HARTNELL COLLEGE

411 Central Avenue
Salinas, CA 93901
(831) 755-6700
www.hartnell.edu

2016 – 2017 COLLEGE CATALOG

ACCREDITATION
Hartnell College is accredited by the Western Association of Schools and Colleges, (10 Commercial Boulevard, Suite 204, Novato, CA 94949 (415) 506-0234), The California Board of Registered Nursing, the California Board of Vocational Nursing and Psychiatric Technicians, the National Academy of Early Childhood Programs, the Commission on Accreditation for Respiratory Care, Monterey County Emergency Medical Services Agency, and the California Community Colleges Board of Governors. It has the approval of the State Department of Education to train veterans under Public Law 874 and Public Law 550. It also has the approval of the U.S. Immigration and Naturalization Service to educate foreign students.
HARTNELL COMMUNITY COLLEGE DISTRICT

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Welcome to Hartnell College

VISION STATEMENT
Hartnell College will be nationally recognized for the success of our students by developing leaders who will contribute to the social, cultural, and economic vitality of our region and the global community.

MISSION STATEMENT
Focusing on the needs of the Salinas Valley, Hartnell College provides educational opportunities for students to reach academic goals in an environment committed to student learning, achievement and success.

VALUES STATEMENTS

- **Students First**
  We believe the first question that should be asked when making decisions is “What impact will the decision have on student access, learning, development, achievement, and success?”

- **Academic and Service Excellence**
  We commit to excellence in teaching and student services that develop the intellectual, personal, and social competence of every student.

- **Diversity and Equity**
  We embrace and celebrate differences and uniqueness among all students and employees. We welcome students and employees of all backgrounds.

- **Ethics and Integrity**
  We commit to respect, civility, honesty, responsibility, and transparency in all actions and communications.

- **Partnerships**
  We develop relationships within the college and community, locally and globally, that allow us to grow our knowledge, expand our reach, and strengthen our impact on those we serve.

- **Leadership and Empowerment**
  We commit to growing leaders through opportunity, engagement, and achievement.

- **Innovation**
  Through collaboration, we seek and create new tools, techniques, programs, and processes that contribute to continuous quality improvement.

- **Stewardship of Resources**
  We commit to effective utilization of human, physical, financial, and technological resources.
ACADEMIC FREEDOM
(Board Policy 4030)

Introduction
Hartnell Community College District is committed to the principle that the free expression of ideas is essential to the education of its students and to the effective governance of its colleges. The District recognizes that academic and intellectual freedom is best protected by a system of tenure, academic due process, and policies and procedures that provide faculty, students, and classified employees with the opportunity to freely express themselves in any campus venue, from the classroom to the board room. The District further subscribes to the principle that the free expression of ideas should be limited only by the responsibility to express ideas with fairness, and in a manner that respects the differing ideas of others and distinguishes between established fact and theories and one's own opinion.

Rights of Academic Employees
Academic freedom shall be guaranteed to all academic employees. No special limitations shall be placed upon study, investigation, presentation, and interpretation of facts and ideas concerning human society, the physical and biological world, and other branches of learning, subject to accepted standards of professional responsibility. The right to academic freedom herein established shall include the right to support or oppose political causes, issues, and parties outside of normal classroom activities.

Academic employees are citizens, members of learned professions, and members of the institution. When academic employees speak or write as citizens, they should be free from institutional censorship or discipline, provided they clearly indicate they are not representing the institution.

Academic freedom allows academic employees to seek and present the truth as they know it on problems and issues, subject to the accepted standards of professional responsibility, without fear of interference from administrators, the District Board of Trustees, governmental authorities, or pressure groups.

Although academic employees have the obligation to ensure that their classroom material meets the valid educational objectives of the course as stated in the approved Course Outline of Record, they are entitled to freedom in the classroom in presenting the subjects they teach and shall be free to select and use textbooks and materials that they deem appropriate to meet the stated learning outcomes for the course.

Academic employees are entitled to full freedom in their use of books, online sources, and internet sites and in the publication of the results of any research that may result from the use of these resources.

Academic employees may arrange for classroom lecturers or speakers to make presentations in regularly scheduled classes or groups of classes. The academic employees shall be responsible for the relevance of the lecturer or speaker’s subject matter to the course.

Obligations of Academic Employees
Academic freedom requires that all academic employees establish and preserve an open learning environment at the college. No special limitations shall be placed upon students in their study, investigation, presentation, and interpretation of facts and ideas concerning human society, the physical and biological world, and other branches of learning, subject to accepted standards of academic responsibility. Students shall have the opportunity to study controversial issues and divergent views and to arrive at their own conclusions. Academic employees have an obligation to protect the student’s right to freedom of inquiry even when the student’s conclusions differ from those of the academic employees.

While students may represent without penalty any opinion in or out of class, they may be required to demonstrate knowledge of views contrary to their own in order to fulfill course requirements.

Libraries and Learning Resource Centers
Books and other library and learning resources materials selected and databases provided should be chosen for values of interest, information, and enlightenment of all the people of the community. In no case should library materials be excluded because of the race, nationality, social, political, or religious views of the authors. Libraries should provide materials and information presenting diverse points of view on current and historical issues. Materials should not be proscribed or removed because of partisan or doctrinal disapproval.
HARTNELL COLLEGE FOUNDATION

The Hartnell College Foundation is a nonprofit, tax-deductible corporation organized by community-spirited citizens in 1979 to support and benefit the Hartnell Community College District. The Foundation Board of Directors consists of up to 35 volunteers from business, industry, and community service. The Board is assisted by over 250 volunteers serving on various committees.

Mission Statement

The Hartnell College Foundation will actively support and advise the college in developing its activities, programs and facilities; will cultivate bequests and donations; and will responsibly administer funds, properties, bequests, annuities, and other instruments in the best interest of the College, the District and the Foundation.

Vision

The Hartnell College Foundation will be a catalyst for change related to support of innovative activities for student access and success.

The Hartnell College Foundation was incorporated in December 1979. During the early years, the Foundation focused its efforts primarily on scholarships. In recent years, the Foundation has grown to include a comprehensive fundraising campaign for scholarships, equipment, program support, and endowments. The Foundation’s purpose is to raise funds to support and benefit the Hartnell Community College District. A broad base of community support has been created that provides the infrastructure to continue worthwhile programs.

Between 2006 and 2012, the Hartnell College Foundation completed the college’s first major comprehensive capital campaign in its 85-year history raising $12 million. The board and committees were expanded to involve over 250 community leaders. As part of the campaign, areas of need were identified for support including: agriculture, the library, construction, athletics, allied health, health sciences, arts and sciences, and scholarships.

At the end of 2012, the Foundation launched a President’s Task Force to identify key initiatives appropriate for private support and create a new 5-year funding plan. The task force included 43 members representing the community. This group, with significant input from the campus leadership, ranked projects according to how attractive they would be for private funding. The draft funding plan, that will be finalized in the first quarter of 2013 includes initiatives for major facilities and new programs; student success scholarships and internships; expansion of science, technology, engineering and math programs; completion of the athletics master plan; high quality arts programs; and additional capacity building for south Monterey County.

HARTNELL’S NAME

WILLIAM EDWARD PETTY HARTNELL was born in 1798 on a country estate in Lancashire, England. He attended Cambridge University and also studied accounting at the College of Commerce in Bremen, Germany. Upon completion of his studies, Hartnell secured a position with the John Begg Trading Company in Santiago, Chile, and began working as an accountant and trade negotiator. He became fluent in Spanish and was soon negotiating trade agreements along the western coast of South America.

In 1822, Hartnell arrived in California and set about establishing a positive relationship with Governor Pablo Vicente Solá and Padre Mariano Payeras, head of the California Missions. As a result of Hartnell’s experience and diplomatic skills, Governor Solá granted him the right to trade in California and to establish monetary trade agreements with the missions and the presidios. Hartnell’s business ventures thrived and he became well known by the Californios, the large land owners in the province. During this time, he frequented the home of Don José de la Guerra, a highly influential Californio living in Santa Barbara. Don José de la Guerra was regarded as the most wealthy, cultivated, and influential man in the province. He and Hartnell became friends and shared many cultural interests. La Casa de la Guerra was a mecca for distinguished visitors from all over the world, and Hartnell often attended fiestas at the de la Guerra home. It was in this setting that he met the lovely María Teresa de la Guerra, daughter of Don José.

In 1824, Hartnell converted to Catholicism and, a year later, he married María Teresa. In the week prior to the wedding, a series of parties and dinners were held in Santa Barbara followed by the wedding ceremony at the Santa Barbara Mission. William Edward Petty Hartnell and María Teresa de la Guerra Hartnell then moved to Monterey to oversee their business ventures.

In 1830, Hartnell became a Mexican citizen and received a share in the Rancho de Alisal. On the Rancho, he and María Teresa planted fruit trees, grain, and grapes. They also grazed over 500 head of cattle. In 1832, Don José wrote to his son-in-law, "... turn (your) natural inclination to teach into an asset and become a schoolmaster." As the Rancho was an ideal setting for a school, Hartnell could combine the pleasures of teaching with those of being a ranchero. Hartnell soon received permission from Governor Figueroa to secure a license to establish a postsecondary school. On May 4, 1834, Governor Figueroa attended a blessing for the new school and made a gift of approximately $150 to support the educational venture.

On January 1, 1834, a huge fiesta formalized the opening of El Colegio de San José on the Alisal Rancho, now re-named "El Patrocinio de San José." Spanish, mathematics, philosophy, French, English, German, and Latin formed the curriculum. Each student paid a fee of 200 pesos for a year's study. During the first year, 15 students enrolled and the school became a social center for young people and visiting dignitaries such as Mariano Vallejo, Juan Bautista Alvarado, and Francisco Pacheco. The census of 1836 listed a total of 44 persons living on the Rancho. This included the six children born to William Edward Petty and María Teresa de la Guerra Hartnell.

Information for this article was taken from historical documents provided by the Monterey County Historical Society and the Monterey County Herald, and writings by Dr. Daniel Ipson. The following references were consulted: The Salinas: Upside-Down River by Anne B. Fisher (1977) and The Lives of William Hartnell by Susanna Dakin (1949). The information above is correct to the best of our knowledge, but we welcome corrections or additions.
OPEN ENROLLMENT

It is the policy of the Hartnell Community College District that, unless health, safety, or limited facilities is a factor in the conduct of a course, every course, course section, or class, wherever offered and maintained by the college, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets the required prerequisites for such course, course section, or class.

CLASS SCHEDULING

Day Classes
Day classes are offered from 7 am to 4:30 pm.

Evening Classes
Evening classes are specifically planned to reflect a full range of academic and vocational programs offered by Hartnell College. The only difference between day and evening classes is the time frame. Academic standards, contact hours, and requirements for student performance are the same for both evening and day classes. Evening classes are scheduled between the hours of 4:30 pm and 10:00 pm.

Weekend Classes
Some class offerings are scheduled on Saturdays and/or Sundays.

Condensed Courses
Hartnell offers courses in a condensed format that may include a comprehensive summer session, a winter intersession, and late-start courses offered throughout the year. All courses offered have the same level of quality and number of contact hours as those same courses offered on a semester-length basis. Condensed courses provide students with more flexibility in pursuing their educational goals while balancing work and family responsibilities.

OFF-CAMPUS INSTRUCTION

Each semester Hartnell College conducts off-campus classes at the Alisal Campus and the King City Center as well as in Greenfield, Soledad, Gonzales, and various other locations throughout the District. Apart from student services offered at all campuses, a counselor is available on site at Soledad High School once a week to help with education plans and enrollment issues. All classes are listed by location on the college website.

Many courses that lead to an Associate Degree are offered at these locations.

Distance Education
Hartnell College offers online classes and hybridized classes with both online and face-to-face instruction. Students taking online courses must have basic computer skills for using word processing and e-mail, including sending attachments and files. Students also need access to the Internet and must have adequate hardware and software capabilities. Web-delivered courses expect the student to have home access to a computer with Internet capabilities. For those students who do not have this access, computers with Internet connectivity are available at satellite campuses at King City, the Alisal Campus, and the main campus (in the Library and the computer classrooms).

All distance education courses are academically rigorous, require the direction of and interaction with qualified faculty, and are equivalent to traditionally taught courses. The course schedules clearly identify Internet-based courses, and the college website has a link for students wishing to obtain more detailed information.

Self-Paced Classes
Hartnell offers some self-paced courses for students who need flexibility in scheduling their time on campus. When completing these courses, students may establish schedules that are convenient and that enable course completion.

THE CAMPUS

The Hartnell College main campus is located a few blocks from downtown Salinas.
The main campus at 411 Central Avenue consists of many academic facilities, most of which were built within the past twenty years. For more information about the college facilities please see maps on pages 251-252.

Cars on Campus
Operation of motor vehicles on Hartnell College campus must be conducted in a manner which ensures the safety of the driver, passengers, pedestrians, and/or any others, and which prevents damage to college property. The College is not responsible for loss of any property or damage to any property sustained by any person parking on campus.

The campus speed limit is 5 miles per hour.
Parking on Main/Alisal/King City Center Campus

PARKING PERMITS ARE REQUIRED TO PARK ON CAMPUS. ALL PARKING IS ON A FIRST-COME, FIRST-SERVED BASIS. PARKING PERMITS ARE SOLD WITH NO GUARANTEE OF SPACE AVAILABILITY.

Parking on campus is a privilege extended by the Board of Trustees to those who have college-related business. Drivers of vehicles on college property shall comply with the rules and regulations of the college. Parking privileges can be withdrawn for violations of parking regulations. Regulations are published on the Hartnell website at http://www.hartnell.edu/parking. For questions or assistance contact Campus Security at (831) 755-6888.

Parking Permits are available for sale online two weeks prior to the start of each semester and sales end approximately 2 months after each semester.

No permits are required for the King City Center Campus.

**Cashier Hours**

Main Campus
Monday – Thursday: 8:30 am to 4:30 pm  
Friday – 9:00 am to 1:00 pm

Alisal Campus
Monday – Thursday 9:30 am to 5:30pm  
Friday – 9:00 am to 4:30 pm

King City Center
Monday – Thursday 8:30am – 4:30pm  
Friday 9:00am – 1:00pm

Cost of Parking Permits:
$40 per semester  
$20 per semester for Financial Aid Students

Daily Parking Permits are available from coin-operated machines in various locations throughout the campus parking lots and garage. These permits are valid only on the day the permit is purchased. All-day parking cost is $2.00.

Parking permits must be displayed in plain view in the appropriate location according to Parking Regulations or a citation will be issued. There are no exceptions. Should you receive a citation, follow the written instructions on the back of the citation. Restricted parking where regular permits are not valid: 30-minute zones (green), staff spaces (orange), handicapped spaces (blue) and car pool spaces.

Car Pool Parking requires the purchase of a student permit and an additional permit which can be obtained without additional cost through the Cashier’s Office.

The District reserves the right to change parking fees based on Hartnell College Board Policy 2255. Parking fees may increase during the 2016-2017 academic year. Please watch our website for official notification.

**Enforcement**

Campus parking and traffic safety regulations are enforced by Hartnell College and the Salinas Police Department. Campus Security issues parking citations for violations. The Parking Enforcement Center in San Ramon, CA, administers collections and appeals. For additional information, contact Campus Security at (831) 755-6888.

**College Cafeteria**

The cafeteria is located in the College Center of the Main Campus. The Steinbeck Hall dining room provides seating for 250 and an additional 200 in the Commons area. An extensive menu offers a wide variety of food. The Cafeteria accepts all major credit and debit cards along with the ASHC student body CatCard. Catering to the campus community is also available. Vending machines are located throughout the campus. Hours of operation are:

- **Fall and Spring semesters**
  Monday – Thursday: 7:30 am – 7:30 pm  
  Friday: 7:30 am – 2:00 pm
- **Summer session**
  Monday – Thursday: 7:30 am – 2:00 pm

**College Store**

Operated by Follett Higher Education Group, Hartnell College Bookstore is a student's single point of contact for all their course materials needs. The bookstore offers flexible pricing options through new, used, rental, and digital textbooks as well as an assortment of general and reference books, emblematic clothing, gifts and school supplies. Additionally, the bookstore offers textbook buy back on titles with current market value. A valid student ID is required to sell books.

The bookstore’s regular hours of operation are:

- **Fall and Spring semesters**
  Monday: 7:45 am – 5:00 pm  
  Tuesday – Thursday: 7:45 am – 6:30 pm  
  Friday: 8:00 am – 2:00 pm
- **Summer session**
  Monday – Thursday: 8:00 am – 5:00 pm

Please visit the bookstore's website for special hours, announcements, and online ordering: www.hartnellshop.com

Limited supplies are available at the King City Center.

**THE COLLEGE**

**VISITORS TO THE COLLEGE**

Parents, the general public, and other interested persons are invited to visit the campus. Visitors should stop at the Office of Student Life located in Building C, Room 140 (831) 755-6734, for information and directions.

No one is permitted to attend classes unless s/he is a registered student. Exceptions to this rule may be made only in unusual circumstances and only when such visit will not disturb the instructional program. A special Visitor’s Permit is required in such instances.

Permission to enter upon the property of the District, either stated or implied in other policies or practices, is subject to immediate revocation by the Governing Board or by the Superintendent-President of the College.

**COMMUNICATIONS**

No telephone messages for students will be accepted by the College. Mail or faxes should not be addressed to students in care of the College. No delivery of any nature will be accepted for students.

**CAMPUS SECURITY**

The Campus Security Office, located in the College Center, assists with reporting on-campus crimes and emergencies and locating lost articles. Campus Security is available 24 hours a day and can be contacted by calling (831) 755-6888 or at the office (831) 770-7000.

When an emergency occurs on campus, call Campus Security – 755-6888 or x6888. An officer will respond and obtain medical assistance as well as other essential insurance information. Any questions regarding student injuries or accidents on campus should be directed to the Student Life Coordinator Office in Building C, Room 104 or phone (831) 755-6825.

**ALERT SYSTEM**

The campus safety and facilities emergency status bulletin telephone number is (831) 796-6222. From a campus line, simply dial 6222. This line will announce any known emergency situations or outages on campus.

Hartnell College is now offering a SMS-based emergency notification service EVERBRIDGE. For information about the new mass notification go to: http://www.hartnell.edu/alert
Library & Learning Resource Center

Hours of operation are:

Fall and Spring semesters
Monday – Thursday: 8:00 am – 9:00 pm
Friday: 8:00 am – 4:00 pm
Saturday: 10:00 am – 2:00 pm

Hours during the sessions other than the fall and spring semesters may vary and will be posted at the entrance to the library and on the library's website at: http://www.hartnell.edu/library. The library is closed during semester breaks.

The current Library and Learning Resource Center opened in June 2006. Located in Building A at the corner of Homestead and Central Avenues, the library is conveniently adjacent to the college parking garage. The 68,000 square foot facility offers students, faculty, staff, and community members a variety of library and technology services, and access to collections in multiple formats. The two floor facility features over 200 computers, networked, multifunctional devices for printing, copying, scanning, and faxing, collaborative group study rooms for students, space for quiet individual study, a Professional Development Center for faculty and staff, and other instructional rooms. Tutorial Services is currently located on the second floor of the Library in Room A-214.

Library Computer & Media Services staff provide basic technical support to computer users, while reference librarians assist students and other library patrons with their information needs. Librarians also teach credit information literacy courses, provide course library orientations and tours, and offer one-on-one consultations that teach students important research skills.

The library’s collections support the college’s curriculum and contain more than 60,000 books, 150,000 electronic books, 150 periodical subscriptions, and over 1,000 video recordings and DVDs. From the library’s webpage, patrons may access the online catalog and more than 40 electronic databases that include full-text periodicals, journals, newspapers, videos, and reference works.

The library was designed to provide access to all students. Accessibility features include computers with assistive technologies and software applications, wheelchair accessible public service desks, self-check stations, group study rooms, study carrels, and study tables.

Hartnell College offers online classes and hybridized classes with both online and face-to-face instruction. Students taking online courses must have basic computer skills for using word processing and e-mail, including sending attachments and files. Students also need access to the Internet and must have adequate hardware and software capabilities. Web-delivered courses expect the student to have home access to a computer with Internet capabilities. For those students who do not have this access, computers with Internet connectivity are available at satellite campuses at King City, the Alisal Campus, and the main campus (in the Library and the computer classrooms).

All distance education courses are academically rigorous, require the direction of and interaction with qualified faculty, and are equivalent to traditionally taught courses. The course schedules clearly identify Internet-based courses, and the college website has a link for students wishing to obtain more detailed information.

OTHER CAMPUS PROGRAMS

Come to FKCE when you
- take care of a relative’s child.
- think you’d like to care for a child in the “system.”
- need to complete mandated state foster care education.
- care for another’s child and want to improve your parenting skills.

Hartnell College Foster & Kinship Care Education cares about you. We know caregivers such as you understand that parenting another’s child is more than just caring. Whether you are taking on the responsibility of caring for a relative’s child or a child in the court system, we understand that there is much you want and need to know. We offer a variety of no-cost trainings and classes to meet your needs. Hartnell FKCE supports the difference you make in the lives of children. We will connect you with more people, more information, and more resources that will help you make a difference.

The California Community Colleges have established the Foster Youth Success Initiative (FYSI) to assist former foster youth in accessing and successfully completing college. FYSI Liasions are located in the Student Support Services Departments. For more information, call (831) 770-7039.

Cultural Programs

Hartnell College provides support for a wide range of cultural programs. A variety of performing arts activities are presented throughout the year.
NON-DISCRIMINATION AND NON-HARASSMENT POLICY

In the pursuit of academic studies and other college-sponsored activities that promote intellectual growth and personal development, all students should be free of unlawful discrimination by any member of the academic community. (Students disturbed by the acts of another student have recourse through the procedures of the Student Code of Conduct.)

Hartnell College ensures that its programs and activities, including employment, are available to all qualified persons without regard to race, color, religion, sex, sexual orientation, age, disability, marital status, ancestry, national origin, or veteran status.

If a student feels s/he has suffered unlawful discrimination, harassment, or retaliation by an instructor, an administrator, or a member of the classified staff, s/he may obtain written instructions for the filing of a grievance from the office of the Vice President of Student Affairs and (831) 755-6822. The complaint must be initiated within one year of occurrence.

College policies regarding discrimination, harassment, and retaliation are in compliance with applicable federal and state laws and the California Education Code.

SEXUAL HARASSMENT POLICY

It is the policy of the Governing Board of the Hartnell Community College District to provide an educational and business environment free of unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct or communications constituting sexual harassment, as defined by Education Code Section 212.5 and otherwise prohibited by state and federal law.

It is unlawful and a violation of this policy for anyone who is authorized to recommend or make personnel or educational decisions affecting an employee or student or who is otherwise authorized to transact business or perform other acts or services on behalf of the District to engage in sexual harassment.

Allegations of sexual harassment shall be thoroughly investigated in accordance with the District’s sexual harassment/discrimination complaint procedures.

It is a violation of this policy to retaliate against a sexual harassment complainant or witness. The initiation of a complaint or participation as a witness in a sexual harassment investigation shall not affect the complainant’s or witness’s future business dealings with the District; his or her employment, compensation, or work assignments; his or her grades, class standing, or other matters pertaining to his or her status, as an employee or student, in any District program.

A complaint and the results of the investigation shall be confidential to the extent maintenance of confidentiality is consistent with a thorough investigation and appropriate disposition of the matter.

Rules and procedures for reporting charges of sexual harassment and pursuing available remedies may be obtained from the Associate Vice President of Human Resources and Equal Employment Opportunity or any employee in the Office of Human Resources and Equal Employment Opportunity.

DISTRIBUTION OF LITERATURE TO AND/OR SOLICITING PETITION SIGNATURES FROM STUDENTS ON DISTRICT PROPERTY

Pursuant to the provisions of California Education Code, Sections 82530 and 82531, individuals/organizations wishing to distribute literature to and/or solicit petition signatures from students of the District, must file a copy of the petitions or materials to be distributed with the Student Activities Office. The application form must include the distributor’s name, address, and social security number.

The Vice President of Student Affairs or designated representative will specify the time, place, and manner in which literature is distributed or petition signatures solicited. The distribution period allowed is two days. No materials shall be distributed in, around, or outside any classroom, or in the halls of any District building.

Distributing literature or soliciting petition signatures at any place or time other than that designated, or in any manner other than that specified by the Vice President of Student Affairs or designee, is strictly prohibited.
ADMISSIONS & RECORDS

The Admissions Office is an integral component of Student Affairs. The Admissions & Records Office is responsible for the admission and registration processes and for the accuracy and maintenance of student records.

Hours of operation are:

Fall and Spring semesters
Monday - Thursday: 8:00 am – 6:00 pm
Friday: 9:00 am – 1:00 pm

Hours during student vacation periods may vary and will be posted at the entrance.

Mailing Address:
Hartnell College
ATTN: Admissions & Records
411 Central Avenue
Salinas, CA 93901

Phone Number: (831) 755-6711
Fax Number: (831) 759-6014

ADMISSIONS PROCEDURES

Application for Admission

Applications for Admission are available in both English and Spanish on the Hartnell College website: http://www.hartnell.edu and can only be submitted online. New and returning students should submit applications early in the registration cycle to have the best opportunity to get courses. Students who have been absent from Hartnell for two or more primary (fall and spring) semesters must reapply for Admissions before registering. Concurrent Enrollment Students attending Hartnell must submit an Application for Admission each semester that they attend until they graduate from high school, at which time a new Application for Admission is required to be submitted to update enrollment status to First Time College Student.

Criteria for Admission

In addition to the residency requirements, outlined in the next section, applicants will or may be admitted to the College as follows:

1. Any person over the age of 18 and possessing a high school diploma or its equivalent.
2. Other persons who are over the age 18 and who, in the judgment of the Superintendent/President or designee are capable of profiting from the instruction offered. Such persons shall be admitted as provisional students, and thereafter shall be required to comply with the District’s rules and regulations regarding scholastic achievement and other standards to be met by provisional or probationary students as a condition to being readmitted in any succeeding semester.
3. Persons who are apprentices as defined in Labor Code Section 3077.

Residence Requirements for Admissions

California Residents

Any person enrolling in courses is subject to residency requirements as outlined by the California Education Code.

Resident: A resident student is one who has been a legal resident in California for more than one year immediately preceding the beginning of the semester in which the student plans to enroll and who demonstrates the intent to remain a permanent California resident.

The right of a student to attend any public community college in California as a resident requires that s/he:

1. be a citizen of the United States, or possess or be an applicant for a permanent-resident, amnesty of another visa type that does not preclude establishing domicile in the United States and meeting certain requirements.

2. be at least 19 years of age and have lived in California one year and one day prior to the residency determination date. (Note: A student who has not been a resident of California for more than one year and who is the dependent [for income tax purposes] child of a California resident who has been a resident since the above-noted residency determination date, is entitled to resident classification and must submit documentation with application.)

3. have parents or a guardian who has resided in California for one year and one day, if s/he is younger than 18 years of age.

4. present evidence showing the student’s (or the student’s parents’ if student is under 19) intent to make California his/her permanent home.

5. manifest residency intent if the student is 19 years of age or over by maintaining a home in California continuously for the last two years, unless there is a contrary evidence of intent.

6. manifest residency intent if the student is under 19 years of age, by both students and his/her parents maintaining a home in California continuously for the last two years, unless there is contrary evidence of intent.

If manifest intent cannot be shown within No. 5 and No. 6 above, the student is required to provide evidence of intent to make California his/her permanent home. Objective manifestations of this intent include, but are not limited to:

1. payment of California state income tax as a resident.

2. registering to vote and voting in California.

3. licensing from California for professional practice.

4. showing California as the home address on a federal income tax return.

5. ownership of residential property or continuous occupancy of rented or leased property in California.

6. possessing California driver’s license or California ID.

7. maintaining a permanent military address or home of record in California while in the armed services.

8. establishing and maintaining active California bank accounts.

9. being the petitioner for a divorce in California.

10. documentation of employment (check stub, letter from employer).

Students who are members of the armed forces of the United States domiciled or stationed in California on active duty are entitled to resident classification for purposes of determining the amount of tuition fees for the duration of their attendance at a community college as long as they remain on active duty.

A student who is a natural or adopted child, stepchild, or spouse and who is a dependent of a member of the armed forces of the United States domiciled or stationed in California on active duty is entitled to resident classification for the purposes of determining the amount of tuition and fees. There is no limitation on the length of resident classification as long as the dependent remains continuously enrolled at that community college.

A student who was a member of the armed forces of the United States stationed in California on active duty for more than one year immediately prior to being discharged shall be exempt from paying nonresident tuition up to one year.

Students with visas will be evaluated for residency based on the type of visa, visa issue date, length of stay in California, and intent to maintain California as their permanent home.

A student who cannot qualify as a resident of California will be classified as a non-resident student. Non-resident fees will be applied.

Definition: “Manifested the intent” means having supportive documentation indicating the intention of making California one’s legal state of residence. Students may be asked to submit this documentation to verify California residency. For further information, contact the Admissions & Records Office at (831) 755-6711.

Per section 54026, California Administrative Code, Title 5, the burden is on the student to clearly demonstrate both physical presence and intent to establish California residency.

California Residency Status Change

A student previously classified as a non-resident may be reclassified. A residence determination date is the day immediately proceeding the opening day of instruction for any primary semester (fall/Spring) or summer session during which the student proposes to attend.

A student may request reclassification by completing a Residency Questionnaire available in the Admissions & Records Office. The request for reclassification must be submitted prior to the semester for which reclassification is to be effective. Extenuating circumstances may be considered in cases where a student failed to petition for reclassification prior to the residency determination date. In no cases, however, may a student receive a non-resident tuition refund after the date of first census.
Students are required to pay non-resident tuition. A non-resident student is one who has not been independent for the purposes of residence classification if the applicant meets all of the following requirements:

- Has not and will not be claimed as an exemption for state and federal tax purposes by his or her parent in the calendar year prior to the year the reclassification application is made.
- Has not lived and will not live for more than six weeks in the home of his/her parent during the calendar year the reclassification application is made.

A student who has established financial independency may be reclassified as a resident if the student has met the requirements of Title 5 Sections 54020, 54022 and 54024.

The Admissions & Records Office will make a determination based on the evidence and notify the student no later than 14 days after the receipt of the request for reclassification.

Non-Residents

A non-resident student is one who has not had a legal residency in California for more than one year immediately preceding the beginning of the semester. Non-resident students are required to pay non-resident tuition in addition to enrollment fees.

**Exemption from Nonresident Tuition (AB540)**

Any student, other than one with a United States Citizenship and Immigration Services nonimmigrant visa status, who meets all of the following requirements, shall be exempt from paying nonresident tuition.

The student must have:

- attended a high school (public or private) in California for three or more years, or
- attained credits earned in California from a California high school equivalent to three or more years of full-time high school work and attended a combination of elementary, middle and/or high schools in California for a total of three of more years.

AND

- The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED, HiSET, TASC, or the California High School Proficiency exam)

AND

- The student must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

Students who are non-immigrants (for example those who hold an F or B visas, etc. are NOT eligible for this exemption.)

The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above.

Student information obtained in the process is strictly confidential unless disclosures are required under law. Documentation to support the nonresident affidavit may be required if conflicting information is provided.

Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but are not classified as California residents.

**INTERNATIONAL STUDENTS**

**F-1 Visa Status**

It is the policy of Hartnell College to provide international student advisement to assist international students with admission, enrollment, matriculation and other supportive services. Hartnell College recognizes that a program for international students makes a significant contribution to the education of its students and to the promotion of international understanding in the District and throughout the world.

**Admission**

An international student designee is available to assist with the school admission procedures and the required documentation for the student F-1 visa. Admission and I-20 requirements include:

1. completed International Student Application form.
2. original high school/college transcript(s), including an English translation and explanation of the grading system.
3. original score from the Test of English as a Foreign Language (TOEFL). Hartnell requires a score of 460 or higher on the paper-based test, 140 or higher on the computer-based test, or 48 or higher on the Internet-based test.
4. a notarized financial statement and bank statement from the sponsor verifying financial solvency. The estimated expense for a full academic year is $23,000.

The complete application packet must be on file in the International Student Office by:

- June 15 Fall Semester
- Nov. 15 Spring Semester
- April 15 Summer Session

**Transferring F-1 Students to Hartnell**

An international student who is accepted by another collegiate institution with F-1 Student Status must attend that institution and successfully complete 12.0 units with a “C” average or better before being considered for admission to Hartnell College.

The complete application packet including a copy of the student’s I-20 and transfer form must be on file by:

- June 15 Fall Semester
- Nov. 15 Spring Semester
- April 15 Summer Session

**F-1 Visa Requirement**

International students must enroll in a minimum of 12.0 units by the end of each fall and spring semester. Failure to comply will result in dismissal.

**Maximum Enrollment**

An international student is expected to complete a program in the most expeditious manner possible, generally in four or five semesters. The maximum enrollment permitted is 6 semesters.

**Health Insurance**

All Hartnell College international students and their accompanying dependents are required to have health insurance coverage. Students must show proof of health insurance coverage by the end of the first week of each fall and spring semester.

**Tuition & Fees**

International students shall pay non-resident tuition set by the Board of Trustees. Tuition and fees are subject to change. Refer to the semester class schedule for current fees. Full payment is due by the printed due dates.

**Academic Dismissal**

An international student who drops below full-time enrollment (12.0 units) or fails to provide proof of health insurance is subject to expulsion from Hartnell College.

**Educational Plan**

All international students must meet with a counselor to create an educational plan before enrolling in their second semester. An educational plan is a plan of coursework needed to meet the student’s goal. Once the educational plan has been completed, no changes will be allowed without prior approval from the international student designee. A copy of the educational plan must be on file with the International Student’s Office in the Admissions & Records Office prior to registering for classes their second semester.

**Housing**

Hartnell College does not have residential facilities on campus. The international student designee will assist students in securing accommodations, but the College is not responsible for arranging housing.
Procedures for High School Students
A student whose age or class level is equal to grades 9-12 may attend Hartnell College as either a special part-time student, a special full-time student, or a special summer session student for advanced scholastic, vocational, or physical education courses in accordance with the following procedures. All admitted students must complete the College’s Assessment test requirements if enrolling in an English/ESL or Math course. Course prerequisites must be met prior to registering.

Concurrent Enrollment students may enroll in up to 9.0 units in the Fall and Spring Semester, and up to 6.0 units in the Summer Session.

Special Part-Time Students & Special Summer Session Students
1. Those enrolled in a public or private high school who must meet each of the following criteria:
   A. Written parental or guardian consent
   B. Written school principal or designee recommendation and consent
   C. Skill level assessment through Hartnell College placement assessment, if applicable
   D. Written approval of a Hartnell College counselor

2. Those whose age or class level is equal to grades 9-12 and not enrolled in school must meet each of the following criteria:
   A. Written parental or guardian consent
   B. Verification of non-enrollment in high school from school principal or designee
   C. Skill level assessment through Hartnell College placement assessment, if applicable
   D. Written approval of Hartnell College Vice President of Student Affairs
   E. Written approval of Hartnell College Superintendent/President

Note: In addition, concurrent enrollment students completing college courses will receive credit on their Hartnell College transcripts. A copy of the Hartnell College transcript is NOT automatically sent to the students’ schools. Students must request official transcripts in writing to the Admissions & Records Office.

Grades K-8*
Students in grades K-8 are not eligible to attend any credit or non-credit course at Hartnell College, except for those courses specifically designed for students at that grade and age level (academic camps for young students, children’s theater, etc.) Hartnell College Board Policy 5010.

For admission, students must meet each of the following criteria:
A. Written parental or guardian consent
B. Written school principal or designee recommendation and consent
C. Skill level assessment through Hartnell College placement assessment, if applicable
D. Written approval of a Hartnell College counselor
E. Written approval from the Vice-President of Student Affairs

Special Full-Time Students
1. Those enrolled in a public or private high school must meet each of the following criteria:
   A. Written parental or guardian consent
   B. Written school principal or designee recommendation and consent
   C. Written approval of the governing board of the high school district in which the student is enrolled
   D. Skill level assessment through Hartnell College placement assessment, if applicable
   E. Written approval of Hartnell College Vice President of Student Affairs

Note: By giving consent, parents of concurrently enrolled students agree and understand that the College is an adult learning environment and students are expected to behave accordingly. Additionally, they understand that classes will be taught at the college level and the curriculum and college procedures will not be modified nor will other accommodations be made.

Confidentiality Statement
Under Section 49061 of the Education Code, parents of community college students do not have a right of access to their children’s student records, regardless of whether the student is under the age of 18. Also, under federal law Section 1232g of Title 20 of the United States Code), there is a general right of parental access to student records, but not for college students, regardless of age.
Acceptance of Credit from Other Institutions

Students may use coursework completed at other institutions to fulfill program, general education, and/or elective unit requirements for the Associate Degree or certificate programs at Hartnell College.

Colleges and Universities must ensure the quality of their programs by adhering to specific evaluation criteria established and evaluated by private educational associations called accrediting agencies. Hartnell College accepts courses from institutions accredited by the following regional agencies:

- MSA  Middle States Association (of Colleges and Schools)
- NCA  North Central Association (of Colleges and Schools)
- NEASC-CIHE  New England Association of Schools and Colleges –Commission on Institutions of Higher Education
- NWCCU  Northwest Commission of Colleges and Universities (formerly NASC Northwest Association of Schools and Colleges)
- SACS  Southern Association of Colleges and Schools
- WASC-ACCJC  Western Association of Schools and Colleges- Accrediting Commission for Community and Junior Colleges
- WASC-ACACS  Western Association of Schools and Colleges- Accrediting Commission for Senior Colleges and Universities

Hartnell College recognizes those institutions that are either fully accredited or are listed as a candidate for accreditation as published in the Database of Accredited Postsecondary Institutions and Programs maintained by the U.S. Department of Education.

The elective unit requirement may be met with courses from regionally accredited colleges and universities without further evaluation. Program and general education requirements may be met with courses from regionally accredited colleges and universities only after being evaluated through the course equivalency or course substitution process.

Course equivalency may be determined by any of the following methods:

1. Direct articulation between Hartnell and the sending institution
2. Indirect articulation between Hartnell and other California Community Colleges based on approval of courses for the California Identification Number System (C-ID)
3. Indirect articulation between Hartnell and a sending institution determined by cross referencing additional public colleges and universities included in the California statewide articulation repository (ASSIST.org). For example, if a course under review is not approved for C-ID and Hartnell does not have direct articulation with the California Community College a CSU that maintains articulation with both Hartnell and the other California Community College could be used to establish indirect articulation.
4. A critical evaluation of the course to verify core elements of the course including topics, course objectives, lecture and/or lab hours, and pre-co-requisites are sufficiently aligned with Hartnell courses. This review will be conducted by the counseling and/or evaluations staff. Some courses will also require review by the college Articulation Officer, appropriate faculty content experts and the appropriate dean.

Course substitutions may be approved by any of the following methods:

1. Courses completed at another California Community College that are approved for an associate degree general education category as outlined in Title 5 will be applied to the same associate degree general education category at Hartnell regardless of whether or not Hartnell has an equivalent course.
2. Courses completed at another California Community College or at a California State University that are approved for a CSU general education category as outlined in CSU E.O. 1065 will be applied to the parallel associate degree general education category at Hartnell.
3. Courses completed at private colleges and universities that are approved for a CSU general education category as outlined in CSU E.O. 1065 will be applied to the parallel associate degree general education category at Hartnell.
4. Courses completed at another California Community College that are approved for the Intersegmental General Education Transfer Curriculum (IGETC) as outlined in the Standards, Policies & Procedures for IGETC will be applied to the parallel associate degree general education category at Hartnell.
Upper Division Units

Hartnell College will accept coursework completed at the upper division level at a regionally accredited college or university under the following conditions:

1. The course must be deemed comparable to a Hartnell College course by the appropriate instructor, discipline area’s dean, and a “Course Substitution” form with the appropriate signatures will be submitted to Admissions and Records.
2. Courses may be used to meet a program requirement, an associate degree general education requirement, or a prerequisite.
3. Courses will be accepted for subject credit only; units will not be awarded.
4. Maximum subject credit for 12 upper division units will be allowed.
5. Courses will not be used to certify CSU GE or IGETC requirements.
6. The upper-division course work and units will not be included on the student's transcript.

Note: Hartnell currently accepts upper division units; and, Title 5 does not limit the acceptance of upper division units. The Chancellor’s Office clearly supports the practice and many CCC now accept upper division units to fulfill program, and GE subject requirements. The relevant Title 5 section is Section 55063.

Foreign Coursework

Foreign coursework must first be evaluated by an accredited and approved evaluation service, and then reviewed by Hartnell’s evaluators. Some courses may also require approval by the appropriate discipline area dean and faculty. Courses may be used to fulfill Hartnell College prerequisite, program, general education and elective unit requirements, after the foreign transcript evaluated in English is submitted for evaluation. Hartnell College will not determine course transferability to other colleges and universities. Courses will not be used to certify CSU GE or IGETC requirements.

To have foreign coursework evaluated, students need to contact one of the approved evaluation agencies listed below and request a detailed comprehensive equivalency report that includes—for each course—a course name in English, whether it is an upper or lower division course, its U.S. semester equivalency, and the grade the student earned. Actual determination of Hartnell College credit for classes taken in another country will begin during an individual appointment with a Hartnell College counselor after you arrive on the Hartnell College campus and present your transcripts together with a valid outside foreign transcripts evaluated copy.

Academic Evaluation Services
Phone: (813) 374-2020
Email: info@aes-edu.org
Web site: http://aes-edu.org/website/home/index.cfm

Educational Credential Evaluators, Inc.
Phone: (414) 289-3412
E-mail: EVAL@ece.org
Web site: www.ece.org

Educational Records Evaluation Service
Phone: (916) 565-7475
E-mail: EDU@eres.com
Web site: www.eres.com

International Education Research Foundation, Inc. Credentials Evaluation Service
Phone: (310) 258-9451
E-mail: info@ierf.org
Web site: www.ierf.org

World Education Services Application for Evaluation of Foreign Educational Credentials
Phone: (800) 414-0142
E-mail: sf@wes.org
Web site: www.wes.org

There may be other foreign evaluation services available; Hartnell College will accept evaluations from agencies holding current membership in Association of Credential Evaluation Services (NACES). For a listing of members, please go to: http://www.naces.org/members.htm

Military Service Credit

Four semester units of elective credit will be granted to any actively enrolled student with an approved DD214 that shows completion of basic training in the Armed Services of the United States and any discharge other than dishonorable. An approved DD214 may also be used to fulfill the California State University 3 unit Area E General Education Breadth requirement.

In addition, elective credit may be granted to actively enrolled students submitting a military transcript for lower division/baccalaureate level courses completed at schools in the Armed Services of the United States and in accordance with recommendations by the American Council on Education (ACE). The number of units awarded is those recommended by the Council in the Guide to the Evaluation of Educational Experience in the Armed Services.

Please note the Community College of the Air Force is accredited by the Southern Association of Colleges and Schools and credit will be granted accordingly.
Transfer General Education Pass Along Certification

CSU GE Certification:

“Certification” means that Hartnell College has verified that a student has completed the lower division general education requirements for the California State University. Certification is important because without it students will be held to the general education requirements specific to the CSU campus to which the student transfers. Courses from other colleges and universities may be considered for certification by petition through a process called “pass along certification”. Courses taken at CSU campuses, participating private colleges and universities*, and other California Community Colleges will be certified in the subject areas (AREA A - E) approved by the institution where the courses were taken. Courses taken at other regionally accredited colleges and universities will be certified only if the course is determined to be equivalent to a course in a California Community College Certification Pattern. Courses deemed equivalent would be certified in the areas (AREA A - E) in which the equivalent courses have been approved.

*Participating private colleges and universities include: Fashion Institute of Design & Merchandising, Humphreys College, Marymount College, and San Joaquin Valley College.

IGETC Certification:

“Certification” means that Hartnell College has verified that a student has completed the lower division general education requirements for the University of California and/or the California State University. Certification is important because without it students will be held to the general education requirements specific to the UC campus to which the student transfers. Courses from other colleges and universities may be considered for certification through a process called “pass along certification”. Courses taken at other California Community Colleges will be certified in the subject areas (AREA 1 – 6) approved by the institution where the courses were taken. Courses taken at other regionally accredited colleges and universities will be certified only if the course is determined to be equivalent to a course on a California Community College IGETC Certification Pattern. Courses deemed equivalent would be certified in the subject areas in which the equivalent CCC courses have been approved.

Credit for External Examinations

For all Credit for External Examinations:

- Units granted will not count toward the residence requirements of Hartnell College.
- Students must have the official score reports sent to the Hartnell College Admissions and Records Office to receive credit.
- Credit by exam is noted and listed first on a student’s transcript.
- Units and subject credit granted at Hartnell College do NOT reflect units or subject credit granted by a transfer institution except as listed below for general education purposes. Use of credit varies at each transfer institution and by major.

Advanced Placement Exams (CEEB)

Hartnell College recognizes high achievements by students who have successfully completed one or more Advanced Placement Examinations as authorized by the College Entrance Examination Board.

Students who have successfully completed exams in the Advanced Placement Program with a score of 3, 4, or 5 may be granted credit for purposes of general education, graduation, and/or advanced placement in the college’s sequence of courses.

Students enrolled at Hartnell College will receive credit for Advanced Placement Examinations, after official scores are sent to the college. The College will confirm the credit granted after receiving the official scores and a Request for Evaluation form is submitted. Please be aware that other institutions, particularly four-year colleges/universities, may evaluate your Advanced Placement credits differently. Check with a Hartnell College Counselor or the institution to which you plan to transfer for an evaluation of your AP credits.

Refer to the following AP chart for information on specific course credit awarded and general education areas cleared to meet Hartnell College' general education requirements as well as the transfer general education areas cleared for CSU-GE and/or IGETC certification. Some universities will not award credit for an AP exam for a course that is part of a major area of study or concentration or will require a higher score than a 3.
<table>
<thead>
<tr>
<th>Subject Exam</th>
<th>Minimum Score</th>
<th>Hartnell Equivalent</th>
<th>Hartnell Units Awarded</th>
<th>Associate Area</th>
<th>CSU GE Area</th>
<th>CSU Units Awarded</th>
<th>IGETC Area</th>
<th>IGETC Units Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College Board Advanced Placement (AP) Tests</strong></td>
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<tr>
<td>AP Art – Art History</td>
<td>3</td>
<td>ART 1A or 1B</td>
<td>3.0</td>
<td>Humanities</td>
<td>C1 or C2</td>
<td>3.0</td>
<td>3</td>
<td>3.0</td>
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<tr>
<td>AP Art - Studio - Art 2D Design</td>
<td>3</td>
<td>3.0-GE</td>
<td>3.0</td>
<td>Humanities</td>
<td>n/a</td>
<td>3.0-GE + 3 Electives</td>
<td>n/a</td>
<td>0.0</td>
</tr>
<tr>
<td>AP Art - Studio- Art 3D Design</td>
<td>3</td>
<td>3.0-GE</td>
<td>3.0</td>
<td>Humanities</td>
<td>n/a</td>
<td>3.0-GE + 3 Electives</td>
<td>n/a</td>
<td>0.0</td>
</tr>
<tr>
<td>AP Art - Studio Art- Drawing</td>
<td>3</td>
<td>3.0-GE</td>
<td>3.0</td>
<td>n/a</td>
<td>3.0-GE</td>
<td>3.0-GE + 3 Electives</td>
<td>n/a</td>
<td>0.0</td>
</tr>
<tr>
<td>AP Biology</td>
<td>3</td>
<td>BIO 10 + 2 Elective</td>
<td>6.0</td>
<td>Nat. Sci.</td>
<td>B2 &amp; B3</td>
<td>4.0-GE + 2 Electives</td>
<td>5-PHY/LAB</td>
<td>4.0</td>
</tr>
<tr>
<td>AP Chemistry</td>
<td>3</td>
<td>CHM 1A + 1 Elective</td>
<td>6.0</td>
<td>Nat. Sci.</td>
<td>B1 &amp; B3</td>
<td>4.0-GE + 2 Electives</td>
<td>5-PHY/LAB</td>
<td>4.0</td>
</tr>
<tr>
<td>AP Chinese Language and Culture</td>
<td>3</td>
<td>5-GE + 1 Elective</td>
<td>6.0</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0-GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Comparative Gov't &amp; Policies</td>
<td>3</td>
<td>3.0-GE</td>
<td>3.0</td>
<td>Soc. &amp; Beh.</td>
<td>D8</td>
<td>3.0-GE</td>
<td>4</td>
<td>3.0</td>
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<tr>
<td>AP Computer Science A*</td>
<td>3</td>
<td>CSS 2A</td>
<td>4.0</td>
<td>Lang. &amp; Rat.</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>0.0</td>
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<tr>
<td>AP Computer Science AB</td>
<td>3</td>
<td>CSS 2A + 2 Elective</td>
<td>6.0</td>
<td>Lang. &amp; Rat.</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>n/a</td>
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<tr>
<td>AP Economics - Microeconomics</td>
<td>3</td>
<td>ECO 5</td>
<td>3.0</td>
<td>Soc. &amp; Beh.</td>
<td>D2</td>
<td>3.0</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Economics - Macroeconomics</td>
<td>3</td>
<td>ECO 1</td>
<td>3.0</td>
<td>Soc. &amp; Beh.</td>
<td>D2</td>
<td>3.0</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>AP English - Lang. &amp; Composition</td>
<td>3</td>
<td>ENG 1A + 3 Elective</td>
<td>6.0</td>
<td>Lang. &amp; Rat.</td>
<td>A2</td>
<td>3.0-GE + 3 Electives</td>
<td>Grp 1A</td>
<td>3.0</td>
</tr>
<tr>
<td>AP English - Lit. &amp; Composition</td>
<td>3</td>
<td>ENG 1A &amp; ENG 1B</td>
<td>6.0</td>
<td>Lang. &amp; Rat.</td>
<td>A2 &amp; C2</td>
<td>6.0</td>
<td>Grp 1A or 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Environmental Science</td>
<td>3</td>
<td>BIO 4B + BIO 4BL</td>
<td>4.0</td>
<td>Nat. Sci.</td>
<td>B1 &amp; B3</td>
<td>4.0</td>
<td>5-PHY/LAB</td>
<td>3.0</td>
</tr>
<tr>
<td>AP French - French Language and Culture</td>
<td>3</td>
<td>5-GE + 1 Elective</td>
<td>6.0</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0-GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AP German Language and Culture</td>
<td>3</td>
<td>5-GE + 1 Elective</td>
<td>6.0</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0-GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AP US Government &amp; Politics.</td>
<td>3</td>
<td>POL 1</td>
<td>3.0</td>
<td>Soc. &amp; Beh.</td>
<td>D8 + US 2</td>
<td>3.0</td>
<td>4 + US 2</td>
<td>3.0</td>
</tr>
<tr>
<td>AP History - European History</td>
<td>3</td>
<td>HIS 4A + 3 Electives</td>
<td>6.0</td>
<td>Soc. &amp; Beh.</td>
<td>C2 or D6</td>
<td>3.0-GE + 3 Electives</td>
<td>3 or 4</td>
<td>3.0</td>
</tr>
<tr>
<td>AP History - United States History</td>
<td>3</td>
<td>HIS 17A + 3 Electives</td>
<td>6.0</td>
<td>Soc. &amp; Beh.</td>
<td>(C2 or D6)</td>
<td>3.0-GE + 3 Electives</td>
<td>3 or 4 and</td>
<td>3.0</td>
</tr>
<tr>
<td>AP History - World History</td>
<td>3</td>
<td>HIS 5A + 3 Electives</td>
<td>6.0</td>
<td>Soc. &amp; Beh.</td>
<td>C2 or D6</td>
<td>3.0-GE + 3 Electives</td>
<td>3 or 4</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Human Geography</td>
<td>3</td>
<td>3.0-GE</td>
<td>3.0</td>
<td>Soc. &amp; Beh.</td>
<td>D5</td>
<td>3.0-GE</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Italian Language and Culture</td>
<td>3</td>
<td>5-GE + 1 Elective</td>
<td>6.0</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0-GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Japanese Language and Culture</td>
<td>3</td>
<td>5-GE + 1 Elective</td>
<td>6.0</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0-GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Latin - Latin</td>
<td>3</td>
<td>5-GE + 1 Elective</td>
<td>6.0</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0-GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Math Statistics</td>
<td>3</td>
<td>MAT 13</td>
<td>5.0</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Math (Calculus AB)</td>
<td>3</td>
<td>MAT 3A</td>
<td>4.0</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Math (Calculus BC)</td>
<td>3</td>
<td>MAT 3A</td>
<td>4.0</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Math (Calculus BC/AB) Subscore</td>
<td>3</td>
<td>3-GE</td>
<td>3.0</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Physics 1†</td>
<td>3</td>
<td>PHY 2A</td>
<td>4.0</td>
<td>Nat. Sci.</td>
<td>B1 &amp; B3</td>
<td>4.0-GE</td>
<td>5-PHY/LAB</td>
<td>4.0</td>
</tr>
<tr>
<td>AP Physics 2†</td>
<td>3</td>
<td>PHY 2A</td>
<td>4.0</td>
<td>Nat. Sci.</td>
<td>B1 &amp; B3</td>
<td>4.0-GE</td>
<td>5-PHY/LAB</td>
<td>4.0</td>
</tr>
<tr>
<td>AP Physics C2 (Mechanics)</td>
<td>3</td>
<td>PHY 4A</td>
<td>4.0</td>
<td>Nat. Sci.</td>
<td>B1 &amp; B3</td>
<td>4.0</td>
<td>5-PHY/LAB</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Physics C2 (Electricity &amp; Magnetism)</td>
<td>3</td>
<td>4-GE</td>
<td>4.0</td>
<td>Nat. Sci.</td>
<td>B1 &amp; B3</td>
<td>4.0</td>
<td>5-PHY/LAB</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>3</td>
<td>PSY 2</td>
<td>3.0</td>
<td>Soc. &amp; Beh.</td>
<td>D9</td>
<td>3.0</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Seminar</td>
<td>3</td>
<td>None-Elective Only</td>
<td>3.0</td>
<td>n/a</td>
<td>3.0</td>
<td>n/a</td>
<td>n/a</td>
<td>0.0</td>
</tr>
<tr>
<td>AP Spanish - Spanish Language and Culture</td>
<td>3</td>
<td>SPA 1, 1S or 1X + 1 Elective</td>
<td>6.0</td>
<td>Lang. &amp; Rat. or Humanities</td>
<td>C2</td>
<td>3.0-GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AP Spanish - Spanish Literature and Culture</td>
<td>3</td>
<td>3-GE + 3 Electives</td>
<td>6.0</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0-GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Students are granted units and subject credit for the Hartnell College Associate degree for College Entrance Examination Board (CEEB) Advanced Placement Tests with scores of 3, 4, or 5. AP credit can also be used to meet CSU GE and IGETC.
# International Baccalaureate (IB)

Students may earn units for International Baccalaureate (IB) exams with scores of 5, 6, or 7, or Higher Level (HL) exams. IB credit can be used to meet the Hartnell College AA GE pattern. An acceptable IB score is equivalent to units as listed below. IB exams may also be used for lower division general education areas on the CSU GE and the IGETC.

<table>
<thead>
<tr>
<th>Subject Exam</th>
<th>Minimum Score</th>
<th>Hartnell Equivalent</th>
<th>Hartnell Units Awarded</th>
<th>Associate Area</th>
<th>CSU GE Area</th>
<th>CSU Units Awarded</th>
<th>IGETC Area</th>
<th>IGETC Units Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Baccalaureate (IB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IB Biology HL</td>
<td>5</td>
<td>3.0 GE</td>
<td>Nat. Sci.</td>
<td>B2</td>
<td>3.0 GE + 3 Electives</td>
<td>5-BIO/no Lab</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Chemistry</td>
<td>5</td>
<td>3.0 GE</td>
<td>Nat. Sci.</td>
<td>B1</td>
<td>3.0 GE + 3 Electives</td>
<td>5-PHY/no Lab</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Economics</td>
<td>5</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>D2</td>
<td>3.0 GE + 3 Electives</td>
<td>4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Geography</td>
<td>5</td>
<td>3.0 GE</td>
<td>Nat. Sci. or Soc. &amp; Beh.</td>
<td>D5</td>
<td>3.0 GE + 3 Electives</td>
<td>4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB History (any region) HL</td>
<td>5</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>C2 or D6</td>
<td>3.0 GE + 3 Electives</td>
<td>3 or 4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Language A Literature (any language) HL (If in English IGETC only gives Area 3 not LOTE)</td>
<td>4-AA or CSU; 5-IGETC</td>
<td>5.0 GE</td>
<td>Lang. &amp; Rat. or Humanities</td>
<td>C2</td>
<td>3.0 GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Language A Language and Literature (any language) HL (If in English IGETC only gives Area 3 not LOTE)</td>
<td>4-AA or CSU; 5-IGETC</td>
<td>5.0 GE</td>
<td>Lang. &amp; Rat. or Humanities</td>
<td>C2</td>
<td>3.0 GE + 3 Electives</td>
<td>LOTE &amp; 3</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Language B (any language) HL</td>
<td>4-AA or CSU; 5-IGETC</td>
<td>5.0 GE</td>
<td>Lang. &amp; Rat. or Humanities</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>LOTE</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Mathematics HL</td>
<td>5</td>
<td>3.0 GE</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE + 3 Electives</td>
<td>2</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Physics HL</td>
<td>5</td>
<td>3.0 GE</td>
<td>Nat. Sci.</td>
<td>B1</td>
<td>3.0 GE + 3 Electives</td>
<td>5-BIO/no Lab</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Psychology HL</td>
<td>5</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>D9</td>
<td>3.0 GE</td>
<td>4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>IB Theatre HL</td>
<td>4-AA or CSU; 5-IGETC</td>
<td>3.0 GE</td>
<td>Humanities</td>
<td>C1</td>
<td>3.0 GE + 3 Electives</td>
<td>3</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>
## College Level Examination Program (CLEP)

Students may earn units for College Level Examination Program (CLEP) exams with scores of 50 or higher. CLEP credits can be used to meet the Hartnell College AA GE pattern. An acceptable CLEP score is equivalent to semester units as indicated below. CLEP exams may also be used for lower division general education areas on the CSU GE but NOT IGETC. Maximum units that may be granted via CLEP are 30.

<table>
<thead>
<tr>
<th>CLEP Program</th>
<th>Units</th>
<th>GE Area</th>
<th>GE Code</th>
<th>CLEP Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEP American Government</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>D8</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP American Literature</td>
<td>50</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Analyzing and Interpreting Lit.</td>
<td>50</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Biology</td>
<td>50</td>
<td>Nat. Sci.</td>
<td>B2</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Calculus</td>
<td>50</td>
<td>Lang &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Chemistry</td>
<td>50</td>
<td>Lang &amp; Rat.</td>
<td>B1</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP College Algebra</td>
<td>50</td>
<td>Lang &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP College Algebra-Trigonometry</td>
<td>50</td>
<td>Lang &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Financial Accounting</td>
<td>50</td>
<td>Electives</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP French I Level II</td>
<td>50</td>
<td>Humanities</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP German I Level II</td>
<td>50</td>
<td>Humanities</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP German II Level II</td>
<td>60</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE + 9 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP History, United States I</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>D6 + US 1</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP History, United States II</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>D6 + US 1</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Human Growth and Develop.</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>E</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Humanities</td>
<td>50</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Info Systems and Computer Applications</td>
<td>50</td>
<td>Electives</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Intro Business Law</td>
<td>50</td>
<td>Electives</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Intro Psychology</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>D9</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Intro Sociology</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>D0</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Natural Sciences</td>
<td>50</td>
<td>Nat. Sci.</td>
<td>B1 or B2</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Pre-Calculus</td>
<td>50</td>
<td>Lang &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Principles of Accounting</td>
<td>50</td>
<td>Electives</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Principles of Macroeconomics</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>D2</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Principles of Management</td>
<td>50</td>
<td>Electives</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Principles of Marketing</td>
<td>50</td>
<td>Electives</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Principles of Microeconomics</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Spanish I Level II</td>
<td>50</td>
<td>Humanities</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Spanish II Level II</td>
<td>63</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE + 9 Electives</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Trigonometry</td>
<td>50</td>
<td>Lang &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Western Civilization I</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>C2 or D6</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
<tr>
<td>CLEP Western Civilization II</td>
<td>50</td>
<td>Soc &amp; Beh.</td>
<td>D6</td>
<td>3.0 GE</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Note: The term Elective(s) means units.
1These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area.
2Areas of California State University- General Education (CSU-GE) Breadth (A1 through E)
3Areas of Intersegmental General Education Transfer Curriculum (IGETC) (1 through 6)
4If a student passes more than one AP exam in Calculus or computer science, only one examination may be applied to CSU baccalaureate.
5If a student passes more than one AP exam in physics, through FA 2015 six units may be applied to the CSU baccalaureate, and four of those units may be applied to certification for CSU-GE-Breadth.
6If a student passes more than one CLEP test in the same language (other than English), and then only one examination may be applied to the baccalaureate (e.g., two exams in French). For each test in a language other than English, a passing score of 50 is considered Level I and the higher score listed for each test is considered Level II and earns additional credits as noted.

Upon student submitting official AP Score Report to Admissions and Records, college credit will be credited to the student's record. For more information, please see a counselor.

**UC CLEP Policies:** The University of California currently does not accept CLEP Examinations.
TRANSFER TRANSCRIPTS

Students who wish to transfer previous coursework from an Accredited institution must meet with a Counselor at which time a major will be discussed. The following process for a review of transfer coursework must be followed.

A. When a student requests an appointment with a Counselor for review of transfer credit, a pre-evaluation appointment will be scheduled in which the student must provide official transcripts. Official transcripts can be hand carried in an unopened sealed envelope or already be on file in Admissions & Records. The Counselor will complete a course-to-course evaluation form. Once the evaluation is completed, the Counselor will send it to the Admissions & Records Office for review and processing by the College Evaluators.

B. Before the student leaves (approximately 4-5 weeks later) a follow up appointment will be set up with the same Counselor to prepare a comprehensive educational plan.

C. The evaluators will then review the evaluation documentation received and update the student’s academic record with course-to-course equivalencies made whenever appropriate. This will be done within 3-4 weeks of receiving the completed documentation.

The student may consult the Accredited Institutions of Post Secondary Education list at the Admissions & Records Office. Credit may also be allowed for college-level USAFI courses and for formal courses taken at military service schools if such credit is recommended in the American Council on Education Guide.

Students who have completed college- or university-level courses outside the United States and are requesting credit must have those transcripts evaluated by a Foreign Credit Evaluation service. A list of these Evaluation Services is available in the Admissions & Records Office or on the web at: www.hartnell.edu/foreign-transcript-evaluation-0

Official transcripts should be mailed directly from the college or university to Hartnell College ATTN: Admissions & Records, 411 Central Ave., Salinas, CA, 93901. Transcripts may be hand delivered to Admissions & Records Office and will be accepted as official if the envelope seal on the college envelope has not been broken.

All transcripts submitted become the permanent property of Hartnell College and copies of these transcripts cannot be forwarded elsewhere or released to the student. College personnel with the need to know will have access to official transcripts. These transfer transcripts can be used by authorized Hartnell College personnel only. The evaluation will include all degree applicable coursework. Transfer coursework that has been evaluated and approved by Hartnell College will become a permanent part of the student’s overall academic record and cannot be removed.

TRANSFER TRANSCRIPTS FOR PREREQUISITES

Students transferring from other colleges or universities and enrolling in courses with prerequisites must document the successful completion of the prerequisites with a signed Prerequisite Clearance form by a Hartnell College counselor and a copy of the other college university transcript prior to registration.

IMPOUND OF STUDENT RECORDS

Students who fail to comply with College rules or regulations, return property owned by the College, pay debts owed to the College, or pay for damaged College property may not be allowed to register, receive degrees or certificates, send unofficial or official transcripts, have transfer credit evaluated, have GE Certifications forwarded, enrollment verifications, and/or receive other services related to student records. Once the student has cleared the obligation with the College, the impoundment of records will be removed. Additional holds may be placed for academic or disciplinary reasons which will result in the student’s inability to register for subsequent classes/semesters.

SERVICE MEMBER’S OPPORTUNITY COLLEGE

Hartnell College subscribes to the Service Member’s Opportunity College (SOC) program of the American Association of Community and Junior Colleges. Upon meeting with the Veterans Counselor, the student may submit military educational records and official college transcripts and request formal evaluation by the Admissions Office. As an SOC college, Hartnell College will:

1. accept for transfer credit all lower-division work taken by a student at a regionally accredited institution.
2. accept for credit courses completed by military personnel in accordance with the USAFI catalog.
3. grant credit under the Advanced Placement Program of the College Entrance Examination Board (CEEB) and the College Level Examination Program (CLEP).
4. grant credit for military schools in accordance with the recommendations provided in the current edition of “A Guide to the Evaluation of Educational Experiences in the Armed Services,” published by the Commission on Accreditation of Service Experiences of the American Council on Education.  
5. grant credit in accordance with the United States Army Service Member’s Opportunity College Associate Degree Programs Handbook (SOCAD).

NON-TRADITIONAL CREDIT

(Military Courses, MOS, DANTES, etc.)

Credit for military school experience and MOS will be limited to a maximum of 30 units commensurate with graduation requirements and course offerings. Students wishing to use military credit may request evaluation of their military credit by meeting with the Veterans Counselor. It is the student’s responsibility to (1) request official transcripts be mailed directly to the Admissions Office (2) submit a copy of his/her DD214.

The following web sites may be used to request transcripts from the military branches:

The Army/ (AARTS): https://jst.doded.mil/smart/welcome.do

The Sailor/Marine/ACE Registry Transcript (SMART): http://www.nps.edu/Academics/Schools/GSEAS/Departments/ECE/Handbook/smartinfo.html


The Coast Guard Institute: http://www.uscg.mil/hr/cqi/

Maximum number of units awarded for non-traditional credit is 30.0 units.

Enrollment Priorities BP & AP 5055

The California Community College Board of Governors approved a policy change to establish system-wide registration priorities in an effort to improve student success. Students now register for courses according to an enrollment priority system as defined by Title 5 regulations and the Hartnell Community College District. BP & AP 5055

Priorities groups and registration dates are determined by the completion of the three Core Services (Assessment, Orientation, and Student Education Plan), the number of units completed at Hartnell Community College District, and maintaining good academic standing.
REGISTRATION

Upon completion of the application for admission, specific registration instructions are emailed to the student. Effective Fall 2014 and thereafter, Hartnell College has established Registration and Enrollment priority procedures in accordance with Title 5, Section 58106. Students will be notified by Hartnell Gmail approximately 2 weeks prior to the beginning of registration.

Concurrent Enrollment Students are eligible to register after continuing and new and returning students. The completed Concurrent Enrollment packet must be submitted prior to or at the time of registration. Registration for Concurrent Enrollment students is on a first-come, first-serve basis. For specific dates, please consult the current class schedule.

Students may register using PAWS online registration at www.hartnell.edu (except K-8 students). Students who miss their registration appointment time may register any day until the Thursday before the semester begins or for short-courses up until the day the course begins.

Assignment of registration dates is determined based upon the following requirements:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Groups</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Legally Mandated:</td>
<td>Fully Matriculated, Good Academic Standing, Does not exceed 100 units of HCC degree applicable units</td>
</tr>
<tr>
<td></td>
<td>• Active Military/Veterans</td>
<td></td>
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<td></td>
<td>• CallWorks</td>
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<td></td>
<td>• Disabled Student Programs and Services (DSPS)</td>
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<td></td>
<td>• Foster Youth and Former Foster Youth (exempt of academic Standards and exceeding 100 Units)</td>
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<td></td>
<td>• Extended Opportunity Programs and Services (EOPS)</td>
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<tr>
<td>2</td>
<td>District approved groups per AP 5055:</td>
<td>Fully Matriculated, Good Academic Standing, Does not exceed 100 units of HCC degree applicable units</td>
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<tr>
<td></td>
<td>• Student Athletes,</td>
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<td></td>
<td>• DSPS Note Takers</td>
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<td>• TRIO</td>
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<td></td>
<td>• HEF</td>
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<td></td>
<td>• SI Leaders</td>
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<tr>
<td>3</td>
<td>Continuing &amp; First Time Students, who have completed a Student Educational Plan (SEP). Priority in this category is based on units completed at Hartnell.</td>
<td>Fully Matriculated, Good Academic Standing, Does not exceed 100 units of HCC degree applicable units</td>
</tr>
<tr>
<td></td>
<td>• 32.0 – 60.9 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 15.0 – 31.9 units</td>
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</tr>
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<td></td>
<td>• 61.0 – 99.9 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 0.3 – 14.9 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 0.00 – 29 units</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Continuing students, new first-time students, returning students and transfer students who have not completed:</td>
<td>Good academic standing</td>
</tr>
<tr>
<td></td>
<td>• Assessment, Orientation, and Student Educational Plan, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• exceed 100 HCC degree applicable units</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Concurrent Enrollment (K-12)</td>
<td></td>
</tr>
</tbody>
</table>

Required Definitions:
- **Fully Matriculated** – A student who completes Orientation, Assessment, and an Educational Plan (SEP).
- **Good Academic Standing** – A student who is not on academic or progress probation for two consecutive terms.
- **Academic Probation** – after attempting 12 units, student’s cumulative GPA falls below 2.0
- **Progress Probation** – after attempting 12 units, student does not complete more than 50% of the units attempted.
- **SEP (Student Educational Plan)** – The plan outlines suggested courses for students based on degree, certificate, or transfer plans.
- **100 Degree Applicable Units** – Based on units earned at HCC. Excludes units earned for basic skills and ESL.

### Online Services

**Personal Access Web Service (PAWS)**

PAWS, an online service, is available to all Hartnell students. Students can access their student information online, from home, office, or on campus by visiting the college website at www.hartnell.edu and clicking on PAWS for Students. Follow the prompts to:

- View the Schedule of Classes for the current semester
- Register/Add/ Drop Classes
- Obtain and print your grades from previous semesters
- Obtain and print a copy of your unofficial transcript
- Obtain and print our Assessment results
- Obtain and print a copy of your current class schedule
- Update your home address, phone number and email address
- Check your financial aid status
- Pay for your classes

### Steps to Enroll at Hartnell College

**STEP 1: ENROLL NOW**

a. Complete and submit an application for admission. Apply online at www.hartnell.edu. Applications are available in English and Spanish. Please allow 1 working day before you register.

- If applicable, complete the California Nonresident Tuition Exemption Request (AB540 & AB 2000 Tuition Exemption Request)

b. Apply for Financial Aid. Apply online at www.fafsa.ed.gov or complete the Board of Governors Fee Waiver (BOGW) application and submit it to the Financial Aid office. For any questions call the Financial Aid office at (831) 755-6806.

**STEP 2: ORIENTATION**

a. Complete New Student Orientation. Orientation is mandatory if enrolling in 6.0 or more units unless you qualify for an Orientation exemption. Please see a Hartnell Counselor for an Orientation Exemption

b. If you need more comprehensive preparation for academic success consider registering for a Counseling 1- Student Success Seminar course. These courses assist students in college success and are UC/CSU accepted.

**STEP 3: ASSESSMENT**

a. Make an appointment and complete the STAAR* Assessment. Assessment is mandatory if enrolling in 6.0 or more units or an English or Math course unless exempt. Call (831) 759-6054 for an appointment at least two weeks before registering.

b. The Assessment test is very important in determining your course sequences. Be sure to prepare for the assessment test. Study guides and sample questions are available at www.hartnell.edu/staar-assessment

For a more comprehensive math preparation guide go to: http://www.aims.edu/student/testing/studyguides/math-acuplacer

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Hartnell College Catalog/2016-2017
STEP 4: COUNSELING DEVELOP AN EDUCATIONAL PLAN

a. All students must schedule an appointment to meet with a counselor to discuss their academic goals and to develop an educational plan. Call (831) 755-6820 to schedule an appointment. All students are required to have a comprehensive educational plan (a plan that outlines courses the student must take to complete their educational goal) by the 15 degree applicable unit mark. Completing the educational plan is mandatory for students in order to maintain enrollment priority and register for courses. A student may be exempt from Counseling and the educational plan requirement (see exemption criteria).

b. The Counselor can also assist with checking for prerequisites for all of your classes. Bring copies of official transcripts from high school and/or colleges attended to Admissions & Records at least two weeks before registering.

STEP 5: REGISTER

a. Register online using P.A.W.S for Students at www.hartnell.edu. Classes fill quickly so register as early as possible.

b. Concurrent enrollment students in grades less than 9th grade must register in person. Please consult the schedule of classes for dates and times.

STEP 6: PAY FEES

a. Pay all registration fees online by the due dates to avoid being dropped for non-payment. Please see the payment deadline schedule.

STEP 7: HARTNELL COLLEGE ID CARD

a. Visit the Student Life office to obtain or update your ID Card. Present your receipt of payment to the ASHC office located in C140.

STAY ON TRACK

a. Follow up with your counselor.

b. Enroll in one or more student support programs on campus (i.e., EOPS/CARE/CALWORKS, TRIO, Veterans, Foster & Kinship Care, MESA, ACE, and others).

Placement Assessment Requirements

Before you can register for classes, you must apply to admissions. Then you must meet assessment requirements as stated in the Schedule of Classes. Assessment sessions are scheduled daily throughout the registration period. To find out more about assessment requirements or to make an appointment, call the Assessment Center at (831) 759-6054.

Schedule of Classes

Prior to the beginning of each semester, the college publishes a schedule of classes indicating courses to be offered, their prerequisites, the time the classes meet, the instructors, and the room assignments. Registration information and other important instructions are also included in the publication. Students can use PAWS for Students (Schedule of Classes) to see active enrollments in classes. Any change such as room changes, instructor changes, and time changes to course sections in the schedule of classes are updated immediately in PAWS.

Enrollment in Courses

During the registration process, students will be checked to ensure that assessments and course prerequisites have been met. While the college will make every effort to assist students in planning their programs of study, the final responsibility for the selection of proper classes rests with the student. Students must attend the first class meeting of each course or they may be dropped and will be charged for all enrollment fees associated with the section.

Wait Lists

Hartnell College offers automated waitlists. All registration rules still apply when using waitlists. Students will be able to place themselves on a waitlist for closed classes. During the open registration time period as seats become available the automated system will register the students from the waitlist. Students are registered in the order that they appear on the waitlist. An email will be sent to the students Gmail account to notify them of registration and fees due for payment. The student must pay their balance by the drop/due dates established each semester or will be dropped from ALL semester enrolled classes. As students are enrolled, students remaining on the waitlist will move up toward the top of the list. Students can only be waitlisted on one section of a course at any one time. Waitlists will close for all students on the last day of registration and the option to have your name placed on a waitlist will no longer be available.

Students who are still on waitlists when classes begin must attend the first day to obtain an add code and complete the registration process by the deadline.

Schedule Changes

Students have the opportunity to add and drop classes during a specified period at the beginning of each semester according to the number of weeks of the semester or session. Admissions & Records Office publishes these dates each term in the current class schedule.
MANDATORY FEES
Enrollment Fees
each student (except K-12 Concurrent Enrollment students) shall be charged an enrollment fee for enrolling in credit courses as required and set by law.

K-12 Concurrent Enrollment students have all enrollment fees waived.

ALL California residents will be charged $46 fee per unit of enrollment per term. Please note that enrollment fees are determined by the California Legislature for all community colleges and are subject to change at any time. Financial Aid is available to those who qualify. See the Financial Aid section for more information. These fees must be paid by the published dates in each class schedule. Fees not paid will result in being dropped from classes for non-payment.

Non-Resident Tuition
Non-resident tuition is charged to all students who are not residents of California. This includes residents of other states and foreign students. Non-Resident Tuition for 2016-2017 academic year has been set at $209 per unit. The tuition is subject to change annually per Board approval. Enrollment fees, as indicated previously, are also required for all non-resident and foreign students for a total of $255 per unit of enrollment basis. These fees must be paid by the published dates in each class schedule. See Impound of Student Records for more information.

To determine whether or not you are a non-resident, refer to the Admissions Residency Requirements for Admissions section of this catalog. Further information concerning tuition and special circumstances for determining California residency is available at the Admissions & Records Office.

Instructional Materials Fees
Students are required to pay materials fees for instructional or other materials for some credit and non-credit courses if those materials are of continuing value to the student outside the classroom and if such materials are not solely or exclusively available from the district.

In certain cases a course materials fee is charged. This fee covers materials that are required for health and safety reasons or material provided in lieu of other generally available but more expensive materials which would otherwise be required. Classes for which a materials fee is charged are specifically designated in the printed schedule of classes. A master list of approved course materials fees is maintained in the appropriate discipline’s administrative office.

Student Activities Fee
The Student Activities Fee is a student fee (currently $10.00 per semester) and is charged to all students at all Hartnell College locations. This fee funds activities and services for Hartnell College students. Part of this fee supports the Associated Students of Hartnell College student clubs, and governance activities. Other services/benefits for ID card holders are: ASHC scholarships, book voucher program, educational workshops, recognition awards, cultural workshops and events, merchant discounts, Monterey-Salinas Transit Free Fare Zone, free access to Hartnell home sporting events, and free access to Hartnell’s Western Stage Regular Season.

The ID card is the official identification used for many of the services at Hartnell College such as: Hartnell’s Library, and Admissions & Records and Financial Aid Offices.

The Student Activities Fee should accompany your registration payment and is paid at the time enrollment fees are paid. The Student Activity fee will be refunded ONLY if the student withdraws from Hartnell College (see refund policy for deadlines) and/or requests a refund prior to the issuance of the student ID card.

Students may also apply for a Student Activities Fee Waiver prior to registering for classes and/or prior to paying their fees. A Student Activities Fee Waiver form is available at the Office of Student Life and at the Cashier’s Office.

Computer Printing Fees
Hartnell College charges students a fee for printing in selected areas. Please refer to the procedures in each lab.

OPTIONAL FEES
Student Parking
A student may purchase a parking permit for $40 each fall/spring/summer term. Financial Aid students pay $20 Term. A student who does not wish to purchase a term parking permit may purchase a daily parking permit for $2 daily rate. Look for the coin-operated machines in various parking lot locations.

The District reserves the right to change parking fees based on Hartnell College Board Policy 2255.

Money Matters
Hartnell College participates in the Chancellors Office COTOPs program which is a collection process for any unpaid outstanding balance on your student account. Unpaid balances are reported once a year to the Franchise Tax Board and will affect any eligibility for State Tax Refunds.

REFUND OF FEES
Enrollment Fees
A refund or reversal of all fees shall be made in accordance with the schedule listed below for reduction in program or withdrawal from class(es). We begin processing refunds the week following the last day of the add/drop period.

Full Semester Courses (16-18 weeks)
- A 100% refund is given upon withdrawal during the first two weeks of the semester.
- No refund or credit is given after withdrawal beyond the second week of the semester, even if registration occurred after the first week of school.
- All refunds may be processed through your HigherOne account.

Refunds will not be processed for amounts under $10 or you may use the credit to pay other fees or apply to the following term.

Summer and Short-Term Courses
The refund/reversal for short-term classes is based on the length of the class and the number of days per week the class meets.
- A 100% refund is given upon withdrawal by the 10% point.
- No refund is given after the 10% point.
- All refunds may be processed through your HigherOne account.

Refunds will not be processed for amounts under $10 or you may use the credit to pay other fees or apply to the following term.

Example:
Course is Scheduled: 100%Refund if Withdrawal
<table>
<thead>
<tr>
<th>Course</th>
<th>100%Refund if Withdrawal</th>
<th>Scheduled: 100%Refund if Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-week session</td>
<td>2nd day of session</td>
<td>is completed by the end of</td>
</tr>
<tr>
<td>6-week session</td>
<td>3rd day of session</td>
<td></td>
</tr>
<tr>
<td>8-week session</td>
<td>4th day of session</td>
<td></td>
</tr>
</tbody>
</table>

Note: Classes meeting fewer weeks or fewer days per week will have shorter withdrawal periods based on their 10% point.
PREREQUISITES, COREQUISITES & ADVISORIES

PREREQUISITES
Prerequisite indicates students have knowledge or skill preparation considered necessary for success in a course. Prerequisite requirements must be met in order to register for some college courses. A college course prerequisite is defined to mean “a condition of enrollment that a student must meet in order to register in a course or program.” (CCR T.5 §55200) It is the student’s responsibility to be certain that s/he has met the necessary prerequisite(s) for any course enrolled. The student will be dropped from any class where it is verified that the required prerequisite has not been successfully completed. Prerequisites will be validated after final grades have been posted.

See a counselor for assistance to clear any prerequisite requirement.

COURSE PREREQUISITE POLICY BP 4260
The college REQUIRES all such prerequisites, co-requisites and advisories shall be established in accordance with the standards set out in Title 5. Any prerequisite, co-requisite, or advisories shall be necessary and appropriate for achieving the purpose for which they are established. The procedure shall include a way in which a prerequisite or co-requisite may be challenged by a student on grounds permitted by law. Prerequisites, co-requisites and advisories shall be identified in District publications available to students.

PREREQUISITE CLEARANCE FORM
If students have taken courses and have met the prerequisite at another college, completed Advanced Placement (AP) exams, are exempt from CSU EAP or EPT/ELM test, or completed a placement assessment at another CA college (within 2 years), they should see a Hartnell College Counselor prior to registration to complete a Prerequisite Clearance form following the procedures below:

1. Take this form to the Counseling Department (B-119) and ask to speak to a Counselor. Upon meeting with a Counselor, the Counselor and student will review transcripts, test scores, assessment information, and/or other multiple measures and will make a determination regarding the course equivalency.

2. Upon approval from the Counselor, submit the completed form along with your documentation to the Admissions & Records Department (B-121).
   - If the prerequisite clearance is documenting other college coursework, completed Advanced Placement (AP) exams, or are exempt from CSU EAP or EPT/ELM test the completed form is submitted to the Admissions & Records Office for clearance.
   - If the prerequisite clearance form is documenting other CA college assessment placement scores, the completed form is submitted to the Assessment Office.
   - If you are eligible for an Exemption for Orientation, submit the Exemption form to the Admissions & Record Office for exemption.

3. All prerequisite Clearance forms require three working days to process. Clearances are granted electronically and placed onto your academic record. You may review our decision by login in to the PAWS for Students and register for the section in which you have been cleared. You will only be contacted by email only if the clearance has been denied. You can check if you have been approved for an Orientation Exemption by clicking on Test Summary.

4. Please note that official college/university of high school transcripts must be on file in the Admissions & Records Office for official graduation evaluation or official transfer credit evaluations. Some programs such as Nursing may require official transcripts. Unofficial transcripts will be accepted only for purposes of Prerequisite Clearance. All transcripts submitted become the permanent property of Hartnell College. Transfer coursework that has been evaluated and approved by Hartnell College become a permanent part of the student’s overall Hartnell academic record and cannot be removed.

NOTE: An Express Add Code does NOT waive the student from meeting the stated prerequisite(s) from the course.

PREREQUISITE CHALLENGE PROCESS
A student may challenge any prerequisite by completing a Prerequisite Challenge Petition available in the Admissions & Records Office or the Counseling Department. A prerequisite challenge requires written documentation, explanation of alternative course work, and/or background or abilities which adequately prepare the student for the course. Prerequisites may be challenged for one or more of the following reasons:

1. Challenging the prerequisite on the grounds that it was established in violation of regulation or in violation of the District approved processes
2. Challenging the prerequisite on the grounds that is has not been made reasonably available
3. The prerequisite is discriminatory or applied in a discriminatory manner
4. Challenging the prerequisite based on my knowledge or ability to succeed in the course despite not meeting the prerequisite

Student Instructions
Step 1  Pickup Prerequisite Challenge Form in the Admissions and Records Office or the Counseling Department.
Step 2  Complete and sign the form. Attach all required documents to challenge form.
Step 3  Request a full time faculty member(s) from appropriate discipline(s) to evaluate documentation for approval.
Step 4  Upon faculty recommendation, submit the challenge form to the Division Dean for final approval.
Step 5  Upon Dean’s recommendation, submit challenge form to Admissions and Records for processing and completing registration. During the add period, it is the student’s responsibility to show proof of an add code to complete registration.
Step 6  Pay appropriate fees for the course.

DEFINITIONS

PREREQUISITE: “Prerequisite” means a condition of enrollment that a student must meet in order to register in a course or educational program. (CCR T.5 §55201)

COREQUISITE: “Corequisite” means a condition of enrollment consisting of a course that a student is required to take simultaneously in order to enroll in another course. (CCR T.5 §55201)

ADVISORY: “Advisory on recommended preparation” means a condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program. (CCR T.5 §55201)
STUDENT AFFAIRS

STUDENT AFFAIRS
The Student Affairs division offers many services and support programs that will insure student success. We develop and offer a wide variety of support services dedicated to complementing instructional programs and providing educational and cultural resources to students, faculty, administrative staff, and the community.

Our goal is simple: to recruit, retain, and graduate students. We believe that education should be accessible to all and is a sound investment for each student and our community.

As a team of well-trained, dedicated professionals, we share a common goal to facilitate student success by providing exceptional support services tailored to the needs of the individual student. Because of our vision and determination, Student Affairs is a leader for student success within the Hartnell Community College District.

Counseling Services

Professional counseling services are available to all students and prospective students of Hartnell College. Counselors assist students with exploring career, educational and personal goals and planning a program of studies to fulfill the educational/course requirements to meet these goals. University transfer, vocational study, basic skills development, professional enrichment, and personal enrichment are all included in academic counseling services. All students meet with a counselor to develop a comprehensive educational plan (a plan that outlines courses the student must take to complete their educational goal) by the 15 degree applicable unit mark to maintain enrollment priority and register for courses.

Classes are also taught by counselors to assist the student with orientation to the college, career exploration, development of skills for academic success and more. These classes are listed in the catalog under the heading Counseling. Specialized counseling is also provided through the DSPS, EOPS/CARE CalWORKS, Veterans and Transfer Center, and Career Center Programs.

Day and evening counseling services are available by appointment and on a walk-in basis. For more information and/or to schedule a counseling appointment, contact the Counseling Appointment Office located in Building B, Room 129 (Center for Assessment and Lifelong Learning) or call (831) 755-6820.

STUDENT DEVELOPMENT SERVICES

Student Success Program (SSP)
The Student Success Program (SSP) is a process designed to promote student success. It ensures fair and consistent assessment, course placement, and access to campus resources. SSP provides the opportunity for students to pursue their educational objectives.

The primary purpose of the SSP is to enhance student success. The SSP agreement acknowledges responsibility of both the college and the student to attain this objective. All students will participate in some form of the SSP. For the college, the SSP agreement includes providing an admissions process, orientation to college, student services, pre-enrollment assessment, counseling and advisement on course selection, a curriculum or program of courses, follow-up on student progress with referral to support services when needed, and a program of institutional research and evaluation.

For the student, the agreement includes a general identification of an educational goal at the point of enrollment and declaration of a specific educational objective after reaching 15 college units. Students agree to be responsible for consistent class attendance, to complete assigned coursework, and to maintain constructive progress toward their educational goals. Students agree to participate in orientation, assessment, counseling and other follow-up services as designated by the college to help them reach their educational goal.

“Partnership Agreement” for success between Hartnell College and each student

Hartnell College agrees to provide:
- Efficient admissions process
- College orientation outlining the college’s programs, services and policies
- Assessment of basic educational skills
- Counseling/advisement
- Appropriate academic and career-technical courses
- Quality instruction
- Attention to each student’s educational progress

Student agrees to:
- Declare an educational goal
- Attend classes
- Work diligently to complete assignments and courses
- Meet with counselors to discuss choices and update educational plans
- Seek out support services as needed
- Strive to make progress toward educational goals

STAAR*

Success Through Assessment/orientation, Advisement and Registration

ASSESSMENT

It is Mandatory for all new Hartnell College students to take the STAAR* assessment, unless determined to be exempt (see Exemptions from Assessment). The purpose of the STAAR* Placement Assessment is to help students enter English and mathematics curriculum at an appropriate level, aid counselors in giving students academic advice, reduce frustrations and academic difficulties, and increase chances of success.

The STAAR* assessment lasts 2-2 1/2 hours and includes a multiple-choice reading assessment and an appropriate mathematics assessment. Your scores on these assessments will help identify abilities and are used for advisory placement and course selection. With this profile of current skills and information about previous educational and work experiences, counselors can recommend courses to enhance academic achievement.

The STAAR* assessment is administered throughout the year at convenient times. There is no charge for the assessment, although a reservation is required. For appointments, questions, and/or concerns regarding assessment, please call the STAAR* Assessment Center, (831) 759-6054. Information about the STAAR* assessment is also available online at http://www.hartnell.edu/staar-assessment.

English as a Second Language

English as a Second Language is offered to students whose primary language is not English. An ESL STAAR* placement assessment is required for those students wanting to take ESL classes. The results help counselors determine advisory placement in ESL classes, other courses, or related learning laboratory courses.

Disabled Students

STAAR* placement assessments for students with disabilities are available for students with documented visual, physical, or other learning disabilities. Page magnifiers, readers, and extended testing times are some of the accommodations available. If a student is seeking alternative testing procedures, please contact the DSP&S office, Building B, Room 107, (831) 755-6760.

Reading, English, and Mathematics Courses

Students who want to enroll in reading, English, or mathematics courses are required to complete the STAAR* assessment before registering for these classes, unless the appropriate prerequisite class has been completed.

Prerequisites or recommended skill levels must be completed with a “C” or better. (They are listed with the course descriptions in this College Catalog and in each semester’s Schedule of Classes.) Courses that are used as prerequisites to allow enrollment in higher-level courses must be completed within five years.

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Exemption from Assessment Services

It is highly recommended that all students take the placement assessment, however Hartnell College students may be exempt from participation in the STAAR* Placement Assessment if they:

- student has earned an AA/AS degree or more advanced degree;
- student has completed both English 253 and Math 201 at Hartnell College or equivalent or higher courses with a grade of “C” or better at another college or university;
- student has provided Assessment scores from another California Community College within the last two years and have presented a copy of these scores to a Hartnell College Counselor for review and documentation;
- student are enrolling in courses in which English and math are not a prerequisite (IT IS HIGHLY RECOMMENDED THAT ALL STUDENTS TAKE THE PLACEMENT ASSESSMENT);
- student who can provide scores to a Hartnell College Counselor from the Advanced Placement Examination from the College Entrance Examination Board (CEEB), Educational Testing Service, with a score of 3 or above in the areas of English – Language & Composition, Math (Calculus AP).
- Plan to enroll in fewer than six (6) units that do not include English or mathematics courses and/or courses requiring English or mathematics prerequisites and their academic goal is personal development.

You can pick up a Prerequisite Clearance form from your counselor. Submit the Prerequisite Clearance form, signed by a Hartnell counselor to the Records Evaluator in the Office of Admissions and Records (Building B, Room 121). Copies of transcripts/diplomas must be attached to the Prerequisite Clearance form.

Exempted students may participate in matriculation services if they so choose.

Frequently Asked Questions (FAQs)

What is assessment?
Assessment is the placement of all new students into the correct levels of English and math. Hartnell uses an electronic placement assessment called Accuplacer. This electronic placement assessment utilizes the latest technology to help students place into the correct levels of English and math.

Who has to take the placement assessment?
All new and returning students are required to take the placement assessment EXCEPT:

1. students who have completed both English 253 and Math 201 at Hartnell College or equivalent or higher courses with a grade of “C” or better at another college or university;
2. students who have earned an AA/AS degree or more advanced degree;
3. students who have provided Assessment scores from another California Community College within the last two years and have presented a copy of these scores to a Hartnell College Counselor for review and documentation;
4. students who are enrolling in courses in which English and math are not a prerequisite;
5. students who can provide scores to a Hartnell College Counselor from the Advanced Placement Examination from the College Entrance Examination Board (CEEB), Educational Testing Service, with a score of 3 or above in the areas of English – Language & Composition, Math (Calculus AP).

I think I meet one of the exemptions from the placement assessment. What do I do?
See a Counselor and work with the Counselor to complete a Pre-Requisite Clearance form. When you meet with the Counselor, be sure to bring copies of all transcripts and any other important documents.

Where and when can I take the placement assessment?
The placement assessment is given in the STAAR Assessment Center currently located in Building B, Room 110. The STAAR* Assessment is generally offered Monday through Friday and some Saturdays. The placement assessment is by appointment only. To make a STAAR* appointment, call (831) 759-6054.

What services are available for students with disabilities?
The placement assessment is not a timed assessment and is accessible to most students with disabilities. Additionally, students with disabilities may arrange for modified placement assessment by calling the Department of Supportive Program and Services (DSP&S) at (831) 755-6760.

Can I take the placement assessment more than once?
Students may take the placement assessment a second time under the following conditions:

- at least fourteen days have passed since the first test (to allow for extra preparation and study), and
- the student has talked with the Assessment Center staff or a Counselor about how to better prepare for the placement assessment and has received sample questions and study materials.

Is there a fee to take the placement assessment?
There is no charge to take the placement assessment.

How long is my placement assessment valid?
Hartnell College recognizes your placement scores for a period of two years. Remember continued use of math and language skills may improve over time. If your scores are over two years old, you must take the test again.

How can I prepare for the placement assessment?
The materials and sample questions are available to you free of charge on our website at www.hartnell.edu/students/staar/. Be sure to come to Assessment Center well rested. Be sure to eat properly before taking the placement assessment. No food or drink is allowed in the Assessment Center.

What if I don’t know how to use a computer?
No computer skills are required and the Assessment Center staff is available to help you in using the computer mouse, if needed.

When I complete the placement assessment what is the next step?
The next step is to enroll in and complete IDS-OR: Orientation to College.
ORIENTATION

All new students are required to complete the Hartnell College online orientation. The orientation is an important tool to ensure students have critical information on college policies and procedures, financial aid, counseling, academic programs, student support services, tutorial services, associated students, athletics, and much more. The orientation is in English, Spanish, and ADA format for visually and hearing impaired students. The orientation takes approximately one hour for students to complete in its entirety. However, please note: students can complete the orientation based on a schedule that is convenient since the orientation bookmarks student progress.

Students who require an orientation in person can contact the Counseling Office at (831) 755-6220 to schedule an in person orientation. This is an option for students who truly need to have this information delivered in person.

If you need to develop a comprehensive set of skills geared towards college success, please consider registering in a Counseling 1- Student Success Seminar course. These courses prepare students for college success by teaching them critical study skills, time management, developing an educational goal and student educational plan (SEP), steps for preparing for transfer, career planning, and much more.

Academic Planning

All first-time Hartnell College students must meet with a Hartnell College counselor, unless determined to be exempt. (See Exemptions from Counseling Services) The primary goal of this meeting is to assist students with appropriate course selection. Although many students will see a counselor during their orientation, further questions and a more in-depth advising can take place during an individual advisement session.

Counselors are knowledgeable about educational choices. The aspirations and interests of the student are primary considerations before a career choice is pursued. Counselors’ thoughtful suggestions make educational planning easier. Hartnell counselors are available to assist students in the areas of career, academic, and personal counseling.

All students are required to meet with a counselor and develop a comprehensive educational plan unless they meet the following:

- Have an Associate or higher degree from a regionally accredited college/university and are clear on courses necessary to complete their designated educational goal;
- Are taking courses for personal interest (not pursuing a degree or certificate)
- Enrolled at Hartnell College solely to take a course that is legally mandated for employment or necessary in response to a significant change in industry or licensure standards.
- Are a K-12 grade concurrently enrolled student

Follow-Up

Once a community member becomes a Hartnell College student and is enrolled in classes, Hartnell College’s partnership continues.

Because academic success is a partnership, students must commit to seeing a counselor every semester to update or change their academic plan. An academic counselor is the expert in assisting students in developing and reviewing their educational plan. Students still undecided on an academic goal or major are referred to appropriate career and life planning courses.

Hartnell College is continually researching and evaluating its Student Success and Equity Plan to assure that students are receiving the best services to assist them in achieving their educational goals.

Transfer Planning

This section is designed to help students to plan an educational program at Hartnell College that will prepare them to transfer to the University of California, California State University, or a private college or university to earn a bachelor’s degree. Students are encouraged to meet regularly with a Hartnell counselor, and use the resources of the Transfer and Career Center to plan an academic program that will assure a smooth transition to the transfer institution of their choice. In addition to completing transfer requirements, students may also earn units toward an Associate in Arts or Associate in Science degree at Hartnell. With careful planning, both objectives can be reached by taking essentially the same set of transferable courses.

Transfer and Career Center

The Transfer and Career Center provides information and offers workshops on choosing a college, transfer admission requirements, completing admission applications, writing the application essay, and financial aid. Transfer and Career Center staff can provide details about special Transfer Admission Agreements that Hartnell has developed with a number of four-year institutions that can guarantee students transfer admission.

Students with a clear transfer objective are more likely to meet transfer requirements in a timely manner. They can make the best use of their time and course work by deciding on a transfer institution and major as soon as possible. Students unable to make these decisions when they enter Hartnell College may follow a general transfer pattern of courses while availing themselves of Transfer and Career Center resources in making transfer plans.

Once they have chosen a major and the institution to which they plan to transfer, students should consult a Hartnell College counselor to discuss Major Preparation. Transfer and Career Center staff and Hartnell counselors can assist students in planning for transfer.

University representatives often visit the campus to meet with students interested in transferring to their institutions. It is wise for the student to consult the catalog of the institution to which they plan to transfer to become familiar with specific transfer and admission requirements. Many college and university catalogs are available for reference in the Transfer and Career Center, and students may write directly to the Admissions Office or visit the institution’s website to obtain an Information Bulletin that outlines requirements for admission as a transfer student.

The Transfer and Career Center also offers comprehensive career advising, information, and individualized assessment. Available services include individual and group career planning and assistance with career exploration, college and training information, labor market information, and vocational assessment. Students may choose to pursue career planning by taking a career development class, attending a workshop, or completing a self-guided career planning packet at the Career and Transfer Center.

Assessments that measure an individual’s interest, aptitudes, personality traits, and work values are available on a drop-in basis.

Staff are available to assist students with a variety of career related services and activities.

Students have online access to labor market and educational information resources.

For more information, call the Career Center at (831) 759-6007.

Transfer of Credit

Students expecting to transfer to a four-year college or university can usually complete their freshman and sophomore years at Hartnell. Students must normally complete 60 transferable semester units to be classified as juniors upon entering a four-year college or university.

Students enrolled in a transfer program can complete their general education and most of their lower division requirements before transferring. High school subject deficiencies may be made up at Hartnell in order to meet university admission requirements. In some instances, students may require an orientation in person to maintain an acceptable grade point average in a minimum of 60.0 units of appropriate transfer courses.

Requirements for Transfer Students

A student can transfer from Hartnell College to a four-year college or university as a junior without loss of time or credits by completing the following:

1. Lower Division Preparation for the Major. These courses, which should be completed before transferring, provide the necessary background and preparation in order for the student to transfer into their major as a junior. Check with a Hartnell Counselor regarding Major Preparation Recommendations for your particular program and institution selection.

2. General Education Requirements (Sometimes called “Breadth Requirements”). These are the courses required to obtain a bachelor’s degree regardless of major. Courses in writing, critical thinking, sciences, humanities and social sciences are included in general education. High unit majors such as engineering and the sciences will generally follow a different set of requirements, and students should meet with a counselor for clarification and to ensure accuracy.

3. Electives. When courses for the major and general education requirements have been completed, enough elective courses must be taken in order to bring the total of all course work to a minimum of 60.0 transferable units.

The Transfer and Career Center and Counseling Department sponsors Transfer Day/College Night each Fall. Call (831) 750-6007 to schedule an appointment with the transfer counselor.
STUDENT FINANCIAL AID

The purpose of Financial Aid is to assist eligible students in meeting educational costs while attending school. The primary responsibility for meeting college costs rests with the student and his/her family. However, we recognize that many students are not able to pay the full costs of a college education. For this reason, Hartnell College offers programs that provide assistance for students with documented financial need. Financial need is the difference between the costs of attendance and the resources available to the student. It is important for students to have sufficient funds available to begin their first two weeks of college even if they have already been offered a financial aid award.

Students are encouraged to call or visit the Financial Aid Office (FAO) which is located in Building B, or call (831) 755-6806. Our website is: http://www.hartnell.edu/financial-aid/

How to Apply for Financial Aid

1. Apply for admission to the College.
2. Complete a free application for Federal Student Aid (FASFA) by contacting the US Dept of Education at (800) 433-3253 or apply electronically via the web at: http://www.fafsa.ed.gov
3. If required, additional documents must be completed and submitted to the FAO prior to the processing of Financial Aid funds. Contact the Hartnell College FAO regarding the Financial Aid processing procedures and applicable deadlines.
4. A new application (FASFA) must be filed every academic year for the upcoming fall, spring and summer terms. Eligible students will be offered a financial aid package containing a combination of grants, and/or work-study.

Financial Aid Programs

Financial aid consists of programs that are funded and regulated by federal and state governments. The programs consist of two different types of aid: Gift Aid and self-help.

Grants (Gift Aid)

A grant is money a student does not have to repay. Students with bachelor's degrees are not eligible for grants. For federal grants, students must possess a high school diploma, or GED.

Federal Pell Grant

This grant provides federal money for students with financial need. The federal government uses the family information from your FAFSA to determine who is eligible and how much each student is eligible to receive. For the 2016-2017 year awards will range from $1,113-$5,775.

Federal Supplemental Education Opportunity Grant (FSEOG)

This program is designed to assist students with exceptional need by supplementing other financial aid sources. You must be enrolled in at least 6 units and have an Expected Family Contribution of 0 to qualify. Award amounts will range from $100 to $200 per year for qualified students.

Beginning Summer Term 2012, Hartnell College no longer participates in the Federal Direct Student Loan Program. Hartnell College will continue to make a variety of federal, state, and private grants, scholarships, and work study programs available to students.

Board of Governors Fee Waiver (BOGW)

BOGW is a financial assistance program to offset enrollment fees; the Financial Aid Office determines student eligibility based on state guidelines and authorizes the Cashier's Office to use BOGW funds to waive the fee charges. The BOGW is available to California residents only. Under the provisions of AB 131, students who are exempt from paying nonresident tuition under Education Code Section 68130.5 (AB 540) are now eligible to participate in the BOG Fee Waiver.

Loss of BOGW changes:

Once you've qualified for the BOG Fee Waiver, it is important to ensure that you are meeting the academic and progress standards in order to avoid losing the fee waiver.

Academic – Sustain a GPA of 2.0 or higher

- If your cumulative GPA falls below 2.0 for two (2) consecutive primary terms (fall and spring semesters are primary terms at Hartnell College) you may lose your fee waiver eligibility

Progress – Complete more than 50% of your coursework

- If the cumulative number of courses you successfully complete falls below 50% in two (2) consecutive primary terms (fall and spring semesters are primary terms at Hartnell College) you may lose your fee waiver eligibility.

Combination of Academic and Progress Standards

- Any combination of two consecutive terms of cumulative GPA below 2.0 and/or cumulative course completion less than 50% may result in loss of fee waiver eligibility.

You will be notified within 30 days of the end of each term if you are being placed on either Academic (GPA) and/or Progress (Course Completion) probation. Your notification will include the information that a second term of probation will result in loss of fee waiver eligibility. After the second consecutive term of probation, you will lose eligibility for the fee waiver at your next registration opportunity.

You may apply for a BOG Fee Waiver Appeal if you meet extenuating circumstances which are verified illness, accident or circumstances beyond the control of the student or other circumstances that might include documented changes in the student's economic situation. Please consult with the financial aid office for more information about the appeal process.

California Dream Act

The California Dream Act of 2011 provides state financial aid to CA students who meet the requirements for in-state tuition under Assembly Bill 540. Visit the following website for Information and application www.caldreamact.org

Cal Grants (A, B, and C)

The State of California, through the Student Aid Commission, offers and administers several grant programs for undergraduate students. These include Cal Grant, A, B, and C. A student can receive only one type of Cal Grant.

- Cal Grant A: To be used at a four-year university.
- Cal Grant B: First year students attending two or four-year institutions.
- Cal Grant C: Students enrolled in a vocational two-year program.

Full Time Student Success Grant:

The Full-Time Student Success Grant is a new financial aid program for Cal Grant B recipients attending a California community college full time. The grant offers an additional $600 annually to qualified Cal Grant B recipients.

SELF-HELP (Monies earned or borrowed)

Self-Help is money either earned through institutional work or monies borrowed that must be repaid.

Federal Work-Study (FWS)

The award is based on need and hours worked under the Federal Work-Study Program. Students cannot exceed 20 hours per week and must maintain Satisfactory Academic Progress (SAP) each semester (SAP). A FWS award is not a guarantee of employment.

Additional information can be found at www.hartnell.edu/financial-aid/

Satisfactory Academic Progress (SAP)

The United States Department of Education requires that financial aid students have their academic progress reviewed each academic year (fall, spring, summer terms) to determine if Satisfactory Academic Progress (SAP) has been achieved. The government requires that students who apply for financial assistance meet two standards: Qualitative and Quantitative.

Qualitative Standard

All students must have a Cumulative Grade Point Average (GPA) of 2.0 or better.

Quantitative Standard

Students must complete a certain percentage of units attempted in order to make progress toward their goal. Students must have completed at least 67% of their cumulative units attempted.

NOTE: Attempted units are defined as any units you remain enrolled in after the add/drop period each semester and appears on your transcript.

Units "earned" or "completed" with satisfactory progress are those courses in which a grade of “A,” “B,” “C,” “D,” or “P” is received.

The number of units you complete with a grade of “I,” “W,” “MW,” “F,” “NC,” “NP,” or “RD” and units for audited classes or credit by exam classes will not count toward your minimum satisfactory academic requirement of 67% of units completed.

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Maximum Units/Time Frame Allowed
Students must also complete their educational objective (graduation, transfer, and certificate in a timely manner) by the time they have attempted 90 units. This includes ALL units attempted at Hartnell College. A student can only receive financial assistance for a maximum of 150% of the published length of the program. All units attempted regardless if required for the major or taken for personal enrichment will count toward the 150% allowable total.

NOTE: Courses in which a student receives a “W” are also included in the 150% allowable total. Completion of 60 units is standard for many of our programs at Hartnell College. Thus, 90 units is the maximum for which a student can receive financial assistance (60 units X 150% = 90 units). The 90-unit maximum includes one change of academic program.

The maximum units time frame includes units attempted at Hartnell College during all periods of enrollment in which the student did or did not receive financial aid. The maximum units time frame also includes evaluated units from prior colleges that meet program requirements of the student’s current academic objective as determined from official transcripts. This is required if the student has requested inclusion of prior academic credit for any purpose within the college.

If the student’s total units equal or exceed the maximum units time frame of 150% (equivalent to 90 attempted units for an AA/AS or transfer), his/her eligibility for financial aid will be terminated. If there are extenuating circumstances, the student may appeal for an exception to this policy by submitting an Excessive Units Worksheet along with a Financial Aid Appeal petition.

SAP APPEAL
Students who have been placed on disqualification status and who have extenuating circumstances may request an Appeal of their Financial Aid status. Such extenuating circumstances shall be those acute medical, family, or other personal problems which rendered normal academic functioning unlikely or impossible. Such circumstances must be verified in writing.

A Financial Aid Appeal Committee will review and make a decision on each student’s appeal request. Only one FA Appeal may be submitted each academic year and up to three SAP appeals for the educational duration of the student’s career at Hartnell College.


Scholarships
Scholarships are available for new, continuing, and transfer students who show academic interest, financial need, scholastic achievement, a desire to succeed, and community or campus involvement. Students do not have to be US Citizens or Permanent Residents to Apply for Hartnell Scholarships. Most scholarships are funded through generous contributions to the Hartnell College Foundation by community groups, businesses, foundations, and individuals who value education and want to make a difference in the lives of our students. A single application places the student in consideration for various scholarships. Students can pick up an application in the Scholarship Office or visit our website at http://www.hartnell.edu/scholarships.

How to Apply for Scholarships
1. Complete a Hartnell College Scholarships Application.
2. Write a one-page personal statement that includes the applicant’s personal and academic goals, as well as financial need and special circumstances.
3. Submit a letter of recommendation from an individual who is familiar with the applicant’s academic progress and goals, such as a teacher, counselor, or advisor.

Applicants are responsible for carefully reading the scholarship material and providing the required documentation. The scholarship application deadline is clearly indicated on the application and brochure, flyers, and the Hartnell College website. No applications will be accepted after the posted deadline.

Applications will be reviewed by various committees during the spring for awards to be given out in the fall. Scholarship checks will be mailed to recipients at the beginning of the semester after verification of enrollment and eligibility criteria and receipt of a thank-you letter written by the recipient to the donor of the scholarship.

The Hartnell College Scholarship Office is available to assist students seeking scholarship information. Call (831) 755-6811. Our website is: http://www.hartnell.edu/scholarships.

Cooperative Agencies Resources for Education (CARE)
As a supplemental component of EOPS, CARE provides educational support services designed for the academically under-prepared, low-income, and single parent population. Grants and allowances for educationally related expenses (such as meals on campus, parking permits, bus passes, and textbooks) may be awarded as a means of improving retention, persistence, graduation and transfer rates of these individuals. Students participating in CARE may choose certificate, license, associate degree or transfer program options. Nearly half of all CARE students seek to transfer to four-year institutions; almost 40 percent choose associate degree objectives.

Hartnell College’s CalWORKs Program serves CalWORKs Cash Aid (formerly AFDC) recipients who enroll at Hartnell College. The program offers five student centered services:

Counseling/Case Management which includes design of an education, study, and employment plan:
- Personal and confidential counseling;
- Selection of courses for rapid employment with a goal of long-term advancement in a chosen field;
- Linkage to campus and community resources;
- Coordination with Department of Social Services and employment development.

Career and Job Programs and Services, which provide five areas of service:
- Vocational assessment for career decision-making;
- Priority Registration;
- Local and state labor market information for informed decision making;
- Access to the Job Bank;
- Subsidized training through the CallWORKs work-study program, not sanctioned against CalWORKs Cash Aid benefits;
- College credit for on-the-job training through Cooperative Work Experience.

Education, which provides general employment skills and occupational training:
- Prepare people for jobs in the local labor market;
- Provide intensive, short-term training for higher wage jobs;
- Offer flexible entrance and exit schedules.
Financial Aid, which includes grants and employment, and may cover the following educational expenses:
- Tuition and fees;
- Books and supplies;
- Living expenses;
- Transportation;
- Personal items.

Coordination with EOPS/CARE Programs, providing additional services for single parents who receive CalWORKs Cash Aid and have children up to age 14.

The CalWORKs Program is located in the EOPS/CARE Center, which is open from 8 am to 5 pm, Monday through Fridays. To schedule an appointment to meet with a CalWORKs designated counselor, call (831) 755-6860

Career Center

See Transfer and Career Center.

HEP

HEP is funded by the US Department of Education, Secondary Education – Office of Migrant Education. HEP is designed to assist migrant and seasonal field workers and their immediate family members to obtain a HSE and either an Associate Degree, Vocational/Technical Certificate, improve employment, military service, or apprenticeship, Certificate of Skills Acquisition, Certificate of Achievement, or an Associate Degree. Childcare is available for qualified HEP students through CCAMPIS (Childcare Access Means Parents In School).

The services include:
- HSE Curriculum delivered through cohorts
- Supplemental academic support/tutoring
- Curriculum that is regularly reviewed and adjusted by HEP Advisory Committee
- Academic advising and enrollment assistance for an Associate Degree at an Institution of Higher Education
- Career/Workplace Readiness

Contact HEP: (831) 770-7070

Job Bank

The Job Bank, located in the Transfer Center/Career Center, provides information for part-time, full-time, temporary, on-campus, federal, state, and summer work. The range of positions varies from unskilled part-time work to highly skilled technical positions.

Any student interested in seeking employment is encouraged to use the Job Bank frequently.

California Mini-Corps Program

Hartnell College is one of 20 colleges and universities which house a California Mini-Corps Program. This program provides training, experience, and support services to college students who are interested in becoming future bilingual educators. The student gains teaching experience by working at a school site, in this county, under the guidance and supervision of a Master Teacher and a Mini-Corps Coordinator. This is a federally funded program which provides direct categorical services to Migrant Students. A class is given to train Mini-Corps students in better meeting the needs of migrant students.

Students enrolling in the program must be full time students; have a 2.0 or above GPA; have bilingual skills; and have knowledge of or come from a Migrant Family background.

The California Mini-Corps Program is located in Building K, Room 124. Office hours are posted on the door. Interested students may write, drop by, or phone (831) 755-6927 for applications or further information.

Veterans' Services

Hartnell College is approved as an institution of higher learning for veterans and veterans’ dependents entitled to educational assistance. The Veterans Office staff provides assistance to Veterans and dependents in planning educational programs, referrals to community agencies, as well as helping students make the transition from military to student life at Hartnell. Additional services include: computers and printing for student use, Veterans Book Lending, on site tutors, and Veterans Club activities. Certification to the Veterans Administration for educational benefits and admissions enrollment in the College are separate functions. The College’s Certifying Official is located in the Veterans Office. It is important that VA beneficiaries notify both the Admissions & Records Office and the College’s Certifying Official before they enroll in classes. Additional Veterans information is located in the Admissions section of this catalog under Service Member’s Opportunity College, and non-traditional credit (military courses, MOS DANTES, etc.). For further information, please refer to our website at www.hartnell.edu/veterans-service-center, or call (831) 755-6809. The Veterans Office is located in the Student Center Building C-138.

Department of Supportive Programs and Services (DSPS)

DSPS offers comprehensive support services and accommodations to meet students' disability related academic needs. Students with documented disabilities may receive services such as:
- Academic, Career, Disability Management and Personal Counseling
- Academic Accommodations
- Deaf Services/Interpreting
- Alternate Media
- Assistive Technology
- Learning Disability Assessment
- Priority Registration

Additionally, DSPS offers instruction or courses designed to address the needs of students with disabilities:
- Learning Skills Courses
- Adaptive PE

Students with verified disabilities desiring any of these services or instructional programs should contact DSPS and make an appointment with a counselor by calling the DSPS Office at (831) 755-6760. Students may also contact DSPS through the Hartnell College website: www.hartnell.edu/students/dsp.

For more information, visit the DSPS Office in Building B, Room 107 or call (831) 755-6760.

For Adaptive Physical Education information, contact Tracy Carpenter in Building G, Room 144 or (831) 755-6876 or email at tcarpenter@hartnell.edu.

International Student Services

Hartnell College offers special services to students from other countries who have entered the U.S. on F-1 or other study visas. The International Student Center and the Admissions & Records Office assists these students with the admission process, including documentation for the visa application; registration, academic and personal counseling; immigration matters; personal adjustment to college life; transfer; and career advising.

For specific information or to make an appointment, call or stop by the Admissions & Records Office, (831) 755-6711. The Center e-mail address is inslstud@hartnell.edu. More information about the International Student Program is online at www.hartnell.edu/international-student-program.
American Indian Services

Each year, the Bureau of Indian Affairs (BIA) provides grants to help eligible Native American students meet their college costs. To be eligible for the BIA educational grant, students must meet all of the following criteria:

1. Be at least one-fourth American Indian, Eskimo, or Aleut as certified by a tribal group served by the BIA.
2. Be enrolled or plan to enroll at an accredited College. (Hartnell is accredited.)
3. Must have completed a FAFSA on file prior to requesting that the American Indian Program Office complete a BIA form.
4. Be enrolled in 12 units or more per semester.

For more information you can reach The Bureau of Indian Affairs at (800) 332-9186 or you can visit the following websites:

- www.bia.gov
- www.bie.edu
- www.finaid.org/otheraid/natamind.phtml

Further questions can be addressed to the Financial Aid Office located in Building B (Student Services Building) or call (831) 755-6806.

TRIO/Student Support Services Program

The TRIO Student Support Services Program is a federally funded student retention program designed to assist first generation and/or low-income students as they earn their associate degree from Hartnell College and transfer to a public university. The services provided by Hartnell College TRIO/Student Support Services are designed to assist students to graduate and transfer.

The TRIO program offers a supportive environment for students and provides opportunities for academic development, including a first-year student cohort program and continued monitoring and encouragement during the subsequent years of the student’s matriculation at Hartnell College. The students are assigned a TRIO counselor to assist them with the development of an educational plan to achieve their goals.

The TRIO staff endeavor to motivate the TRIO students towards the successful completion of their postsecondary education, whether graduation and/or transfer. The goal of the TRIO Program is to assist our students to make transitions from one level of higher education to the next. The TRIO program assists students to overcome barriers to succeed within higher education.

The services that are offered to TRIO students include academic counseling and guidance: tutoring; peer advising; freshmen year experience; Freshmen Summer Transition (STP) Program; study center; textbook lending library; visits to 4-year universities; personal finance workshops, cultural and campus activities; and FAFSA and Scholarship Aid. To meet TRIO Eligibility Guidelines, TRIO students must:

- Be a citizen or legal resident of the United States and
- Be at full-time student (12 units), working toward an AA degree at Hartnell College and planning to transfer to a university and
- Have completed less than 40 degree applicable units and
- Have an academic need and
- Have financial need according to Federal financial aid criteria and/or be a first generation college student (meaning neither parent has earned a Bachelor's degree).

For more information and/or an appointment, call, email, or stop by the TRIO Student Office located in Building D, Room 114, (831) 755-6013.

Director: Manuel Bersamin
email: mbersami@hartnell.edu
Clerical Assistant: Eva Diaz
direct: ediaz@hartnell.edu
Counselor: Norma Nichols
direct: nnichols@hartnell.edu
Counselor: Nancy Reyes
direct: nreyes@hartnell.edu

For more information, visit us online at:
http://www.hartnell.edu/trio-student-support-services

Mathematics Engineering Science Achievement (MESA)

MESA is an academic support program for educationally disadvantaged students who are seeking a Bachelor’s degree in a Science Technology Engineering or Mathematics (STEM) field.

What Does MESA Offer?

- MESA Student Center in N-30 where students can study in a supportive environment;
- Computer equipment and space for study groups in the Student Center;
- Tutoring for individuals and groups in transfer level math and science courses;
- Academic Excellence Workshops that accompany some math and science classes;
- Academic, career, and personal counseling;
- Assistance with internships and financial aid;
- Field trips to universities, industries, and research centers; and
- Calculator and locker loan program.

If you are interested in joining the program and would like to pick up an application, drop by N-30, and learn more about the program.

MESA students must

- be a math, science, engineering or computer science major;
- intend to transfer to a four-year college;
- be eligible to take Math 121 (Elementary Algebra) or higher-level math;
- sign an enrollment application; and
- prepare a comprehensive education plan.

When applying to the Hartnell College MESA Program, students must qualify under both the Educational and Financial Criteria.

Education Criteria:

- First-generation college student
- Attended federally designated high school
- Under 24 years old and living independently
- Began with math assessment below MAT121

Financial Criteria:

- Eligible for EOPS
- Board of Governors Fee Waiver
- GAIN Participants
- Receiving Financial Aid
- Work-Study Eligible
- TRIO Programs Participants

Academy for College Excellence (ACE)

The ACE Program is a cohort based program for first time college students or older adults experiencing transition. Students gain skills that will help them be successful when taking courses, choosing their career and managing school, work and their personal lives.

The first two weeks are spent in the Foundation Course where students learn about themselves and how to work with other students in their cohort. After the Foundation Course is over, students then take one semester of courses with their cohort. AB540/Undocumented students are welcome and encouraged to participate in ACE.

ACE Program Services

- Assistance with completing the steps to success and registering for classes
- Educational planning
- Tutoring and support
- Caring teachers
- Fieldtrips

For more information call 831.755.6723 or email Director of Special Programs Bronwyn Moreno: bmoreno@hartnell.edu
Services for AB540/Undocumented Students (Dreamers)

Hartnell College is committed to supporting all students regardless of their residency status. We provide specialized services for Dreamer students through the Center for Achievement and Student Advancement (La CASA).

Mi CASA Services for Dreamers:
- A safe space for Dreamers (La CASA in D-383)
- Assistance with AB540 Affidavit and Deferred Action for Childhood Arrivals (DACA)
- Educational planning and counseling
- Scholarship and financial aid assistance
- Peer mentoring and social activities
- Referrals to other campus services through the Dreamer Ally network
- Advocacy and support

La CASA is located at Hartnell College Main Campus Building D, Room 383. For more information call (831) 755-6723 or email Director of Special Programs Bronwyn Moreno: bmoreno@hartnell.edu

Mentoring Programs for Women & Men

Hartnell College offers two formal mentoring and life skills programs: Women’s Educational Leadership Initiative (WELI) and Men of Hartnell. Both programs offer scholarships, mentoring, and leadership training to help men and women succeed academically and personally. Students meet with trained, professional mentors who can offer advice and connections in specific life areas.

Participation requirements:
To qualify for WELI or Men of Hartnell, students must apply in March of each year. Dreamer (AB540/Undocumented) students are welcomed. Transgender students may self-identify. Student applications will be selected based upon academic achievement in context of adversity, financial need, and leadership potential. Other eligibility requirements may apply.

For more information call (831) 755-6723 or email Director of Special Programs Bronwyn Moreno: bmoreno@hartnell.edu

STUDENT INSURANCE

When a student experiences an accident or injury on campus or during a college-sponsored event, an accident/injury report as well as essential insurance information is required to determine the level of assistance available. Students are to contact Campus Security upon injury. An officer will respond and obtain medical assistance as well as gather other essential insurance information.

Any questions regarding student injuries or accidents on campus should be directed to the Student Affairs Office at (831) 755-6822.

It is mandatory that international students have health and accident insurance. International student insurance applications may be obtained from the Admissions & Records Office.

STUDENT LOCKERS

Student lockers in Building N may be rented at the Cashier’s Office in Building B.

LOST & FOUND

Found articles should be turned in to Campus Security (C-135) or the mailroom located next to the Cashier’s Office in Building B. Lost articles can be claimed in the mailroom in Building B.

STUDENT LIFE

The goal of the Office of Student Life is to engage students in meaningful activities that will strengthen their understanding of college life by participating in programs and services that will support their educational and lifelong learning.

Associated Students of Hartnell College

The purpose of Student Senate is to provide an influential voice with quality representation in the shared governance process as well as valuable services that will help students achieve academic excellence.

Programs and Services

The Office of Student Life and offers students an array of programs designed to support their academic, social and emotional well-being.
- Inter-Club Council
- Book Voucher
- Student and Multi-Cultural Activities
- Student Ambassadors
- Week of Welcome (WOW)
- Conflict Resolution Center

Student Clubs

Supported by the ASHC, student organizations and clubs provide an opportunity for students to share common interests and new experiences beyond the classroom. These include honor societies, service and religious organizations, ethnic/multicultural groups, and departmental and special interest groups.

The Office of Student Life is located in the Student Center, Building C, C-140 or call (831) 755-6734.
ACADEMIC POLICIES

Scholastic standards of Hartnell College are established to assist students in making appropriate educational plans. The College will advise students of their educational progress in order that students may make sound self-appraisal of their college work.

The regulations in this section are consistent with State Law and District Policy. They serve to inform students of standards that they are expected to maintain.

The determination of the grading system to be used in each course shall be made by the discipline offering the course. The grading system used in each course is published in the Catalog and Schedule of Classes.

Grades and Grade Point Averages

Grades from a grading scale shall be averaged on the basis of the point equivalencies to determine a student's grade point average. The highest grade shall receive four points, and the lowest shall receive zero points, using only the following evaluative symbols:

<table>
<thead>
<tr>
<th>GRADE</th>
<th>DEFINITION</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Barely Passing</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>Pass (at least satisfactory-units awarded but not counted in GPA)</td>
<td>0</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass (less than satisfactory, or failing -not counted in GPA)</td>
<td>0</td>
</tr>
</tbody>
</table>

Pass/No Pass

The college offers some courses:

1. solely on the P/NP (Pass/No Pass) grade basis.
2. solely on the standard letter grade basis.
3. in which the student may choose to complete the course on either a pass/no pass or letter grade basis.

In accordance with the California Education Code and California Code of Regulations Title 5, Hartnell College has established a grading policy which adds the “P” (pass) and “NP” (no pass) grades to the standard letter grades (“A,” “B,” “C,” “D,” “F”) used in college and universities. A course in which a “P” grade is earned indicates completion with “C” or better work and will apply towards the 60 units required for graduation but will not affect the student’s grade point average. However, units attempted for which “NP” is recorded shall be considered in probation and dismissal procedures. A maximum of 12 units of “P” may be applied towards the Associate in Arts/Science Degree. Courses in which a student has no such option (such as Work Experience) will not apply towards the 12 units maximum. Courses in which a “NP” grade is earned will not apply towards graduation and will not affect the student’s grade point average.

Offering courses for pass/no pass grades provides the student with the opportunity to explore areas outside his/her current interest without undue concern for his/her grade point average. This policy also recognizes that a standard letter grade may not always measure the value of a course to an individual student.

On or before the last day of the fifth week (or 25%) of the instructional term, the student shall inform the Admissions & Records Office, by petition, of his/her intention to complete a course for a grade or on Pass/No Pass basis, and the instructor shall report to the Dean of Student Affairs a final grade of “P” or “NP” for students who so petition. Students may repeat a course in which a grade of “NP” is earned.

President’s Honor Roll and Dean’s List

Full-time students earning a grade point average of 3.5 to 4.0 in a semester are included on the President’s Honor Roll each semester. Those full-time students who earn a grade point average of 3.0 to 3.49 in a semester are placed on the Dean’s List. This applies only to students completing 12 or more units of letter grade work per semester.

Grade Point Average (GPA) is determined by dividing the total units attempted into total grade points from “A,” “B,” “C,” “D,” and “F” grades. “P,” “I,” “W,” “IP,” and “NP” are not included in the total course units attempted. For example, a student who earns a “B” in a class worth four units, an “A” in a class worth three units, a “C” in a class worth two units, an “F” in a class worth three units, and a “B” in a class worth one unit would have a GPA (Grade Point Average) of 2.38, calculated as follows:

\[
\begin{align*}
4 \text{ units of B} & \times 3 \text{ points} = 12 \text{ grade points} \\
3 \text{ units of A} & \times 4 \text{ points} = 12 \text{ grade points} \\
2 \text{ units of C} & \times 2 \text{ points} = 4 \text{ grade points} \\
3 \text{ units of F} & \times 0 \text{ points} = 0 \text{ grade points} \\
1 \text{ unit of B x 3 points} & = 3 \text{ grade points} \\
\hline
13 \text{ total units attempted} & = 31 \text{ total grade points} \\
31 \text{ Grade Points} & = 2.38 \text{ Average} \\
13 \text{ Total Units Attempted} & = (or a 2.38 GPA) 
\end{align*}
\]
Non-Evaluative Symbols

The following non-evaluative symbols authorized are "I," "RD," "W," and "MW".

Definitions:
Incomplete (Symbol "I")
Incomplete academic work for unforeseeable, emergency, and justifiable reasons at the end of the term may result in an "I" symbol being entered in the student’s record. The condition for removal of the "I" symbol shall be stated by the instructor in written record which shall also indicate the grade to be assigned in lieu of its removal. This record must be given to the student with a copy placed on file in the Admissions & Records Office until the "I" is made up or the time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed. The "I" must be made up no later than the last class day of the semester following the one in which the "I" grade was assigned; otherwise, the in lieu grade will automatically be entered on the transcript. Students may not register for the same course in order to make up the incomplete work. The "I" symbol shall not be used in calculating units attempted nor for grade points. The student may petition the instructor for a time extension (one additional semester only) due to extenuating circumstances.

Withdrawal (Symbol "W")

Students’ withdrawal from a class or classes shall be authorized through the last day of the 14th week (or 75%) of the instructional term. No "W" will be given after the 14th week. After the fourteenth week, the only grades given will be A, B, C, D, F, NP, or IP. No notation ("W" or other) shall be made on the academic record of the student who withdraws during the first three weeks or 20% of a term, whichever is less. For semester-length courses (16-18 weeks), withdrawal between the end of the third week and the last day of the fourteenth week of instruction shall be recorded as a "W" on the student’s record. For courses less than a semester in length, withdrawal between 20% and 75% of the course shall be recorded as a "W" on the student’s record. The "W" shall not be used in calculating grade point averages, but excessive "Ws" (see Standards of Probation and Dismissal) shall be used as factors in probation and dismissal procedures. The Admissions and Records Manager may, by regulation, authorize withdrawals from a class or classes in extenuating circumstances after the last day of the fourteenth week (or 75% of the term, whichever is less) upon petition of the student or his/her representative. The Admissions and Records Manager will consult with the appropriate faculty. Extenuating circumstances are verified cases of accidents, illnesses, or other circumstances beyond the control of the student.

Total Withdrawal

A total withdrawal from the college may impact your academic record and Financial Aid status at Hartnell and future financial aid eligibility at another college or university. It is highly encouraged to speak with a Hartnell College Counselor and the Financial Aid Office prior to making that decision. Please contact the Counseling Office at (831) 755-6820 and See Financial Aid for more information on Withdrawal from Classes.

Military Withdrawal (Symbol "MW")
The "MW" shall be assigned only to students who are members of an active or reserve military service and who receive orders compelling a withdrawal from courses. Upon verification of such orders, this symbol may be assigned at any time during the semester by the Dean of Student Affairs. The "MW" shall not be counted in progress probation and dismissal calculations. "W" grades incurred after January 1, 1990, which meet the definition of "MW" may be changed to "MW" upon petition and verification of military orders.

Report Delayed (Symbol "RD")
The "RD" symbol may be assigned by the Dean of Student Affairs only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. "RD" shall not be used in calculating grade point averages.

Grades Reports

Hartnell College does not issue final grade reports each semester. Semester grades are generally available three weeks from the last day of the semester. It is the student’s responsibility to check his/her grades at the end of each semester. Students may access their semester grades three ways:

- Access PAWS for students at www.hartnell.edu. Students may print their own grade reports.

Examinations

Final examinations are mandatory in all courses except laboratory courses. The examinations will include essays, term projects and/or term papers, and/or, where appropriate, use symbol systems and/or skill demonstrations by students. In laboratory courses, final examinations are given at the option of the instructor. Each final examination should be comprehensive and be based upon the entire semester’s work. Mid-semester and other examinations are encouraged.

Excess Units

A student who wishes to enroll in more than 18 units per semester must review his/her units with a counselor and complete an Excess Units Petition. Counselor approval on the Petition is required.

Hartnell Transcripts

Upon written request, two official transcripts of record, bearing the seal of the Hartnell College and signature of the Dean of Student Affairs, will be mailed without charge. Additional copies are $6 each, payable at the time of the request. Transcripts will not be released until all financial obligations to the College are cleared. See Impound of Records for more information.

Students may use the transcript request form that is located on our web page at: www.hartnell.edu/transcripts

The signed transcript request form may be faxed to (831) 759-6014. The credit card payment form may be downloaded and faxed if any fees are owed.

The official transcript includes courses taken at Hartnell College, and if transcripts from other colleges have been previously evaluated and accepted for credit at Hartnell, the Advanced Standing (Transfer Coursework) will show. However, official transcripts from those other colleges must be requested directly from those institutions.

Transcript requests are usually processed within a minimum of 7 working days or fewer and may take up to 15 working days at the end of the semester.

Rush Service: Rush Service is available for an additional $12 fee per transcript. Rush Service transcript requests will be processed within one working day of receipt of the request. We do not offer an overnight mail delivery service. We use regular US mail service only. Rush Service is only available from the 2nd through the 17th week of each semester. Rush Service is not available during the Add/Drop period or during Finals.

Students may print their own unofficial transcript by accessing PAWS for students at www.hartnell.edu.

Academic Probation

At Hartnell College, a student’s academic performance is measured by two main factors. The first is grade point average (GPA); the second is by comparing the number of course units completed compared to the number of course units attempted. A student who does not maintain at least a 2.0 GPA and complete at least 50% of their attempted coursework will be placed on academic and/or progress probation. A student becomes subject to academic probation when he/she has enrolled in 12 or more semester units, even if the student later withdraws from any or all of these units. At the point the student becomes subject to the probation rules, all previous units attempted will be considered in the determining the student’s academic status.

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ACADEMIC POLICIES

Progress Probation

Placement on Progress Probation
A student shall be placed on progress probation when the number of units for which entries of “W” or Withdraw, “I” or Incomplete, “NP” or No Pass, and “NC” or No Credit are recorded and reaches or exceeds fifty-percent (50%) of all units attempted.

Removal from Progress Probation
A student on progress probation shall be removed from probation when the percentage of units in this category meets or exceeds completion of fifty-percent (50%) of attempted units.

Academic Probation

Placement on Academic Probation
A student shall be placed on academic probation when the student’s cumulative GPA falls below 2.0 in all graded units.

Removal from Academic Probation
A student shall be removed from academic probation when the student’s cumulative GPA becomes 2.0 or better.

Students on Level 1 Academic/Progress Probation (A1/P1) must clear their probation hold before registration by successfully completing the Hartnell College online Student Success (Probation) workshop. The probation hold will be removed within 24 hours of completion of the workshop during normal business hours.

Students on Level 2 Academic/Progress Probation (A2/P2) are required to complete an online College Success Tutorial workshop. This workshop will provide students with critical strategies for classroom success.

Students on Level 1 and 2 Academic/Progress Probation are strongly encouraged to meet with an Academic Counselor if there are any questions about the process or steps necessary for removal from probation.

Academic Counseling Services

In addition to the online Student Success (Probation) and online College Success Tutorial workshops, Academic Counselors are available to provide one on one counseling and guidance to students. Counseling workshops are also hosted three times a week including Saturdays. Each student on probation will be provided counseling and guidance services to ensure students are prepared with information needed to complete their educational goals. Counselors may recommend limiting course unit loads to ensure students are taking a manageable number of courses based on other personal factors e.g. number of hours of work per week. The ultimate goal is to assist students in achieving success in the courses they enroll in.

Disqualification/Dismissal

Academic/Progress Dismissal (AD/PD)
A student shall be dismissed (not including summer session), if, during each of the three consecutive semesters, the student’s performance falls under one or the combination of the following two conditions:
- The student’s cumulative GPA is less than 2.0
- The percentage of units in which the student has been enrolled for which entries of “W” or Withdraw, “I” or Incomplete, “NP” or No Pass, and “NC” or No Credit are recorded reaches or exceeds fifty-percent (50%) of all units attempted

Student success is our mission. If you need assistance with your coursework we have tutorial services available at all of the campuses and centers. If you need any other type of assistance please be sure to connect with a counselor, we want to assist all students in achieving their educational goals. For additional information and access to support resources please visit the link below:
http://www.hartnell.edu/counseling-and-guidance

Grade Change Policy

BP 4231

Changing Grades
The instructor of the course shall determine the grade to be awarded to each student.

The determination of the student’s grade by the instructor is final in the absence of mistake, fraud, bad faith, or incompetence. “Mistake” may include, but is not limited to, errors made by an instructor in calculating a student’s grade, and clerical errors. “Fraud” may include, but is not limited to, inaccurate recording or change of a grade by any person who gains access to grade records without authorization.

The removal or change of an incorrect grade from a student’s record shall only be done pursuant to Education Code Section 76232 or by an alternative method that ensures that each student shall be afforded an objective and reasonable review of the requested grade change.

If the procedure requires that a student first request a grade change from the instructor, provisions shall be made to allow another faculty member to substitute for the instructor if the student has filed a discrimination complaint, if the instructor is not available or where the District determines that it is possible that there may have been gross misconduct by the original instructor.

In the case of a mistake, fraud, bad faith, or incompetence, the final determination concerning removal or change of grade will be made by the Dean of Enrollment Services or designee. The student may file a “final grade complaint” if they have evidence that the faculty member issued their final grade because of a mistake, fraud, bad faith, or incompetence. See the Hartnell College Student Handbook for additional information.

In all cases, the instructor who first awarded the grade will be given written notice of the change. If the faculty member is not available, the request should be submitted through the appropriate Dean and/or Vice President; however, only the faculty member that assigned the original grade may authorize a change of grade.

Procedures:
1. Students should submit a request in writing/email directly to the faculty member within one year after completing the course for which the grade change is being requested.
2. The faculty member obtains and/or requests a grade change form from Admissions & Records.
3. Once the faculty member has completed the grade change form, the form must be hand delivered by the instructor or appropriate Dean and/or Vice President of Academic Affairs to the Admissions & Records Office for processing.
4. The Dean of Enrollment Services or designee will review and process grade changes within 5 working days from receipt of the form.
5. If approved, the student’s academic record will be updated. The grade change form will then be processed and annotated as having changed the grade.
6. If there are any questions about the grade change form, the Dean of Enrollment Services or designee will contact the faculty member immediately.
7. The pink copy of the grade change form will be mailed to the student
8. The yellow copy of the grade change form will be put into on campus mail to the faculty member.
Academic Renewal policy and procedures BP 4240
Consistent with Title 5 Section 55046, previously recorded substandard academic performance may be disregarded if it is not reflective of a student's demonstrated ability.
Students may petition to have their academic record reviewed for academic renewal of substandard (D, F, NC, NP Grades) academic performance under the following conditions:

- Students must have achieved a cumulative grade point average of a minimum of 2.0 since the end of the term to be disregarded at Hartnell.
- The student has completed 18 semester units since the end of the term to be disregarded leading to a certificate, associate degree, or university transfer requirements at Hartnell. Work completed at another institution cannot be used to satisfy this requirement.
- At least 3 semesters, excluding summer must have elapsed from the time the course work to be removed was completed.
- Up to 18 semester units of substandard course work may be eliminated from consideration in the cumulative grade point average computation.
- It can be demonstrated that the level of performance in the term(s) under consideration resulted from extenuating circumstances. Such extenuating circumstances shall be those acute medical, family, or other personal problems which rendered normal academic functioning unlikely or impossible. Such circumstances must be verified in writing.
- Academic renewal procedures may not conflict with the District's obligation to retain and destroy records or with the instructor's ability to determine a student's final grade.
- A student may be granted academic renewal only once.
- Academic renewal actions are irreversible. The student's permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history. This policy applies only to Hartnell degree requirements and it might not be accepted at other institutions.
- Academic renewal by Hartnell College does not guarantee that other institutions will honor the elimination of units from consideration in the grade point average. It is the student's responsibility to confirm with a transfer institution whether academic renewal will be accepted.

Procedures:
1. Students can pick up an Academic Renewal Petition in the Admissions & Records Office.
2. The student completes and submits the Academic Renewal Petition to a Counselor who verifies that all of the above eligibility conditions have been met.
3. The student then submits the Academic Renewal Petition to the Admissions & Records Office for review and approval/disapproval. The student retains the yellow copy of the petition for their records as proof of submission.
4. The Dean of Enrollment Services or designee will review and process the Academic Renewal Petition within 10 working days from receipt of the petition.
5. If there are any questions about the Academic Renewal Petition, the Dean of Enrollment Services or designee will contact the student immediately by phone or email.
   a. If approved, the Academic Renewal Petition will then be processed and annotated as having updated the student's academic record.
   b. If disapproved, the petition will be not be processed. An explanation of why it was disapproved will be annotated on the petition and returned to the student.
6. The pink copy of the Academic Renewal Petition will be mailed to the student's home address.

Repetition of Courses BP 4225
Except where allowed by regulation, the maximum number of times a student can enroll in a credit course and receive an evaluative or non-evaluative symbol is three. Grading symbols included in this total are A, B, C, D, F, P, NP, W, and I. Under specific circumstances specified in Title 5 Section 58161, a student may enroll one, or more, additional times in a course in which a grading symbol was recorded.

The permanent academic record shall contain all courses attempted, including repetitions, thus ensuring a true and complete record of the academic history of the student.

The procedures for filing a repetition appeal for special circumstances can be found in our class schedules.

I. Definitions
A. Course Repetition – Course repetition occurs when a student who has previously received an evaluative symbol in a credit course re-enrolls in that course and receives an evaluative symbol.
B. Repeatable Course – A course that can be repeated one or more times as identified in the college catalog and the official course outline.
C. Non-repeatable Course – A course not identified in the college catalog and the official course outline as repeatable.
D. Grade Alleviation – Repeating a course where a substandard grade was recorded in an effort to have the previous grade and credit disregarded from the computation of a student's grade point average.

II. Repeatable Courses
A. Certain courses are repeatable for credit and are so designated in the college catalog.
B. Substandard grades for repeatable courses may be alleviated according to Section below.
C. Only the following types of courses are repeatable:
   1. Courses for which repetition is necessary to meet the major requirements of California State Universities or Universities of California for completion of a bachelor's degree. The district must retain supporting documentation that verifies that the repetition is necessary to meet the major requirements of California State Universities or Universities of California for completion of a bachelor's degree.
   2. Intercollegiate athletics, as defined in section 55000; and
   3. Intercollegiate academic or vocational competition, as defined in section 55000, where enrollment in the course and courses that are related in content is limited to no more than four times for semester courses. This enrollment limitation applies even if the student receives a substandard grade or "W" during one or more of the enrollments in such a course or petitions for repetition due to special circumstances.
   4. Students may enroll in active participatory courses, as defined in section 55000, in physical education, visual arts or performing arts that are related in content. These courses are described in the college catalog as a family. Enrollment is limited to four courses within each family. This limitation applies even if a student receives a passing grade, substandard grade, or "W" during one or more of the enrollments in such a course or petitions for repetition due to extenuating circumstances.
   D. When a course is repeated pursuant to this section, the grade received each time shall be included for purposes of calculating the student's grade point average.
III. Non-Repeatable Courses

Students can only repeat courses designated as “non-repeatable” if they meet one of the criteria listed below. However, students may receive a “W” (non-evaluative) symbol and/or earn a substandard grade of D, F, NP, or NC inclusive of any combination of W, D, F, NP, or NC. The three enrollment limitation in non-repeatable courses is inclusive of any combination of W, D, F, NP, or NC.

A. Repetition to Alleviate Substandard Academic Work
1. Any non-repeatable course may be repeated when the grade earned was substandard (D, F, NP, or NC) or a non-evaluative symbol of “W” was reported.

B. Upon completion of a repeated course in which a substandard grade was earned, the most recent grade will be computed in the cumulative grade point average. The previous grade and credit shall be disregarded in the computation of grade point average, even if the previous grade was higher.

C. Course Repetition for Satisfactory Grades (“C” or better) A course in which a grade of “C” or better was received may not be repeated unless such repetition is provided for in the official course description or by District policy. Only under specific conditions can a course be repeated in which a satisfactory grade (“C” or better) was earned.

1. Significant Lapse of Time. A student may repeat a course, one time, where a standard grade was earned after a lapse of no less than 36 months (3 years) or if there is a properly established recency prerequisite for a course or program pursuant to section 55003 or if there is a documented recency requirement at an institution where the student is transferring. The course must be requested and approved through the Course Repetition petition process. Pursuant to petition, students may repeat a course where less than 36 months (3 years) have elapsed if the student documents the repetition is necessary for the student’s transfer to an institution of higher education. The previous grade and credit will be disregarded in the student’s grade point average.

2. Legally Mandated Training Requirement. A student may repeat a course any number of times as required to meet legally mandated training requirements as a condition of paid or volunteer employment or the course is required for recertification in a technical or medical field regardless of whether substandard academic work has been recorded. The course must be requested and approved through the Course Repetition petition process. The student is required to certify or document that course repetition is legally mandated. The grade and credit will be included in the student’s grade point average each time the course is taken.

3. Occupational Work Experience. A student may repeat a course in occupation work experience under the circumstances described in section 55253. When an occupation work experience course is repeated pursuant to that section, the grade received each time shall be included for purposes of calculating the student’s grade point average.

4. Disabled Students as part of a Disability-Related Accommodation. Special classes for students with disabilities can be repeated any number of times based on an individualized determination that such repetition is required as a disability-related accommodation for that particular student. The course must be requested and approved through the Course Repetition petition process. The previous grade and credit will be disregarded in computing the student’s grade point average.

5.  Legally mandated. The grade and credit will be included in the student’s grade point average each time the course is repeated.

6. Significant Change in Industry or Licensure Standards. A student may petition the district to repeat a course as a result of a significant change in industry or licensure standards such that repetition of the course is necessary for employment or licensure. Such courses may be repeated for credit any number of times. The course must be requested and approved through the Course Repetition petition process. The student is required to certify or document that there has been a significant change in industry or licensure standards necessitating course repetition. The grade and credit will be included in the student’s grade point average each time the course is taken.

7. Military Withdrawals (MW) shall not be counted in progress probation and dismissal calculations or the permitted number of withdrawals or the student enrollment limit.

8. Extenuating Circumstances. A student may petition to repeat a course where a previous standard or substandard grade was earned, one time, for extenuating circumstances based upon extreme documented, verifiable situations beyond the student’s control. Extraordinary circumstances are those which would justify the District providing the student a refund. Extenuating circumstances are verified cases of accidents, illness, or other circumstances beyond the control of the student. The course repetition must be requested and approved through the Course Repetition Appeal Request petition process. The previous grade and credit will be included in the student’s grade point average.

IV. When courses are repeated under this procedure, the student’s permanent academic record shall clearly indicate any courses repeated and be annotated in such a manner that the record of all work remains legible, insuring a true and complete academic history.

V. Nothing in this procedure can conflict with Education Code Section 76224 pertaining to the finality of grades assigned by instructors, or with Title 5 or district procedures relating to retention and destruction of records.

VI. Apportionment will be limited as set forth in section 58161.
Auditing Classes BP 4070

The Board authorizes a person to audit a community college course, and the District may charge that person a fee pursuant to CEC section 76370. The CEO or designee establishes procedures for course audit. Auditing fees will be charged as authorized in BP 5030 and published in the schedule of classes for each term.

Classroom attendance of students auditing a course shall not be included in computing the apportionment due a community college district.

Course Audit may be allowed under the following conditions:

- Auditors must be eligible for admission to the college as regularly enrolled students.
- Auditors must have exhausted their eligibility to enroll in the course for credit.
- Students enrolling for credit will have priority in all credit classes. Auditors are required to attend the first class meeting but will be permitted to register for the course only at the conclusion of the add/drop period and on a space available basis, but no later than the third week of classes for the fall/spring semesters and two weeks for summer/intersessions.
- Course outline of record must reflect the course is eligible for audit.
- K-12 Concurrent Enrollment students are not permitted to audit.
- Faculty members instructing audit-eligible courses have the right to refuse auditors.
- Audited classes will not be posted to the student’s academic transcript.
- No transfer from audit to credit status or the reverse will be permitted.
- Auditors will not be charged the regular enrollment fee that is paid for credit enrollment. As established in Education Code 76370, a non-refundable audit fee will be charged and is payable by the end of the fourth week of classes for the fall/spring semesters and third week for summer/intersession. Students enrolled in ten or more credit units will not be charged a fee for auditing three or fewer units per semester.
- Regular material fees and/or course costs will be charged to auditors.
- Auditors will be allowed to purchase parking permits.
- The non-resident tuition fee will not apply to auditors.

Credit by Examination

BP 4235

(Challenging a Course)

Consistent with Title 5 Section 55050, course credit may be awarded to students who satisfactorily pass authorized examinations.

Credit by satisfactory completion of an examination administered by the college in lieu of completion of a course listed in the college catalog. Credit by examinations may be written, oral, and/or demonstrative/ manipulative.

Determination of Eligibility to Take the Examination:

- The course is listed in the current college catalog.
- The student must have completed a minimum of six semester units at Hartnell College.
- The student must have a cumulative grade point average of 2.0 or better.
- The student must meet all course prerequisites.
- The student must pay all of the fees associated with a credit by examination before the examination will be administered. The student will be charged the same per-unit fee for her/his residency status as for any other course. (Financial Aid programs do not cover the enrollment fees for credit by examination.)
- The student will not be permitted to petition for credit by examination for the course in which she/he was enrolled in the preceding semester.
- The student will not be permitted to petition for credit by examination for the course in which she/he was enrolled in the current semester after the No Grade of Record “NGR” period.
- Only one credit by examination per course may be administered regardless of grade earned.

Administration:

- The student’s academic record clearly indicates that the credit was earned by examination.
- Credits acquired by examination shall not be counted in determining the 12 semester hours of credit in residence required for an Associate degree.
- Credits acquired by examination do NOT count toward Selective Service deferment, veterans’ or Social Security benefits, financial aid, or scholastic honors.
- Applications for Credit by Examination are available in the Admissions & Records Office, and require the approval/signature of a full-time faculty member (if available) in that discipline who will be administering the examination and the Vice President of Academic Affairs.
- Credit by examinations are only offered between the 1st and the 14th week for fall and spring semesters; and the 1st and 4th week for summer sessions.
- In no case may credit be awarded for more than one course in a sequence of courses.
- An applicant for the Associate Degree program in Nursing who uses a challenge procedure must challenge Nursing courses in sequential order and will receive an examination grade and number of units for each course.
- The College reserves the right to deny a Credit by Examination to any specific course.

Procedures:

1. Students can pick up the Credit by Examination Petition in the Admissions and Records Office.
2. The student completes and signs the top portion of the petition.
3. The student then obtains the approval/signature of the full-time faculty member in the discipline who will be administering the examination.
4. Upon approval from the instructor, the student then submits the petition to the Vice President of Academic Affairs for final approval.
5. Upon final approval, the Vice President of Academic Affairs or designee will forward the petition to the Scheduling Office within 5 working days.
   a. In-lieu of denying the petition, the office of the Vice President of Academic Affairs will contact the student.
6. Within 5 working days, the Scheduling Office will create a section and annotate the information on the petition and forward the original petition to the Admissions and Records Office.
7. The Admissions and Records Office will enroll the student in the designated section, and mail the student a copy of the processed petition as well as a copy of the registration receipt showing the appropriate fee owed.
8. Upon receiving the registration receipt, the student will pay appropriate fees for the course to the Cashier’s Office and make arrangements with the instructor to complete the exam within 2 weeks of receipt of the approved petition. Fees must be paid in full before the examination can be administered.
9. The Admissions and Records Office will also send the original petition to the instructor of record so that the instructor knows that the examination may be administered within 2 weeks.
1. Students who do not attend the first class meeting may be dropped and may be replaced by other students unless the student notifies the instructor in advance.

2. Any absence from class is detrimental to a student's experience. A college student is expected to attend all of his/her class sessions. It is the responsibility of each student to know the attendance and absence policy of each class in which he or she is enrolled.

Failure to attend class can result in a lower grade or dismissal from class. Any student who stops attending a class without officially dropping it in the Admissions & Records Office may receive a grade of "F."

The College’s attendance policy relies on the following five basic premises:

1. Regular attendance and consistent study are student responsibilities and the two factors which contribute most to a successful college experience. A college student is expected to attend all of his/her class sessions. It is the responsibility of each student to know the attendance and absence policy of each class in which he or she is enrolled.

2. Any lack of attendance which leads an instructor to judge that unsatisfactory progress is being made may result in the student being dropped. Absence from a full-semester class in excess of two weeks (consecutive or non-consecutive) may result in the instructor dropping the student. That is, a student may be dropped after missing one more class meeting than twice the number of class meetings per week.

Absences in excess of one week (consecutive or non-consecutive) from a summer session class, or any regular semester class from 6-17 weeks in duration, may result in the instructor dropping the student. That is, a student may be dropped after missing one more class meeting than the number of class meetings per week.

Absence in excess of 10% of the scheduled class meetings in classes from one-five weeks in duration may result in the instructor dropping the student. That is, a student may be dropped after missing one class meeting more than 10% of the total number of scheduled class meetings.

4. When a student is dropped due to the attendance policy, the assignment of a "W" will be based on the drop occurring before the 14th week for a full semester class. After the 14th week, no drops are allowed, and the only grades given will be: "A," "B," "C," "D," "F," "NP," or "P." It is the student's responsibility to withdraw formally from classes by the last day to withdraw with a "W." Any student who stops attending a class without officially dropping it in the Admissions & Records Office may receive a grade of "F."

5. If the student has been dropped due to the attendance policy, the instructor may reinstate the student only if all of the following conditions are met:
   a. the student had been doing satisfactory work,
   b. in the judgment of the instructor, the student has a reasonable chance of passing the course, and
   c. the student verifies extenuating circumstances beyond his/her control.

The student must complete a Student Reinstatement Form with supporting documentation. Student Reinstatement Forms may be obtained from the Admissions & Records Office.

If the student is denied reinstatement, the student may petition the Vice President for Student Affairs.

Multiple and Overlapping Enrollments BP 4226

Students may enroll in two or more sections of the same credit course during one term, only if the length of the courses does not overlap. No student may enroll in more than one section of the same course at any given time.

Students may petition to enroll in courses where the meeting times of those courses overlap, only under the conditions specified in Title 5, Section 55007.

A student may not enroll in two or more courses where the meeting times for the courses overlap, by more than 15 minutes unless:

- The student provides a valid justification, other than scheduling convenience, of the need for an overlapping schedule.
- The instructor of the course in which time must be made up must approve both the makeup schedule and Conflicting Course Petition.
- The student makes up the overlapping hours at some other time during the same week under the supervision of the instructor of the course.
- The instructor must document on his attendance roster when the student made up the time and how much time was made up.

Note: An Attendance Policy for Distance Education courses is currently being developed in the 2014-2015 year. Once approved, this policy will be available in the current semester schedule of classes.
PROBATION AND DISMISSAL
BP 4250

Students who have attempted 12 or more units with a grade point average of less than 2.0 will be considered scholastically deficient. There are three conditions of deficiency:

1. Probation (Academic and Progress)
2. Subject to Dismissal
3. Dismissed

Placement on Probation

Academic Probation

Students with 12 or more attempted units whose grade point average (GPA) for all work attempted at Hartnell College falls below a 2.0 (“C”) will be placed on academic probation.

Progress Probation

Students who have 12 units or more attempted, but have failed to complete more than 50% of the cumulative number of units attempted, due to entries of “W,” “I,” and “NP” will be placed on progress probation.

Explanation: Student grade reports carry the designations “UA” and “UC.”

Definition of Units Attempted (“UA”): All units in which the student was enrolled after the “No Grade of Record” drop date of a semester.

Definition of Units Completed (“UC”): All units in which the student received a grade of “A,” “B,” “C,” “D,” or “F”.

Responsibility of Probationary Students

1. Probationary students must meet periodically with their counselors so that their academic progress may be reviewed.
2. Probationary students will be advised to take a program of study that is designed to assist them in raising their GPA.

Removal from Probation

Academic: Students will be removed from academic probation upon earning a 2.0 (“C”) average or better in all college work attempted at Hartnell College and when the overall Grade Point Average for all college work attempted equals a 2.0 (“C”) or better.

Progress: Students will be removed from progress probation once their cumulative units completed is 50% of the cumulative units attempted.

Probationary students’ grade reports will indicate when they have been removed from such status

Subject to Dismissal: For “Subject to Dismissal” purposes, consecutive semesters are based upon the student’s enrollment. If not enrolled during the spring semester, then fall followed by summer would be consecutive.

Progress: Students on progress probation will be subject to dismissal after two consecutive semesters of progress probation.

Academic: A student who is on academic probation shall be subject to dismissal when the student’s earned cumulative grade point average is less than 2.0 in all units attempted for two consecutive semesters.

Dismissed: A student shall be dismissed when his/her earned cumulative GPA is below 2.0 for three consecutive semesters.

Standards for Dismissal

For purposes of this section, semesters shall be considered consecutive on the basis of the student’s enrollment pattern rather than the calendar year. For example, the semesters of a student enrolled in the fall, not spring, but again in the fall are considered to be consecutive.

A student who is on academic probation shall be subject to dismissal if the student earned a cumulative GPA of 1.99 or below in all units attempted in each of the three consecutive semesters which were graded on the basis of the grading scale.

A student who has been placed on progress probation shall be subject to dismissal if the percentage of units in which the student has been enrolled for which entries “W,” “I,” and “NC” are recorded in at least three consecutive semesters reaches or exceeds 50%.

Readmission

Students who have been dismissed from Hartnell College or other accredited collegiate institutions may apply at the Admissions & Records Office for readmission after one semester of nonattendance. Students so applying may be readmitted after completing a petition and an educational plan with their counselor and the approval of the Academic Probation Petition.

Students readmitted who have a grade point average of less than 2.0 (“C”) for the term immediately following readmission shall be dismissed from the College and not be eligible for readmission for a period of one academic year.

Note: Students readmitted after dismissal from Hartnell College or other accredited collegiate institutions may be restricted in the type of classes and the number of units taken.

In extreme cases in which dismissal resulted from extenuating circumstances, students ineligible for admission under the above regulations may appeal via the Academic Probation Petition.

In such extenuating circumstances, such extenuating circumstances shall be those acute medical, family, or other personal problems which rendered normal academic functioning unlikely or impossible.

Basic Skills Course Limitation

State regulations specify that students may take no more than 30 units in “Pre-Collegiate Basic Skills” courses. However, this limit shall not apply to the following students:

1. Students enrolled in one or more courses of English-as-a-Second-Language.
2. Students identified by the College as having a verified learning disability.

See Your Counselor for a List of Basic Skills Courses.

Appeal and Waiver Procedures

1. A student seeking to waive or appeal the limitation on enrollment in pre-collegiate basic skills courses shall submit a Pre-Collegiate Basic Skills “Waiver”Petition to a Hartnell counselor. The counselor shall meet with the student to review his/her academic record (transcript) and develop an academic educational plan for the next semester. The student shall forward the Pre-Collegiate Basic Skills “Waiver” Petition, the student’s educational plan, and academic record (transcript), to the Dean of Student Affairs.

2. The student shall sign a form acknowledging his/her knowledge of the limitations of the waivers.

3. Permission to waive the 30-unit limit will allow the student to enroll in basic skills courses for a period not to exceed one semester and for a maximum of ten basic skills units.

4. Once a waiver is approved, the student will be allowed to register in basic skills classes up to the maximum unit limit allowed.

If the waiver is denied, the counselor shall refer the student to appropriate adult education programs or community services.

5. A student whose waiver was previously denied may start the process at Step 1 above for reinstatement upon the successful completion of coursework, or a community services program, and/or appropriate scores on Hartnell’s placement assessment tests. In addition, a Hartnell counselor recommendation for approval on the Pre-Collegiate Basic Skills “Waiver” Petition is required.
STUDENT CONDUCT and DUE PROCESS

Student Rights

In joining the academic community, students enjoy the right of freedom to learn and share responsibility in exercising that freedom. Students, as well as other members of the academic community, are expected to conduct themselves in accordance with the standards of the College which are designed to perpetuate its educational purposes. When a student is charged with misconduct, such a charge will be processed in accordance with the College’s Student Conduct and Due Process Policy in order to protect the student’s rights and the College’s interest. Copies of the Students’ Rights, Responsibilities, and Grievance Procedures are available from the Office of Student Affairs and on Hartnell’s website.

Privacy Rights of Students

Students are advised that the College maintains a policy pursuant to federal and state law providing access to students’ records only upon written request of students or former students. The College does maintain directory information which is defined as:

1. Student participation in officially recognized activities and sports including weight and height and high school of graduation of members of athletic teams.
2. Degrees, awards, and scholarships received by students, including honors and President’s or Dean’s List recognition.
3. Names, addresses, phone and fax numbers of graduates and former students for publication in the College alumni directory and only with their consent.

This directory information can and will be made public unless individual students request in writing to the Vice President of Student Affairs that their name be removed from the directory information.

Unless authorized by the individual student or required by judicial order, the College will not provide access to student records or acknowledge student enrollment to other persons, including parents. Specific written authorization by the student is needed to release records, including the forwarding of transcripts.

Specific exceptions to this statement on accessibility of the records are spelled out in the policy. The detailed policy is not reproduced here, but is available from the Vice President of Student Affairs.

Students (and former students) are also advised that they have a right to challenge the content of their records if they feel that such records contain inaccurate, misleading, or otherwise inappropriate information. Contact the Admissions & Records Office.

Student Grievances

Grievances and complaints by Hartnell College students, concerning Hartnell College personnel and/or procedures, shall be handled in compliance with Title IX, the California Education Code, and this policy. Students shall maintain directory information which is defined as:

1. Student participation in officially recognized activities and sports including weight and height and high school of graduation of members of athletic teams.
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Student Grievances include:

1. Charges of discrimination on the basis of race, color, religion, sex, sexual orientation, age, disability, marital status, ancestry, national origin, or veteran status.
2. Charges of arbitrary imposition of sanctions without proper regard for individual rights and due process.
3. Charges of prejudicial or capricious decisions in the academic evaluation of a student’s performance.
4. Other complaints as determined in the legislation policies stated above.

Note: Records of all complaints that are not resolved at lower levels must be kept on file with the Office of Student Affairs.

Grievances of Hartnell College students concerning Hartnell College personnel and/or procedures shall be handled in compliance with Title IX, AB 803, Section 504 of PL 93-112, the California Education Code, and Hartnell College policy. Students shall be granted and assured all rights and procedures inherent in the above. Hartnell College shall make a comprehensive effort to ensure that all students are informed of and, as applicable, assisted with these procedures.

DRESS GUIDELINES

Hartnell College students are expected to demonstrate maturity by exercising good judgment and taste in every day attire. Students are required to be fully attired (undergarments covered) including footwear.

Instructors in charge of field trips and/or social events may enforce additional dress regulations which they deem are required for the occasion.

ACADEMIC POLICIES

Student Conduct and Due Process

Student Rights

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Students (and former students) are also advised that they have a right to challenge the content of their records if they feel that such records contain inaccurate, misleading, or otherwise inappropriate information. Contact the Admissions & Records Office.

Solomon Amendment

Hartnell College fully complies with the Solomon Amendment. For more information on this amendment, see the website http://www.aacrao.org/resources/compliance/solomon-amendment

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Students (and former students) are also advised that they have a right to challenge the content of their records if they feel that such records contain inaccurate, misleading, or otherwise inappropriate information. Contact the Admissions & Records Office.

Academic Dishonesty

Dishonesty includes, but is not limited to, in-class cheating, out-of-class cheating, plagiarism, knowingly assisting another student in cheating or plagiarism, or knowingly furnishing false information to college staff, faculty, administrators or other officials. Following are definitions of in-class cheating, out-of-class cheating, plagiarism, and furnishing information. These are not all-inclusive, and the list itself is not meant to limit the definition of cheating to just those mentioned.

1. In-class cheating: During an examination or on any work for which the student will receive a grade or points, unauthorized looking at or procuring information from any unauthorized sources or from any other student’s work.
2. Out-of-class cheating: unauthorized acquisition, reading or knowledge of test questions prior to the testing date and time; changing any portion of a returned graded test or report and resubmitting as original work to be regraded; or presenting the work of another as one’s own for a grade of points.
3. Plagiarism: unauthorized use of expression of ideas from either published or unpublished work(s) as a student’s own work for a grade in a class. This also includes the violation of copyright laws, including copying of software packages.
4. Furnishing false information: forgery, falsification, alteration, or misuse of College documents, records, or identification in class or in laboratory situations.

Instructor Disciplinary Action When Cheating/Plagiarism Occurs

When a student is charged with plagiarism or cheating related to a class and the instructor has reasonable proof or documentation or the student admits the violation, the instructor may select one or more of the following options:

1. Issue an oral or written notification and warn the student that further acts of this sort will result in additional disciplinary action.
2. Issue a “NP” or a failing grade ("F") for the assignment in question.

The faculty will refer the case to the Vice President of Academic Affairs and provide them with the related documentation for record of the violation. The Vice President of Academic Affairs Office may consider additional sanctions as outlined in the “Penalties for Student Misconduct” in cases of continued plagiarism or cheating.

The student has a right to appeal any of these disciplinary actions and the right to have the case reviewed by a Hearing Board. If the student wishes to appeal, s/he should contact the Director of Student Affairs within five working days of notification of the disciplinary action.
STANDARDS OF STUDENT CONDUCT AP5500

The District has an obligation to specify those standards of behavior essential to its educational mission and campus life. The following types of misconduct for which students are subject to disciplinary sanctions apply at all times on campus, off-site centers, and at any off-campus functions sponsored or supervised by the College:

The following conduct shall constitute good cause for discipline, including but not limited to the removal, suspension or expulsion of a student.

1. Causing, attempting to cause, or threatening to cause physical injury to another person. Physical or verbal abuse of any person or group, or conduct which intimidates, threatens, or endangers the health or safety of any person or group. Assault, battery, or any threat of force or violence upon the College’s staff members, students, or visitors.

2. Possession, sale or otherwise furnishing any firearm, knife, explosive or other dangerous chemicals or object, including but not limited to any facsimile firearm, knife, or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a District employee, which is concurred in by the College CEO.

3. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in California Health and Safety Code Sections 11053 et seq., an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5.

4. Committing or attempting to commit robbery or extortion.

5. Causing or attempting to cause damage to District property or to private property on campus.

6. Stealing or attempting to steal District property or private property on campus, or knowingly receiving stolen District property or private property on campus.

7. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or the District.

8. Committing sexual harassment as defined by law or by District policies and procedures.

9. Engaging in harassing or discriminatory behavior based on race, sex, (i.e., gender) religion, age, national origin, disability, or any other status protected by law.

10. Engaging in intimidating conduct or bullying against another student through words or actions, including direct physical contact; verbal assaults, such as teasing or name-calling; social isolation or manipulation; and cyber-bullying.

11. Willful misconduct which results in injury or death to a student or to College personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the District or on campus.

12. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, College personnel.

13. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.

14. Dishonesty, forgery, alteration or misuse of College documents, records or identification; or knowingly furnishing false information to the District.

15. Unauthorized entry upon or use of District facilities.

16. Lewd, indecent or obscene conduct or expression on District-owned or controlled property, or at District sponsored or supervised functions.

17. Engaging in expression which is obscene, lewd, lascivious or slanderous, or which so incites students as to create a clear and present danger of the commission of unlawful acts on District premises, or the violation of lawful District regulations, or the substantial disruption of the orderly operation of the District.

18. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.

19. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any district policy or administrative procedure.

20. Violations of other applicable federal and state statutes and College rules and regulations.

STUDENT DISCIPLINE AP5520

The purpose of this procedure is to provide a prompt and equitable means to address violations of the Standards of Student Conduct, which guarantees to the student or students involved the due process rights guaranteed them by state and federal constitutional protections. This procedure will be used in a fair and equitable manner, and not for purposes of retaliation. It is not intended to substitute for criminal or civil proceedings that may be initiated by other agencies.

These Administrative Procedures are specifically not intended to infringe in any way on the rights of students to engage in free expression as protected by the state and federal constitutions, and by Education Code Section 76120, and will not be used to punish expression that is protected.

ANIMAL CONTROL

1. No personal pets or animals are allowed on any Hartnell College campus except for:
   a. Professional service dogs for persons with a verified disability.
   b. Animals used in an instructional program.

   Students not observing this regulation will be in violation of the Student Code of Conduct and will be handled through established student disciplinary policy and procedures.
Information Disclosure: The federal Student Right-to-Know (SRTK) and Campus Security Act of 1990 requires all institutions of higher education to disclose information about program completion and transfer rates. The information presented here provides the academic outcomes over a three year tracking period for all first-time, full-time students who were first enrolled at Hartnell College in fall 2011 with educational goals of earning a degree, earning a certificate, or transferring to a four-year institution. This cohort represents only a small proportion of all students enrolled.

Definitions: A completer is a student who attained a certificate or degree or became transfer prepared during the three year period from Fall 2011 to Spring 2014. A transfer-prepared student is a student who completed 60 transferable units with a GPA of 2.0 or better. A transfer student is a student who transferred to another post-secondary institution prior to attaining a degree, certificate or becoming transfer-prepared during a five semester period from Spring 2012 to Spring 2014.

Official Rates: Hartnell College’s official SRTK completion rate for the 2011 cohort is 25.53%, compared with the statewide rate across all California community colleges of 27.98%. The official SRTK transfer rate for Hartnell is 10.26%, and the statewide rate is 12.09%. Please note that SRTK rates substantially underrepresent success in preparing students for transfer to four-year institutions, as the methodology only allows each student to be counted once, even though a student can both complete a degree and transfer to a four-year institution. Students who complete a degree and also transfer are counted only in the completion category; they are not counted in the transfer category. Additionally, SRTK rates do not account for student outcomes occurring after the three year tracking period.

Trends: The last four years (from 2008-2011) average Completion rate for Hartnell is 23.44% and 10.55% for Transfer. The average statewide is 2.5 percent points higher than Hartnell for Completion (25.99%) and almost 3 percent points higher for Transfer (13.48%).

Completion rates for Hartnell increased by 10% when comparing 2008 and 2011 cohorts. The increase was more noticeable at statewide level (14%). Transfer rates decreased by 9% for Hartnell from 2008 to 2011. However, the decrease was deeper statewide (-13%). (See table 1 below)

Table 1: Trends

<table>
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<th>Group</th>
<th>Metric</th>
<th>2008 Cohort</th>
<th>2009 Cohort</th>
<th>2010 Cohort</th>
<th>2011 Cohort</th>
<th>Average</th>
<th>% Change from 2008</th>
</tr>
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<tr>
<td>Hartnell</td>
<td>Completion Rate</td>
<td>23.26%</td>
<td>22.46%</td>
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<td>25.53%</td>
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<td></td>
<td>Transfer Rate</td>
<td>11.23%</td>
<td>10.30%</td>
<td>10.41%</td>
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<tr>
<td>Statewide</td>
<td>Completion Rate</td>
<td>24.64%</td>
<td>25.08%</td>
<td>26.26%</td>
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<td>Transfer Rate</td>
<td>13.87%</td>
<td>14.36%</td>
<td>13.59%</td>
<td>12.09%</td>
<td>13.48%</td>
<td>-13%</td>
</tr>
</tbody>
</table>

*Rounded percentage change between 2011 and 2008 cohort rates.

Source: California Community Colleges Chancellor’s Office, January 19th, 2016
INSTRUCTIONAL PROGRAMS

Educational Programs at Hartnell College are varied and designed to meet the specific needs of the District residents.

General Education

General Education is that part of education which is concerned with the common knowledge, skills, and attitudes needed by each individual to be effective as a person, a family member, a worker, and a citizen. General Education courses require students to cultivate the disciplines of scholarship and to develop the attitudes necessary for academic achievement in upper-division work. Hartnell College has a full articulation agreement with the California State University System and the University of California Board of Regents, which certifies completion of lower division general education requirements. This information is represented in the college’s CSU-GE and IGETC documents and listed in this catalog and can be accessed online at www.assist.org.

SPECIAL OCCUPATIONAL PROGRAMS

Nursing

Hartnell College offers students the opportunity to major in Nursing (AA/AS Degree) leading to eligibility to take the licensing examination and become a Registered Nurse.

Apprenticeship Programs

In cooperation with the Joint Apprenticeship and Training Committees of Monterey/Santa Clara/Santa Cruz Counties, the College operates apprenticeship programs, whereby students can prepare for the skilled labor force. At the present time, opportunities for apprenticeship exist within the electrician discipline. Apprentices are employed full time during the day and take related classroom instruction at the IBEW Local Union 234, Castroville, California.

Cooperative Work

Experience Education Program

Cooperative work experience provides a bridge between the classroom and on-the-job training involving the student, faculty, college, and an employer. Students work in a job related to their career interest on a part-time basis while attending classes at Hartnell College. The program provides a gradual transition from formal instruction to career, allows students to apply knowledge gained in the classroom to the practical world of work, and permits students the opportunity to test their interest in and suitability for the field of interest endeavor.

COURSE NUMBERING

1-99
Courses numbered 1 through 99 are baccalaureate level courses, carrying lower division credit at most four-year colleges and universities. In accordance with the Chancellor’s Office of the California State Universities and College’s Executive Order No. 167, Hartnell College has developed courses that are baccalaureate level. The California State Universities and most private, independent college/universities accept Hartnell courses numbered 1-99. Courses numbered 100 through 199 may be accepted for transfer credit at some CSU, UC, or private/independent college/universities in certain majors. Most courses numbered 1-50 are accepted by most University of California campuses; however, students should consult the “University of California Transfer Course Agreement (TCA)” listed online at www.assist.org for the most current information and any limitations. Hartnell courses transfer to four-year college/universities in terms of specific or elective credit depending upon the institution and major selected.

1-199
Courses numbered 1-199 are associate degree level courses and apply toward the 60-unit graduation requirement for the Associate Degree. Courses 100-199 are intended as associate degree level courses; however, some may transfer to four-year colleges and universities in certain occupational curricula. Consult a counselor to determine which courses transfer to a four-year institution.

200-299
Courses numbered 200-299 do not transfer and are not associate degree level courses. These courses do not apply toward the 60-unit graduation requirement for the Associate degree.

300+
Courses numbered 300+ are non-credit courses. These courses are non-associate degree level and are not transferable.

Selected Topics

Selected areas of study, which are intended primarily for courses offered on an experimental or trial basis, may be offered through any discipline contained in the catalog by using the number 39 (or 139 or 239). The same content may not be offered more than three times under Selected Topics. Selected Topics may be repeated for credit if taken with different course content.

CSU/UC NOTATIONS ON COURSES

The designation of “CSU or UC” at the end of a course description signifies the course has been approved for at least elective credit by those university systems. In addition, if the course has the designation CSU-GE, Area designator or IGETC, Area designator, a general education requirement within the designated area could be satisfied with the course. Courses that carry a number between 1-99 are expected to transfer for baccalaureate credit to four-year institutions, but the individual senior institution or a counselor should be consulted to determine the transferability of a specific course. “Baccalaureate applicable” courses in the 1-99 course numbering meet the following criteria: 1) the course has procedural rigor and treats subject matter at university level, or 2) the course is parallel to one offered at a California State University or University of California campus. The ASSIST database at www.assist.org gives specific transfer course information for most all CSU and UC majors and individual course-to-course agreements.

Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system used for transfer courses that is independent of the actual course numbers assigned. Each C-ID number identifies a lower-division, transferable course commonly articulated between the California community colleges and CSU, and independent colleges/universities. The C-ID number conveys that any course at another college bearing the same C-ID number will be accepted at that institution. In other words, the C-ID number can be used to identify comparable courses at different institutions. Students should check with a counselor to determine how the C-ID designation can be used to identify comparable courses at different institutions. The C-ID number is not intended to be used as a substitute for the actual course number in any of the tables of transfer course equivalents found in the catalog. Hartnell College has a full articulation agreement with the California State University System and the University of California campuses; however, students should consult the “University of California Transfer Course Agreement (TCA)” listed online at www.assist.org for the most current information and any limitations.
TUTORIAL SERVICES

Tutoring Services are available to all registered students free of charge. Tutors and Supplemental Instruction (SI) Leaders must be approved by an instructor and must complete a tutor training course. Students wishing to use tutorial services and students who wish to become tutors or SI Leaders are encouraged to apply in Building A, Room 214. For more information, online resources, applications, and/or Drop-in Tutoring, Supplemental Instruction, and Workshop schedules, visit our web site at http://www.hartnell.edu/tutorial-services

Questions may be asked in person or by calling (831) 755-6815.

Computer Center

The Computer Center, located in Building E, Room 211, offers self-paced courses in computer skills, Internet resources, computer applications, and keyboarding. In addition, tutoring is available for those students who need technology support. Questions may be asked in person or by calling (831) 755-6777.

Language Lab

The Language Lab, located in Building D, Room 359, offers individualized lab instruction in support of ESL curriculum from beginning to advance with computer software and tutorial guidance. These services are available for corequisite lab courses. Questions may be asked in person or by calling (831) 770-7066.

ATHLETICS

Hartnell College offers a complete and diverse program of intercollegiate athletics for both men and women. Both programs compete under the rules of the California Community College Athletic Association (CCCAA), the Coast Conference and Northern California Football Association (NCFA) maintaining membership in each organization. Our current women’s intercollegiate sports include basketball, cross country, soccer, softball, track & field, and volleyball. Our current men’s intercollegiate sports are baseball, basketball, cross country, football, soccer, and track & field. Students enrolling in intercollegiate athletic programs must meet all CCCAA eligibility requirements. Student/athletes must be continuously and actively enrolled in and attending classes—minimum of 12 units (full-time student) and at least 9 of the 12 units must be attempted in academic courses counting towards remediation, career technical education/certificate courses, associate degree requirements, or transfer/general education as defined by the course catalog. For additional eligibility information, please contact the Physical Education/Athletic Office in Building H, Room 114 or phone (831) 755-6830.

Academic Athletic Counselor

The mission of athletic counseling is to connect Hartnell College student/athletes with programs and services aimed to support their academic and professional growth. Our services include academic, career and personal counseling, crisis intervention, course planning, academic progress monitoring, learning assistance, as well as two- and four-year college athletic eligibility education. Student/athletes will work with an athletic counselor to advise/provide them with a comprehensive individual educational plan.

Rich Givens or Erica Michel-Palacio
Student/Athlete Counselor
(831) 755-6840
Building H, Room 106
rgivens@hartnell.edu

Joanne Venegas – Eligibility Assistant
(831) 755-6830
Building H, Room 114
jvenegas@hartnell.edu

Athletic Eligibility

In order to be eligible to participate in the Hartnell College Intercollegiate Athletic Program, a student/athlete must be actively enrolled in and attending at least 12 semester units.

To continue athletic participation in any sport, the student/athlete shall maintain a cumulative 2.0 grade point average (GPA) in accredited post-secondary course work. Computation begins at the start of the semester of the first participation in any sport. In order to remain eligible after having first participated in a collegiate sport

a. A student/athlete enrolling prior to 7/1/2015 must complete 24 semester units, 18 semester units shall be in course work counting toward remediation, career technical education/certificate courses, associate degree requirements, transfer/general education, and/ or lower division theoretical major preparation courses as defined by the college catalog and/or articulation agreements and be consistent with the student athlete’s educational plan with a cumulative grade point average of 2.0.

b. A first year student/athlete enrolling after 7/1/2015 must complete 27 semester units, 21 semester units shall be in course work counting toward remediation, career technical education/certificate courses, associate degree requirements, transfer/general education, and/ or lower division theoretical major preparation courses as defined by the college catalog and/or articulation agreements and be consistent with the student athlete’s educational plan with a cumulative grade point average of 2.0.

College eligibility is not affected by high school students attending classes at the community college. Participation in any scheduled contest in any institution above high school level during a sport season shall be recorded as one season’s participation in that sport.

Athletic Facilities

Our athletic facilities include two gymnasiums, a swimming pool, fitness center, football practice field, all-weather track, soccer field, baseball field, softball field, and an athletic training room.
## HARTNELL COLLEGE DEGREES AND CERTIFICATES

<table>
<thead>
<tr>
<th>Program</th>
<th>Associate Degree</th>
<th>Certificate</th>
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<tr>
<td>Administration of Justice for Transfer</td>
<td>AS-T</td>
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<td>General Studies</td>
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<td>Humanities Emphasis</td>
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<td>Language and Rationality Emphasis</td>
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<td>Natural Science Emphasis</td>
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<td>Social and Behavioral Sciences Emphasis</td>
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<td>Digital and Web Design Option</td>
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<td>Construction—Sustainable Construction:</td>
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<td>Early Childhood Education for Transfer</td>
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<tr>
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<td>Earth Science</td>
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<td>Economics for Transfer</td>
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<td>Elementary Teacher Preparation for Transfer</td>
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<tr>
<td>Engineering</td>
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<tr>
<td>English for Transfer</td>
<td>AA-T</td>
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</tbody>
</table>

Associate Degree (AA or AS) programs allow students the benefits of a general college education and the option of choosing occupational training, liberal arts, or concentration in a discipline in the College. The Associate in Arts for Transfer (AA-T) and the Associate in Science for Transfer (AS-T) are intended for students who plan to transfer and complete a bachelor's degree in a similar major at a CSU campus. In addition, Hartnell College offers a variety of programs designed to develop and upgrade vocational proficiency and for which Certificates of Achievement are offered.

Students must submit a Petition for Associate Degree/Certificate of Achievement to be evaluated for eligibility to be awarded a Degree or Certificate. Deadlines for filing the Petition are noted in the Schedule of Classes and are posted in the Admissions and Records Office. To be awarded a Certificate of Achievement from Hartnell College, it is required that at least half of the required number of units be taken at Hartnell College.

Not all courses required for listed programs may be offered during this catalog cycle. Please contact a counselor for current Information (831) 755-6820.
GENERAL INFORMATION – 2016-2017 Graduation Requirements for the Associate Degree

GRADUATION HONORS
Honors on the graduation card is determined by the GPA at the time of evaluation (reflected on the student’s graduation worksheet). The GPA includes all Hartnell and transfer degree-applicable coursework. The diploma and transcript will reflect one of the three following levels, if applicable:
- 3.25 - 3.49 cum laude
- 3.50 - 3.74 magna cum laude
- 3.75 - 4.00 summa cum laude

For the ceremony, HONORS will be announced rather than the cum laude level. A final determination will be made once final grades have been reviewed. Graduation honors will be annotated on the student’s official transcript.

GRADUATION EVALUATION
Students who wish to receive an Associate Degree must submit a Petition for Associate Degree/Certificate to the Admissions & Records Office to have college course work officially evaluated. Transcripts from all institutions previously attended must be submitted as part of the graduation evaluation process. The evaluation compares completed college work with the curriculum requirements for the year that the student began continuous enrollment at Hartnell.

DOUBLE DEGREE
Although students may not receive two associate degrees simultaneously, they may concurrently complete the requirements for a second degree. An AA/AS Degree, with a double major, can be earned by completion of all General Education, and Competency Requirements, and course work required for both majors. The General Education and General Studies with an emphasis majors may not be included as part of the Double Major.

ADDITIONAL ASSOCIATE DEGREE
Having received an AA/AS, Bachelor’s Degree or higher, a student may qualify for an AA or AS Degree in other fields (with the exception of an AA Degree in General Studies with an emphasis) provided a minimum of 12 units in residence are completed after the previous degree was awarded.

CATALOG RIGHTS FOR CONTINUING STUDENTS
Provided that continuous enrollment is maintained, students may elect the degree or certificate requirements in which they have declared a major that is in effect at 1) the time of entrance to Hartnell College, or 2) any catalog thereafter. Continuous enrollment is defined as attendance at Hartnell College during both fall and spring semesters each year. Any academic report symbol (“A” through “F,” “P,” “NP,” “I,” “IP,” “RD,” “W”) shall constitute enrollment. Upon reentry to the college after an absence, catalog rights will be reestablished using the current academic catalog determined by the student’s semester/term of reentry.

PROGRAM DISCONTINUANCE
In order to maintain academic programs that meet current community and industry demands, programs are reviewed on a regular basis. If a program is found to not meet current community and industry demands and is therefore discontinued, the College will provide students the opportunity to complete the remaining required major coursework if the students
- have a declared major associated with the program; and
- have enrolled in the program on a full-time basis (or have enrolled on a part-time basis and have completed at least half of the required major courses at the time of program discontinuance).

Students who meet these requirements will be notified of their eligibility and will be provided a modified student educational plan in which all remaining required major coursework will be completed within one academic year from the date of discontinuance. Students’ ability to complete the discontinued program’s elective and required general education course requirements will not be limited to the same one-year period provided for required major coursework.

Requirements for Hartnell College Associate Degree

Units/Grade Point Average
A minimum of 60 semester units with a grade of “C” or better must be maintained in all degree applicable units. Only courses numbered 1-199 may apply toward the Associate Degree.

Residence
Of the 60 units required for graduation, the student must have completed one of the following residence requirements:
- A minimum of 45 units at Hartnell if not in attendance during the semester of graduation.
- A minimum of 12 units in residence if in attendance at Hartnell during the semester of graduation.

Competency Requirements
1. Competency in Written Expression and Reading
Completion of ENG 1A with a grade of “C” or better. (Nursing (RN) majors should take an ENG 1A section with “Multicultural Perspective”, thus fulfilling the Ethnic Groups in the United States graduation requirement, as well as, the Written Composition requirement. Nursing (RN) is the only major that allows the double counting of these two degree requirements.

2. Competency in mathematics
Completion of MAT123 (5 units) or completion of any math course in which MAT123 is a prerequisite with a “C” or better. All students must meet the 6.0 unit Communication & Analytical Thinking requirement.

Note: A maximum of 5 units of MAT-123, may be applied towards the AA or AS degree requirements.

General Education
A minimum of 21 units which shall include courses in each of the following areas:
1. Natural Sciences (3 units)
2. Social & Behavioral Sciences (3 units)
3. Humanities (3 units)
4. Ethnic Groups in the United States (3 units)
5. Language & Rationality
   a. Written Expression (3 units)
   b. Communication & Analytical Thinking (6 units)

Major
Refer to the requirements listed in catalog for chosen major.

ASSOCIATE DEGREES FOR TRANSFER (AA-T OR AS-T)

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units. See Student Transfer Achievement Reform Act on page 50 of this catalog for additional information.
# ASSOCIATE DEGREE REQUIREMENTS

## NATURAL SCIENCES (3 Units)

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>ABT92</td>
<td>Plant Science</td>
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<td>ANT1</td>
<td>Introduction to Biological Anthropology</td>
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<td>AST1</td>
<td>Introduction to Astronomy</td>
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<td>Astronomy Laboratory</td>
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<td>BIO1</td>
<td>Fundamental Biological Concepts</td>
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<td>BIO2</td>
<td>General Zoology</td>
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<td>General Botany</td>
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<td>Human Anatomy</td>
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<td>BIO11</td>
<td>Introductory Human Anatomy and Physiology</td>
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<td>BIO12</td>
<td>Introduction to Genetics</td>
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<td>BIO13</td>
<td>Introduction to Forensic DNA Analysis</td>
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<td>BIO18</td>
<td>Introduction to Pathophysiology</td>
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<td>BIO20</td>
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<td>BIO27</td>
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<td>PHY4C</td>
<td>General Physics/Wave, Heat, Light and Modern Physics</td>
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<td>PHY10</td>
<td>Introduction to Physics</td>
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<td>PHY32</td>
<td>Survey of Chemistry and Psychics</td>
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## SOCIAL AND BEHAVIORAL SCIENCES (3 Units)

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<td>ABT53</td>
<td>Agribusiness Economics</td>
</tr>
<tr>
<td>AN1</td>
<td>Introduction to Biological Anthropology</td>
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<tr>
<td>ANT2</td>
<td>Introduction to Anthropology: Cultural</td>
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<td>ANT3</td>
<td>Introduction to Archeology</td>
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<tr>
<td>ANT10</td>
<td>California Indians</td>
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<tr>
<td>ANT15</td>
<td>North American Indians</td>
</tr>
<tr>
<td>ANT20</td>
<td>Cultures of Mexico</td>
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<tr>
<td>AOD1</td>
<td>Fundamentals of Chemical Dependency</td>
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<tr>
<td>BUS2</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>COM4</td>
<td>Intercultural Communication</td>
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<tr>
<td>ECO1</td>
<td>Principles of Economics-Macro</td>
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<tr>
<td>ECO5</td>
<td>Principles of Economics-Micro</td>
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<tr>
<td>ECO10</td>
<td>Introduction to Economics</td>
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<tr>
<td>ETH1</td>
<td>Introduction to Ethnic Studies</td>
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<td>ETH2</td>
<td>Chicano Leadership</td>
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<td>ETH3</td>
<td>Chicanos in American Society</td>
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<td>ETH4</td>
<td>Chicano Culture</td>
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<td>ETH5</td>
<td>Chicano Politics and the American Political System</td>
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<td>ETH6</td>
<td>La Chicana</td>
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<td>ETH12</td>
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<td>ETH25</td>
<td>American Indian Literature</td>
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<tr>
<td>FCS14</td>
<td>Child Development</td>
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<td>GEG1</td>
<td>Introduction to Geography: Physical Elements</td>
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<td>GEG10</td>
<td>Geography and World Affairs: A Regional Approach</td>
</tr>
<tr>
<td>HED2</td>
<td>Individual Health and Wellness</td>
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<td>HED7</td>
<td>Women's Health</td>
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<tr>
<td>HES1</td>
<td>Introduction to Public Health</td>
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<tr>
<td>HIS4A</td>
<td>Western Civilization A</td>
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<tr>
<td>HIS4B</td>
<td>Western Civilization B</td>
</tr>
<tr>
<td>HIS5A</td>
<td>World History A</td>
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<td>HIS5B</td>
<td>World History B</td>
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<td>HIS6</td>
<td>History of Mexico</td>
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<td>HIS8A</td>
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<td>HIS9B</td>
<td>Modern Latin American History</td>
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<td>HIS10</td>
<td>History of California</td>
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<td>HIS17A</td>
<td>United States History A</td>
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<td>HIS17B</td>
<td>United States History B</td>
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<td>HIS40</td>
<td>History of Women in the United States</td>
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<tr>
<td>HIS46A</td>
<td>Race and Ethnicity in American History A</td>
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<td>HIS46B</td>
<td>Race and Ethnicity in American History B</td>
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<td>HIS47</td>
<td>Religions of the World</td>
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<td>HIS49A</td>
<td>Chicano History A</td>
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<td>HIS51</td>
<td>Women in History</td>
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<td>HIS55</td>
<td>U.S History through Film</td>
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<tr>
<td>PETH5</td>
<td>Sport in Society</td>
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<tr>
<td>PHL2</td>
<td>Introduction to Philosophy</td>
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<tr>
<td>PHL10</td>
<td>Ethics</td>
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<td>PHL15</td>
<td>Critical Thinking and Logic</td>
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<td>POL1</td>
<td>American Political Institutions</td>
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<tr>
<td>POL2</td>
<td>Contemporary Governments Abroad</td>
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<tr>
<td>POL3</td>
<td>Introduction to International Relations</td>
</tr>
<tr>
<td>POL5</td>
<td>Chicano Politics and the American Political System</td>
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<tr>
<td>POL6</td>
<td>Introduction to Contemporary Political Thought</td>
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<td>PSY2</td>
<td>General Psychology</td>
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<td>PSY6</td>
<td>Social Psychology</td>
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<td>PSY8</td>
<td>Research Methods in Psychology</td>
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<tr>
<td>PSY10</td>
<td>Introduction to Biological Psychology</td>
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<td>PSY12</td>
<td>Theories of Personality</td>
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<td>PSY14</td>
<td>Child Psychology</td>
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<td>PSY15</td>
<td>Human Sexuality</td>
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<td>PSY22</td>
<td>Abnormal Psychology</td>
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<td>PSY25</td>
<td>Developmental Psychology : Lifespan</td>
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<td>PSY33</td>
<td>Personal and Social Adjustment</td>
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<td>PSY41</td>
<td>Psychology of Human Relations</td>
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<td>PSY42</td>
<td>Psychology of Women</td>
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<tr>
<td>SOC1</td>
<td>Introduction to Sociology</td>
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<td>SOC5</td>
<td>Introduction to Social Problems</td>
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<tr>
<td>SOC15</td>
<td>Sociology of Immigration &amp; Identity in the US</td>
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<tr>
<td>SOC20</td>
<td>Sociology of Gender &amp; Society</td>
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<tr>
<td>SOC30</td>
<td>Sociology of Latino/Latina in US Society</td>
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<td>SOC41</td>
<td>Marriage and the Family</td>
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<td>SOC42</td>
<td>The Sociology of Minority Relations</td>
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<td>TAC23</td>
<td>Theatre for Social Change</td>
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</table>

Hartnell College Catalog/2016-2017
ASSOCIATE DEGREE REQUIREMENTS

HUMANITIES

(3 Units)

ANT2 Intro. to Anthropology: Cultural
ANT3 Introduction to Archeology
ANT20 Cultures of Mexico

ART1A Art History Survey I
ART1B Art History Survey II
ART3 Drawing and Composition
ART10 Art Appreciation
ART12A Design
ART15A Ceramics A
ART15B Ceramics B
ART70 Introduction to Graphic Design
ART72 Introduction to Digital Photography
ART80 Introduction to Digital Imaging

ASL1 American Sign Language I
ASL2 American Sign Language II
ASL3 American Sign Language III

COM9 Oral Interpretation of Literature

ENG1B College Literature and Composition
ENG17 The Contemporary Shakespeare
ENG22 Studies in Poetry
ENG24 The Short Story
ENG26 Chicano Literature
ENG31 Beginning Creative Writing
ENG32 Intermediate Creative Writing
ENG33 Advanced Creative Writing
ENG41 Art of Steinbeck
ENG44A World Literature I
ENG44B World Literature II

ENG46A Survey of British Literature I
ENG46B Survey of British Literature II
ENG47A Survey of American Literature I
ENG47B Survey of American Literature II
ENG50 Introduction to Film: History up to the 1960's
ENG51 Film Appreciation 1960 to the Present

ETH6 La Chicana
ETH12 Chicana Cinema
ETH25 American Indian Literature

HUMANITIES

(continued)

HIS04 History of Women in the US
HIS47 Religions of the World
HIS51 Women in History

MUS1A Music Appreciation-Historical Perspective
MUS2 Music Fundamentals
MUS5 Ethnic Musics in the U.S.
MUS6 Hawaiian Music
MUS7 Jazz Appreciation
MUS8 American Popular Music
MUS20 Hartnell College Choir
MUS21 Hartnell Chamber Singers
MUS23.1 Hartnell Chorale-Renaissance/Baroque Emphasis
MUS23.2 Hartnell Chorale-Classic/Romantic Emphasis
MUS23.3 Hartnell Chorale-20th Century Emphasis
MUS23.4 Hartnell Chorale-20th Century "POPS" Emphasis
MUS23.5 Hartnell Chorale-21st Century Emphasis
MUS24 Estudiantina Hartnell
MUS26 Jazz Ensemble
MUS29.1 Symphonic Band-18th Century Emphasis
MUS29.2 Symphonic Band-19th Century Emphasis
MUS29.3 Symphonic Band-20th Century Emphasis
MUS29.4 Symphonic Band-20th Century "POPS" Emphasis
MUS29.5 Symphonic Band-21st Century Emphasis
MUS34.1 Symphony Orchestra-18th Century Emphasis
MUS34.2 Symphony Orchestra-19th Century Emphasis
MUS34.3 Symphony Orchestra-20th Century Emphasis
MUS34.4 Symphony Orchestra-20th Century "POPS" Emphasis
MUS46 Music Theory and Musicianship
MUS47 Music Theory and Musicianship II
MUS48 Music Theory and Musicianship III
MUS49 Music Theory and Musicianship IV
MUS54 Introduction to Songwriting

PHL2 Introduction to Philosophy
PHL10 Ethics

PHO1 Introduction to Photography
PHO2 Beginning Black and White Photography
PHO4 Portfolio Photography

SPA1 Elementary Spanish
SPA1S Elementary Spanish for Spanish Speakers
SPA2 Elementary Spanish
SPA2S Elementary Spanish for Spanish Speakers

SPA2X Elementary Spanish for Chicano Students

SPA3 Intermediate Spanish
SPA3S Intermediate Spanish for Spanish Speakers
SPA4 Intermediate Spanish
SPA4S Intermediate Spanish for Spanish Speakers

TAC1 Introduction to Theatre
TAC2 Script Analysis
TAC3 History of Theatre
TAC18 Voice and Diction
TAC21 Intro to Modern Play Production
TAC22 Intro to Musical Theatre
TAC23 Theatre for Social Change
TAC24 Intro to World Theatre Production
TAC25 Introduction to Revival Play Production
TAC26 Scenic Construction
TAC29 Stage Lighting and Sound
TAC40 Stage Costuming Practicum
TAC50 Introduction to Film: History up to the 1960's

TAC53 Playwriting and Screenwriting
ASSOCIATE DEGREE REQUIREMENTS

ETHNIC GROUPS IN THE UNITED STATES (3 Units)

- ANT10 California Indians
- ANT15 North American Indians
- AOD4 Counseling Diverse Populations
- COM4 Intercultural Communication
- ECE53 Teaching in a Diverse Society
- EDU1 Multicultural Perspectives in Education
- ENG1A College Composition and Reading/Multicultural Perspective
- ENG1B College Composition and Reading/Multicultural Perspective
- ENG26 Chicano Literature
- ETH1 Introduction to Ethnic Studies
- ETH2 Chicano Leadership
- ETH3 Chicanos in American Society
- ETH4 Chicano Culture
- ETH5 Chicano Politics
- ETH6 La Chicanita
- ETH12 Chicano Cinema
- ETH25 American Indian Literature
- HED6 Multicultural Health Beliefs
- HES2 Health and Social Justice
- HIS10 History of California
- HIS40 History of Women in the US
- HIS46A Race and Ethnicity in American History A
- HIS46B Race and Ethnicity in American History B
- HIS49A Chicano History A
- HIS49B Chicano History B
- MUS5 Ethnic Musics in the U.S.
- MUS6 Hawaiian Music
- MUS7 Jazz Appreciation
- MUS8 American Popular Music
- SOC15 Sociology of Immigration and Identity in the U.S.
- SOC20 Sociology of Gender and Society
- SOC30 Sociology of Latino/Latina in US Society
- SOC42 The Sociology of Minority Relations

NOTE: Only students in the Nursing (RN) programs can use ENG 1A College Composition and Reading/Multicultural Perspective as an Ethnic Groups course

LANGUAGE AND RATIONALITY (9 Units)

A. Written Composition (3 units)

- ENG1A College Composition and Reading
- ENG1A College Composition and Reading/Multicultural Perspective

B. Communication and Analytical Thinking (6 units)

Completion of any Math course shown below with a grade of “C” or better fulfills the Math Competency requirement. In addition, choose one course from either category below to complete the remaining 6.0 unit requirement.

1. MAT2 Calculus for Managerial, Life, and Social Sciences
   - MAT3A Analytic Geometry & Calculus I
   - MAT3B Analytic Geometry & Calculus II
   - MAT3C Analytic Geometry & Calculus III
   - MAT4 Linear Algebra
   - MAT5 Differential Equations
   - MAT10 Math For Liberal Arts
   - MAT12 Number Systems
   - MAT13 Elementary Statistics
   - MAT16 Finite Mathematics
   - MAT24 Trigonometry
   - MAT25 Pre-Calculus Mathematics
   - MAT123 Intermediate Algebra

NOTE: A maximum of 5 units of Math 123, Intermediate Algebra, may be applied towards the AA or AS Degree Requirements.

2. ASL1 American Sign Language I
   - ASL2 American Sign Language II
   - ASL3 American Sign Language III
   - BUS1A Accounting Principles-Financial Business Information Systems and Information Literacy
   - BUS43 Business Information Systems and Information Literacy
   - COM1 Introduction to Public Speaking
   - COM2 Argumentation and Debate
   - COM3 Survey of Human Communication
   - COM4 Intercultural Communication
   - COM5 Professional & Leadership Communication
   - COM6 Small Group Communication
   - COM7 Introduction to Persuasion
   - COM8 Interpersonal Communication

LANGUAGE AND RATIONALITY (continued)

- CSS1 Intro to Comp Science and Programming Fundamentals
- CSS2A Object Oriented Programming
- CSS2B Data Structures and Algorithms
- CSS3 Computer Architecture & Assembly Language
- CSS4 Introduction to Scientific Programming
- CSS31 Database Management
- CSS44 Computer Science and Information Systems
- CSS123 Network Security Principles
- COU1 Student Success Seminar
- COU23 Student Skills for Success: Career Development
- COU27 Life Planning
- ENG1B College Literature and Composition
- ENG1B College Literature and Composition/Multicultural Perspective
- ENG2 Critical Thinking and Writing
- LIB2 Introduction to Academic Library & Information Competency
- LIB5 Information Competency in the Sciences & Applied Technology
- LIB6 Information Competency in the Social Sciences
- LIB7 Information Competency in Literature and the Fine Arts
- PHL15 Critical Thinking and Logic
- SPA1 Elementary Spanish
- SPA1S Elementary Spanish for Spanish Speakers
- SPA1X Elementary Spanish for Chicano Students
- SPA2 Elementary Spanish
- SPA2S Elementary Spanish for Spanish Speakers
- SPA2X Elementary Spanish for Chicano Students
- SPA3 Intermediate Spanish
- SPA3S Intermediate Spanish for Spanish Speakers
- SPA4 Intermediate Spanish
- SPA4S Intermediate Spanish for Spanish Speakers
CORE COMPETENCIES

(Institutional Student Learning Outcomes)

In accordance with its mission of ensuring that all students shall have equal access to a quality education and the opportunity to pursue and achieve their goals, it is also the college’s responsibility to ensure that students who graduate with an AA or AS degree should be able to demonstrate the following competencies:

Global Engagement
Students will demonstrate global citizenship via knowledge of and interaction with civic participation, diverse cultures and people, and social justice advocacy.

Personal Growth
Students will demonstrate ethical decision making, goal setting, and positive lifestyle choices.

Aesthetic Analysis and Application
Students will analyze, conceptualize, evaluate, and/or synthesize creative and artistic expression as applied via contexts such as cultures and disciplines.

Communication
Students will effectively communicate to varied audiences via spoken, written, visual and other forms of communication.

Information Competency
Students will define information needs, utilizing appropriate technology and resources to access information efficiently and effectively, evaluate information critically, and use information ethically.

Inquiry and Reason
Students will use analytical, creative, and critical thinking to evaluate ideas, predict outcomes and form conclusions and solutions.
2016-2017 TRANSFER PLANNING

Students planning to transfer have many options. The California State University with 23 campuses; the University of California with 10 campuses, and over 60 private, independent college/universities in California provide a wide range of academic programs. Hartnell College offers the equivalent of the first two years of these four-year college/university programs. Students pursuing any of these educational alternatives should meet with a counselor as early as possible to discuss their educational plan. Careful planning will help avoid mistakes, which could prolong academic goals.

Successful planning requires the following steps:

1. Selecting a career goal
2. Selecting an appropriate major to meet your career goal
3. Selecting an appropriate college/university
4. Planning and completing an appropriate transfer program
5. Completing the application process

All college/universities have specific admissions requirements and may have special course and unit requirements as well as minimum grade point averages that must be met prior to transfer. Once students identify their major and the college/university to which they wish to transfer, they should consult the respective catalog and/or website of the college/university for specific requirements. Catalogs for California State University campuses, University of California campuses, and many private, independent college/universities are available for use in the Transfer Center.

Four-year college/universities require students to complete specific general education requirements as well as major requirements for the baccalaureate degree. Students should work toward completing both general education and lower-division major requirements prior to transfer. Each four-year institution has its own basic pattern of lower-division requirements regarding both general education and specific majors. These requirements vary from college/university to college/university and often change from year to year. Therefore, students should take advantage of the publications and services available.

Articulation agreements with course-to-course and major-to-major equivalencies are available through the counseling office and can be accessed via Internet at www.assist.org for most California State University and University of California campuses. Counselors will assist with interpreting articulation agreements and major requirements.

In accordance with the Chancellor’s Office of the California State Universities and College’s Executive Order No. 167, Hartnell College has developed courses which were evaluated. The California State Universities and most private, independent colleges accept Hartnell courses numbered 1-99. Courses numbered 1-50 are accepted by most University of California campuses; however, students should consult the “University of California Transfer Course Agreement (TCA)” at www.assist.org for the most current information and any limitations. Hartnell courses transfer to four-year college/universities in terms of specific or elective credit depending upon the institution and major selected.

Articulation Agreements

Articulation is the process of negotiating and approving Hartnell College courses with other institutions. Hartnell has course-to-course and major preparation articulation agreements with most UC and CSU campus, and many independent four-year colleges and universities. This information is available from a counselor, the Transfer Center, or at www.assist.org. College/University requirements and articulation agreements are continually changing. The following catalog pages represent our best attempt to provide current and pertinent information for transfer students.

ASSIST is an acronym for Articulation System Stimulating Interinstitutional Student Transfer, which is the official source for California articulation and student transfer information. ASSIST is the official repository of articulation for California’s colleges/universities and therefore provides the most accurate and up-to-date information available about student transfer in California.

Program Changes

Transfer programs and Associate degree requirements are subject to change without notice. Information about course offerings, fees, refunds and college policies published in this Catalog is subject to change. It may be necessary to cancel courses or programs without prior notice in this publication. Students should consult a Hartnell counselor for information.

Guaranteed Transfer Agreement

Transfer Admission Agreements (TAA), also referred to as a Transfer Admission Guarantees (TAG), are commitments that selected universities made with Hartnell College students who meet specific GPA and course requirements. A TAA serves as a contract between a student and the transfer college or university. Students who complete a TAA and meet the contractual requirements are guaranteed admission. TAA’s are generally written one year prior to transfer.

Make an appointment to meet with a Hartnell College counselor (831) 755-6820 for deadlines, policies and the process to initiate a TAA/TAG. Agreements are subject to periodic changes without notice, so it is important to meet with a counselor to receive the most current information.

Student Transfer Achievement Reform Act

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer,” a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that accepts the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Hartnell College has several approved Associate Degrees for Transfer listed on p. 45. Additional programs are being developed. To view the most current list of Hartnell College’s Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to http://adegreewithaguarantee.com/ and http://www.hartnell.edu/catalog-courses.

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

Hartnell College Catalog/2016-2017
CALIFORNIA STATE UNIVERSITY (CSU)
23 CAMPUSES

Admission as a Transfer Student to CSU

A student may satisfy CSU admission requirements as an upper division transfer student by:

- Completing a minimum of 60 transferable semester units
- Maintaining a grade point average of 2.0 or higher in all transferable units attempted. Nonresidents must have a 2.4 grade point average.
- Satisfying a minimum of 30 units of General Education including grades of C or better in: A1 Oral Communication, A2 Written Communication, A3 Critical Thinking, B4 Quantitative Reasoning.

Supplementary Admissions Requirements.
Some majors and campuses receive more applications during the initial filing period than can be accommodated and have higher admission standards. For detailed information regarding Impacted Undergraduate Majors and Campuses in the California State University, go to http://www.calstate.edu/AR/impactioninfo.shtml.

Admission Application Dates
To ensure consideration for admission to the campus of major of first choice, students are reminded to file a completed application form during the appropriate filing period shown below:

- Term: Applications First Accepted
  - Summer Quarter: February 1 (proceeding the summer term)
  - Fall Semester/Quarter: October 1 (preceding the term)
  - Winter Quarter: June 1 (preceding the term)
  - Spring Semester/Quarter: August 1 (preceding the term)

Application for impacted programs and campuses must be filed during the initial application filing period. Otherwise, each campus accepts applications until capacities are reached. If you are applying after the initial filing period, consult the campus admissions office for current information.

Apply online at www.csumentor.edu.

UNIVERSITY OF CALIFORNIA (UC)
10 CAMPUSES

Minimum UC Transfer Eligibility Requirements

To be eligible for admission to UC as a transfer student, you must fulfill the following criteria:

- Complete 60 semester units (90 quarter units) of transferable college credit with a grade point average of at least 2.4, and
- Complete a course pattern requirement to include:
  - Two transferable college courses (3 semester units or 4-5 quarter units each) in English composition; and
  - One transferable college course (3 semester units or 4-5 quarter units) in Mathematical Concepts and Quantitative Reasoning; and
  - Four transferable college courses (3 semester units or 4-5 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, the physical and biological sciences.

The current admission requirements for nonresident transfer applicants are the same as those for residents except that nonresidents must have a grade point average of 2.8 or higher in all transferable college course work.

In recent years, the number of applicants to many campuses and majors has greatly exceeded the spaces available. This increased competition means the university may no longer be able to guarantee admission to all eligible students. When a campus has to choose among qualified students, it applies standards that are more demanding than the minimum requirements. Using a process called comprehensive review, admissions officers look beyond the required course work and grades to evaluate applicants' academic achievements in light of the opportunities available to them and the capacity each student demonstrates to contribute to the intellectual life of the campus.

Admission Application Dates
To ensure consideration for admission to the campus of first choice, students are reminded to file a completed application form during the appropriate Priority Filing Period:

- University of California, Berkeley and Merced
  - Fall Semester: File November 1-30
  - Spring Semester: File July 1-31
  - UC Berkeley application is accepted for the fall only

- All Other University of California Campuses
  - Fall Quarter: File November 1-30
  - Winter Quarter: File July 1-31
  - Spring Quarter: File October 1-31

For the Fall term, all majors and programs are open to new students. Check with the specific campus Admissions Office if applying for other than the fall term.

Apply online at www.universityofcalifornia.edu/apply.
CSU General Education Distribution Requirements

Area A: Communication & Critical Thinking
(9 Units Required)

Choose one course from each sub-group
A1, A2 and A3

A1 ORAL COMMUNICATION
(3 units required)

COM1 Introduction to Public Speaking
COM2 Argumentation and Debate
COM3 Survey of Human Communication
COM5 Professional & Leadership Communication

A2 WRITTEN COMMUNICATION
(3 units required)

ENG1A College Composition and Reading
ENG1B College Literature and Composition

A3 CRITICAL THINKING
(3 units required)

COM2 Argumentation and Debate
ENG1B College Literature and Composition
ENG2 Critical Thinking and Writing
PHL15 Critical Thinking and Logic

Area B: Physical Universe and Its Life Forms
(9 Units Required)

Choose one course from each sub-group
B1, B2, & B4

Note: Laboratory Activity—At least one of the courses from B1 or B2 must have a laboratory. Courses with a laboratory are bold face type.

B1 PHYSICAL UNIVERSE
(3 units required)

ABT90 Soil Science
AST1 Introduction to Astronomy

CHM1A General Chemistry I
CHM1B General Chemistry II
CHM12A Organic Chemistry I
CHM12B Organic Chemistry II
CHM22 The Science of Chemistry
CHM23 Organic and Biological Chemistry for Health Sciences
CHM60 Principles of Chemistry

GEG1 Introduction to Geography: Physical Elements
GEL1 Physical Geology
GEL2 Introduction to Geology
GEL6 History of the Earth
GEL25 Environmental Geology
MET1 Meteorology-Weather and Climate
OCN1 Oceanography

Area B: Physical Universe (continued)

B2 LIFE FORMS (3 units required)

ABT92 Plant Science

ANT1 Intro. to Biological Anthropology

BIO1 Fundamental Biological Concepts
BIO2 General Zoology
BIO3 General Botany
BIO5 Human Anatomy
BIO6 Introductory Physiology
BIO6L Physiology Laboratory
BIO10 General Biology
BIO11 Intro Human Anatomy and Physiology
BIO12 Introduction to Genetics
BIO13 Introduction to Forensic DNA Analysis
BIO18 Introduction to Pathophysiology
BIO20 Field Biology/Natural Science
BIO27 Principles of Microbiology
BIO30 Marine Biology
BIO42 Human Biology
BIO47 Ecology
BIO48 Environmental Science
PSY10 Introduction to Biological Psychology

CSU GENERAL INFORMATION

The California State University provides California Community College transfer students a general education pattern CSU-GE for transfer to fulfill all lower division general education requirements. The CSU-GE is accepted at all California State University campuses. The CSU-GE requires 39 semester units of lower division courses.

Note: A few majors, such as nursing, engineering, science, and other technical majors, recommend students complete very specific coursework to meet general education and major preparation. Students should see a counselor and consult with the university campus to which they intend to apply to best determine which courses should be completed prior to transfer for these majors.

CSU-GE for STEM: Certain Associate Degrees for Transfer (AA/AS-T) use CSU-GE for STEM. The CSU-GE for STEM option allows students to follow the general education pattern but delay one Arts or Humanities and one Social and Behavioral Science course until after transfer. The AA/AS-T degree catalog page lists the degrees approved for CSU-GE for STEM.

General Education-Breadth Requirements for California State University 2016-2017

Students planning to graduate from one of the 23 campuses of the California State University (CSU) system must complete 48 semester units of general education breadth courses. Hartnell may certify 39 semester units of lower division (freshman & sophomore) level courses. Nine (9) semester units of general education coursework must be completed at the upper division level after transfer. Do not use this as a guide for the University of California (UC) campuses or for private colleges and universities; please consult the catalog of the school of your choice and see a counselor for assistance.

1. Lower division General-Education-Breadth Requirements Certification should be formally requested from the Hartnell Admissions & Records Office by the student at the beginning of the last term of attendance prior to graduation or transfer.

2. A single course may not meet more than one general education requirement even though some courses may be listed in two areas.

3. General Education units in excess of area maximums will transfer as either elective or pre-major units to the California State University system.

4. If the 39 units are not certified by Hartnell, the completion of lower division General Education program will be determined by the CSU campus.

5. The General Education-Breadth Requirements apply to and are accepted at the following state universities: Bakersfield, Channel Islands, Chico, Dominguez Hills, Fresno, Fullerton, Hayward, Humboldt, Long Beach, Los Angeles, Monterey Bay, Northridge, Pomona, Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo, San Marcos, Sonoma, and Stanislaus.

6. A grade of "C" or better must be earned in Areas A1, A2, A3, and B4.

CSU General Education Distribution Requirements

Area A: Communication & Critical Thinking
(9 Units Required)

Choose one course from each sub-group
A1, A2 and A3

A1 ORAL COMMUNICATION
(3 units required)

COM1 Introduction to Public Speaking
COM2 Argumentation and Debate
COM3 Survey of Human Communication
COM5 Professional & Leadership Communication

A2 WRITTEN COMMUNICATION
(3 units required)

ENG1A College Composition and Reading
ENG1B College Literature and Composition

A3 CRITICAL THINKING
(3 units required)

COM2 Argumentation and Debate
ENG1B College Literature and Composition
ENG2 Critical Thinking and Writing
PHL15 Critical Thinking and Logic

Area B: Physical Universe and Its Life Forms
(9 Units Required)

Choose one course from each sub-group
B1, B2, & B4

Note: Laboratory Activity—At least one of the courses from B1 or B2 must have a laboratory. Courses with a laboratory are bold face type.

B1 PHYSICAL UNIVERSE
(3 units required)

ABT90 Soil Science
AST1 Introduction to Astronomy

CHM1A General Chemistry I
CHM1B General Chemistry II
CHM12A Organic Chemistry I
CHM12B Organic Chemistry II
CHM22 The Science of Chemistry
CHM23 Organic and Biological Chemistry for Health Sciences
CHM60 Principles of Chemistry

GEG1 Introduction to Geography: Physical Elements
GEL1 Physical Geology
GEL2 Introduction to Geology
GEL6 History of the Earth
GEL25 Environmental Geology
MET1 Meteorology-Weather and Climate
OCN1 Oceanography

Area B: Physical Universe (continued)

B2 LIFE FORMS (3 units required)

ABT92 Plant Science

ANT1 Intro. to Biological Anthropology

BIO1 Fundamental Biological Concepts
BIO2 General Zoology
BIO3 General Botany
BIO5 Human Anatomy
BIO6 Introductory Physiology
BIO6L Physiology Laboratory
BIO10 General Biology
BIO11 Intro Human Anatomy and Physiology
BIO12 Introduction to Genetics
BIO13 Introduction to Forensic DNA Analysis
BIO18 Introduction to Pathophysiology
BIO20 Field Biology/Natural Science
BIO27 Principles of Microbiology
BIO30 Marine Biology
BIO42 Human Biology
BIO47 Ecology
BIO48 Environmental Science
PSY10 Introduction to Biological Psychology
<table>
<thead>
<tr>
<th>Area B: Physical Universe (continued)</th>
<th>Area C: Arts, Literature, Philosophy &amp; Foreign Language (9 Units Required)</th>
<th>C2 Humanities (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B3 LABORATORY ACTIVITY</strong></td>
<td>Choose at least one course in the arts and one in humanities.</td>
<td>HISSA World History A</td>
</tr>
<tr>
<td>ABT90 Soil Science</td>
<td>ART1A Art History Survey I</td>
<td>HISSB World History B</td>
</tr>
<tr>
<td>ABT92 Plant Science</td>
<td>ART1B Art History Survey II</td>
<td>HIS6 History of Mexico</td>
</tr>
<tr>
<td>AST1L Astronomy Laboratory</td>
<td>ART10 Art Appreciation</td>
<td>HIS40 History of Women in the U.S.</td>
</tr>
<tr>
<td>BIO1 Fund. Biological Concepts</td>
<td>ENG50 Intro to Film Appreciation: History up to the 1980’s</td>
<td>HIS47 Religions of the World</td>
</tr>
<tr>
<td>BIO2 General Zoology</td>
<td>ENG51 Film Appreciation 1960-Present</td>
<td>HIS55 US History through Film</td>
</tr>
<tr>
<td>BIO3 General Botany</td>
<td>MUS1A Music Appreciation-Historical Perspective</td>
<td>PHL2 Introduction to Philosophy</td>
</tr>
<tr>
<td>BIO5 Human Anatomy</td>
<td>MUS2 Music Fundamentals</td>
<td>PHL10 Ethics</td>
</tr>
<tr>
<td>BIO6L Physiology Laboratory</td>
<td>MUS5 Ethnic Musics in the U.S.</td>
<td>SPA1 Elementary Spanish</td>
</tr>
<tr>
<td>BIO10 General Biology</td>
<td>MUS6 Hawaiian Music</td>
<td>SPA1X Elementary Spanish for Chicano Students</td>
</tr>
<tr>
<td>BIO11 Introductory Human Anatomy and Physiology</td>
<td>MUS7 Jazz Appreciation</td>
<td>SPA1S Elementary Spanish for Spanish Speakers</td>
</tr>
<tr>
<td>BIO20 Field Biology/Natural Science</td>
<td>MUS8 American Popular Music</td>
<td>SPA2 Elementary Spanish</td>
</tr>
<tr>
<td>BIO27 Principles of Microbiology</td>
<td>PHO1 Introduction to Photography</td>
<td>SPA2S Elementary Spanish for Spanish Speakers</td>
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<td>BIO30 Marine Biology</td>
<td>TAC1 Introduction to Theatre</td>
<td>SPA3X Elementary Spanish for Chicano Students</td>
</tr>
<tr>
<td>BIO47 Ecology</td>
<td>TAC2 Script Analysis</td>
<td>SPA3 Intermediate Spanish</td>
</tr>
<tr>
<td>BIO48L Environmental Science Lab</td>
<td>TAC3 History of Theatre</td>
<td>SPA3S Intermediate Spanish for Spanish Speakers</td>
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<td>CHM1A General Chemistry I</td>
<td>TAC23 Theatre for Social Change</td>
<td>SPA4 Intermediate Spanish</td>
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<tr>
<td>CHM1B General Chemistry II</td>
<td>TAC50 Intro to Film: History up to the 1960’s</td>
<td>SPA4S Intermediate Spanish for Spanish Speakers</td>
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<td>CHM12A Organic Chemistry I</td>
<td>TAC53 Playwriting and Screenwriting</td>
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<tr>
<td>CHM12B Organic Chemistry II</td>
<td>TAC56 Introduction to Media Aesthetics and Contemporary Cinematic Arts</td>
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<tr>
<td>CHM22 The Science of Chemistry</td>
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<tr>
<td>CHM23 Organic and Biological Chem. for Health Sciences</td>
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<tr>
<td>CHM60 Principles of Chemistry</td>
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<tr>
<td>GEL1 Physical Geology</td>
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<td>GEL6 History of the Earth</td>
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<tr>
<td>PHY2A College Physics I</td>
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<td>PHY2B College Physics II</td>
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<tr>
<td>PHY4A General Physics/Mechanics</td>
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<tr>
<td>PHY4B General Physics/Electricity and Magnetism</td>
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<tr>
<td>PHY4C General Physics/Waves, Heat, Light, and Modern Physics</td>
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<tr>
<td>PHY10 Introduction to Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHY22 Survey of Chemistry and Physics</td>
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<tr>
<td><strong>B4 MATHEMATICAL CONCEPTS, QUANTITATIVE REASONING &amp; APPLICATIONS (3 units required)</strong></td>
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<tr>
<td>MAT2 Calculus for Managerial, Life, and Social Sciences</td>
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<tr>
<td>MAT3A Analytic Geometry and Calculus I</td>
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<tr>
<td>MAT3B Analytic Geometry and Calculus II</td>
<td></td>
<td></td>
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<td>MAT3C Analytic Geometry and Calculus III</td>
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<tr>
<td>MAT4 Linear Algebra</td>
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<tr>
<td>MAT5 Differential Equations</td>
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<tr>
<td>MAT10 Math For Liberal Arts</td>
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<tr>
<td>MAT12 Number Systems</td>
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<tr>
<td>MAT13 Elementary Statistics</td>
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<tr>
<td>MAT16 Finite Mathematics</td>
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<tr>
<td>MAT24 Trigonometry</td>
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<tr>
<td>MAT25 Pre-Calculus Mathematics</td>
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</tr>
<tr>
<td>MAT2 Calculus for Managerial, Life, and Social Sciences</td>
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<td>MAT16 Finite Mathematics</td>
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<td>MAT24 Trigonometry</td>
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<td></td>
</tr>
<tr>
<td>MAT25 Pre-Calculus Mathematics</td>
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<td></td>
</tr>
</tbody>
</table>

**AMERICAN HISTORY & INSTITUTIONS**

*Note: CSU graduation requires fulfillment of a U.S. History and Political Institutions requirement which may or may not be included in the general education package. Student must complete one course:
(1) History 17A or History 17B or History 40 to satisfy the U.S. History requirement (US1); AND one course
(2) Ethnic Studies 5 or Political Science 1 or Political Science 5 to satisfy the U.S. Constitution California State and local Government requirements (US2 and US3).

Students planning on transfer to a CSU campus are advised to complete a U.S. History and Political Institution course as 6 units of the required 9 general education units from Area C2 or D.

Hartnell will certify both of these courses toward satisfying the Area C2 or D requirements.
### Area D: Social, Political & Economic Institutions
(9 Units Required)

Select at least 3 courses from at least 2 disciplines

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<thead>
<tr>
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<tr>
<td>ADJ1</td>
<td>Intro. to Administration of Justice</td>
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<tr>
<td>ADJ3</td>
<td>Concepts of Criminal Law</td>
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<td>ADJ51</td>
<td>Criminology</td>
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<td>ANT1</td>
<td>Intro. Biological Anthropology</td>
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<tr>
<td>ANT2</td>
<td>Intro. to Anthropology: Cultural</td>
</tr>
<tr>
<td>ANT3</td>
<td>Introduction to Archeology</td>
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<td>ANT10</td>
<td>California Indians</td>
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<td>ANT15</td>
<td>North American Indians</td>
</tr>
<tr>
<td>ANT20</td>
<td>Cultures of Mexico</td>
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<td>BUS32</td>
<td>Introduction to Business</td>
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<td>COM8</td>
<td>Interpersonal Communication</td>
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<tr>
<td>CON4</td>
<td>Intercultural Communication</td>
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<td>ECO2</td>
<td>Home, School &amp; Community Relations</td>
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<td>ECO1</td>
<td>Principles of Economics-Macro</td>
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<td>Principles of Economics-Micro</td>
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<td>Introduction to Economics</td>
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<tr>
<td>EDU1</td>
<td>Multicultural Perspectives of Education</td>
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<tr>
<td>ETH1</td>
<td>Introduction to Ethnic Studies</td>
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<tr>
<td>ETH2</td>
<td>Chicano Leadership</td>
</tr>
<tr>
<td>ETH3</td>
<td>Chicanos in American Society</td>
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<tr>
<td>ETH4</td>
<td>Chicano Culture</td>
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<tr>
<td>ETH5</td>
<td>Chicano Politics and the American Political System</td>
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<td>ETH6</td>
<td>La Chicana</td>
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<td>ETH25</td>
<td>American Indian Literature</td>
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<td>Introduction to Geography: Physical Elements</td>
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<tr>
<td>GEG10</td>
<td>Geography and World Affairs: A Regional Approach</td>
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<tr>
<td>HED7</td>
<td>Women’s Health</td>
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<tr>
<td>HES1</td>
<td>Introduction to Public Health</td>
</tr>
<tr>
<td>HES2</td>
<td>Health and Social Justice</td>
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<tr>
<td>HIS4A</td>
<td>Western Civilization A</td>
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<td>Western Civilization B</td>
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<tr>
<td>HIS5A</td>
<td>World History A</td>
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<td>World History B</td>
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<td>History of Mexico</td>
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<td>HIS8A</td>
<td>Colonial History of Latin America A</td>
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<td>Colonial History of Latin America B</td>
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<td>History of California</td>
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<td>United States A</td>
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<td>United States B</td>
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<td>HIS46A</td>
<td>Race and Ethnicity in American Hist A</td>
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<td>Race and Ethnicity in American Hist B</td>
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<td>Religions of the World</td>
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<td>HIS49A</td>
<td>Chicano History A</td>
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<td>Chicano History B</td>
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<td>ADJ30</td>
<td>Crime and Social Policy</td>
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<td>ANT21</td>
<td>Cultural Anthropology</td>
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<td>BUS34</td>
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<td>COM9</td>
<td>Communication Skills</td>
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<td>Intercultural Communication</td>
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<td>ECO3</td>
<td>Principles of Economics-Macro</td>
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<td>Multicultural Education</td>
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<td>Ethnic Studies</td>
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<td>HES5</td>
<td>Introduction to Health Science</td>
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<td>Health Education and Wellness</td>
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<td>HES11</td>
<td>Public Health Education</td>
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<td>History of Latin America A</td>
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<td>HIS42</td>
<td>History of Latin America B</td>
</tr>
<tr>
<td>HIS43</td>
<td>History of the World</td>
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<td>HIS49</td>
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<td>HIS51</td>
<td>Women in History</td>
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### Area E: Lifelong Understanding and Self Development
(3 Units Required)

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<tr>
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<tr>
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<tr>
<td>BIO42</td>
<td>Human Biology</td>
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<td>COU1</td>
<td>Student Success Seminar</td>
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<tr>
<td>COU23</td>
<td>Student Skills for Success: Career Development</td>
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<td>COU27</td>
<td>Life Planning</td>
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<td>FCS14</td>
<td>Child Development</td>
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<td>FCS23</td>
<td>Nutrition</td>
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<td>GEL25</td>
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<td>Health Education and Wellness</td>
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<td>HED6</td>
<td>Multicultural Health Beliefs</td>
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<td>PETH1</td>
<td>Introduction to Kinesiology</td>
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<td>PETH4</td>
<td>Mental Skills for Sports Performance</td>
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<td>PSY14</td>
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<td>Personal and Social Adjustment</td>
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<td>Psychology of Human Relations</td>
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<td>Psychology of Women</td>
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<td>SOC20</td>
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<td>SOC30</td>
<td>Sociology of Latina/Latino in U.S. Society</td>
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<td>Marriage and the Family</td>
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<td>SOC42</td>
<td>The Sociology of Minority Relations</td>
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<td>TAC23</td>
<td>Theatre for Social Change</td>
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<tr>
<td>SOC5</td>
<td>Introduction to Social Problems</td>
</tr>
<tr>
<td>SOC41</td>
<td>Marriage and the Family</td>
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</table>

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Hartnell College Catalog/2016-2017
INTERSEGMENITAL GENERAL EDUCATION TRANSFER CURICULUM (IGETC) FOR UC AND CSU

California Community college transfer students can use the Intersegmental General Education Transfer Curriculum (IGETC) to fulfill all lower division general education requirements at any California State University or many University of California (UC) campuses. Because the IGETC is accepted by both the CSU and UC, it is an excellent option for students who are undecided about the university system to which they plan to transfer. The IGETC requires completion of a minimum of 37 semester units of lower division with a “C” grade or better in each course.

Note: A few majors, such as nursing, engineering, sciences, and other technical majors, recommend students complete very specific coursework to meet general education and major preparation. Students should see a counselor and consult with the university campus to which they intend to apply to best determine which courses should be completed prior to transfer for these majors.

IGETC for STEM: Certain Associate Degrees for Transfer (AA/AS-T) use IGETC for STEM. The IGETC for STEM option allows students to follow the general education pattern but delay one Arts or Humanities and one Social and Behavioral Science course until after transfer. The AA/AS-T degree catalog page lists the degrees approved for IGETC for STEM.

Intersegmental General Education Transfer Curriculum (IGETC) for the University of California or California State University 2016-2017

The following Intersegmental General Education Transfer curriculum (IGETC) must be completed by all students who enrolled at Hartnell College for the first time beginning Fall of 1991 and who plan to transfer to the University of California or California State University.

Please consult with a counselor to see if IGETC is appropriate for your course of study.

Area 1 - English Communication
CSU – 3 courses required, one from each Group A, B, C.
UC – 2 courses required, one from each Group A, B.
Group A: Reading and Composition
(3 units required)
ENG 1A Composition and Reading
Group B: Critical Thinking-English Composition
(3 units required)
ENG 1B College Literature and Composition
ENG 2 Critical Thinking & Writing
Group C: Oral Communication
(3 units required) (CSU Only)
COM 1 Introduction to Public Speaking
COM 3 Survey of Human Communication
COM 2 Argumentation and Debate

Area 2 - Mathematical Concepts and Quantitative Reasoning
(1 course, 3 semester units required)
**MATH 2 Calculus for Managerial, Life, & Social Science
**MATH 3A Analytic Geometry and Calculus I
MATH 3B Analytic Geometry and Calculus II
MATH 3C Analytic Geometry and Calculus III
MATH 4 Linear Algebra
MATH 5 Differential Equations
MATH 10 Math for Liberal Arts
MATH 12 Number Systems
MATH 13 Elementary Statistics
MATH 16 Finite Mathematics
MATH 25 Pre-Calculus Mathematics

** Indicates that transfer credit may be limited by UC or CSU or both. Please consult with a counselor.

Area 3 - Arts and Humanities
Select 3 courses with at least one course from the Arts and one course from the Humanities (9 units minimum).

Art Courses
ART 1A Art History Survey I
ART 1B Art History Survey II
ART 10 Art Appreciation
ENG 51 Film Appreciation 1960 to the Present
MUS 1A Music Appreciation-Historical Perspective
MUS 2 Music Fundamentals
MUS 5 Ethnic Musics in the United States
MUS 6 Hawaiian Music
PHO 1 Intro. to Photography
TAC 1 Intro. to Theatre
TAC 3 History of Theatre

Humanities Courses
ENG 1B College Literature and Composition
ENG 17 The Contemporary Shakespeare
ENG 22 Studies in Poetry
ENG 24 The Short Story
ENG 26 Chicano Literature
ENG 41 Art of Steinbeck
ENG 44A World Literature I
ENG 44B World Literature II
ENG 46A Survey of British Literature I
ENG 46B Survey of British Literature II
ENG 47A Survey of American Literature I
ENG 47B Survey of American Literature II
ENG 50 Intro. to Film Appreciation:
ETH 12 Chicano Cinema
ETH 25 American Indian Literature
HIS 4A Western Civil I
HIS 4B Western Civil II
HIS 5A World History A
HIS 5B World History B
HIS 6 History of Mexico
HIS 10 History of California
HIS 17A United States History I
HIS 17B United States History II
HIS 40 History of Women in the U.S.
HIS 47 Religions of the World
HIS 49A Chicano History A
HIS 49B Chicano History B
HIS 51 Women in History
MUS 7 Jazz Appreciation
MUS 8 American Popular Music
PHL 2 Introduction to Philosophy
PHL 10 Ethics
***SPA 3 Intermediate Spanish
***SPA 3S Intermediate Spanish
***SPA 4 Intermediate Spanish
***SPA 4S Intermediate Spanish
TAC 50 Intro. to Film Appreciation:
**SPA 3 and SPA 3S combined, maximum credit one course; and, SPA 4 and SPA 4S combined, maximum credit one course.
Area 4 - Social & Behavioral Sciences

Select at least three courses from two disciplines (9 units minimum).

ADJ 1 Intro to Admin Justice
ADJ 3 Concepts of Criminal Law
ADJ 51 Criminology
ANT 2 Intro. to Anthropology: Cultural
ANT 3 Intro. to Archaeology
ANT 10 California Indians
ANT 15 North American Indians
ANT 20 Cultures of Mexico
COM 4 Intercultural Communications
COM 8 Interpersonal Communications
ECE 2 Home, School & Community Relations
ECO 1 Principles of Economics - Macro
ECO 5 Principles of Economics - Micro
ETH 1 Intro to Economics
ETH 2 Intro. to Ethnic Studies
ETH 3 Chicano Leadership
ETH 4 Chicano Culture
ETH 5 Chicano Politics and the American Political System
ETH 6 La Chicana
FCS 14 Child Development
GEG 2 Intro. to Geography: Cultural Elements
GEG 10 Geography of World Affairs: Regional Approach
HED 7 Women’s Health
HIS 5A World History A
HIS 5B World History B
HIS 6 History of Mexico
HIS 40 History of Women in the U.S.
HIS 46A Race and Ethnicity in American History A
HIS 46B Race and Ethnicity in American History B
POL 1 American Political Institutions
POL 2 Contemporary Governments Abroad
POL 3 Introduction to International Relations
POL 5 Chicano Politics and the American Political System
POL 6 Introduction to Contemporary Political Thought
PSY 2 General Psychology
PSY 6 Social Psychology
PSY 12 Theories of Personality
PSY 14 Child Psychology
PSY 15 Human Sexuality
PSY 22 Abnormal Psychology
PSY 25 Developmental Psychology-Lifespan
PSY 42 Psychology of Women
SOC 1 Introduction to Sociology
SOC 5 Intro. to Social Problems
SOC 20 Sociology of Immigration and Identity in the U.S.
SOC 21 Sociology of Gender and Society
SOC 41 Marriage and the Family
SOC 42 The Sociology of Minority Relations
TAC 23 Theatre for Social Change

Area 5 - Physical & Biological Sciences

Select at least two courses, one from Physical Science and one from Biological Science, at least one course needs to incorporate a laboratory (7 units minimum)

Physical Science Courses

All courses with a lab component are bold face type.

ABT 90 Soil Science
ABT 1 Introduction to Biological Anthropology
AST 1 Introduction to Astronomy
AST 1L Astronomy Laboratory
CHM 1A General Chemistry I
CHM 1B General Chemistry II
**CHM 12A Organic Chemistry I
**CHM 22 The Science of Chemistry
GEL 1 Physical Geology
**GEL 2 Introduction to Geology
GEL 6 History of the Earth
GEL 25 Environmental Geology
MET 1 Meteorology - Weather and Climate
OCN 1 Oceanography
**PAY 2A College Physics I
**PAY 2B College Physics II
**PAY 4A General Physics/Mechanics
**PAY 4B General Physics/Electricity and Magnetism
**PAY 4C General Physics/Waves, Heat, Light and Modern Physics
**PAY 10 Introduction to Physics
**PAY 32 Survey of Chemistry and Physics

NOTE:

Courses listed in multiple areas shall not be certified in more than one area except for courses in Languages other than English, which can be certified in both areas 3 and 6.

UC REQUIREMENT ONLY - AREA 6

Languages Other Than English (LOTE)

Complete 2 years of the same foreign language of high school level work with a grade of “C” or better OR earn a score of 3 or higher on the Foreign Language Advanced Placement Test OR 550 on the College Board Achievement Test in Foreign Languages OR complete one course below:

ASL 1 American Sign Language I
ASL 2 American Sign Language II
ASL 3 American Sign Language III
SPA 1 Elementary Spanish
SPA 1S Elementary Spanish for Spanish Speakers
SPA 1X Elementary Spanish
SPA 2 Elementary Spanish
SPA 2S Elementary Spanish for Spanish Speakers
SPA 2X Elementary Spanish for Chicano Students
SPA 2L Elementary Spanish
SPA 3 Intermediate Spanish
SPA 3S Intermediate Spanish for Spanish Speakers
SPA 4 Intermediate Spanish
SPA 4S Intermediate Spanish for Spanish Speakers

Area 6 - Biological Sciences Courses

All courses with a lab component are bold face type.

ABT 92 Plant Science
BIO 1 Fundamental Biological Concepts
**BIO 2 General Zoology
**BIO 3 General Botany
BIO 5 Human Anatomy
BIO 6 Introductory Physiology
BIO 6L Physiology Laboratory
**BIO 10 General Biology
BIO 11 Introductory Human Anatomy and Physiology
BIO 12 Introduction to Genetics
BIO 18 Introduction to Pathophysiology
BIO 20 Field Biology/Natural Science
BIO 27 Principles of Microbiology w/lab
BIO 30 Marine Biology
BIO 42 Human Biology
BIO 47 Ecology
BIO 48 Environmental Science
BIO 48L Environmental Science Lab
PSY 10 Introduction to Biological Psychology

Hartnell College Catalog/2016-2017
ADMINISTRATION OF JUSTICE—ASSOCIATE IN SCIENCE IN ADMINISTRATION OF JUSTICE FOR TRANSFER DEGREE (AS-T)

PROGRAM DESCRIPTION

The Associate in Science Degree in Administration of Justice for Transfer provides a clearly articulated curricular track for students who wish to transfer to baccalaureate Administration of Justice, Criminal Justice, or Criminology degree programs at a California State University (CSU) campus. This degree provides the lower division Administration of Justice major courses required at many CSUs while exposing students to the core principles and practices in the field of Administration of Justice. The AS-T degree will enable students to develop a strong foundation in the theory and practice of law enforcement and law enforcement investigation, the origin and application of criminal law, the various components of the criminal justice system, the structure of the various court systems, and trial process. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT:
Lisa Storm at (831) 755-6745, lstorm@hartnell.edu (email preferred), Office E-218
Lindsey Bertomen at (831) 755-6742, lbertomen@hartnell.edu (email preferred), Office E-207

PROGRAM OUTCOMES

Upon successful completion of the Associate in Science in Administration of Justice for Transfer Degree, a student should be able to:

- analyze the United States legal system, describing the sources of law, the branches of government, and the federal and state court systems.
- analyze cases to ascertain legal precedents and apply them to hypothetical fact patterns.
- select and apply the appropriate peacekeeping strategy in a multicultural community.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

   Students also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ADJ-1</td>
<td>Introduction to Administration of Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-3</td>
<td>Concepts of Criminal Law</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of (6) units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-2</td>
<td>Community Relations: Multicultural Diversity/Discrimination</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-5</td>
<td>Criminal Court Process</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-4</td>
<td>Criminal Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-8</td>
<td>Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-10</td>
<td>Juvenile Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-50</td>
<td>Introduction to Correctional Science</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of (6) units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-10</td>
<td>Juvenile Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-51</td>
<td>Criminology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>SOC-1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units), OR</td>
<td>39.0</td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td>34.0-</td>
</tr>
<tr>
<td>Administration of Justice Required Major and Restricted Electives</td>
<td>18.0</td>
</tr>
<tr>
<td>Electives(Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0</td>
<td>1.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Students can double-count required degree courses and courses for General Education.

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
ADMINISTRATION OF JUSTICE—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Administration of Justice Associate’s Degree program includes the theory and practice of law enforcement, correctional science and paralegal/legal assistantship. Law enforcement courses focus on police activities including effective patrol services to the public. Correctional science courses instruct on the incarceration process as well as rehabilitation of the offender. Paralegal/legal assistantship courses overview the preparation of cases for court under the supervision of an attorney.

Administration of Justice offers a wide range of career opportunities, including, police officer or deputy sheriff, correctional officer, probation officer, parole agent and paralegal. Working professionals in criminal justice and corrections can earn significant pay increases by obtaining an Associate’s Degree in Administration of Justice. Courses in Administration of Justice also prepare students for transfer into four-year degree programs in criminal justice and paralegal.

The Administration of Justice Associate’s Degree offers specialized electives to enhance a student’s career opportunities. Students who wish to pursue careers in the following areas are recommended to complete:

<table>
<thead>
<tr>
<th>Correctional Science</th>
<th>Complete restricted degree electives ADJ-12, ADJ-50, and ADJ-61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paralegal/Legal Assistant</td>
<td>Complete restricted degree electives ADJ-25, ADJ-34, and ADJ-36; and complete as a general elective BUS-18 Legal Environment of Business</td>
</tr>
</tbody>
</table>

Students who have official college transcripts from an approved accredited college proving they have successfully completed a California POST Basic Police Academy, or official documents proving successful completion of a California Basic Correctional Officer Academy or a California Highway Patrol Academy shall receive credit for ADJ 1 and all major elective courses necessary for the Administration of Justice Degree program.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty on how best to complete the program in which you are enrolled.

FOR MORE INFORMATION, CONTACT:  
Lisa Storm at (831) 755-6745, lstorm@hartnell.edu (email preferred), Office E-218
Lindsey Bertomen at (831) 755-6742, lbertomen@hartnell.edu (email preferred), Office E-207

PROGRAM OUTCOMES

Upon successful completion of the Administration of Justice Associate’s Degree program, a student should be able to:

- analyze the United States legal system, describing the sources of law, the branches of government, and the federal and state court systems.
- analyze cases to ascertain legal precedents and apply them to hypothetical fact patterns.
- demonstrate effective law enforcement report writing skills.
- compare and contrast legal and illegal narcotics and dangerous drugs.
- select and apply the appropriate peacekeeping strategy in a multicultural community.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ADJ-1</td>
<td>Introduction to Administration of Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-2</td>
<td>Community Relations and the Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-3</td>
<td>Concepts of Criminal Law</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-4</td>
<td>Criminal Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-5</td>
<td>Criminal Court Process</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-11</td>
<td>Law Enforcement Report Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-21A</td>
<td>Narcotics and Dangerous Drugs</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (21.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Complete a minimum of 9.0 units from the following)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-8</td>
<td>Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-10</td>
<td>Juvenile Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-12</td>
<td>Legal Aspects of Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-25</td>
<td>Introduction to Paralegal/Legal Assistantship</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-30</td>
<td>Sexual Assault Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-33</td>
<td>Constitutional Law for Criminal Justice Professionals</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-34</td>
<td>Civil Litigation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-36</td>
<td>Legal Research and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-50</td>
<td>Introduction to Correctional Science</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-51</td>
<td>Criminology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-61</td>
<td>Control and Supervision in Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-102</td>
<td>PC 832 Arrest and Firearms</td>
<td>3.5</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9.0)
## CON’T OF ADMINISTRATION OF JUSTICE—ASSOCIATE OF SCIENCE DEGREE

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences</td>
<td></td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td></td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States</td>
<td></td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td></td>
<td>A. Written Composition</td>
<td>ENG-1A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123*</td>
</tr>
</tbody>
</table>

General Education 21.0

Administration of Justice Required Major Courses and Restricted Major Electives 30.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 9.0

**TOTAL UNITS 60.0**

*Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.

† These courses also satisfy General Education Requirements.

**TRANSFER STUDENTS:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.

## ADMINISTRATION OF JUSTICE—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ADJ-1</td>
<td>Introduction to Administration of Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-2</td>
<td>Community Relations and the Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-3</td>
<td>Concepts of Criminal Law</td>
<td>3.0</td>
</tr>
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<td>Required Major Course</td>
<td>ADJ-4</td>
<td>Criminal Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-5</td>
<td>Criminal Court Process</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-11</td>
<td>Law Enforcement Report Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADJ-21A</td>
<td>Narcotics and Dangerous Drugs</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (21.0)

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-121†</td>
<td>Elementary Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (≥ 24.0)**

*Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.
ADVANCED DIESEL TECHNOLOGY—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Advanced Diesel Technology program is designed to provide students with the skills and knowledge required to succeed as technicians in the field of heavy-duty diesel equipment, transportation and agriculture industries, or related industries. The curriculum provides both theoretical and hands-on learning experiences that provide students with the opportunity to apply the learned skills in a variety of different areas, such as transportation, and agriculture equipment to name only two. Diagnosis and repair procedures performed on heavy-duty diesel equipment enable students to develop the skills required for placement in the heavy duty diesel technology industry.

FOR MORE INFORMATION, CONTACT: Valentin Rodriguez at (831) 770-7078, vrodriguez@hartnell.edu, Alisal Campus, AC-A101

PROGRAM OUTCOMES:

Upon successful completion of the Associate of Science Degree in Advanced Diesel Technology, a student should be able to:

- accurately complete work orders that relate to equipment/engines/motors manifesting problems, suggest corrective actions, and complete repairs.
- apply knowledge of personal and environmental safety practices to promote a safe work environment, and environmental responsibility.
- research applicable equipment and service information using heavy-duty equipment manuals in print and electronic formats, pertinent websites, and diagnostic equipment to identify, analyze, and correct problems of all major heavy-duty equipment systems.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT-100</td>
<td>Diesel Engine Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-101</td>
<td>Diesel Engine Rebuild</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-110</td>
<td>Electrical and Electronic Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-111</td>
<td>Electronic Systems and Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-120</td>
<td>Climate Control</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-121</td>
<td>Preventive Maintenance</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-130</td>
<td>Brake Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-131</td>
<td>Steering and Suspension Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-140</td>
<td>Power Drive Train</td>
<td>4.0</td>
</tr>
<tr>
<td>ADT-141</td>
<td>Automatic Transmission</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS-43</td>
<td>Business Information Systems and Information Literacy</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (44.0)

A. Written Composition

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
</tr>
</tbody>
</table>

B. Communication and Analytical Thinking

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
</tr>
</tbody>
</table>

General Education 21.0

Advanced Diesel Technology—General Automotive Mechanics Required Major Courses 44.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0

TOTAL UNITS 65.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.

†These courses also satisfy General Education Requirements.
AGRICULTURE—AGRICULTURE BUSINESS —ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Agriculture program offers an Associate of Science degree and a Certificate of Achievement in Agriculture Business, Agriculture Production, Small Farm Operation and Management, Sustainable Crop Management or Food Safety. Courses in these areas provide students with skills valuable to businesses in the Central Coast’s produce industry or with one of the many companies providing support services and products. Many of the courses are fully transferable to the California State University system. Internships and work experience are an important part of the program, providing students with experience and networking opportunities in the local produce industry.

FOR MORE INFORMATION, CONTACT: Center for Advanced Technology, (831) 755-6960, Alisal Campus, A102
Steven Triano, (831) 755-6961, striano@hartnell.edu, Alisal Campus, C101

PROGRAM OUTCOMES

Upon successful completion of any of the emphases within the Agriculture program, a student should be able to:

- demonstrate problem-solving techniques and critical thinking skills while engaged in job situations.
- prepare and deliver business documents and use math skills in appropriate form, format, and language essential for career success in an agriculture business setting.
- demonstrate professional and personal development of work habits and safety practices.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-110</td>
<td>Careers in Agriculture and Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>ABT-49</td>
<td>Introduction to Agriculture Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-54</td>
<td>Agriculture Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-58</td>
<td>Agriculture Laws &amp; Regulations</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-90</td>
<td>Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-92</td>
<td>Plant Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-99</td>
<td>Cooperative Work Experience (3.0 Units Recommended)</td>
<td>1.0–3.0</td>
</tr>
<tr>
<td>ABT-57 or BUS-43 or BUS-50</td>
<td>Agriculture Computer Applications or Business Information Systems and Information Literacy or Introduction to PC Applications</td>
<td>3.0–4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (21.0–24.0)**

Complete a minimum of 6.0 units from the following elective courses:

### RESTRICTED MAJOR ELECTIVES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-52</td>
<td>Sales &amp; Service in Agribusiness</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-53 or ECO-5</td>
<td>Agribusiness Economics or Principles of Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-60</td>
<td>Introduction to Sustainable Agriculture and Food</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-160</td>
<td>Introduction to Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-1A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS-18</td>
<td>The Legal Environment of Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (25.0)**

Required Major Courses plus Major Electives must be a minimum of 27 units. **SUBTOTAL UNITS, Major Courses + Electives (27.0)**

### REQUIRED GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-92F or ABT-921</td>
<td>Soil Science or Plant Science</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ABT-90F or ABT-921</td>
<td>Soil Science or Plant Science</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**General Education** 21.0

Agriculture Required Major Courses and Restricted Major Electives

**ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0**

**TOTAL UNITS 60.0**

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.

† These courses also satisfy General Education Requirements.

**TRANSFER STUDENTS:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
AGRICULTURE—AGRICULTURE BUSINESS—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>Required Major Course</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ABT-110</td>
<td>Careers in Agriculture and Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-49</td>
<td>Introduction to Agriculture Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-54</td>
<td>Agriculture Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-58</td>
<td>Agriculture Laws &amp; Regulations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-90*</td>
<td>Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-52*</td>
<td>Plant Science</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-99</td>
<td>Cooperative Work Experience (3.0 Units Recommended)</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-57 or BUS-43 or BUS-50</td>
<td>Agriculture Computer Applications or Business Information Systems and Information Literacy or Introduction to PC Applications</td>
<td>3.0–4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (21.0–24.0)**

Complete a minimum of 6.0 units from the following elective courses:

<table>
<thead>
<tr>
<th>Restricted Major Elective</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-52</td>
<td>Sales &amp; Service in Agribusiness</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-53 or ECO-5</td>
<td>Agribusiness Economics or Principles of Microeconomics</td>
<td>3.3</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-80</td>
<td>Introduction to Sustainable Agriculture and Food</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-160</td>
<td>Introduction to Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-1A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-18</td>
<td>The Legal Environment of Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (≥26.0)**

**OTHER REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Required Course</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101* or ESL-101*</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (≥27.0)**

*Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.
# AGRICULTURE—AGRICULTURE PRODUCTION—ASSOCIATE OF SCIENCE DEGREE

## Program Description

The Agriculture Production Emphasis is intended for students interested in a wide range of career and educational pathways: farm management, harvest operations, agricultural research, and many more. Students may use this emphasis to obtain skills and knowledge to work in industry, or as a foundation for transfer to a four-year college or university.

## For More Information, Contact:

Center for Advanced Technology, (831) 755-6960, Alisal Campus, A102

Steven Trano, (831) 755-6961, sttrano@hartnell.edu, Alisal Campus, C101

## Program Outcomes

Upon successful completion of any of the emphases within the Agriculture program, a student should be able to:

- Demonstrate problem-solving techniques and critical thinking skills while engaged in job situations.
- Prepare and deliver business documents and use math skills in appropriate form, format, and language essential for career success in an agriculture business setting.
- Demonstrate professional and personal development of work habits and safety practices.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

## Required Major Courses

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-110</td>
<td>Careers in Agriculture and Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>ABT-66</td>
<td>Agriculture Laws &amp; Regulations</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-90</td>
<td>Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-92</td>
<td>Plant Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-99</td>
<td>Cooperative Work Experience (3.0 Units Recommended)</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>ABT-57</td>
<td>Agriculture Computer Applications or Business Information Systems</td>
<td>3.0-4.0</td>
</tr>
</tbody>
</table>

## Restricted Major Electives

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-91</td>
<td>Irrigation Practices and Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-95</td>
<td>Introduction to Small Fruit Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-96</td>
<td>Vegetable Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-97</td>
<td>Vineyard Production &amp; Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-98</td>
<td>Fertilizers &amp; Plant Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-41</td>
<td>Pesticide Applicator Certification Training</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-66</td>
<td>Introduction to Geographic Information System</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-67</td>
<td>Intermediate GIS with Applications to Agriculture</td>
<td>4.0</td>
</tr>
<tr>
<td>ABT-80</td>
<td>Introduction to Sustainable Agriculture and Food</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-81</td>
<td>Integrated Pest Management Principles in Entomology</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-82</td>
<td>Integrated Pest Management Principles in Weed Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-84</td>
<td>Integrated Pest Management Principles in Plant Pathology</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-93</td>
<td>Product Processing &amp; Cooling</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-94</td>
<td>Introduction to Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-70</td>
<td>Introduction to Mechanized Agriculture or Agricultural and Industrial Equipment Operation</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-71</td>
<td>Agricultural Machinery Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-101</td>
<td>Organic Vegetable Production</td>
<td>1.5</td>
</tr>
<tr>
<td>ABT-102</td>
<td>Organic Field Production Methods</td>
<td>1.5</td>
</tr>
<tr>
<td>ABT-103</td>
<td>Ag Planning and Recordkeeping for Small Farmers</td>
<td>1.5</td>
</tr>
<tr>
<td>ABT-104</td>
<td>Ag Business Development for New Organic Farmers</td>
<td>1.5</td>
</tr>
<tr>
<td>ABT-105</td>
<td>Marketing Opportunities and Growth for Organic Farming</td>
<td>1.5</td>
</tr>
<tr>
<td>ABT-130</td>
<td>Introduction to Food Safety</td>
<td>1.5</td>
</tr>
</tbody>
</table>

## General Education Courses

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-900</td>
<td>Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-92</td>
<td>Plant Science</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

## Electives (Courses Numbered 1-199)

Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.

Hartnell College Catalog/2016-2017
# AGRICULTURE—AGRICULTURE PRODUCTION—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

The Agriculture Production Emphasis is intended for students interested in a wide range of career and educational pathways: farm management, harvest operations, agricultural research, and many more. Students may use this emphasis to obtain skills and knowledge to work in industry, or as a foundation for transfer to a four year college or university.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ABT-110</td>
<td>Careers in Agriculture and Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-58</td>
<td>Agriculture Laws &amp; Regulations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-90¹</td>
<td>Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-92²</td>
<td>Plant Science</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-99</td>
<td>Cooperative Work Experience</td>
<td>1.0–3.0 Units Recommended</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-57 or BUS-43 or BUS-50</td>
<td>Agriculture Computer Applications or Business Information Systems and Information Literacy or Introduction to PC Applications</td>
<td>3.0–4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (15.0–18.0)

Complete a minimum of 12.0 units from the following elective courses:

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP A. Choose a minimum of 6.0 units from the following courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-91</td>
<td>Irrigation Practices and Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-95</td>
<td>Introduction to Small Fruit Science</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-96</td>
<td>Vegetable Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-97</td>
<td>Vineyard Production &amp; Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-98</td>
<td>Fertilizers &amp; Plant Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

GROUP B. Choose a minimum of 6.0 units from the following courses:

| Restricted Major Elective   | ABT-41     | Pesticide Applicator Certification Training | 3.0   |
| Restricted Major Elective   | ABT-66     | Introduction to Geographic Information System | 3.0   |
| Restricted Major Elective   | ABT-67     | Intermediate GIS with Applications to Agriculture | 4.0   |
| Restricted Major Elective   | ABT-80     | Introduction to Sustainable Agriculture and Food | 3.0   |
| Restricted Major Elective   | ABT-81     | Integrated Pest Management Principles in Entomology | 3.0   |
| Restricted Major Elective   | ABT-82     | Integrated Pest Management Principles in Weed Science | 3.0   |
| Restricted Major Elective   | ABT-83     | Integrated Pest Management Principles in Plant Pathology | 3.0   |
| Restricted Major Elective   | ABT-93     | Product Processing & Cooling | 3.0   |
| Restricted Major Elective   | ABT-160    | Introduction to Agriculture | 3.0   |
| Restricted Major Elective   | AIT-70 or AIT-71 or AIT-75 | Introduction to Mechanized Agriculture or Agricultural and Industrial Equipment Operation or Agricultural Machinery Management | 3.0   |
| Restricted Major Elective   | ABT-101    | Organic Vegetable Production | 1.5   |
| Restricted Major Elective   | ABT-102    | Organic Field Production Methods | 1.5   |
| Restricted Major Elective   | ABT-103    | Ag Planning and Recordkeeping for Small Farmers | 1.5   |
| Restricted Major Elective   | ABT-104    | Ag Business Development for New Organic Farmers | 1.5   |
| Restricted Major Elective   | ABT-105    | Marketing Opportunities and Growth for Organic Farming | 1.5   |
| Restricted Major Elective   | ABT-130    | Introduction to Food Safety | 1.5   |

SUBTOTAL UNITS (≥12.0)

<table>
<thead>
<tr>
<th>✓ OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101* or ESL-101*</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (≥27.0)

*Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.
AGRICULTURE—FOOD SAFETY—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

The Food Safety Emphasis is intended for students interested in the specialized practices required for the safe production, handling, transportation and manufacturing of food products. Students will be trained in skills critical to the agriculture and food manufacturing industries.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ABT-130</td>
<td>Introduction to Food Safety</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-131</td>
<td>Agricultural Practices for Food Safety</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-132</td>
<td>Food Safety Management</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-133</td>
<td>Facility Management for Food Safety</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-134</td>
<td>Environmental Effects on Food borne Pathogens</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-135</td>
<td>Introduction to Food Microbiology</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-58</td>
<td>Agriculture Laws &amp; Regulations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (12.0)

<table>
<thead>
<tr>
<th>✓ OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or</td>
<td>ESL-101**</td>
<td>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (≥12.0)

*Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.
AGRICULTURE—AGRICULTURAL AND INDUSTRIAL TECHNOLOGY—INDUSTRIAL MECHANICS—CERTIFICATE OF ACHIEVEMENT

PROGRAM DESCRIPTION

Agricultural and Industrial Technology is an inter-disciplinary program designed to prepare the student for positions of employment requiring a general background in the application of technology or transfer to the state university system. The introductory program in Industrial Mechanics is intended to allow students to acquire a solid base of skills in a variety of mechanical areas. More advanced skills can be learned in courses leading to the Industrial Technician certificate.

Typical careers in the area of Agricultural & Industrial Technology might include: farm shop and equipment dealer mechanic, processing facility maintenance worker or supervisor, parts technician, refrigeration technician, or equipment fabricator.

FOR MORE INFORMATION CONTACT: Al Graham at (831) 759-6088, agraham@hartnell.edu, Alisal Campus, AC-B123

PROGRAM OUTCOMES:
Upon successful completion of the Agricultural and Industrial Technology program, a student should be able to:
• demonstrate industrial workplace skills associated with both agriculture and non-agriculture industries.
• analyze and solve problems associated with equipment design.
• read and compare industrial blueprints.
• perform basic fabrication assignments.
• communicate using industrial terms.
• practice safe work habits.

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

✓ REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT-70</td>
<td>Introduction to Agriculture Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-71</td>
<td>Agricultural and Industrial Equipment Operation</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-169</td>
<td>Hazmat and Industrial Safety</td>
<td>1.0</td>
</tr>
<tr>
<td>AIT-172</td>
<td>Agricultural Equipment Fabrication</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-178</td>
<td>Industrial Electricity</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-180</td>
<td>Industrial Workplace Skills</td>
<td>1.0</td>
</tr>
<tr>
<td>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
</tr>
</tbody>
</table>

✓ OTHER REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>or ESL-101*</td>
<td>Academic Writing &amp; Reading II</td>
<td></td>
</tr>
<tr>
<td>MAT-151L1, L2, and L3**</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>3.0</td>
</tr>
</tbody>
</table>

TOTAL UNITS (18.0)

* Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.
AGRICULTURE—AGRICULTURAL AND INDUSTRIAL TECHNOLOGY—INDUSTRIAL TECHNICIAN—CERTIFICATE OF ACHIEVEMENT

PROGRAM DESCRIPTION

Agricultural and Industrial Technology is an inter-disciplinary program designed to prepare the student for or for positions of employment requiring a general background in the application of technology or for transfer to the state university system. The introductory program in Industrial Mechanics is intended to allow students to acquire a solid base of skills in a variety of mechanical areas. More advanced skills can be learned in courses leading to the Industrial Technician certificate.

Typical careers in the area of Agricultural & Industrial Technology might include: farm shop and equipment dealer mechanic, processing facility maintenance worker or supervisor, parts technician, refrigeration technician, or fabrication shop worker.

FOR MORE INFORMATION CONTACT: Al Graham at (831) 759-6088, agraham@hartnell.edu, Alisal Campus, AC-B123

PROGRAM OUTCOMES:

Upon successful completion of the Agricultural and Industrial Technology program, a student should be able to:

- demonstrate industrial workplace skills associated with both agriculture and non-agriculture industries.
- analyze and solve problems associated with equipment design.
- read and compare computer generated industrial blueprints.
- analyze applications of fluid power.
- demonstrate management skills associated with agriculture and non agriculture industries.
- determine appropriate material use for given applications.

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>AIT-75</td>
<td>Agricultural Machinery Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AIT-176</td>
<td>Hydraulics &amp; Pneumatics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AIT-178</td>
<td>Industrial Electricity</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-57</td>
<td>Agricultural Computer Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-151</td>
<td>Gas &amp; Tig Welding</td>
<td>2.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or ESL-101*</td>
<td></td>
<td>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-151L1, L2, and L3**</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS [16.0]

* Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.
ALCOHOL AND DRUG ABUSE COUNSELING—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The Hartnell College Associate Degree in Alcohol and Drug Abuse Counseling provides students with the academic preparation needed for employment in the substance abuse field. The curriculum is designed to meet the California Association of Alcoholism and Drug Abuse Counselors (CAADAC) requirements and pending legislative regulations requiring 350 hours of approved alcohol and drug classroom education, 45 hours of supervised practicum and 255 hours of supervised work experience.

Students who wish to continue their course of study to a 4-year setting are recommended to complete the Associate in Arts Degree program, which includes both the general education requirements and major courses in Alcohol and Other Drug Counseling. Completion of additional requirements for transfer may be required. It is recommended that students take AOD courses in numeric order. AOD 1-9 must be completed before enrolling in AOD 10 (Chemical Dependency Practicum Seminar) and AOD 99 (Practicum in Chemical Dependency).

Career opportunities for certified Alcohol and Drug Counselors include: counselors in social model county residential treatment programs; counselors in pre-treatment, inpatient, outpatient, and aftercare programs; counselors in hospital-based chemical-dependency community prevention and education programs; recovery/release prevention counseling in the private sector; counselors in recovery home/sober living environments. California state laws require that individuals who are providing services in an alcohol or drug abuse setting be registered. Students may obtain a registration manual, which contains information on academic requirements, procedures, forms, examination schedules and fees by going to the CAADAC website (http://caadac.org) and clicking on “certification” where an order form and other information are provided.

For more information, contact: Carol Kimbrough at (831) 755-6856, ckimbrough@hartnell.edu, E-308

PROGRAM OUTCOMES

Upon successful completion of the Alcohol and Drug Abuse Counseling program, a student should be able to:

- demonstrate proficiency in each of the core functions and performance domains of substance abuse counselors
- function as ethical and competent entry-level substance abuse counselors, with an understanding of and sensitivity to the diverse populations which they will serve

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>AOD-1</td>
<td>Fundamentals of Chemical Dependency</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-2</td>
<td>Pharmacology and Physiology of Alcohol and Other Drugs</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-3</td>
<td>Intervention, Treatment and Recovery</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-40</td>
<td>Counseling Diverse Populations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-5</td>
<td>Legal/Ethical Considerations and Professional Growth</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-8</td>
<td>Prevention, Education and Relapse Prevention</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-7</td>
<td>Individual Counseling Skills in Chemical Dependency</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-8</td>
<td>Family and Group Counseling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-10</td>
<td>Chemical Dependency Practicum Seminar</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-99</td>
<td>Practicum in Chemical Dependency</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BIO-11‡</td>
<td>Introduction to Human Anatomy &amp; Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-22</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (38.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 6.0 units from the following:</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Electives</td>
<td>AOD-9 or</td>
<td>Co-Occurring Disorders or Abnormal Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Electives</td>
<td>PST-33 or</td>
<td>Personal and Social Adjustment or Psychology of Human Relations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (6.0)

<table>
<thead>
<tr>
<th>RECOMMENDED MAJOR ELECTIVES (Select from the following; none required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-10</td>
<td>Introduction to Biological Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-22</td>
<td>Abnormal Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-33</td>
<td>Personal and Social Adjustment</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-41</td>
<td>Psychology of Human Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-42</td>
<td>Psychology of Women</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>SOC-41</td>
<td>Marriage and the Family</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>BIO-11‡</td>
<td>Introduction to Human Anatomy &amp; Physiology</td>
<td>(4.0)</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>PST-22‡</td>
<td>General Psychology</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>AOD-42</td>
<td>Counseling Diverse Populations</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General Education | 21.0

Electives (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 65.0

TOTAL UNITS | 65.0

‡ These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
The Certificate program in Alcohol and Abuse provides students with a strong academic background in chemical dependency. This program is best suited for those individuals already working in the chemical dependency or mental health field and who may NOT need to complete a supervised work experience and practicum. (Those students seeking to meet CAADAC requirements are encouraged to consider the AA Degree in Alcohol and Drug Abuse Counseling).

For more information, contact: Carol Kimbrough at (831) 755-6856, ckimbrough@hartnell.edu, E-308

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th><strong>REQUIRED MAJOR COURSES</strong></th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ADD-1</td>
<td>Fundamentals of Chemical Dependency</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADD-2</td>
<td>Pharmacology &amp; Physiology of Alcohol and Other Drugs</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADD-3</td>
<td>Introduction to Treatment Planning and Case Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADD-4</td>
<td>Counseling Diverse Populations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADD-5</td>
<td>Legal and Ethical Considerations and Professional Growth</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADD-6</td>
<td>Prevention, Education and Relapse Prevention</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADD-7</td>
<td>Individual Counseling Skills in Chemical Dependency</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADD-8</td>
<td>Family &amp; Group Counseling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ADD-9</td>
<td>Co-Occurring Disorders</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-2</td>
<td>Introduction to Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (30.0)**

<table>
<thead>
<tr>
<th><strong>RESTRICTED MAJOR ELECTIVES</strong> (Select a minimum of 6.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>PSY-25</td>
<td>Developmental Psychology—Lifespan</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PSY-33</td>
<td>Personal &amp; Social Adjustment</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PST-41</td>
<td>Psychology of Human Relations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

<table>
<thead>
<tr>
<th><strong>REQUIRED BASIC COMPETENCY</strong></th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td></td>
<td>or ESL-101*</td>
<td>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (36.0)**

* Eligibility for ENG-1A fulfills this requirement. Students are directed to placement assessment testing for both Math and English in their first semester of study.

** Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.
ART—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The study of art involves the understanding and appreciation of various cultural heritages and the development of skills in drawing, painting, design, weaving, jewelry and/or ceramics. The faculty of the art discipline are committed to making the arts of the past and present available to students through historical surveys and studio experience. The heritage of thought and skill, going beyond our immediate time and culture, will enrich students’ lives, broaden their personal view of the world and their improve their ability to communicate ideas through added knowledge and greater intercultural understanding.

The majority of these art courses prepare students for higher levels of study at a university. For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major. Students can also access major and transfer information for California State Universities and University of California at www.assist.org.

Positions for which BA graduates in art are qualified include arts administrator, art critic, art dealer, ceramicist, industrial designer, display designer, designer, gallery director, historian, merchant, sculptor, muralist, or painter.

FOR MORE INFORMATION, CONTACT: Office of Academic Affairs at (831) 770-7090, D-102

PROGRAM OUTCOMES

Upon successful completion of the Visual Arts program, a student should be able to:

- demonstrate effective technical proficiency in at least one medium of traditional visual art.
- structure visual information to produce images or objects of intermediate level aesthetic quality.
- interpret and produce art works that communicate intellectually and emotionally.
- demonstrate an intermediate knowledge of the history of art.
- demonstrate an awareness of the influence of art and artists on the lives of all individuals, cultures and societies.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ART-1A</td>
<td>Art History Survey I</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-1B</td>
<td>Art History Survey II</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-3P</td>
<td>Drawing and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-15A</td>
<td>Ceramics A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-71</td>
<td>Introduction to 2D Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (21.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ART-6A</td>
<td>Watercolors and Gouache</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-15B</td>
<td>Ceramics B</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-50</td>
<td>Gallery Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (3.0)

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ART-1A</td>
<td>Art History Survey I</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Humanities</td>
<td>ART-1A</td>
<td>Art History Survey I</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Language and Rationale (9 Units)</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

| Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS) | |

GENERAL EDUCATION 21.0

Art Required Major Courses and Restricted Major Electives 24.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 15.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a ‘C’ or better.

†These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
ASTRONOMY—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Astronomy program introduces students to the physical properties and processes that govern celestial bodies in the Universe. Students may take astronomy courses to satisfy their natural sciences requirements or to transfer with a major in astronomy/astrophysics or double major in astronomy and physics to the university. Transfer level astronomy curricula stress very strong preparation in physics and mathematics. While most astronomy courses will be taken at the upper division or graduate level, exposure to lower division astronomy courses will assist in exploring the major. Students planning to transfer may need to complete additional coursework and/or select specific electives required by the transfer institution and should consult with a Hartnell College counselor to identify required courses at their target university.

Students who pursue a B.S. degree in astronomy will be qualified to enter a teaching credential program, operate a planetarium, and assist at an observatory. With an M.S. degree, students can teach astronomy or physics at a community college, be a telescope operator at a major observatory, or work in industry. A Ph.D. qualifies students for a career in research at a university, space agency, or observatory.

FOR MORE INFORMATION, CONTACT:
Dr. Pimol Moth at (831) 755-6893, pmoth@hartnell.edu, N-5

PROGRAM OUTCOMES

Upon successful completion of the Astronomy program, a student should be able to:

- explain and discuss basic astronomical phenomena including, but not limited to:
  - gravitation,
  - the seasons,
  - the phases of the Moon,
  - eclipses,
- apply the laws of physics to explain the properties of planets, stars, galaxies, and the Universe.
- explain and discuss the impact and history of scientific theories and their importance in the advancement of astronomy.
- demonstrate proficiency in applying scientific procedures for making observations and measurements typical of modern astronomical research.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>AST-1H</td>
<td>Introduction to Astronomy</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AST-1L</td>
<td>Astronomy Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-4A</td>
<td>General Physics/Mechanics I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-4B</td>
<td>General Physics/Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light and Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (34.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 5.0 units from the following)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CHM-1A</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-4</td>
<td>Programming for Scientist and Engineers</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>SCI-124</td>
<td>Science, Technology, Engineering and Mathematics (STEM) Internship Preparation</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (5.0)

| ✓ GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.) | | | Units |
|-----------------------------------------------------------------------------------------------|---------------------------------|-------|
| Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal: |
| A. Minimum units to meet CSU-GE breadth certification requirements (39.0 units) OR |
| B. Minimum units to meet IGETC certification requirements (34.0-37.0 units) |
| Include a 3-unit Hartnell College Ethnic Groups in the United States course (Note: Bolded courses listed on the CSU-GE and IGETC sheets meet the requirement) |

General Education 34.0-39.0

Astronomy Required Major Courses and Restricted Major Electives 39.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0

TOTAL UNITS 69.0-72.0

‡ These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
ADVANCED AUTOMOTIVE TECHNOLOGY—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Advance Automotive Technology Program is designed to provide students with the skills and knowledge necessary to succeed as technicians in a professional auto repair shop. The curriculum provides classroom and hands-on learning experience in a state-of-the-art laboratory which provides students with the opportunity to apply the basic theories of the automotive technology. Diagnosis and repair procedures performed on vehicles enables students to develop the skill levels required for placement in the automotive technology industry.

Graduates of our automotive training programs have traditionally enjoyed high job placement success. Automotive Technology continues to be a vital link in the nation’s economy and you can look forward to a rewarding career, some excellent employment opportunities include new vehicle dealers and fleets, independent repair shops and government agencies.

A charcoal grey long-sleeve work shirt, safety glasses, pants, and work boots are required dress in all AAT classes for safety reasons.

FOR MORE INFORMATION, CONTACT:
Valentin Rodriguez at 831-770-7078, vrodriguez@hartnell.edu, Alisal Campus Office D-118
Mark Dehart at 831-770-7057, mdehart@hartnell.edu, Alisal Campus D-117

PROGRAM OUTCOMES:

Upon successful completion of the Advanced Automotive Technology program, a student should be able to:

- apply knowledge of personal and environmental safety practices to promote a safe work environment, and environmental responsibility.
- apply appropriate automotive theories, concepts, principles, methods, and laboratory skills to an automotive repair setting.
- research applicable vehicle and service information using automotive manuals in print and electronic formats, pertinent websites, and diagnostic equipment to identify, analyze, propose correction and correct problems of all major automotive systems.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>AAT-100</td>
<td>Introduction to Automotive Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-101</td>
<td>Engine Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-110</td>
<td>Climate Control</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-120</td>
<td>Electrical and Electronic Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-121</td>
<td>Electronic Systems and Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-130</td>
<td>Engine Performance</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-140</td>
<td>Brake Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-141</td>
<td>Steering and Suspension Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-150</td>
<td>Manual Transmission and Drive Train</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AAT-151</td>
<td>Automatic Transmissions</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-43</td>
<td>Computer Systems and Information Competency</td>
<td>4.0</td>
</tr>
</tbody>
</table>

RECOMMENDED ELECTIVES (none required)

Recommended Major Elective
AAT-131 Fuel System and Emissions Control 4.0

GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
</tr>
<tr>
<td>MAT-123</td>
<td>Intermediate Algebra</td>
</tr>
<tr>
<td>BUS-43</td>
<td>Computer Systems and Information Competency</td>
</tr>
</tbody>
</table>

Total General Education 20.0

Advanced Automotive Technology Required Major Courses 44.0

TOTAL UNITS 64.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better

**This course satisfies both Major and General Education requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
BIOLOGY—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION
The Biology program offers courses that are intended to create interest and enrichment through the study of living organisms and the basic biological principles. The major courses provide a strong background in the biological sciences for students transferring to four-year institutions who are interested in careers such as agriculture, health, research, and teaching. Prerequisite courses for nursing and other allied health programs are also offered.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT:
Alexander Edens at (831) 770-7055, aedens@hartnell.edu, N-14
Rebecca Fields at (831) 755-6921, rfields@hartnell.edu, N-14
Jeffrey Hughley at (831) 770-7054, jhughey@hartnell.edu, N-26C
Ann Wright at (831) 770-6112, awright@hartnell.edu, N-14
Nancy Wheat (831) 755-6881, nwheat@hartnell.edu, N-5

PROGRAM OUTCOMES:
Upon successful completion of the Biology program, a student should be able to:
- apply the scientific method to problem solving, devising a research plan, and evaluating data and findings.
- describe the structure and function of biological molecules, cells and organelles, and tissues and organ systems of plants and animals.
- apply the principles of heredity at the molecular, cellular, and organismal levels.
- explain the mechanism and evidence of evolution through natural selection.
- apply taxonomic principles to the classification of organisms.
- describe the flow of energy within organisms and within ecosystems.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

- **REQUIRED MAJOR COURSES**
  - **Course No.**  
  - **Course Title**  
  - **Units**
  - BIO-1  
  - Fundamental Biological Concepts  
  - 5.0
  - BIO-2  
  - General Zoology  
  - 5.0
  - BIO-3  
  - General Botany  
  - 5.0
  - CHM-1A  
  - General Chemistry  
  - 5.0
  - CHM-1B  
  - General Chemistry  
  - 5.0
  - MAT-13  
  - Elementary Statistics  
  - 5.0
  - MAT-25  
  - Pre-Calculus  
  - 4.0
  - PHY-2A  
  - College Physics  
  - 8.0
  - or
  - PHY-4A  
  - General Physics  
  - or
  - 12.0

  **SUBTOTAL UNITS (42.0-46.0)**

- **RECOMMENDED MAJOR ELECTIVES (Select from the following; none required)**
  - **Course No.**  
  - **Course Title**  
  - **Units**
  - CHM-12A  
  - Organic Chemistry I  
  - 5.0
  - CHM-12B  
  - Organic Chemistry II  
  - 5.0
  - MAT-2  
  - Calculus for Managerial, Life, & Social Sciences  
  - 4.0
  - MAT-3A  
  - Analytic Geometry and Calculus I  
  - 4.0
  - MAT-3B  
  - Analytic Geometry and Calculus II  
  - 4.0
  - MAT-3C  
  - Analytic Geometry and Calculus III  
  - 4.0

- **GENERAL EDUCATION COURSES**
  - **Course No.**  
  - **Course Title**  
  - **Units**
  - CHM-1A  
  - General Chemistry  
  - (5.0)

**TOTAL UNITS** 63.0-67.0

These courses also satisfy General Education Requirements.

TRANSFER STUDENTS:
Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
BIZINESS ADMINISTRATION—ASSOCIATE IN SCIENCE IN BUSINESS ADMINISTRATION FOR TRANSFER DEGREE (AS-T)

PROGRAM DESCRIPTION
The Associate in Science in Business Administration for Transfer degree aligns with the CSU Bachelor of Science in Business Administration. The Associate in Science in Business Administration for Transfer degree is designed to provide students with the common core of lower division courses required to transfer and pursue a baccalaureate degree in Business Administration. This includes four-year business degree options such as accounting, finance, human resources management, international business, management, operations management, and marketing. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT:
Carol Hobson at (831) 755-6852, chobson@hartnell.edu (email preferred), Office E-216
Robert Maffei at (831) 755-6744, rmaffei@hartnell.edu (email preferred), Office D-365

PROGRAM OUTCOMES
Upon successful completion of the Associate in Science in Business Administration for Transfer Degree, a student should be able to:

- Define information needs, identify the scope and level of information needed, and access information effectively and efficiently using appropriate electronic tools in a business environment to make and communicate sound decisions.
- Interpret, analyze, and use quantitative and logical reasoning to evaluate and solve business problems.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>BUS-1A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-1B</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECO-1±</td>
<td>Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECO-5±</td>
<td>Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-18</td>
<td>The Legal Environment of Business</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-43</td>
<td>Business Information Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-50</td>
<td>Introduction to PC Applications</td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-32±</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (25.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 3 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-2±</td>
<td>Calculus for Managerial, Life, and Social Sciences</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-13±</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-16±</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (3.0-5.0)

<table>
<thead>
<tr>
<th>✓ REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units): OR</td>
<td>39.0</td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td>34.0-37.0</td>
</tr>
<tr>
<td>Business Administration Required Major and Restricted Electives</td>
<td>28.0-30.0</td>
</tr>
<tr>
<td>Electives (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0</td>
<td>1.0-6.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60.0</td>
</tr>
</tbody>
</table>

* Up to 9 units of required courses can be double counted for CSU GE or IGETC

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.com. Please consult with a Hartnell College counselor to review transfer requirements.
# BUSINESS OFFICE TECHNOLOGY—INFORMATION PROCESSING—ASSOCIATE OF SCIENCE DEGREE

## PROGRAM DESCRIPTION

The Business Office Technology programs promote the economic development of the community; provide for lifelong learning and academic excellence through course content, application, and technology; serve diverse populations; encourage positive work ethic; and meet workforce needs through skills development, training, and personal growth.

The Business Office Technology programs offer training in keyboarding, office software applications, filing and records management, accounting (Bookkeeping Certificate), customer service, and business English and math applications. Students are prepared for career opportunities in administrative support, bookkeeping and data entry, customer service and other entry-level office positions.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty on how best to complete the program in which you are enrolled.

**FOR MORE INFORMATION, CONTACT:**  
Peter Calvert at (831) 755-6747, pcalvert@hartnell.edu, E-212  
Carol Hobson at (831) 755-6852, chobson@hartnell.edu (email preferred), E-216

## PROGRAM OUTCOMES

Upon successful completion of the Business Office Technology program, a student should be able to:

- demonstrate proficiency in selecting and using appropriate business software application and tools.
- prepare and deliver business documents and presentations in appropriate form, format, and language.
- solve problems and make decisions collaboratively or independently.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM-5P</td>
<td>Professional &amp; Leadership Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-50</td>
<td>Introduction to PC Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS-111</td>
<td>Intermediate Office Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-128</td>
<td>Professionalism in the Workplace</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS-129</td>
<td>Practical Customer Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS-131</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-140A</td>
<td>Keyboarding Speed and Accuracy</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS-150.15</td>
<td>Word Processing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-172</td>
<td>Machine Calculations on the Microcomputer</td>
<td>1.5</td>
</tr>
<tr>
<td>BUS-173</td>
<td>Filing Procedures and Records Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-175</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-177</td>
<td>Proofreading and Editing Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-190</td>
<td>Career Management</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS-194</td>
<td>Human Relations in Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (36.0)**

### RECOMMENDED MAJOR ELECTIVES (Select from the following; none required)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-32</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-151</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-125*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>COM-5F</td>
<td>Professional &amp; Leadership Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**General Education 21.0**

### BUSINESS OFFICE TECHNOLOGY—INFORMATION PROCESSING Required Major Courses

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-194</td>
<td>Human Relations in Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-125*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>COM-5F</td>
<td>Professional &amp; Leadership Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**TOTAL UNITS 60.0**

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

1These courses also satisfy General Education Requirements.

**TRANSFER STUDENTS:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.asset.org](http://www.asset.org). Please consult with a Hartnell College counselor to review transfer requirements.
BUSINESS OFFICE TECHNOLOGY—BOOKKEEPING—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>BUS-50</td>
<td>Introduction to PC Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-110</td>
<td>Beginning Keyboarding and Document Formatting</td>
<td>3.0</td>
</tr>
<tr>
<td>or BUS-110A and BUS-110B</td>
<td></td>
<td>or Beginning Keyboarding and Beginning Formatting and Document Processing</td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-128</td>
<td>Professionalism in the Workplace</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-129</td>
<td>Practical Customer Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-131</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-150.25</td>
<td>Electronic Spreadsheets</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-152</td>
<td>Introduction to Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-154</td>
<td>Computerized Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-172</td>
<td>Machine Calculations on the Microcomputer</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-173</td>
<td>Filing Procedures and Records Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-190</td>
<td>Career Management</td>
<td>2.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or ESL-101*</td>
<td></td>
<td>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>BUS-151**</td>
<td>Business Mathematics</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (30.0)

* Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.

BUSINESS OFFICE TECHNOLOGY—INFORMATION PROCESSING—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>BUS-50</td>
<td>Introduction to PC Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-111</td>
<td>Intermediate Office Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-128</td>
<td>Professionalism in the Workplace</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-129</td>
<td>Practical Customer Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-131</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-140 A &amp; B</td>
<td>Keyboarding Speed and Accuracy</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-150.15</td>
<td>Word Processing</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-172</td>
<td>Machine Calculations</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-173</td>
<td>Filing Procedures and Records Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-177</td>
<td>Proofreading and Editing Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-190</td>
<td>Career Management</td>
<td>2.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or ESL-101*</td>
<td></td>
<td>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>BUS-151**</td>
<td>Business Mathematics</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (27.0)

* Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.
CHEMISTRY—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Chemistry program at Hartnell College is designed to meet the needs of the diverse community of interests served by the community college. A full program of chemistry for the aspiring professional scientist is offered through general chemistry and a two-semester course in organic chemistry. A separate track is offered for nursing and allied health students which includes general inorganic, organic and biochemistry. The Chemistry discipline also has a strong commitment to the student with little or no prior chemistry background. The entire program is taught with a strong laboratory emphasis, and in the more advanced classes, students receive hands-on experience with a wide variety of instruments.

Four-year graduates in chemistry are qualified for positions in research, industry, education, engineering, and the allied medical fields.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Lawrence Yee at (831) 755-6887, lyee@hartnell.edu, N-24A
Amy Takemoto (831) 755-6886, ataketomo@hartnell.edu, N-23A

PROGRAM OUTCOMES

Upon successful completion of the Chemistry program, a student should be able to:

- apply appropriate chemical theories, concepts, principles, methods, and laboratory skills to relevant science and engineering settings.
- demonstrate competence in chemistry laboratory techniques and experimental methods.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CHM-1A</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-1B</td>
<td>General Chemistry II</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-12A</td>
<td>Organic Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-12B</td>
<td>Organic Chemistry II</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-13I</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-25I</td>
<td>Pre-Calculus</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-2A &amp; PHY-2B or PHY-4A &amp; PHY-4B</td>
<td>College Physics I &amp; College Physics II or General Physics/Mechanics I General Physics/Electricity and Magnetism</td>
<td>8.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (45.0)**

<table>
<thead>
<tr>
<th>✓ RECOMMENDED MAJOR ELECTIVES (Select from the following; none required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light and Modern Physics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM-1A</td>
<td>General Chemistry I</td>
<td>(5.0)</td>
</tr>
<tr>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>(5.0)</td>
</tr>
<tr>
<td>MAT-25I</td>
<td>Pre-Calculus</td>
<td>(4.0)</td>
</tr>
</tbody>
</table>

**ELECTIVES (Courses Numbered 1-199)** required when GE units plus Degree units total are fewer than 60.0

**TOTAL UNITS** 66.0

‡These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
CHICANO STUDIES—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The Chicano Studies program provides organized studies in the heritage of Chicanos and fosters and expands general understanding of the cultural contributions of this group. The Chicano Studies courses give students opportunities to develop competence in and an understanding of the language, history, and culture of Chicanos, as well as current issues affecting the Chicano community. Completion of the Chicano Studies major enhances students’ qualifications for positions in schools, community groups, governmental organizations, and private enterprise.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Hermelinda Rocha-Tabera at (831) 755-6750, hrocha@hartnell.edu, D-369

PROGRAM OUTCOMES:

Upon successful completion of the Chicano Studies program, a student should be able to:

- demonstrate knowledge of the history of Chicanos in the United States including an evaluation of the Chicano political experience with respect to local and national leaders.
- apply critical thinking skills in reading, comprehending, and interpreting Chicano Studies scholarship including the ideas of the major thinkers who have influenced Chicano Studies past and present.
- demonstrate knowledge of Chicano culture including and analysis of the cultural expressions of Chicanos including but not limited to popular culture, literature, and cinema.
- distinguish variations within the Chicano community with respect to class, culture, gender, ethnicity, race, and sexuality.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS-49A</td>
<td>Chicano History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-49B</td>
<td>Chicano History B</td>
<td>3.0</td>
</tr>
<tr>
<td>ETH-3</td>
<td>Chicanos in American Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (12.0)**

### REQUIRED MAJOR ELECTIVES—CULTURE (Select a minimum of 3.0 units from the following:)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETH/POL-5</td>
<td>Chicano Politics and the American Political System</td>
<td>3.0</td>
</tr>
<tr>
<td>ETH-2</td>
<td>Chicano Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>ETH-6</td>
<td>La Chicana</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (3.0)**

### REQUIRED MAJOR ELECTIVES—LITERATURE (Select a minimum of 3.0 units from the following:)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1B</td>
<td>College Reading and Composition: Chicano Perspective</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG-20</td>
<td>Chicano Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ETH-12</td>
<td>Chicano Cinema</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (3.0)**

### RECOMMENDED ELECTIVES (Select from list; none required)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA-2, 2S, or 2X</td>
<td>Elementary Spanish or higher</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>3.0</td>
</tr>
<tr>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-125</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**TOTAL UNITS 60.0**

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a grade of “C” or better.

*These courses also satisfy General Education Requirements.

TRANSFER STUDENTS

Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
COMMUNICATION STUDIES—ASSOCIATE IN ARTS IN COMMUNICATION STUDIES FOR TRANSFER DEGREE (AA-T)

PROGRAM DESCRIPTION
The Associate in Arts in Communication Studies for Transfer allows students to focus their major course work and required electives to meet the needs of business, interpersonal, and public communication; and to demonstrate communicative competence. A degree in Communication Studies can lead to a career (or further study) in public relations, teaching, consulting, broadcasting, law ministry, public administration or any field in which communication skills are highly valued. Upon successful completion of the Associate in Arts in Communication Studies for Transfer, a student should be able to: conceive, develop and deliver a focused, cogent, and clear oral presentation; explain the transactional and transformative nature of human communication; and research, organize and write a paper concerning the development, implementation, and effective use of various communication theories.

FOR MORE INFORMATION, CONTACT:
Jason Hough at (831) 755-6994, jhough@hartnell.edu, E-208
Lana McDonnell at (831) 755-6823, lmcdonnell@hartnell.edu, D-354

PROGRAM OUTCOMES
Upon successful completion of the Associate in Arts in Communication Studies for Transfer Degree, a student should be able to:

- Conceive, develop and deliver a focused, cogent, and clear oral presentation.
- Explain the transactional and transformative nature of human communication.
- Research, organize, and write a paper concerning the development, implementation, and effective use of various communication theories.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 80 semester or 90 quarter units.

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
- (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
- (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-2</td>
<td>Argumentation and Debate</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-3</td>
<td>Survey of Human Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-4</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-8</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (15.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-2</td>
<td>Introduction to Anthropology, Cultural</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>COM-5</td>
<td>Professional &amp; Leadership Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-2</td>
<td>Critical Thinking and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>SOC-1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (3.0)

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units) OR 39.0</td>
<td></td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements 34.0-37.0</td>
<td></td>
</tr>
<tr>
<td>Communication Studies Required Major and Restricted Electives 18.0</td>
<td></td>
</tr>
<tr>
<td>Electives (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0</td>
<td>3.0-8.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
COMMUNICATION STUDIES—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION
The Communication Studies program allows students to focus their major course work and required electives to meet the needs of business, interpersonal, and public communication and demonstrate communicative competence. A degree in Communication Studies can lead to career (or further study) in public relations, teaching, consulting, broadcasting, law, ministry, public administration, politics, or any field in which communication skills are highly valued.

FOR MORE INFORMATION, CONTACT: Jason Hough at (831) 755-6994, jhough@hartnell.edu, E-208
Lana McDonnell at (831) 755-6823, lmcdonnell@hartnell.edu, D-354

PROGRAM OUTCOMES
Upon successful completion of the Communication Studies Associate’s Degree program, a student should be able to:

- Conceive, develop and deliver a focused, cogent, and clear oral presentation.
- Explain the transactional and transformative nature of human communication.
- Research, organize, and write a paper concerning the development, implementation, and effective use of various communication theories.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

✓ REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COM-3</td>
<td>Survey of Human Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COM-4</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COM-8</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (12.0)

✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 9.0 units from the following)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT-2</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-175</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-184</td>
<td>Human Relations in Business</td>
<td>3.0</td>
</tr>
<tr>
<td>COM-5</td>
<td>Professional &amp; Leadership Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC-41</td>
<td>Marriage and Family Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY-41</td>
<td>Psychology of Human Relations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9.0)

✓ GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education

Communication Studies Required Major Courses and Restricted Major Electives

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.

✓ These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
COMPUTER SCIENCE AND INFORMATION SYSTEMS—COMPUTER SCIENCE OPTION—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Computer Science and Information Systems program prepares students taking the Computer Science Option with the lower-division coursework required at most universities for advancement to upper-division coursework for the Bachelor’s Degree with a major in Computer Science or Information Systems fields. All options are designed to provide students with the skills necessary for employment in the information systems and computer science industry.

Computer Science Option

This certificate or degree program is designed for those interested in becoming programmers in a technical, scientific systems or game development environment, or for students desiring transfer to a four-year Computer Science Degree Program.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty member on how best to complete the program in which you are enrolled.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Sonia Arteaga at (831) 755-6741, sarteaga@hartnell.edu, Alisal Campus, AC-A104

PROGRAM OUTCOMES

Upon successful completion of the Computer Science and Information Systems—Computer Science Option program, a student should be able to:

- demonstrate strong interpersonal skills, communicate effectively with technical and non-technical colleagues, and work effectively on a team.
- design and construct significant computer application(s) using current programming languages and operating systems.
- describe the functions of a contemporary operating system with respect to convenience, efficiency, and the ability to evolve.
- demonstrate the ability to evaluate algorithms, select from a range of possible options, provide justification for that selection, and implement the algorithm in programming context.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS-1</td>
<td>Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-2A</td>
<td>Object Oriented Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-2B</td>
<td>Data Structures and Algorithms</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-3</td>
<td>Computer Architecture and Assembly Language</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-7</td>
<td>Discrete Structures</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (20.0)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS-4B</td>
<td>General Physics/Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (40.0)

General Education (22.0)

Electives (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0

TOTAL UNITS 60.0

These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
## COMPUTER SCIENCE AND INFORMATION SYSTEMS—COMPUTER SCIENCE OPTION—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CSS-1</td>
<td>Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-2A</td>
<td>Object Oriented Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-2B</td>
<td>Data Structures and Algorithms</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-3</td>
<td>Computer Architecture and Assembly Language</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-7</td>
<td>Discrete Structures</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (20.0)**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 8.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-122</td>
<td>Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-120A</td>
<td>Introduction to Networks</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-125</td>
<td>Storage Management and Virtualization</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (8.0)**

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td></td>
<td>or ESL-101</td>
<td>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (28.0)**

*Eligibility for ENG-1A fulfills this requirement.

**Completion of any math in which MAT-123 is a prerequisite with a grade of “C” or better.
PROGRAM DESCRIPTION

The Computer Science and Information Systems program prepares students taking the Computer Science Option with the lower-division coursework required at most universities for advancement to upper-division coursework for the Bachelor’s Degree with a major in Computer Science or Information Systems fields. All options are designed to provide students with the skills necessary for employment in the information systems and computer science industry.

DIGITAL AND WEB DESIGN OPTION

This certificate or degree program is designed for those interested in designing effective and persuasive digital and web media. This option emphasizes the following competencies: managing the development and delivery of comprehensive, integrated digital media, and schedule, customer liaison skills and client interaction, and integrating all facets of digital media into an effective product.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty member on how best to complete the program in which you are enrolled.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Christine Svendsen at (831) 755−6851, svendsen@hartnell.edu E-205

PROGRAM OUTCOMES

Upon successful completion of the Computer Science and Information Systems—Digital and Web Design Option program, a student should be able to:

- anticipate, identify and solve technical and design issues by applying current media design standards
- demonstrate strong interpersonal skill, communicate effectively with technical and non-technical colleagues, work effectively on a team
- apply knowledge in a variety of computer skill and proficiency areas including programming languages, software applications, and hardware setup and configuration.

A minimum of **60.0 semester** units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS-1</td>
<td>Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-25</td>
<td>Multimedia Integration</td>
<td>3.0</td>
</tr>
<tr>
<td>CSS-27</td>
<td>Management and Content Development</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-29</td>
<td>Programming for Multimedia</td>
<td>3.0</td>
</tr>
<tr>
<td>CSS-31</td>
<td>Database Management</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-44</td>
<td>Computer Science &amp; Information Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-126</td>
<td>Dreamweaver</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-127</td>
<td>Flash Design</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (30.0)**

### RESTRICTED MAJOR ELECTIVES (Select a minimum of 12.0 units from the following):

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS-50A</td>
<td>2-D Game Development</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-78</td>
<td>Beginning Flash Game Design and Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-84</td>
<td>Beginning Digital Cartooning in Flash</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (12.0)**

### GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

†These courses also satisfy General Education Requirements.

**TRANSFER STUDENTS:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
COMPUTER SCIENCE AND INFORMATION SYSTEMS—DIGITAL AND WEB DESIGN OPTION—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CSS-1</td>
<td>Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-25</td>
<td>Multimedia Integration</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-27</td>
<td>Management and Content Development</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-29</td>
<td>Programming for Multimedia</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-31</td>
<td>Database Management</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-44</td>
<td>Computer Science and Information Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-126</td>
<td>Dreamweaver</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-127</td>
<td>Flash Design</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (30.0)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-60A</td>
<td>2-D Game Development</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-60B</td>
<td>3-D Game Development</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-78</td>
<td>Beginning Flash Game Design and Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-84</td>
<td>Beginning Digital Cartooning in Flash</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (12.0)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101* or ESL-101</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0) or (5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (42.0)**

*Eligibility for ENG-1A fulfills this requirement.

**Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.
Computer Science and Information Systems—Network and Security Option—Associate of Science Degree

**Program Description**

The Computer Science and Information Systems program prepares students taking the Computer Science Option with the lower-division coursework required at most universities for advancement to upper-division coursework for the Bachelor's Degree with a major in Computer Science or Information Systems fields. All options are designed to provide students with the skills necessary for employment in the information systems and computer science industry.

**Network and Security Option**

This certificate or degree program is designed for those interested in becoming network and security specialists in a networked business or information systems environment.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty member on how best to complete the program in which you are enrolled.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

**FOR MORE INFORMATION, CONTACT:** Center for Advanced Technology, (831) 755-6960, Alisal Campus, A102

**Program Outcomes**

Upon successful completion of the Computer Science and Information Systems—Network and Security Option program, a student should be able to:

- design, plan, and implement a small office network, incorporating current industry standards for performance, reliability, and security.
- demonstrate strong interpersonal skills, communicate effectively with technical and non-technical colleagues, and work effectively on a team.
- assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems.
- configure small business and small enterprise networking, storage and virtual equipment, (servers and network devices) to create a reliable, secure, and efficient networking infrastructure.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS-124</td>
<td>Systems and Network Administration</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-125</td>
<td>Storage Management and Virtualization</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-169</td>
<td>Computer Maintenance and Repair</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**General Education Courses**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS-1</td>
<td>Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-44</td>
<td>Computer Science and Information Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-120A</td>
<td>Introduction to Networks</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-120B</td>
<td>Routing and Switching Essentials</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-120C</td>
<td>Scaling Networks</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-120D</td>
<td>Connecting Networks</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-122</td>
<td>Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-123</td>
<td>Network Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-124</td>
<td>Systems and Network Administration</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-125</td>
<td>Storage Management and Virtualization</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-169</td>
<td>Computer Maintenance and Repair</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units**

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

**Electives (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0**

**General Education**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Network and Security Option Required Major Courses**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS-124</td>
<td>Systems and Network Administration</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units**

62.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

† These courses also satisfy General Education Requirements.

**Transfer Students:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
**COMPUTER SCIENCE AND INFORMATION SYSTEMS—NETWORK AND SECURITY OPTION—CERTIFICATE OF ACHIEVEMENT**

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CSS-1</td>
<td>Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>or</td>
<td>CSS-44</td>
<td>Computer Science and Information Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-120A</td>
<td>Introduction to Networks</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-120B</td>
<td>Routing and Switching Essentials</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-120C</td>
<td>Scaling Networks</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-120D</td>
<td>Connecting Networks</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-122</td>
<td>Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-123</td>
<td>Network Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-124</td>
<td>Systems and Network Administration</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-125</td>
<td>Storage Management and Virtualization</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-169</td>
<td>Computer Maintenance and Repair</td>
<td>4.0</td>
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</tbody>
</table>

**SUBTOTAL UNITS (40.0)**

<table>
<thead>
<tr>
<th>✓ OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or</td>
<td>ESL-101</td>
<td>Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (41.0)**

*Eligibility for ENG-1A fulfills this requirement.

**Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.
CONSTRUCTION—SUSTAINABLE CONSTRUCTION—ASSOCIATE OF SCIENCE DEGREE

PROGRAM IS CURRENTLY BEING REVISED. PLEASE CONTACT CONSTRUCTION FACULTY FOR MORE INFORMATION.

PROGRAM DESCRIPTION
The construction industry is steadily shifting to more environmentally sound materials and methods in all areas of building, including residential, commercial, industrial, and civil construction. The centerpiece of our Sustainable Construction program is the “Field Practice” class in which students work on a “green” construction project together. Students may select a special emphasis in Green Building, Sustainable Design, or Construction Management. In addition to the Associate of Science Degree (60 units), Certificates of Achievement (18 units, plus basic math and English competency) are available in these same areas of emphasis, which can be completed over two semesters.

The sustainable construction field offers a wide range of career opportunities, including craft, trades, and field construction workers; construction manager; sustainable building designer; green building specialist, auditor, commissioner, inspector, or certification manager; remodeling contractor; construction project estimator; facilities manager; environmental planner; energy efficiency upgrades installer; building permit processor; and other similar positions.

The Construction—Sustainable Construction Associate’s Degree offers specialized electives to enhance a student’s career opportunities. Students who wish to pursue careers in the following areas are recommended to choose from the following:

- **Green Building**
  - Complete electives CONS 126, CONS 128, CONS 132, CONS 134, CONS 136, CONS 150, CONS 151, CONS 154
- **Sustainable Design**
  - Complete electives CONS 128, CONS 150, CONS 151, DRA 52, DRA 70, DRA 71, CSS 66
- **Construction Management**
  - Complete electives CONS 140, CONS 144, CONS 149, CONS 150, CONS 151, CONS 152, CONS 154

FOR MORE INFORMATION, CONTACT: John Anderson, (831) 755-6962, janderson@hartnell.edu, Alisal Campus, AC-A109
Center for Advanced Technology, (831) 755-6962, Alisal Campus, AC-A102

PROGRAM OUTCOMES
Upon successful completion of the Sustainable Construction program, a student should be able to:

- demonstrate construction experience and knowledge to prospective employers in the industry.
- analyze and interpret construction blueprints and other job orders.
- compare and contrast conventional construction materials and methods with green building.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CONS-101</td>
<td>Introduction to Sustainable Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-104</td>
<td>Print Reading and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-150</td>
<td>Construction Field Practice I</td>
<td>6.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-151</td>
<td>Construction Field Practice II</td>
<td>6.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-152</td>
<td>Construction Field Practice III</td>
<td>6.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (15.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 15.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-126</td>
<td>Green Building Remodel and Retrofit</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-128</td>
<td>Sustainable Building Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-132</td>
<td>Masonry and Concrete</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-134</td>
<td>Plumbing and HVAC</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-136</td>
<td>Electrical</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-140</td>
<td>Construction Management and Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-142</td>
<td>Construction Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-144</td>
<td>Construction Law and Contracts</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-149</td>
<td>Commercial Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-151</td>
<td>Construction Field Practice I</td>
<td>6.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-152</td>
<td>Construction Field Practice II</td>
<td>6.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (15.0)

<table>
<thead>
<tr>
<th>✓ RECOMMENDED MAJOR ELECTIVES (None Required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>EDU-110</td>
<td>Foundations of Success (ACE)</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>EDU-111</td>
<td>Team Self-Management (ACE)</td>
<td>2.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BUS-32</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BUS-129</td>
<td>Practical Customer Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BUS-150.15</td>
<td>Word Processing</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BUS-150.25</td>
<td>Electronic Spreadsheets</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BUS-152</td>
<td>Introduction to Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BUS-43</td>
<td>Business Information Systems and Information Literacy</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>DRA-50</td>
<td>Introduction to Drafting and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>DRA-52</td>
<td>Introduction to AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>DRA-70</td>
<td>Architectural Design and Visual Communication I</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>DRA-71</td>
<td>Architectural Design and Visual Communication II</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>WLD-52</td>
<td>Sheet Metal Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
</tr>
</tbody>
</table>
**CON’T OF CONSTRUCTION—SUSTAINABLE CONSTRUCTION—ASSOCIATE OF SCIENCE DEGREE**

<table>
<thead>
<tr>
<th>UNITS</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Course Title</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
</tr>
<tr>
<td>5.0</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION COURSES**

- Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)
- Social & Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)
- Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)
- Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)
- Language and Rationale (9 Units)
  - A. Written Composition
  - B. Communication and Analytical Thinking

**Construction Required Major Courses and Restricted Major Electives**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS-101</td>
<td>Introduction to Sustainable Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-104</td>
<td>Print Reading &amp; Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-140</td>
<td>Construction Management and Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-142</td>
<td>Construction Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-144</td>
<td>Construction Law and Contracts</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-149</td>
<td>Commercial Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-150</td>
<td>Construction Field Practice I</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-151</td>
<td>Construction Field Practice II</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-152</td>
<td>Construction Field Practice III</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**REQUIRED BASIC COMPETENCY**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ESL-101*</td>
<td>Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>MAT-151L1, L2, and L3*</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION REQUIREMENTS**

- Natural Sciences
- Social & Behavioral Sciences
- Humanities
- Ethnic Groups in the United States
- Language and Rationale

**Construction Required Major Courses and Restricted Major Electives**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS-101</td>
<td>Introduction to Sustainable Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-104</td>
<td>Print Reading &amp; Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-140</td>
<td>Construction Management and Scheduling</td>
<td>3.0</td>
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<td>CONS-142</td>
<td>Construction Estimating</td>
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<tr>
<td>CONS-144</td>
<td>Construction Law and Contracts</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-149</td>
<td>Commercial Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-150</td>
<td>Construction Field Practice I</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-151</td>
<td>Construction Field Practice II</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-152</td>
<td>Construction Field Practice III</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**PROGRAM OUTCOMES:**

Upon successful completion of the Construction Management Certificate, a student should be able to:

- demonstrate entry-level construction management knowledge, including green building.
- compare and contrast management, financial, and legal requirements of commercial and residential construction.

**TRANSFER STUDENTS:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.

**CONSTRUCTION—SUSTAINABLE CONSTRUCTION—CONSTRUCTION MANAGEMENT—CERTIFICATE OF ACHIEVEMENT**

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

**FOR MORE INFORMATION, CONTACT:**

John Anderson, 755-6962, jkanderson@hartnell.edu, Alisal Campus, AC-A109

Center for Advanced Technology, (831) 755-6960, Alisal Campus, AC-A102

**PROGRAM OUTCOMES:**

Upon successful completion of the Construction Management Certificate, a student should be able to:

- demonstrate entry-level construction management knowledge, including green building.
- compare and contrast management, financial, and legal requirements of commercial and residential construction.
CONSTRUCTION—SUSTAINABLE CONSTRUCTION—GREEN BUILDING—CERTIFICATE OF ACHIEVEMENT

PROGRAM IS CURRENTLY BEING REVISED. PLEASE CONTACT CONSTRUCTION FACULTY FOR MORE INFORMATION.

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

PROGRAM OUTCOMES:

Upon successful completion of the Green Building Certificate, a student should be able to:

- demonstrate entry-level knowledge of green building.
- compare and contrast conventional construction materials and methods with green building.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CONS-101</td>
<td>Introduction to Sustainable Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-126</td>
<td>Green Building Remodel and Retrofit</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (12.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-128</td>
<td>Sustainable Building Design</td>
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</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-132</td>
<td>Masonry and Concrete</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-134</td>
<td>Plumbing and HVAC</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-136</td>
<td>Electrical</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-150</td>
<td>Construction Field Practice I</td>
<td>6.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-151</td>
<td>Construction Field Practice II</td>
<td>6.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (6.0)

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101* or ESL-101*</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>3.0 (5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-151L1, L2, and L3**</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>3.0 (5.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (18.0)

CONSTRUCTION—SUSTAINABLE CONSTRUCTION—SUSTAINABLE DESIGN—CERTIFICATE OF ACHIEVEMENT

PROGRAM IS CURRENTLY BEING REVISED. PLEASE CONTACT CONSTRUCTION FACULTY FOR MORE INFORMATION.

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

PROGRAM OUTCOMES:

Upon successful completion of the Sustainable Design Certificate, a student should be able to:

- analyze and create basic construction blueprints and other designs.
- compare and contrast sustainable design principles with conventional building.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CONS-101</td>
<td>Introduction to Sustainable Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-104</td>
<td>Print Reading &amp; Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-121</td>
<td>Principles of Sustainable Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-123</td>
<td>Sustainable Design Studio</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-128</td>
<td>Sustainable Building Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (18.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-126</td>
<td>Green Building Remodel and Retrofit</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-150</td>
<td>Construction Field Practice I</td>
<td>6.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-151</td>
<td>Construction Field Practice II</td>
<td>6.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-52</td>
<td>Introduction to Drafting Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-70</td>
<td>Architectural Design and Visual Communication I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-71</td>
<td>Architectural Design and Visual Communication II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (18.0)

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101* or ESL-101*</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>3.0 (5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-151L1, L2, and L3**</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>3.0 (5.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (18.0)

* Eligibility for ENG-1A fulfills this requirement.
**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.
CONSTRUCTION—SUSTAINABLE DESIGN—ASSOCIATE OF SCIENCE DEGREE

PROGRAM IS CURRENTLY BEING REVISED. PLEASE CONTACT CONSTRUCTION FACULTY FOR MORE INFORMATION.

PROGRAM DESCRIPTION
This program will provide students with an innovative and progressive foundation in Sustainable Design thinking and approaches, including resource efficiency, full capacity use, renewable energy, product life cycle analysis, closed-loop systems, multi-functionality, biomimicry, and appreciative inquiry. A knowledge of sustainable design principles and practices will support many professional career directions, including architecture, design/build contracting, construction management, Interior Design, environmental careers, community planning, product and industrial design, commercial merchandising, or business processes.

FOR MORE INFORMATION, CONTACT: Center for Advanced Technology, (831) 755-6960, Alisal Campus, AC-A102

PROGRAM OUTCOMES
Upon successful completion of the Sustainable Design program, a student should be able to:

- demonstrate sustainable design experience and knowledge.
- analyze design challenges and interpret blueprints.
- compare and contrast conventional design solutions with sustainable materials and methods.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CONS-121</td>
<td>Principles of Sustainable Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-123</td>
<td>Sustainable Design Studio (w/lab)</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-128</td>
<td>Sustainable Building Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-50</td>
<td>Introduction to Drafting and Design</td>
<td>3.0</td>
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</table>

SUBTOTAL UNITS (15.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select 15 units - Required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-101</td>
<td>Introduction to Sustainable Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-104</td>
<td>Print Reading and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-43</td>
<td>Business Information Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-52</td>
<td>Introduction to AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-70</td>
<td>Architectural Design and Visual Communication I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-71</td>
<td>Architectural Design and Visual Communication II</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>EGN-1</td>
<td>Introduction to Engineering</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>EGN-2</td>
<td>Engineering Graphics/CAD</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-55</td>
<td>Engineering Drawing with Solidworks</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (15.0)

<table>
<thead>
<tr>
<th>REQUIRED GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>3.0</td>
<td></td>
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<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>3.0</td>
<td></td>
<td></td>
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<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>3.0</td>
<td></td>
<td></td>
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<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>3.0</td>
<td></td>
<td></td>
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<tr>
<td>Language and Rationality (9 Units)</td>
<td>9.0</td>
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<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General Education 21.0
Sustainable Design Required Major Courses 15.0
Sustainable Design Required Electives 15.0

Electives (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0

TOTAL UNITS (60.0) 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a 'C' or better or a score of 70% or greater on the mathematics competency exam

‡ These courses also satisfy General Education Requirements

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
Certificate of Achievement in California State University General Education Breadth (CSU-GE)

The Certificate of Achievement in California State University General Education Breadth (CSU-GE), developed by the Counseling Discipline, will be awarded upon completion of the CSU GE Breadth requirements as outlined on the catalog year’s CSU-GE Breadth sheet. Students must complete a minimum of 39 units, which are distributed among five areas. CSU-GE Breadth Sheet requirements are designed to be taken with a major area of concentration and elective courses in preparation for transfer to a California State University. This certificate recognizes the completion of lower-division general education requirements for the CSU. For many majors, students are encouraged to complete the CSU GE pattern; however, it is not required for admission to the CSU. An official petition must be filed with the Admission and Records Office prior to the graduation deadlines as stated in the Academic Calendar. Certification of the CSU-GE Breadth will be indicated on the student’s transcript.

CSU-GE for STEM or IGETC-CSU for STEM

IGETC for STEM or CSU-GE for STEM is applicable for the (AS-T) Biology for Transfer degree only at the time of the catalog publication. IGETC-CSU for STEM- All Areas will be completed with minimum units/courses as required and listed on IGETC except AREAS 3 and 4, which is approved with 6 units/2 courses. CSU-GE for STEM- All AREAS will be completed with minimum units/courses as required and listed on CSU-GE except AREAS C and D, which is approved with 6 units/2 courses. These GE courses are not waived but will be completed after transfer. Students completing the CSU-GE or IGETC-CSU for STEM will not receive a Certificate of Achievement, which requires a full certification of areas; however, students can request a partial certification be sent to their transfer institution by completing the appropriate form and submitting to Admissions and Records.

For more information contact:
Counseling Discipline, Building B
(831) 755-6820
DIGITAL ARTS—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION
The Digital Arts program offers a certificate and associate degree in Digital Arts. Classes include training in graphic design, digital graphics, 2D digital illustration, 2D digital photographic imaging, digital video and audio editing, 2D and 3D digital animation, 3D modeling, storyboard development for animation and interactive digital media interface design. The AA degree is Digital Arts offers 3 tracks of specialization; graphic design for print, screen and time-based, digital photography and video, or digital animation and illustration.

An imaginative blend of art, design, photography, video, animation and illustration is applied to producing digital media presentations for business, education, entertainment, telecommunication and medical industries graduates in Digital Arts are qualified for positions in graphic design, web design, game design, 2D illustration, digital photographic imaging, audio engineering, video editing, digital video, or digital media interface design. Graduates in Digital Arts with animation specialization are qualified for positions in 3D digital art, game design, storyboard art, 3D modeling; character animation, digital 3D broadcast logo design, digital 3D volumetrics, 3D animation and compositing, 2D digital art, 2D compositing, 2D chroma key, 2D texture painting, or rotoscopy.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major. As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty member on how best to complete the program in which you are enrolled.

FOR MORE INFORMATION, CONTACT: Jerri Nemiro at (831) 755-6797, nemiro@hartnell.edu, J-204

PROGRAM OUTCOMES
Upon Successful completion of the Digital Arts program, a student should be able to:

- Produce effective technical proficiency in the creation of digital artwork or projects
- Design effective visual communication for print, animation, and interactive media.
- Structure visual information utilizing digital design aesthetic principles

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Each course listed below has prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ART-70</td>
<td>Introduction to Graphic Design /</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-71</td>
<td>Introduction to 2D Digital</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-79</td>
<td>Digital Art Portfolio &amp; Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-74</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-76</td>
<td>Introduction to 3D Digital</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-77</td>
<td>Introduction to Digital Video and</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-80</td>
<td>Introduction to Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-71</td>
<td>Introduction to Graphic Design /</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-72</td>
<td>Graphic Design / Computer Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-73</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-74</td>
<td>Digital Art Portfolio &amp; Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-75</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-76</td>
<td>Introduction to 3D Digital</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-77</td>
<td>Introduction to Digital Video and</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-80</td>
<td>Introduction to Photography Photographic Imaging</td>
<td>3.0</td>
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</tbody>
</table>

RESTRICTED MAJOR ELECTIVES (Select 9 units from the following):

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-3</td>
<td>Drawing and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-78</td>
<td>Motion Graphics and Design Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-84</td>
<td>Digital Art Portfolio &amp; Business Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-73</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-13</td>
<td>Three-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-2</td>
<td>Beginning Black and White Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-72‡</td>
<td>Introduction to Digital Arts *</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-125</td>
<td>Intermediate Algebra</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Digital Arts Required Major Courses and Restricted Major Electives

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-70</td>
<td>Introduction to Graphic Design /</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-71</td>
<td>Computer Graphics</td>
<td></td>
</tr>
<tr>
<td>ART-79</td>
<td>Digital Art Portfolio &amp; Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-74</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-76</td>
<td>Introduction to 3D Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-77</td>
<td>Introduction to Digital Video and</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-80</td>
<td>Video Editing</td>
<td></td>
</tr>
<tr>
<td>ART-71</td>
<td>Introduction to Graphic Design /</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-72</td>
<td>Computer Graphics</td>
<td></td>
</tr>
<tr>
<td>ART-73</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-74</td>
<td>Digital Art Portfolio &amp; Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-75</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-76</td>
<td>Introduction to 3D Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-77</td>
<td>Introduction to Digital Video and</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-80</td>
<td>Video Editing</td>
<td></td>
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</tbody>
</table>

Required Major Course

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-71</td>
<td>Introduction to Graphic Design /</td>
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</tr>
<tr>
<td>ART-72</td>
<td>Computer Graphics</td>
<td></td>
</tr>
<tr>
<td>ART-73</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-74</td>
<td>Digital Art Portfolio &amp; Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-75</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-76</td>
<td>Introduction to 3D Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-77</td>
<td>Introduction to Digital Video and</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-80</td>
<td>Video Editing</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
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<td>ART-79</td>
<td>Digital Art Portfolio &amp; Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-84</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-78</td>
<td>Motion Graphics and Design Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-73</td>
<td>Digital Three Dimension Design</td>
<td>3.0</td>
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<td>ART-13</td>
<td>Three-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-2</td>
<td>Beginning Black and White Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

TOTAL UNITS

60.0

*Completion of MAT-123 or completion of any math in which MAT-121 is a prerequisite with a 'C' or better or a score of 70% or greater on the mathematics competency exam

†These courses satisfy Major and General Education requirements

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
DIGITAL ARTS—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ART-70</td>
<td>Introduction to Graphic Design / Computer Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-71</td>
<td>Introduction to 2D Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-72</td>
<td>Introduction to Digital Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-74</td>
<td>Digital Three Dimensional Design and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-76</td>
<td>Introduction to 3D Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-77</td>
<td>Introduction to Digital Video and Video Editing</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-80</td>
<td>Introduction to Digital Photography and Photographic Imaging</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (21.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-84</td>
<td>Digital Art Portfolio &amp; Business Practices</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-78</td>
<td>Motion Graphics and Design Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-73</td>
<td>Introduction to Digital Illustration for Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-13</td>
<td>Three-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (≥3.0)

<table>
<thead>
<tr>
<th>✓ OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or</td>
<td>ESL-101*</td>
<td>or English for Academic Purposes II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-121**</td>
<td>Beginning Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (≥24.0)

*Eligibility for ENG-1A fulfills this requirement.

**Completion of any math in which MAT-121 is a prerequisite with a grade of "C" or better or a score of 70% or greater on the mathematics competency exam fulfills this requirement.
DRAFTING AND DESIGN TECHNOLOGY—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Drafting and Design Engineering Technology is a two-year program that combines drafting, engineering, and computer skills. Drafting and design engineering technologists prepare detailed drawings based on information, rough sketches, specifications, calculations and estimates prepared by other individuals or teams. A graduate of this program would qualify for employment in most drafting positions. Because the program is easily adapted to a number of specialized areas, it offers the opportunity for employment in architectural, construction, mechanical, electrical, and other related industries. This program also makes it possible for graduates to advance to a supervisory position in the drafting and design field. Completion of this program also enables the graduates to draw drawings based on information, rough sketches, specifications, calculations and estimates prepared by other individuals or teams. A graduate of this program would qualify for employment in most

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty on how best to complete the program in which you are enrolled.

FOR MORE INFORMATION, CONTACT: Parviz Entekhabi at (831) 755-6966, pentekhabi@hartnell.edu, Alisal Campus, AC-A109

PROGRAM OUTCOMES

Upon successful completion of the Drafting and Design Engineering Technology program, a student should be able to:

- use modern technical engineering techniques, skills, and technology including computer-aided design applications and computing tools necessary for technical engineering/drafting practice.
- document the product/process model using appropriate methods, (multi-view drawings, pictorial, 3D solid models, charts/graphs, rendered and shaded image).
- function effectively on diverse, multi-disciplinary teams.
- access and evaluate information from a variety of sources including the internet.
- apply appropriate theory, knowledge, and design standards of conventional practice to the preparation of documentation drawings

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>DRA-50</td>
<td>Introduction to Drafting and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-52</td>
<td>Introduction To AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-53</td>
<td>Advanced AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-54</td>
<td>AutoCAD 3D Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-55</td>
<td>Engineering Drawing with SolidWorks</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-58</td>
<td>Computer-Aided Mechanical Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-70</td>
<td>Architectural Design and Visual Communication I</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-71</td>
<td>Architectural Design and Visual Communication II</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-72</td>
<td>Architectural Design and Visual Communication III</td>
<td>3.0</td>
</tr>
<tr>
<td>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 6.0 units from the following)</td>
<td>Course No.</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-104</td>
<td>Print Reading and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-142</td>
<td>Construction Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-43</td>
<td>Business Information Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>✓ RECOMMENDED GENERAL EDUCATION COURSES</td>
<td>Course No.</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>LIB-5</td>
<td>Information Competency in the Sciences and Applied Technology</td>
<td>1.0</td>
</tr>
<tr>
<td>✓ General Education</td>
<td></td>
<td></td>
<td>21.0</td>
</tr>
<tr>
<td>Drafting and Design Engineering Technology Required Major Courses and Restricted Major Electives</td>
<td></td>
<td></td>
<td>33.0</td>
</tr>
<tr>
<td>ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0</td>
<td></td>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td></td>
<td>60.0</td>
</tr>
</tbody>
</table>

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
DRAFTING AND DESIGN TECHNOLOGY—ARCHITECTURAL EMPHASIS—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRA-50</td>
<td>Introduction to Drafting Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>DRA-52</td>
<td>Introduction To AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>DRA-53</td>
<td>Advanced AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>DRA-70</td>
<td>Architectural Design and Visual Communication I</td>
<td>3.0</td>
</tr>
<tr>
<td>DRA-71</td>
<td>Architectural Design and Visual Communication II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Eligibility for ENG-1A fulfills this requirement.**

**Eligibility for MAT-123 or completion of any math in which MAT-121 is a prerequisite with a grade of "C" or better.**
DRAFTING AND DESIGN ENGINEERING TECHNOLOGY—MECHANICAL EMPHASIS—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>DRA-50</td>
<td>Introduction to Drafting Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-52</td>
<td>Introduction To AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-53</td>
<td>Advanced AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-54</td>
<td>AutoCAD 3DModeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-58</td>
<td>Computer-Aided Mechanical Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>SUBTOTAL UNITS (15.0)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-55</td>
<td>Engineering Drawing with SolidWorks</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>SUBTOTAL UNITS (3.0)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101* or ESL-101</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(5.0)</td>
</tr>
<tr>
<td><strong>TOTAL UNITS (18.0)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Eligibility for ENG-1A fulfills this requirement.
**Eligibility for MAT-123 or completion of any math in which MAT-121 is a prerequisite with a grade of "C" or better.
EARLY CHILDHOOD EDUCATION—ASSOCIATE IN SCIENCE IN EARLY CHILDHOOD EDUCATION FOR TRANSFER DEGREE (AS-T)

PROGRAM DESCRIPTION

The Associate in Science degree in Early Childhood Education (ECE) for Transfer provides a clearly articulated curricular track for students who wish to transfer to a CSU campus, while also serving the diverse needs of students interested in the breadth and depth of the field of early childhood education. Additionally, this degree exposes students to the core principles and practices of the field in order to build a foundation for their future personal, academic, or vocational paths.

The degree was designed to facilitate students’ successful transfer to certain California State University (CSU) campuses that prepare them for advanced study in a variety of graduate programs, as well as a variety of careers such as teaching, Child Development Specialist, Program Directors, and Child Life Specialists. With a BA in ECE/Child Development, students are eligible for the Master Teacher and Site Supervisor levels of the CA Child Development Permit, using the Alternative Qualifications category.

FOR MORE INFORMATION, CONTACT: Andrea Zarate at (831) 755-6885, azarate@hartnell.edu, J-114

PROGRAM OUTCOMES

Upon successful completion of the Associate in Science in Early Childhood Education for Transfer Degree, a student should be able to:

- plan and organize activities in a safe and healthy learning environment for optimum development of all young children in groups of 12 to 24 children.
- assess and evaluate all children and learning environments to write reports according to state mandated guidelines.
- work with families and their children to build respectful, supportive relationships for optimum growth and development of young children
- connect with community agencies and programs to support children, families, and the early education and care profession.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2) Obtainment of a minimum grade point average of 2.0.*

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ECE-1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-2</td>
<td>Home, School and Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-4</td>
<td>Introduction to Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-10</td>
<td>Observation and Assessment</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-12A</td>
<td>Preschool Theory &amp; Practicum</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-19</td>
<td>Safety, Health, and Nutrition in the Child Care Setting</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-53</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>FCS-14</td>
<td>Child Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SUBTOTAL UNITS (25.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units); OR</td>
<td>39.0</td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.0 units) certification requirements</td>
<td>34.0-37.0</td>
</tr>
<tr>
<td>Early Childhood Education Required Major and Restricted Electives</td>
<td>25.0</td>
</tr>
<tr>
<td>Electives (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0</td>
<td>1.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>(60.0)</td>
</tr>
</tbody>
</table>

*Students can double-count required degree courses and courses for General Education.

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
EARLY CHILDHOOD EDUCATION—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Early Childhood Education (ECE) program offers a comprehensive course of study to prepare students for career and job opportunities in early education and care of young children from diverse family backgrounds. Includes instruction in parent education as well as preparation for employment in child development centers, family child-care settings, preschools, before- and after-school care programs, programs for children with special needs, and other ECE related programs in the community.

The ECE curriculum provides coursework with specializations in administration of ECE programs, infant/toddler development and care, advanced ECE curriculum, and special needs. Students will be eligible to meet Department of Social and Employment Services Title 22 and Education Code Title 5 licensing regulations for teaching personnel and administrative staff in private and public child development programs and agencies.

As a result of ongoing changes of laws, mandates, and licensing regulations for teaching personnel and ECE programs, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty on how best to complete the program AND/OR CHILD DEVELOPMENT PERMIT in which you are enrolled.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

<table>
<thead>
<tr>
<th>Child Development Permit issued by the Commission on Teacher Credentialing (CTC)—Educational and Experience Day Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level</strong></td>
</tr>
<tr>
<td>Teacher assistant</td>
</tr>
<tr>
<td>Associate Teacher</td>
</tr>
<tr>
<td>Teacher</td>
</tr>
<tr>
<td>Master Teacher</td>
</tr>
<tr>
<td>Infant/Toddler</td>
</tr>
<tr>
<td>Special Needs</td>
</tr>
<tr>
<td>Curriculum</td>
</tr>
<tr>
<td>Experience Days</td>
</tr>
<tr>
<td>Site Supervisor</td>
</tr>
<tr>
<td>Program Director</td>
</tr>
</tbody>
</table>

FOR MORE INFORMATION, CONTACT: Andrea Zarate at (831) 755-6885, azarate@hartnell.edu, J-114

PROGRAM OUTCOMES

Upon successful completion of the Early Childhood Education program, a student should be able to:

- plan and organize activities in a safe and healthy learning environment for optimum development of all young children in groups of 12 to 24 children.
- assess and evaluate all children and learning environments to write reports according to state/federal mandated guidelines.
- work with families and their children to build respectful, supportive relationships for optimum growth and development of young children.
- connect with community agencies and programs to support children, families, and the early education and care profession.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ECE-101</td>
<td>Orientation to ECE</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-2</td>
<td>Home, School and Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-4</td>
<td>Introduction to Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-10</td>
<td>Observation and Assessment</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-12A</td>
<td>Preschool Theory &amp; Practicum</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-19</td>
<td>Safety, Health, and Nutrition in the Child Care Setting</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-53A</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>FCS-14</td>
<td>Child Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (26.0)
CON’T OF EARLY CHILDHOOD EDUCATION—ASSOCIATE OF SCIENCE DEGREE

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE-11</td>
<td>Cognitive Activities and Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-12B</td>
<td>Advanced Theory &amp; Practicum in ECE</td>
<td>4.0</td>
</tr>
<tr>
<td>ECE-20</td>
<td>Infant and Toddler Development</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-21</td>
<td>Infant/Toddler Group Care</td>
<td>1.0</td>
</tr>
<tr>
<td>ECE-22</td>
<td>Infant/Toddler: Family Relations of Diverse Backgrounds</td>
<td>1.0</td>
</tr>
<tr>
<td>ECE-23</td>
<td>Infant/Toddler Education: Cognitive and Language Learning</td>
<td>2.0</td>
</tr>
<tr>
<td>ECE-24</td>
<td>Infant/Toddler: Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-26</td>
<td>Children with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-27</td>
<td>Principles &amp; Practices in Guiding Children’s Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-54</td>
<td>Language and Early Literacy Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-70A</td>
<td>Supervision and Administration in ECE</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-70B</td>
<td>Advanced Administration of Child Development Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-71</td>
<td>Supervision of Adults in an ECE Setting</td>
<td>2.0</td>
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SUBTOTAL UNITS (6.0)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS-14‡</td>
<td>Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-53‡</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education: 21.0

Early Childhood Education Required Major Courses and Restricted Major Electives: 32.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0: 7.0

TOTAL UNITS: 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better

†These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ECE-101</td>
<td>Orientation to ECE</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-2</td>
<td>Home, School and Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-4</td>
<td>Introduction to Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-10</td>
<td>Observation and Assessment</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-12A</td>
<td>Preschool Theory &amp; Practicum</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-19</td>
<td>Safety, Health, and Nutrition in the Child Care Setting</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-53</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>FCS-14</td>
<td>Child Development</td>
<td>3.0</td>
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</table>

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101**</td>
<td>Intermediate Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (26.0)**

*Eligibility for ENG-1A fulfills this requirement.

*ENG-101 satisfies the English requirement for the Child Development Teacher permit.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.
ECONOMICS —ASSOCIATE IN ARTS IN ECONOMICS FOR TRANSFER (AA-T)

PROGRAM DESCRIPTION

The Associate in Arts degree in Economics for Transfer provides a clearly articulated curricular track for students who wish to transfer to baccalaureate Economics degree programs at a California State University (CSU) campus. This degree provides the lower division economics major courses required at many CSUs while exposing students to the core principles of the economics field. Economics is the study of how people choose to use scarce resources to produce goods and services and how they make allocation decisions to satisfy their wants and needs. In pursuing the Associate in Arts in Economics for Transfer degree, students acquire skills to analyze problems and then to use sound reasoning to make decisions. Students majoring in economics develop critical thinking, problem solving, and communication skills. As economic majors, students have learning opportunities that are relevant to many types of careers, including economists, public policy, government agencies and government related organizations (for example, the Federal Reserve System and the Bureau of Labor Statistics), business, finance, data analysis, accounting and education. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their major.

PROGRAM OUTCOMES

Upon successful completion of the Economics Associate in Arts for Transfer Degree, the student should be able to:

- Apply economic theories and economic reasoning to real life situations using the concepts of scarcity, opportunity cost and supply and demand for individual (micro) and collective (macro) decision-making.
- Evaluate the goal, limitations, and mechanics of government intervention such as regulation, taxation, tariffs, quotas, and monetary and fiscal policies.

FOR MORE INFORMATION, CONTACT: Tina Esparza-Luna at (831) 755-6170, cesparza-luna@hartnell.edu (email preferred), Office E-305

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

ADTs also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ECO-1</td>
<td>Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECO-5</td>
<td>Principles of Microeconomics</td>
<td>3.0</td>
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<tr>
<td>Required Major Course</td>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-12</td>
<td>Calculus for Managerial, Life, and Social Sciences</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Or</td>
<td>Analytic Geometry and Calculus I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAT-3A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBTOTAL UNITS</td>
<td></td>
<td></td>
<td>15.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES List A: (Select one from the following)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ECO-10</td>
<td>Introduction to Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-16</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-1A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-1B</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-43</td>
<td>Business Information Systems and Information Literacy</td>
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</tr>
<tr>
<td>SUBTOTAL UNITS</td>
<td></td>
<td></td>
<td>3.0-4.0</td>
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</table>

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES List B: (Select one from the following)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>SUBTOTAL UNITS</td>
<td></td>
<td></td>
<td>3.0-4.0</td>
</tr>
</tbody>
</table>

Ú REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)

- Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:
  - A. Minimum units to meet CSU-GE breadth certification requirements (39 units); OR 39.0
  - B. Minimum units to meet IGETC (34-37.50 units) certification requirements 34.0-37.50

- Economics Required Major and Restricted Electives 22.0-23.0

- Electives (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0 7.0-10.0

TOTAL 60.0

Students can double-count required degree courses and courses for General Education.

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
EARTH SCIENCE—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Earth Science program provides the opportunity for an interdisciplinary curriculum for students whose interests cross over into various areas of earth science. Students completing this discipline build a strong foundation in several aspects of earth science, preparing them to continue in the field.

FOR MORE INFORMATION, CONTACT: Robert Barminski at (831) 770-7056, rbarminski@hartnell.edu, N-9

PROGRAM OUTCOMES

Upon successful completion of the Earth Science program, a student should be able to:

- apply the scientific method to knowledge acquisition and transfer of information.
- demonstrate proficiency in the areas of graphical presentation, oral communication and scientific writing.
- examine the various Earth system components and their complex interaction through inquiry-based, interdisciplinary curricula in the physical sciences.
- use observing systems, geospatial technology, computers, information processing and data analysis.
- explain the significance of geological resources and their economic and sustainable value for long-term habitation of the planet by humans.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

- **REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEL-1‡</td>
<td>Physical Geology</td>
<td>4.0</td>
</tr>
<tr>
<td>GEL-6</td>
<td>History of the Earth</td>
<td>4.0</td>
</tr>
<tr>
<td>AST-1</td>
<td>Introduction to Astronomy</td>
<td>3.0</td>
</tr>
<tr>
<td>OCN-1</td>
<td>Oceanography</td>
<td>3.0</td>
</tr>
<tr>
<td>MET-1</td>
<td>Meteorology—Weather and Climate</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM-1A</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY-2A/2B or PHY-4A/4B/4C</td>
<td>College Physics I and II or General Physics/4A: Mechanics 4B: Electricity and Magnetism 4C: Waves, Heat, Light and Modern Physics</td>
<td>8.0 or 12.0</td>
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</table>

SUBTOTAL UNITS (30.0-34.0)

- **RECOMMENDED MAJOR ELECTIVES (Select from list; none required)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEL-25</td>
<td>Environmental Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEG-1</td>
<td>Introduction to Geography: Physical Elements</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM-1B</td>
<td>General Chemistry II</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
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</table>

- **GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEL-1‡</td>
<td>Physical Geology</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (30.0-34.0)

General Education 21.0

Earth Science Required Major Courses and Restricted Major Electives 30.0-34.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 5.0-9.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

*These courses also satisfy General Education Requirements.

**TRANSFER STUDENTS:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
ELEMENTARY TEACHER EDUCATION—ASSOCIATE IN ARTS IN ELEMENTARY TEACHER EDUCATION FOR TRANSFER (AA-T)

PROGRAM DESCRIPTION
The A.A. Degree in Elementary Teacher Education is intended for students who plan to complete a bachelor’s degree at a transfer institution in preparation for a California Multiple Subject Teaching Credential. Most students pursue this credential with the goal of becoming an elementary school or special education teacher.

FOR MORE INFORMATION, CONTACT: Counseling Discipline at (831) 755-8260, CALL Building

PROGRAM OUTCOMES
Upon successful completion of the Elementary Teacher Education for Transfer Degree, a student should be able to:

- clarify and articulate career goals of becoming a teacher
- demonstrate basic grasp of the disciplines most commonly taught in elementary schools in California, including physical science, biology, art, and literature in a cultural or geographic context, world geography, United States history, and United States government; and
- transfer into the traditional Liberal Studies major.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>EDU-1</td>
<td>Multicultural Perspective of Education</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ENG-2</td>
<td>Critical Thinking and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ENG-1B</td>
<td>College Literature and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-12</td>
<td>Number Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>POL-1</td>
<td>American Political Institutions</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-17A</td>
<td>United States History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-5A</td>
<td>World History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>FCS-14</td>
<td>Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>QEG-10</td>
<td>Geography and World Affairs: A Regional Approach</td>
<td>3.0</td>
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<tr>
<td>Required Major Course</td>
<td>PHY-32</td>
<td>Survey of Chemistry and Physics, or The Science of Chemistry and Introduction to Physics, or</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
<td>4.0 and</td>
</tr>
<tr>
<td></td>
<td>CHM-22 and</td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>PHY-10</td>
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<td>Required Major Course</td>
<td>PHY-10</td>
<td>Introduction to Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BIO-10</td>
<td>General Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>GEL-1</td>
<td>Dynamic Earth</td>
<td>4.0</td>
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**SUBTOTAL UNITS (49.0)**

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ART-10</td>
<td>Art Appreciation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MUS-1A</td>
<td>Music Appreciation- Historical Perspective</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>THA-1</td>
<td>Introduction to Theatre</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (3.0)**

<table>
<thead>
<tr>
<th>✓ REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal.</td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units); OR</td>
<td>39.0</td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td>34.00-37.00</td>
</tr>
</tbody>
</table>

Elementary Teacher Education Required Major and Restricted Electives 48.0-52.0

**ELECTIVES (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0**

**TOTAL** 60.0

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
ENGINEERING —ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION
Engineering is the practical application of math and science to solve problems. Engineers are problem-solvers who make things work faster, cheaper, and more efficiently. Technologies developed by engineers improve the ways that we live, communicate, work, travel, stay healthy, and entertain ourselves. From computer chips to cellphones and buildings to automobiles, engineering makes every aspect of our modern life possible.

Hartnell College offers a two-year lower division engineering program that prepares students for transfer in all engineering disciplines to colleges and universities in California and across the United States. The first two years of the engineering curriculum at most colleges and universities have a shared core of mathematics and physics, with specialization in several areas. As there are different disciplines within engineering, the Engineering Faculty Discipline Review Group (FDRG) has developed four different model curricula and each one feeds into one or more majors at the baccalaureate level. The four discipline clusters are:

1. Mechanical, Aerospace, and Manufacturing Engineering
2. Civil Engineering
3. Electrical Engineering
4. Computer and Software Engineering

The required core curriculum follows the Intersegmental Model Curricula (ISMC) developed by the Engineering Liaison Council (ELC) between community colleges and four-year public colleges and universities.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT:  Dr. Melissa Hornstein at (831) 755-6889, mhornstein@hartnell.edu, N-21
Parviz Entekhabi at (831) 755-6966, pentekhabi@hartnell.edu, Alisal Campus, AC-A109

PROGRAM OUTCOMES
Upon successful completion of the Engineering program, a student should be able to:

- employ science and mathematical skills required for occupational needs.
- design a system, component, or process with supervision of a licensed engineer to meet desired needs.
- analyze engineering problems and make appropriate decisions with supervision of a licensed engineer.
- demonstrate appropriate technical communication skills (written, verbal and drawing).
- work effectively in a team, exercise initiative and function in a leadership role.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>C-ID</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ENGR 110</td>
<td>EGN-1</td>
<td>Introduction to Engineering</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MATH 210</td>
<td>MAT-3A‡</td>
<td>Analytical Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MATH 220</td>
<td>MAT-3B‡</td>
<td>Analytical Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MATH 230</td>
<td>MAT-3C</td>
<td>Analytical Geometry and Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MATH 240</td>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHYS 205</td>
<td>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHYS 210</td>
<td>PHY-4B</td>
<td>General Physics/Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHYS 215</td>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light &amp; Modern Physics</td>
<td>4.0</td>
</tr>
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</table>

SUBTOTAL UNITS (30.0)

<table>
<thead>
<tr>
<th>MECHANICAL/AEROSPACE/MANUFACTURING ENGINEERING Track: Select ALL of the following.</th>
<th>C-ID</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CHEM 110</td>
<td>CHM-1A‡</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 260</td>
<td>EGN-6</td>
<td>Circuit Analysis</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 150</td>
<td>EGN-2</td>
<td>Engineering Graphics</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 130</td>
<td>EGN-3</td>
<td>Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 140</td>
<td>EGN-4</td>
<td>Materials Science and Engineering</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 220</td>
<td>EGN-5</td>
<td>Programming and Problem-Solving in MATLAB</td>
<td>3.0</td>
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</table>

SUBTOTAL UNITS (23.0)

<table>
<thead>
<tr>
<th>CIVIL ENGINEERING Track: Select ALL of the following.</th>
<th>C-ID</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CHEM 110</td>
<td>CHM-1A‡</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 180</td>
<td>EGN-11</td>
<td>Surveying</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 150</td>
<td>EGN-2</td>
<td>Engineering Graphics</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 130</td>
<td>EGN-3</td>
<td>Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 140</td>
<td>EGN-4</td>
<td>Materials Science and Engineering</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 220</td>
<td>EGN-5</td>
<td>Programming and Problem-Solving in MATLAB</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (22.0)

<table>
<thead>
<tr>
<th>ELECTRICAL ENGINEERING Track: Select ALL of the following.</th>
<th>C-ID</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>CHEM 110</td>
<td>CHM-1A‡</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 260</td>
<td>EGN-6</td>
<td>Circuit Analysis</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 120</td>
<td>EGN-7</td>
<td>Introduction to Programming Concepts and Methodologies for Engineers</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (13.0)
CON’T OF ENGINEERING—ASSOCIATE OF SCIENCE DEGREE

<table>
<thead>
<tr>
<th>Track: Select ALL of the following.</th>
<th>C-ID</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 260</td>
<td>EGN-6</td>
<td>Circuit Analysis</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 260L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENGR 120</td>
<td>EGN-7</td>
<td>Introduction to Programming Concepts and Methodologies for Engineers</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-2B</td>
<td></td>
<td>Data Structures and Algorithms</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-7</td>
<td></td>
<td>Discrete Structures</td>
<td>4.0</td>
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</table>

SUBTOTAL UNITS (16.0)

<table>
<thead>
<tr>
<th>Track: All Tracks (Select from list; none required).</th>
<th>C-ID</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>MATH 250</td>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (6.0)

<table>
<thead>
<tr>
<th>Track: (Students can double count General Education courses with major courses.)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either (A) CSU-GE or (B) IGETC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) Minimum units to meet CSU-GE breadth (39 units) certification requirements; OR</td>
<td>39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B) Minimum units to meet IGETC (37.00 units) certification requirements; OR</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Required Major Courses and Restricted Major Electives</td>
<td></td>
<td></td>
<td>43-53</td>
</tr>
<tr>
<td>Double Count units</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td></td>
<td>63-85</td>
</tr>
</tbody>
</table>

‡ These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
**ENGLISH—ASSOCIATE IN ARTS IN ENGLISH FOR TRANSFER DEGREE (AA-T)**

**PROGRAM DESCRIPTION**

The Associate in Arts in English for Transfer offers a study of composition, language, and literature designed to develop skills in reading perceptively, writing effectively, and thinking critically. The program prepares students for diverse careers in advertising, business, communications media, public relations, law, government service, and teaching. For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

**FOR MORE INFORMATION, CONTACT:**

Rhea Mendoza-Lewis at (831) 755-6784, rmendoza@hartnell.edu, D-364
Dr. Hetty Yelland at (831) 755-6779, tyelland@hartnell.edu, D-382
Dan Peterson at (831) 755-6953, dpeterson@hartnell.edu, D-368

**PROGRAM OUTCOMES**

Upon successful completion of the Associate in Arts in English for Transfer Degree, a student should be able to:

- Apply appropriate interpretive strategies to read, discuss, and analyze a variety of works of literature within any given genre and expository texts.
- Analyze and evaluate major themes and techniques found in literature and expository texts by applying appropriate writing strategies and skills.
- Demonstrate an appreciation for the aesthetic value of literature and expository texts from a diversity of cultural, historical, and ethnic perspectives.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing elsewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ENG-1B</td>
<td>College Literature and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ENG-2</td>
<td>Critical Thinking and Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 9.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-44A</td>
<td>World Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-44B</td>
<td>World Literature II</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-46A</td>
<td>Survey of British Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-46B</td>
<td>Survey of British Literature II</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-47A</td>
<td>Survey of American Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-47B</td>
<td>Survey of American Literature II</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-22</td>
<td>Studies in Poetry</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-24</td>
<td>The Short Story</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-31</td>
<td>Beginning Creative Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (9.0)**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-17</td>
<td>The Contemporary Shakespeare</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-26</td>
<td>Chicano Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-41</td>
<td>Art of Steinbeck</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-48</td>
<td>Introduction to Children’s Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-50</td>
<td>Introduction to Film: History up to the 1960s</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-51</td>
<td>Film Appreciation 1950</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (3.0)**

<table>
<thead>
<tr>
<th>REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units); OR</td>
<td>39.0</td>
</tr>
<tr>
<td></td>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td>34.00-</td>
</tr>
</tbody>
</table>

**English Required Major and Restricted Electives** | 18.0 | 18.0 |

**Electives(Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0** | 3.0-8.0 | 8.0 |

**TOTAL** | 60.0 | 60.0 |

Students can double-count required degree courses and courses for General Education.

**TRANSFER STUDENTS:** Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
GENERAL STUDIES WITH AN AREA OF EMPHASIS—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The General Studies with an Area of Emphasis program, developed by the Counseling Discipline, is designed to meet the needs of students interested in graduating with an Associate level college degree by studying specific related disciplines of academic subjects (Natural Sciences, Social and Behavioral Sciences, Humanities, Ethnic Groups in the United States, or Language and Rationality).

The degree prepares the student for the following:

- a broad range of educational outcomes including reasoning skills, general education, basic skills, mathematical skills, communication skills and intercultural understandings desired by employers and required in a variety of entry level professional careers and or promotional opportunities
- the completion of a major leading to a two-year college degree
- a solid beginning in the transfer planning process through careful educational planning with a counselor

FOR MORE INFORMATION, CONTACT: Counseling Discipline at (831) 755-6820, Building B

PROGRAM OUTCOMES

Upon successful completion of the General Studies program, a student should be able to:

- read, write, speak and verbally comprehend at a college level.
- define information needs, access information efficiently and effectively, evaluate information critically, and use information ethically.
- use quantitative and logical reasoning to analyze information evaluate ideas and solve problems.
- understand and respect the cultural, economic, social, political, biological and interdependence of global life.
- acquire an appreciation in and involvement in the creation or performance of the work of fine arts/music culture.

This degree provides an opportunity for students to earn an Associate of Arts (AA) degree in a comprehensive area of study and is intended for the student who may not be planning on transfer to a university in the near future.

A minimum of 60.0 semester units must be completed with a grade of ‘C’ or better in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree.

CHOOSE A SINGLE AREA OF EMPHASIS: Complete 18 units in one of the areas of emphasis listed below. 18 units are required from one emphasis: Choose either Natural Science, Social and Behavioral Science, Humanities, Ethnic Groups in the US or Language and Rationality. For this degree, students can double count General Education courses.

Area of Emphasis: Natural Sciences

Courses in the natural sciences are those that examine the physical universe, its life forms, and its natural phenomena. Students will develop an appreciation and understanding of the scientific method and an understanding of the relationships between science and other human activities.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students can double count General Education courses with area of emphasis.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture: ABT 90, 92</td>
</tr>
<tr>
<td>Anthropology: ANT 1</td>
</tr>
<tr>
<td>Astronomy: AST 1, 1L</td>
</tr>
<tr>
<td>Biology: BIO 1, 2, 3, 5, 6, 6L, 10, 11, 12, 13, 18, 20, 27, 30, 42, 47, 48, 48L</td>
</tr>
<tr>
<td>Chemistry: CHM 1A, 1B, 12A, 12B, 22, 23, 60</td>
</tr>
<tr>
<td>Geography: GEG 1</td>
</tr>
<tr>
<td>Geology: GEL 1, 2, 6, 25</td>
</tr>
<tr>
<td>Meteorology: MET 1</td>
</tr>
<tr>
<td>Oceanography: OCN 1</td>
</tr>
<tr>
<td>Physics: PHY 2A, 2B, 4A, 4B, 4C, 10, 32</td>
</tr>
</tbody>
</table>

Natural Science Emphasis Units 18.0

Area of Emphasis: Social and Behavioral Sciences

Courses in the social and behavioral sciences are those that focus on people as members of society. Courses will stimulate critical thinking about the ways people act and have acted in response to their societies and will promote appreciation of how societies and social subgroups operate.

Students will develop an awareness of the method of inquiry used by the social and behavioral sciences.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students can double count General Education courses with area of emphasis.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Justice: ADJ 1, 5</td>
</tr>
<tr>
<td>Agriculture: ABT 53</td>
</tr>
<tr>
<td>Alcohol and Other Drugs: AOD 1</td>
</tr>
<tr>
<td>Anthropology: ANT 1, 2, 3, 10, 15, 20</td>
</tr>
<tr>
<td>Business: BUS 32</td>
</tr>
<tr>
<td>Communication Studies: COM 4 (previously COM-35)</td>
</tr>
<tr>
<td>Economics: ECO 1, 5, 10</td>
</tr>
<tr>
<td>Ethnic Studies: ETH 1, 2, 3, 4, 5, 6, 12, 25</td>
</tr>
<tr>
<td>Family Consumer Science: FCS 14</td>
</tr>
<tr>
<td>Geography: GEG 1, 10</td>
</tr>
<tr>
<td>Health Education: HED 2, 7</td>
</tr>
<tr>
<td>History: HIS 4A, 4B, 5A, 5B, 6, 10, 17A, 17B, 40, 46A, 46B, 47, 49A, 49B, 51</td>
</tr>
<tr>
<td>Philosophy: PHL 2, 10, 15</td>
</tr>
<tr>
<td>Political Science: PCL 1, 2, 3, 5, 6</td>
</tr>
<tr>
<td>Psychology: PST 2(TA), 6, 8, 10, 12, 14, 15, 15, 22, 25, 33, 36, 41, 42</td>
</tr>
<tr>
<td>Sociology: SOC 1, 5, 20, 41, 42</td>
</tr>
</tbody>
</table>

Social and Behavioral Science Emphasis Units 18.0
### Area of Emphasis: Humanities

Courses in the humanities are those that study the cultural activities and artistic expressions of human beings. Students will develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creations and develop aesthetic understanding and an ability to make value judgments.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students can double count General Education courses with area of emphasis.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Sign Language: ASL 1, 2, 3</td>
</tr>
<tr>
<td>Anthropology: ANY 2, 3, 20</td>
</tr>
<tr>
<td>Art: ART 1A, 1B, 3, 10, 12A, 15A, 15B, 70, 72, 80</td>
</tr>
<tr>
<td>English: ENG 1B, 17, 22, 24, 26, 31, 32, 33, 41, 44A, 44B, 46A, 46B, 47A, 47B, 50, 51</td>
</tr>
<tr>
<td>Ethnic Studies: ETH 1, 3, 4, 5, 6, 12, 25</td>
</tr>
<tr>
<td>History: HIS 40, 47, 51</td>
</tr>
<tr>
<td>Music: MUS 1A, 2, 5, 6, 7, 8, 10, 11, 12, 23.1, 23.2, 23.3, 23.4, 23.5, 24, 25, 26, 28, 29, 29.1, 29.2, 29.3, 29.4, 29.5, 34.1, 34.2, 34.3, 34.4, 46, 47, 48, 49</td>
</tr>
<tr>
<td>Philosophy: PHL 2, 10</td>
</tr>
<tr>
<td>Photography: PHO 1, 2, 4</td>
</tr>
<tr>
<td>Spanish: SPA 1, 1S, 1X, 2, 2S, 2X, 3, 3S, 4, 4S</td>
</tr>
<tr>
<td>Theatre and Cinema: TAC 1, 3, 18, 20, 21, 23, 24, 25, 50</td>
</tr>
</tbody>
</table>

**Humanities Emphasis Units 18.0**

### Area of Emphasis: Ethnic Groups in the United States

Courses in the ethnic groups are those that study important themes and issues in United States history, society and cultural. Courses will address the theoretical and analytical issues relevant to understanding race, culture and ethnicity in our society. Students will develop a framework for better understanding one's particular cultural/historical identity in our society.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students can double count General Education courses with area of emphasis.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol and Other Drugs: AOD 4</td>
</tr>
<tr>
<td>Anthropology: ANT 10, 15</td>
</tr>
<tr>
<td>Communications: COM 4 (previously COM-35)</td>
</tr>
<tr>
<td>Early Childhood Education: ECE 53</td>
</tr>
<tr>
<td>Education: EDU 1</td>
</tr>
<tr>
<td>English: ENG 1B Multicultural Perspective, 26</td>
</tr>
<tr>
<td>Ethnic Studies: ETH 1, 2, 3, 4, 5, 6, 12, 25</td>
</tr>
<tr>
<td>Health Education: HED 6</td>
</tr>
<tr>
<td>History: HIS 10, 40, 46A, 46B, 49A, 49B</td>
</tr>
<tr>
<td>Music: MUS 5, 6, 7, 8</td>
</tr>
<tr>
<td>Sociology: SOC 40, 42</td>
</tr>
</tbody>
</table>

**Ethnic Groups in the United States Emphasis Units 18.0**

### Area of Emphasis: Language and Rationality

Courses in language and rationality are those that study English expository writing and composition, communication, and analytical thinking. Courses include oral communication, mathematics, logic, statistics, computer languages and related disciplines. Students will develop the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation of communication in whatever symbol system the students use.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students can double count General Education courses with area of emphasis.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Sign Language: ASL 1, 2, 3</td>
</tr>
<tr>
<td>Business: BUS 1A, 43</td>
</tr>
<tr>
<td>Communications: COM 1, 2 (previously COM-20), 3, 4 (previously COM-35), 8</td>
</tr>
<tr>
<td>Computer Science: CSS 1, 2A, 2B, 3, 4, 31, 44, 122, 123</td>
</tr>
<tr>
<td>Counseling: COU 1, 23, 27</td>
</tr>
<tr>
<td>English: ENG 1B, ENG 1B Multicultural Perspective, 2</td>
</tr>
<tr>
<td>Library: LIB 2, 5, 6, 7</td>
</tr>
<tr>
<td>Mathematics: MAT 2, 3A, 3B, 3C, 4, 5, 10, 12, 13, 16, 24, 25, 121, 123</td>
</tr>
<tr>
<td>Philosophy: PHL 15</td>
</tr>
<tr>
<td>Spanish: SPA 1, 1S, 1X, 2, 2S, 2X, 3, 3S, 4, 4S</td>
</tr>
</tbody>
</table>

**Language and Rationality Emphasis Units 18.0**
### Electives (Courses Numbered 1-199)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Elective Units: 21.0-24.0**

### Required General Education Courses

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)**

**Social & Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)**

**Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)**

**Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)**

**Language and Rationality (9 Units)**

**A. Written Composition**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG-1A College Composition and Reading</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**B. Communication and Analytical Thinking**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT-123*</td>
<td></td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Communication and Analytical Thinking**

**General Education: 21.0**

**Area of Emphasis: 18.0**

**Electives (Courses Numbered 1-199) are required when degree units plus GE units total are fewer than 60.0: 21.0-24.0**

**Degree Total Units: 60.0**

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a ‘C’ or better or a score of 70% or greater on the mathematics competency exam*

**Transfer Students:** Completing the AA degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.
HISTORY—ASSOCIATE IN ARTS IN HISTORY FOR TRANSFER DEGREE (AA-T)

PROGRAM DESCRIPTION

History, in the broad sense, is the study of all human experience. It examines people, institutions, ideas, and events through past and into the future. The study of history develops cultural literacy, critical thinking, and other skills while helping to understand today and plan for tomorrow. The discipline provides us with a better understanding of ourselves as individuals and as a society. In the study of history it is more important to learn the skills of finding, interpreting, and relating historical information than it is to simply memorize historical data. Through the study of history, a student can acquire the techniques of gathering and applying information to gain a perspective on the human condition. Fields for which BA graduates in history are qualified are law, journalism, writing, the foreign service, consulting, teaching, archiving, researching, and museum curating.

The Associate of Arts degree in History for Transfer provides a clearly articulated curricular track for students who wish to transfer to baccalaureate degree programs at a California State University (CSU) campus. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT:  
Ann De Jesus Riley at (831) 755-6787, adejesus@hartnell.edu, D-367  
Samuel Pacheco at (831)759-6002, spacheco@hartnell.edu E-306

PROGRAM OUTCOMES

Upon successful completion of the Associate in Arts in History for Transfer Degree, a student should be able to:

- demonstrate an understanding of the processes, peoples and events in the multicultural histories of the United States.
- apply critical thinking skills in reading, comprehending, and interpreting historical scholarship.
- employ historical research methods to address historical questions using primary and secondary sources.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS-17A</td>
<td>United States History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-17B</td>
<td>United States History B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### LIST A-RESTRICTED MAJOR ELECTIVES- (Select a minimum of 6 units from the following:)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS-5A</td>
<td>World History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-4A</td>
<td>Western Civilization A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-5B</td>
<td>World History B</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-4B</td>
<td>Western Civilization B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### LIST B-RESTRICTED MAJOR ELECTIVES- (Select a minimum of 6 units from the following:)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS-5A</td>
<td>World History A (if not used in List A)</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-5B</td>
<td>World History B (if not used in List A)</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-6</td>
<td>History of Mexico</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-10</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-46A</td>
<td>Race and Ethnicity in American History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-46B</td>
<td>Race and Ethnicity in American History B</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-47</td>
<td>Religions of the World</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-49A</td>
<td>Chicano History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-49B</td>
<td>Chicano History B</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-40</td>
<td>History of Women in the US</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units)</td>
<td>39.0</td>
<td></td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td>34.0</td>
<td></td>
</tr>
<tr>
<td>History for Transfer Degree Required Major and Restricted Electives</td>
<td>18.0</td>
<td></td>
</tr>
</tbody>
</table>

### Electives (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0 | 3.0

**TOTAL 60.0**

Students can double-count required degree courses and courses for General Education.

**TRANSFER STUDENTS:** Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.
HISTORY—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

History, in the broad sense, is the study of all human experience. It examines people, institutions, ideas, and events through past and into the future. The study of history develops cultural literacy, critical thinking, and other skills while helping to understand today and plan for tomorrow. The discipline provides us with a better understanding of ourselves as individuals and as a society. In the study of history it is more important to learn the skills of finding, interpreting, and relating historical information than it is to simply to memorize historical data. Through the study of history, a student can acquire the techniques of gathering and applying information to gain a perspective on the human condition.

Fields for which BA graduates in history are qualified are law, journalism, writing, the foreign service, consulting, teaching, archiving, researching, and museum curating. For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT:
Ann De Jesus Riley at (831) 755-6787, adejesus@hartnell.edu, D-367
Samuel Pacheco at (831)759-6002, spacheco@hartnell.edu E-306

PROGRAM OUTCOMES

Upon successful completion of the History program, a student should be able to:

- demonstrate an understanding of the processes, peoples and events in the multicultural histories of the United States.
- apply critical thinking skills in reading, comprehending, and interpreting historical scholarship.
- employ historical research methods to address historical questions using primary and secondary sources.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>HIS-17A</td>
<td>United States History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-17B</td>
<td>United States History B</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-5A</td>
<td>World History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-5B</td>
<td>World History B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (12.0-13.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 6.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-4A</td>
<td>Western Civilization A</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-4B</td>
<td>Western Civilization B</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-6</td>
<td>History of Mexico</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-10</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-46A</td>
<td>Race and Ethnicity in American History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-46B</td>
<td>Race and Ethnicity in American History B</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-49A</td>
<td>Chicano History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-49B</td>
<td>Chicano History B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (6.0)

<table>
<thead>
<tr>
<th>✓ RECOMMENDED MAJOR ELECTIVES (Select from list; none required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>ANT-2</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>ETH-1</td>
<td>Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
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</tr>
</tbody>
</table>

General Education 21.0

History Required Major Courses and Restricted Electives 18.0-19.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 19.0-20.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
Certificate of Achievement in Intersegmental General Education Transfer Curriculum (IGETC)

The Certificate of Achievement in Intersegmental General Education Transfer Curriculum (IGETC), developed by the Counseling Discipline, will be awarded upon completion of the IGETC requirements as outlined on the catalog year’s IGETC sheet. Students must complete 34-37 units, which are distributed among six areas. IGETC requirements are designed to be taken with a major area of concentration and elective courses in preparation for transfer to a California State University or a University of California campus. This certificate recognizes the completion of lower-division general education requirements for IGETC. For many majors, students are encouraged to complete the IGETC pattern; however, it is not required for admission to the CSU or UC. An official petition must be filed with the Admission and Records Office prior to the graduation deadlines as stated in the Academic Calendar. Certification of the IGETC will be indicated on the student’s transcript.

CSU-GE for STEM or IGETC-CSU for STEM

IGETC for STEM or CSU-GE for STEM is applicable for the (AS-T) Biology for Transfer degree only at the time of the catalog publication. IGETC-CSU for STEM- All Areas will be completed with minimum units/courses as required and listed on IGETC except AREAS 3 and 4, which is approved with 6 units/2 courses. CSU-GE for STEM- All AREAS will be completed with minimum units/courses as required and listed on CSU-GE except AREAS C and D, which is approved with 6 units/2 courses. These GE courses are not waived but will be completed after transfer. Students completing the CSU-GE or IGETC-CSU for STEM cannot receive a Certificate of Achievement, which requires a full certification of areas; however students can request a partial certification be sent to their transfer institution by completing the appropriate form and submitting to Admissions and Records.

For more information contact:
Counseling Discipline, Building B
(831) 755-6820
The Associate in Arts Award in Kinesiology is designed to provide a foundation for students interested in working in these careers or careers in related fields. Hartnell College partners with the University of California (UC) and California State University (CSU) systems to assist students in obtaining an associate degree for transfer. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to the local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

The Associate in Arts Award in Kinesiology is available to students interested in these careers or careers in related fields. Hartnell College partners with the University of California (UC) and California State University (CSU) systems to assist students in obtaining an associate degree for transfer. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to the local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

For more information, contact:

- Daniel Teresa, Athletic Director at (831) 755-6837, dteresa@hartnell.edu
- Rich Givens, Student Athlete Counselor at (831) 755-6848, rgivens@hartnell.edu

PROGRAM OUTCOMES

Upon successful completion of the Associate in Arts in Kinesiology for Transfer Degree, a student should be able to:

- Demonstrate competence in performing a variety of skill-related behaviors.
- Describe health and physical activity concepts that will enable him or her to make informed decisions concerning health.
- Recognize health issues, understanding the similarities and contrasts among cultures.
- Demonstrate sensitivity to cultural and physical diversity.
- Explain the value and significance of physical activity for human development, human interaction and quality of life and its relationship to their particular disability.
- Transfer into the traditional Kinesiology major and will be eligible and prepared for admission to California State University System institutions (SB1440 and Ed Code 66746)

For more information and program requirements, please refer to the links provided in the Hartnell College Catalog.

**KINESIOLOGY—ASSOCIATE IN ARTS IN KINESIOLOGY FOR TRANSFER DEGREE (AA-T)**

**PROGRAM DESCRIPTION**

The Associate in Arts in Kinesiology for Transfer Degree provides formalized educational opportunities for the development and acquisition of motor skills, improved physical fitness and their application to sports and physical activities. The curriculum covers a broad knowledge base that serves the diverse needs of students who wish to obtain an in-depth understanding of the field while providing a clear pathway to students who wish to transfer to a CSU campus. Baccalaureate programs may include, but are not limited to, exercise science, health promotion, physical education, therapeutic exercise & rehabilitation, and exercise & movement science. The Associate in Arts for Transfer Degree in Kinesiology for Transfer can provide a foundation for students interested in working in these careers or careers in related fields.

Four-year graduates in Physical Education and Kinesiology are qualified for positions in coaching, education, industry wellness centers and allied medical fields.

For more information, contact Rich Givens, Student Athlete Counselor at (831) 755-6848 or email rgivens@hartnell.edu.

**FOR MORE INFORMATION, CONTACT:**

- Daniel Teresa, Athletic Director at (831) 755-6837, dteresa@hartnell.edu
- Rich Givens, Student Athlete Counselor at (831) 755-6848, rgivens@hartnell.edu

**PROGRAM OUTCOMES**

Upon successful completion of the Associate in Arts in Kinesiology for Transfer Degree, a student should be able to:

- Demonstrate competence in performing a variety of skill-related behaviors.
- Describe health and physical activity concepts that will enable him or her to make informed decisions concerning health.
- Recognize health issues, understanding the similarities and contrasts among cultures.
- Demonstrate sensitivity to cultural and physical diversity.
- Explain the value and significance of physical activity for human development, human interaction and quality of life and its relationship to their particular disability.
- Transfer into the traditional Kinesiology major and will be eligible and prepared for admission to California State University System institutions (SB1440 and Ed Code 66746)

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to the local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

A. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
B. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."
LIBERAL ARTS WITH AN AREA OF EMPHASIS—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

This degree is designed for transfer students pursuing an area of study requiring only introductory lower-division major preparation courses within a broader liberal arts breadth pattern and transferring to a California State University (CSU), University of California (UC).

This degree represents only 12 of the 26 general areas of study identified in “Exploring Majors” on the www.assist.org transfer web site. These 12 general areas of emphasis are outlined below. Selecting courses from these general areas will prepare students to transfer to a variety of majors. This degree is an interdisciplinary approach allowing students to meet their individual transfer goals and lower division CSU-GE breadth or UC/CSU IGETC patterns.

Undecided students and those pursuing one of the other areas of study requiring a specific sequence or pattern of courses are encouraged to identify a major area of study as early as possible and follow requirements to the four-year university in consultation with a Hartnell College counselor. Those 14 other areas not included in this degree are: Agricultural Sciences, Architecture and Environmental Design, Biological Sciences, Business and Economics, Chemistry, Computer Science, Engineering, Environmental Studies and Sciences, Health and Physical Education, Mathematics, Media/Film and Television, Physical Sciences, Physics, and Teacher Education.

FOR MORE INFORMATION, CONTACT: Counseling Discipline at (831) 755-6820, Building B

PROGRAM OUTCOMES

Upon successful completion of the General Studies program, a student should be able to:

- read, write, speak and verbally comprehend at a college level.
- define information needs, access information efficiently and effectively, evaluate information critically, and use information ethically.
- use quantitative and logical reasoning to analyze information, evaluate ideas and solve problems.
- understand and respect the cultural, economic, social, political, biological and interdependence of global life.
- acquire an appreciation in and involvement in the creation or performance of the work of fine arts/music culture.

A minimum of 60.0 transferable semester units must be completed with a grade of “C” or better in all degree-applicable units.

1. Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:

   A. Minimum units to meet CSU-GE breadth certification requirements; or 19.0 units
   B. Minimum units to meet IGETC certification requirements 34.0-37.0 units

2. AREAS of EMPHASIS: Choose a single AREA OF EMPHASIS listed below. For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

3. Include a 3-unit Hartnell College Ethnic Groups in the United States course (Note: Bolded courses listed on the CSU-GE and IGETC sheets meet the requirement)

4. Complete any electives necessary to total 60 transferable units required by the Universities.

CHOOSE A SINGLE AREA OF EMPHASIS: Complete 18 units in one of the areas of emphasis listed below. For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

- Anthropology
- Art and Design
- Communication

Area of Emphasis: ANTHROPOLOGY

Anthropology is the study of humans and human societies. Branches of anthropology include cultural anthropology, physical anthropology, linguistic anthropology, and archaeology.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

**REQUIRED DEGREE COURSE OPTIONS**

Anthropology – ANT 1, 2, 3, 10, 15, 20
Math – MAT 13
Psychology – PSY 2 (1A)
Sociology – SOC 1

Anthropology Emphasis Units (18.0)

Area of Emphasis: ART AND DESIGN

The study of art and design includes drawing, painting, printmaking, sculpture/installation (wood, metal, ceramics, and mixed media), video art, performance art and interactive digital art, and art history.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

**REQUIRED DEGREE COURSE OPTIONS**

Art – ART 1A, 1B, 3, 6A, 10, 12A, 15A
Photography – PHD 1, 2
Digital Art – ART 70, 72, 73

Art and Design Emphasis Units (18.0)

Area of Emphasis: COMMUNICATION

The study of communication focuses on how people produce and process messages, and how their message options and decisions affect others’ thoughts, attitudes, and behaviors.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

**REQUIRED DEGREE COURSE OPTIONS**

English – ENG 1B, 2
Communication Studies – COM 1, 3, 4 (formerly COM-35), 5, 8, or COU-35
Philosophy – PHIL 15

Communication Emphasis Units (18.0)
**Area of Emphasis: CULTURE AND SOCIETY**

The study of the diversity of human cultures is an inter-disciplinary activity. Cultural and ethnic study includes aspects of history, language, literature, sociology, archaeology, art and art history, and other humanities and social sciences.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology – ANT 2</td>
</tr>
<tr>
<td>Child Development – ECE 2, 12A</td>
</tr>
<tr>
<td>Criminal Justice – ADJ 1, 2, 3, 4, 5, 6</td>
</tr>
<tr>
<td>Ethnic Studies – ETH 3, 4</td>
</tr>
<tr>
<td>Family and Consumer Studies – FCS 14</td>
</tr>
<tr>
<td>Mathematics – MAT 13</td>
</tr>
<tr>
<td>Psychology – PSY 2 (1A)</td>
</tr>
<tr>
<td>Sociology – SOC 1, 5</td>
</tr>
</tbody>
</table>

Cultural and Society Emphasis Units (18.0)

**Area of Emphasis: HISTORY**

The study of history is the interpretation of human affairs and institutions as they change in time, and provides a necessary perspective on the contemporary world.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art – ART 1A, 1B</td>
</tr>
<tr>
<td>History – 4A, 4B, 5A, 5B, 6, 10, 17A, 17B, 40, 46A, 46B, 47, 49A, 49B, 51</td>
</tr>
</tbody>
</table>

History Emphasis Units (18.0)

**Area of Emphasis: HUMANITIES**

The humanities include, but are not limited to, history; literature; philosophy and ethics; foreign languages and cultures; linguistics; jurisprudence or philosophy of law; archaeology; comparative religion; the history, theory, and criticism of the arts; and those aspects of the social sciences (anthropology, sociology, psychology, political science, government, and economics) that use historical and interpretive rather than quantitative methods. The humanities enable us to reflect upon our lives and ask fundamental questions of value, purpose, and meaning in a rigorous and systematic way.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology – ANT 2, 3</td>
</tr>
<tr>
<td>Art – ART 1A, 1B, 3, 12A</td>
</tr>
<tr>
<td>English – ENG 17, 22, 24, 26, 31, 41, 44A, 44B, 46A, 46B, 47A, 47B, 50</td>
</tr>
<tr>
<td>Geography – GEG 1</td>
</tr>
<tr>
<td>History – 4A, 4B</td>
</tr>
<tr>
<td>Philosophy – PHL 2, 15</td>
</tr>
<tr>
<td>Theater and Cinema – TAC 50</td>
</tr>
</tbody>
</table>

Humanities Emphasis Units (18.0)

**Area of Emphasis: LANGUAGES AND LITERATURE**

The study of languages and literature includes the history of literature, the geographical and cultural regions of language and writing, the methods and theories of literary and cultural analysis, and training in creative and critical writing.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Sign Language – ASL 1, 2, 3 (formerly COU 80, 81, 83)</td>
</tr>
<tr>
<td>Spanish – SPA 1, 15, 1X, 2, 2S, 3X, 3S, 4S</td>
</tr>
</tbody>
</table>

Languages and Literature Emphasis Units (18.0)

**Area of Emphasis: PERFORMING ARTS**

The performing arts offer opportunities in theatre, dance, music, interdisciplinary arts, musical theatre, and arts criticism.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music – MUS 1A, 2, 5, 6, 7</td>
</tr>
<tr>
<td>Theater and Cinema – TAC- 1, 10, 11</td>
</tr>
</tbody>
</table>

Performing Arts Emphasis Units (18.0)

**Area of Emphasis: PHILOSOPHY**

Philosophy is a quest for a comprehensive understanding of human existence. The objective of philosophy is to consider the rational justification of logical inferences, human values, criteria for establishing the claims of knowledge and certainty, and interpretations of the nature of reality.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>History – HIS 4A, 4B, 5A, 5B, 5F</td>
</tr>
<tr>
<td>Mathematics – MAT 13</td>
</tr>
<tr>
<td>Philosophy – PHI 10, 15</td>
</tr>
</tbody>
</table>

Philosophy Arts Emphasis Units (18.0)
**Area of Emphasis: POLITICAL SCIENCE**

Political Science is a social science concerned with the description and analysis of political, and especially governmental, institutions and processes. Increasingly, the emphasis is being placed on how governments deal with specific policy problems, such as war and peace, poverty, crime, education, energy, pollution, or inter-group relations, and on the factors that affect these problems. The study of political science provides one with the concepts, theories and methods necessary to analyze these policy problems scientifically.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics – ECO 1, 5</td>
</tr>
<tr>
<td>History – HIS 4A, 4B, 5A, 5B, 17A, 17B</td>
</tr>
<tr>
<td>Mathematics – MAT 13</td>
</tr>
<tr>
<td>Political Science – POL 1, 2, 3, 5, 6</td>
</tr>
</tbody>
</table>

Political Science Emphasis Units (18.0)

**Area of Emphasis: PSYCHOLOGY**

Psychology is the study of human behavior. Psychologists study the biological, physiological and genetic causes of behavior, as well as the emotional, social, and developmental factors involved.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology – ANT 1, 2</td>
</tr>
<tr>
<td>Biology – BIO 1, 5, 10, 11</td>
</tr>
<tr>
<td>Mathematics – MAT 13</td>
</tr>
<tr>
<td>Psychology – PSY 2(1A), 6, 8, 10, 12, 14, 15, 22, 25, 33</td>
</tr>
<tr>
<td>Sociology – SOC 1, 5, 41, 42</td>
</tr>
</tbody>
</table>

Psychology Emphasis Units (18.0)

**Area of Emphasis: SOCIOLOGY AND SOCIAL SCIENCES**

Social Sciences refer to any discipline or branch of science that deals with the social and cultural aspects of human behavior. The Social Sciences generally include Economics, Political Science, Sociology, and History, and may include Cultural Anthropology, Geography, Psychology, and Social Psychology.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of Justice – ADJ 1, 2, 3, 5, 6</td>
</tr>
<tr>
<td>Anthropology – ANT 1, 2</td>
</tr>
<tr>
<td>Economics – ECO 1, 5</td>
</tr>
<tr>
<td>Family and Consumer Studies – FCS 14</td>
</tr>
<tr>
<td>Geography – GEG 1</td>
</tr>
<tr>
<td>Mathematics – MAT 13</td>
</tr>
<tr>
<td>Political Science – PUL 1, 2, 3, 5, 6</td>
</tr>
<tr>
<td>Psychology – PSY 2(1A), 6</td>
</tr>
<tr>
<td>Sociology – SOC 1, 5, 41, 42</td>
</tr>
</tbody>
</table>

Sociology and Social Sciences Emphasis Units (18.0)

**GENERAL EDUCATION COURSES** *(Students can double count General Education courses with major courses.)*

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSU-GE or IGETC for the General Education pattern related to your educational goal:</td>
</tr>
<tr>
<td>34.0-39.0</td>
</tr>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39.0 units); OR</td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC certification requirements (34.0-37.0 units)</td>
</tr>
<tr>
<td>Include a 3-unit Hartnell College Ethnic Groups in the United States course (Note: Bolded courses listed on the CSU-GE and IGETC sheets meet the requirement)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Education</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.0-39.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area of Emphasis</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives (Courses numbered 1-99) are required when degree units plus GE units total are fewer than 60.0</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0-8.0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 60.0

**TRANSFER STUDENTS**: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.
MATHEMATICS—ASSOCIATE IN SCIENCE IN MATHEMATICS FOR TRANSFER DEGREE (AS-T)

PROGRAM DESCRIPTION

The Associate in Science in Mathematics for Transfer offers course work in all levels of mathematics from arithmetic through differential equations and linear algebra. Students seeking improvement in their basic mathematical skills and those desiring development of advanced mathematical methods can all find meaningful activities in the Associate in Science in Mathematics for Transfer. While there are job opportunities in pure mathematics, there are even more in applied mathematics, statistics, engineering, and other technical fields relying heavily on mathematics. Positions for which four-year graduates in mathematics are qualified can be found in the fields of business, computers, teaching, and research.

FOR MORE INFORMATION, CONTACT:  
Leticia Contreras at (831) 770-7053, lcontreras@hartnell.edu, D-251
Greg Perkins at (831) 755-6705, gperkins@hartnell.edu, D-253

PROGRAM OUTCOMES

Upon successful completion of the Associate in Science in Mathematics for Transfer Degree, a student should be able to:

- demonstrate proficiency in solving mathematical problems involving major concepts, theories, and principles including, but not limited to:
  - applying derivatives and integrals
  - solving 2nd order differential equations
  - constructing basic mathematical proofs
- analyze data using appropriate technology to enhance mathematical understanding.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>MAT-3A1</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3B1</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES-Group 1 (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Elective</td>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES-Group 2 (Select one additional course from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Elective</td>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-2A</td>
<td>Object Oriented Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th></th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units)</td>
<td>OR</td>
<td>39.0</td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td></td>
<td>34.0-37.0</td>
</tr>
<tr>
<td>Mathematics Required Major and Restricted Electives</td>
<td></td>
<td>18.0</td>
</tr>
<tr>
<td>Electives (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0</td>
<td></td>
<td>3.0-8.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>60.0</td>
</tr>
</tbody>
</table>

Students can double-count required degree courses and courses for General Education.

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
MUSIC—ASSOCIATE IN ARTS IN MUSIC FOR TRANSFER (AA-T)

PROGRAM DESCRIPTION
The Music Program offers coursework and ensembles that embrace the diversity of our valley. Music is the universal language of the global village of the 21st century. It forms an integral part of our lives, from the musical "logos" that introduce every media program, to the songs and dances that provide identity to our diverse backgrounds. Study and participation in music has proven to further not only creativity and critical thinking, but also our sense of cooperation and community. At Hartnell, performance opportunities are available for all students in a wide range of vocal and instrumental ensembles. In addition, many courses are designed for students with no previous training in music. The department offers courses that prepare music majors for transfer to four-year universities as well as many courses for the general student.

FOR MORE INFORMATION, CONTACT: Steve Ettinger at 831-755-6906 settinger@hartnell.edu, K-123

PROGRAM OUTCOMES
Upon successful completion of the Associate in Arts in Music for Transfer Degree, a student should be able to:

- analyze the harmonic structure of music from the Common Practice Period.
- sight-sing intermediate level tonal melodies.
- demonstrate piano proficiency at the lower-intermediate level.
- perform individually on an instrument or with the voice, and collaboratively in an instrumental or vocal ensemble.
- aurally identify the genre and stylistic period of examples from the western art music tradition.
- utilize computer applications for audio recording and notation.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

*(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtaining a state minimum grade point average of 2.0.*

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th><img src="image" alt="REQUIRED MAJOR COURSES" /></th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>MUS 46</td>
<td>Music Theory and Musicianship I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS 47</td>
<td>Music Theory and Musicianship II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS 48</td>
<td>Music Theory and Musicianship III</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS 39</td>
<td>Music Theory and Musicianship IV</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course - 2 units</td>
<td>MUS 11</td>
<td>Applied Music-instrumental</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course - ENSEMBLE</td>
<td>MUS 20</td>
<td>Hartnell College Choir</td>
<td>4.0</td>
</tr>
<tr>
<td>4 units selected from the following:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 21</td>
<td>Hartnell Chamber Singers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 23.1</td>
<td>Hartnell Chorale-Renaissance and Baroque</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 23.2</td>
<td>Hartnell Chorale-Classical/Romantic Emphasis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 23.3</td>
<td>Hartnell Chorale-20th Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 23.4</td>
<td>Hartnell Chorale-20th Century Pops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 23.5</td>
<td>Hartnell Chorale-21st Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 23.6</td>
<td>Jazz Ensemble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 29.1</td>
<td>Symphonic Band -18th Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 29.2</td>
<td>Symphonic Band -19th Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 29.3</td>
<td>Symphonic Band -20th Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 29.4</td>
<td>Symphonic Band-20th Century Pops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 29.5</td>
<td>Symphonic Band-21st Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 34.1</td>
<td>Symphonic Orchestra 18th Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 34.2</td>
<td>Symphonic Orchestra 19th Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 34.3</td>
<td>Symphonic Orchestra 20th Century</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 34.4</td>
<td>Symphonic Orchestra 20th Century Pops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 34.5</td>
<td>Symphonic Orchestra 21st Century</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (22)**

<table>
<thead>
<tr>
<th><img src="image" alt="RESTRICTED MAJOR ELECTIVES" /></th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (0)**

<table>
<thead>
<tr>
<th><img src="image" alt="REQUIRED GENERAL EDUCATION COURSES" /></th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required General Education Courses (Students can double count General Education courses with major courses)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Choose IGETC for the General Education pattern related to your educational goal:
A. Minimum units to meet IGETC (34-37.00 units) certification requirements: 34.00-37.00
B. Minimum units to meet IGETC (34-37.00 units) certification requirements: 34.00-37.00

Music Required Major and Restricted Electives: 22.0

Electives (Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0: 1-4

**TOTAL:** 60.0

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.
MUSIC—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The Music Program offers coursework and ensembles that embrace the diversity of our valley. Music is the universal language of the global village of the 21st century. It forms an integral part of our lives, from the musical "logos" that introduce every media program, to the songs and dances that provide identity to our diverse backgrounds. Study and participation in music has proven to further not only creativity and critical thinking, but also our sense of cooperation and community. At Hartnell, performance opportunities are available for all students in a wide range of vocal and instrumental ensembles. In addition, many courses are designed for students with no previous training in music. The department offers courses that prepare music majors for transfer to four-year universities as well as many courses for the general student.

The AA Degree in Music prepares students for transfer and careers in the following fields: credentialed school instruction; private studio instruction; vocal or instrumental performance; composition or arranging for film, television, or multimedia; sound engineering; conducting; college or university instruction; arts and education administration; and music journalism. For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Steve Ettinger at (831) 755-6906, settinger@hartnell.edu K-123

PROGRAM OUTCOMES

Upon successful completion of the Music program, a student should be able to:

- analyze the harmonic structure of music from the Common Practice Period.
- sight-sing intermediate level tonal melodies.
- demonstrate piano proficiency at the lower-intermediate level.
- perform individually on an instrument or with the voice, and collaboratively in an instrumental or vocal ensemble.
- aurally identify the genre and stylistic period of examples from the western art music tradition.
- utilize computer applications for audio recording and notation.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>MUS-1A*</td>
<td>Music Appreciation—Historical</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-2</td>
<td>Music Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-46</td>
<td>Music Theory and Musicianship I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-47</td>
<td>Music Theory and Musicianship II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-48</td>
<td>Music Theory and Musicianship III</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-49</td>
<td>Music Theory and Musicianship IV</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Courses – PIANO</td>
<td>MUS-13A or MUS-13B or MUS-14 or MUS-15</td>
<td>Beginning Piano I or Beginning Piano II or Intermediate Piano or Advanced Piano</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Courses – ENSEMBLE</td>
<td>MUS-20 or MUS-21 or MUS-23.1 - .5 or MUS-26 or MUS-29.1 - .5 or MUS-34.1 - .5</td>
<td>Hartnell College Choir or Hartnell Chamber Singers or Hartnell Chorale or Jazz Ensemble or Symphonic Band or Symphony Orchestra</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-42</td>
<td>Electronic Music</td>
<td>2.0</td>
</tr>
</tbody>
</table>

RECOMMENDED MAJOR ELECTIVES (Select from list; none required)

<table>
<thead>
<tr>
<th>Recommended Major Electives</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS-43</td>
<td>MIDI Sequencing</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>MUS-10</td>
<td>Applied Music-Voice</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>MUS-11</td>
<td>Applied Music—Instrumental</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>MUS-17A-17D</td>
<td>Guitar</td>
<td>1.0</td>
<td></td>
</tr>
</tbody>
</table>

GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS-1A*</td>
<td>Music Appreciation—Historical or Music Appreciation—Genre Perspective</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education 21.0

Music Required Major Courses 30.0

ELECTIVES (Courses Numbered 1-199) required when GE units plus degree units total are fewer than 60.0 9.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

† These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
NURSING—REGISTERED NURSING—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Hartnell College Registered Nursing (RN) Program is a defined group of prerequisite, and corequisite courses and a 4-semester course of study consisting of classroom, high-fidelity simulation, nursing skills laboratory, seminar, and clinical experiences. Upon successful completion of program requirements, graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). After passing, graduates may practice as registered nurses in a variety of acute and community-based settings. The Hartnell College RN Program is fully approved by the California Board of Registered Nursing (BRN) and is seeking accreditation by the Accreditation Commission for Education in Nursing.

PROGRAM OUTCOMES

Upon successful completion of the Registered Nursing Program, a student will:

1. communicate with clarity, purpose and sensitivity with patients, families, communities, and inter-professional team members.
2. access information required to assess, plan, implement, and evaluate patient care in accordance with legal and ethical standards.
3. utilize evidence-based practice and critical thinking skills when applying the nursing process to the nursing care of patients throughout the lifespan.
4. integrate cultural competence when providing holistic nursing care across the lifespan based on knowledge of physical, social, and behavioral sciences.
5. value lifelong learning, continuing education, and accountability for professional practice and development.
6. advocate for patients, consumers, and the nursing profession through involvement in healthcare policy and nursing practice.
7. assume responsibility for the promotion, maintenance, and restoration of health for patients, families, and communities by utilizing the nursing process and a variety of teaching/learning strategies.
8. use the principles of ethical decision-making according to the Nursing Code of Ethics and Patient Rights and Responsibilities when planning care.
9. demonstrate competence in nursing skills and caring practice at an entry level into the nursing profession in accordance to quality and safety initiatives.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Some courses have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Prerequisite for RN Program</td>
<td>BIO-6</td>
<td>Introductory Physiology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Prerequisite for RN Program</td>
<td>BIO-6L</td>
<td>Physiology Laboratory</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Prerequisite for RN Program</td>
<td>BIO-27</td>
<td>Principles of Microbiology</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9.0)

Please note: Additional Required Prerequisites for Registered Nursing Program admission are listed below under Required General Education Courses.

<table>
<thead>
<tr>
<th>REQUIRED GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences</td>
<td>BIO-5</td>
<td>Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Humanities</td>
<td>ANT-2</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (3.0)

Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ethnic Groups Course (see catalog for courses)</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language and Rationality</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Composition</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>MAT-123</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>COM-1 or COM-3</td>
<td>Introduction of Public Speaking or Survey of Human Communication</td>
<td>3.0 or 3.0</td>
</tr>
<tr>
<td>HES-120</td>
<td>American Heart Association Basic Life Support for Health Care Providers</td>
<td>(0.5)</td>
<td></td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (8.0-8.5)

1 SOC-1 Introduction to Sociology is acceptable in lieu of ANT-2; however, a separate course is required to satisfy the Humanities general education requirement.

2 Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better, or a score of 70% or greater on the mathematics competency exam. MAT-13 is required for transfer to a four-year college/university.

3 Or any American Heart Association Healthcare Provider Basic Life Support certification course.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES AFTER ACCEPTANCE INTO REGISTERED NURSING PROGRAM</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester Subtotal (13.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 110</td>
<td>Foundation for Success for Registered Nurses</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 30</td>
<td>Basics of Pharmacology for Nursing Practice</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 41</td>
<td>Nursing Theory I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 41.1</td>
<td>Nursing Clinical I</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 41.2</td>
<td>Clinical Reasoning Seminar I</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 41.3</td>
<td>Nursing Skills Lab I</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 50.41</td>
<td>Supervised Nursing Skills Practice I</td>
<td>0.5</td>
</tr>
<tr>
<td>Second Semester Subtotal (10.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 42</td>
<td>Nursing Theory II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 42.1</td>
<td>Nursing Clinical II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 42.2</td>
<td>Clinical Reasoning Seminar II</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 42.3</td>
<td>Nursing Skills Lab II</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN 50.42</td>
<td>Supervised Nursing Skills Practice II</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Hartnell College Catalog/2016-2017
Eligibility
Licensed Vocational Nurses are eligible for placement into the RN Program after meeting the RN Program minimum requirements of admission eligibility (ASSOCIATE DEGREE IN NURSING LVN-to-RN Hartnell College Nursing and Allied Health website (http://www.hartnell.edu/nursing-and-allied-health). Accepted applicants are required to take standardized LVN-to-RN nursing content examinations for conditional acceptance into the program. Questions regarding these screenings should be directed to the Dean of Academic Affairs: Nursing and Allied Health.

Minimum Requirements for Admissions Eligibility:
1. Hartnell College enrollment or a Hartnell College Application for Admission on file in the Office of Admissions and Records
2. Completion of High School or equivalent: official high school transcripts or equivalent required. (Board of Registered Nursing, Rules and Regulations, Section 1412)
3. Completion of all prerequisite courses with a minimum of a ‘C’ grade as documented on official transcripts. In-progress courses will not be accepted for admission GPA purposes. Science GPA Requirement: 2.5
4. Minimum score 62% on the standardized pre-readiness for nursing assessment exam (ATI TEAS V), the approved pre-readiness for nursing assessment test. Multi-criteria screening factors are evaluated, including the ATI TEAS V score, healthcare experience, educational history, and a personal essay. Drug screening and a background check are required and completed after conditional acceptance into the program. Questions regarding these screenings should be directed to the Dean of Academic Affairs: Nursing and Allied Health.
5. Ability to meet the Essential Capabilities and Functional Requirements
6. Current American Heart Association Healthcare Provider Basic Life Support certification (required prior to entry into the program)

Success in the Registered Nursing Program is based upon theoretical knowledge, nursing skills proficiency, clinical reasoning, professional behaviors, and their application in the clinical setting. To progress and graduate from the nursing program, students must achieve at least ‘C’ grades in all nursing courses. Additionally, students entering the RN Program must have essential abilities and skills in five categories: Cognitive-Conceptual, Behavioral and Social Attributes, Communication, Sensory, and Motor. A student should be able to perform in a reasonably independent manner without the use of a surrogate. To practice safely and effectively, these capabilities must be demonstrated in the clinical, laboratory, and classroom settings. A full account of Essential Capabilities and Functional Requirements can be requested.

ASSOCIATE DEGREE IN NURSING LVN-to-RN
Licensed Vocational Nurses are eligible for placement into the RN Program after meeting the RN Program minimum requirements of admission eligibility (see “Minimum Requirements for Admissions Eligibility”). LVN-to-RN applicants must hold a current and active California vocational nursing license. Decision for admission is based on space availability. Enrollment periods are posted on the Hartnell College Nursing and Allied Health website (http://www.hartnell.edu/nursing-and-allied-health). Accepted applicants are required to take standardized LVN-to-RN nursing content examinations to determine placement in the first, second, or third semester.

FOR MORE INFORMATION, CONTACT:
Hartnell College Nursing and Allied Health Program: 831.770.6146
Hartnell College Counselor: 831.775.6500
Email: nursingandalliedhealth@hartnell.edu
NURSING—VOCATIONAL NURSING—CERTIFICATE OF ACHIEVEMENT

PROGRAM DESCRIPTION

The Hartnell College Vocational Nursing (VN) Program is a defined group of prerequisite and corequisite courses in a 12-month certificate program of study consisting of classroom, high-fidelity simulation, nursing skills laboratory, and clinical experiences. Licensed vocational nurses perform essential nursing services under the supervision of a registered nurse or physician. Upon successful completion of program requirements, graduates are eligible to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN). After passing, graduates may practice as vocational nurses in a variety of settings, including but not limited to community agencies, medical offices, hospitals, and long-term care facilities. The Hartnell College VN Program is fully approved by the California Board of Vocational Nurses and Psychiatric Technicians (BVN/PT) and is seeking accreditation by the Accreditation Commission for Education in Nursing.

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College.

PROGRAM OUTCOMES

Upon successful completion of the Hartnell College Vocational Nursing Program, a student will
1. function in a collaborative role with members of the health care team to promote comfort, protect, maintain and restore health for individuals, families, and communities by utilizing the nursing process.
2. demonstrate competence in nursing skills and caring practice at the entry level of a vocational nurse in accordance with quality and safety initiatives.
3. apply evidence-based practice and critical thinking skills when using the nursing process to provide care to individuals throughout the lifespan.
4. communicate with clarity, purpose and sensitivity with individuals, families, communities, and inter-professional team members.
5. provide safe and effective nursing care, employ curiosity in accessing information to assist with assessment, and demonstrate caring in the implementation of nursing actions in accordance with legal and ethical standards.
6. demonstrate patient-centered care that is sensitive to individual’s preferences, values, and needs.
7. follow the rights of medication administration, and administer medications with appropriate assessments and teaching.
8. promote self-advocacy for individuals through the involvement in community and nursing practice.
9. adhere to the Nursing Code of Ethics and all legal principles encompassed in the Vocational Nursing Scope of Practice.
10. value life-long learning, continuing education, and accountability for nursing practice and development.

✓ REQUIRED PREREQUISITE CERTIFICATE COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HES-120</td>
<td>American Heart Association Basic Life Support for Health Care Providers</td>
</tr>
<tr>
<td>NVN-119</td>
<td>Vocational Nursing: Theory I</td>
</tr>
<tr>
<td>NVN-120</td>
<td>Vocational Nursing: Clinical Knowledge Practice I</td>
</tr>
<tr>
<td>NVN-130</td>
<td>Basic Pharmacology I</td>
</tr>
<tr>
<td>NVN-131</td>
<td>Vocational Nursing: Clinical Knowledge Practice III</td>
</tr>
<tr>
<td>NVN-132</td>
<td>Vocational Nursing: Theory II</td>
</tr>
<tr>
<td>NVN-133</td>
<td>Vocational Nursing: Clinical Knowledge Practice II</td>
</tr>
<tr>
<td>NVN-134</td>
<td>Basic Pharmacology B</td>
</tr>
<tr>
<td>NVN-135</td>
<td>Vocational Nursing: Theory III</td>
</tr>
<tr>
<td>NVN-136</td>
<td>Vocational Nursing: Clinical Knowledge Practice III</td>
</tr>
<tr>
<td>NVN-137</td>
<td>Basic Pharmacology B</td>
</tr>
<tr>
<td>NVN-138</td>
<td>Vocational Nursing: Theory IV</td>
</tr>
<tr>
<td>NVN-139</td>
<td>Vocational Nursing: Clinical Knowledge Practice IV</td>
</tr>
<tr>
<td>NVN-140</td>
<td>Basic Pharmacology B</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (21-26.5)

1 Or any American Heart Association Healthcare Provider Basic Life Support certification course.
2 MAT-123 is preferred.
3 Prerequisite courses marked with an asterisk must be completed within five (5) years of entering the vocational nursing program per California Code of Regulations, Title 16: Professional Regulations, Division 25: Board of Vocational Nursing and Psychiatric Technicians of the State of California.
**MODULE 4**

<table>
<thead>
<tr>
<th>Required Certificate Course</th>
<th>NVN -122 A</th>
<th>Vocational Nursing: Theory IV</th>
<th>4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Certificate Course</td>
<td>NVN -122 B</td>
<td>Vocational Nursing: Clinical Knowledge Practice IV</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Certificate Course</td>
<td>NVN -122 C</td>
<td>Vocational Nursing: Clinical IV</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**MODULE 5**

<table>
<thead>
<tr>
<th>Required Certificate Course</th>
<th>NVN -123 A</th>
<th>Vocational Nursing: Theory V</th>
<th>3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Certificate Course</td>
<td>NVN -123 C</td>
<td>Vocational Nursing: Clinical V</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Certificate Course</td>
<td>NVN -130 C</td>
<td>Basic Pharmacology C</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (40.3)**

Required Prerequisite Certificate Units 21-26.5

NVN Required Major Courses Units 40.3

TOTAL UNITS: 61.3-66.8

**NVN-150.1 is a full-semester course, coinciding with Modules 2 and 3.**

---

**NURSING AND ALLIED HEALTH ELECTIVES***

<table>
<thead>
<tr>
<th>Optional Elective</th>
<th>NRN 60.1</th>
<th>Simulation for Nursing and Allied Health I</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional Elective</td>
<td>NRN 60.2</td>
<td>Simulation for Nursing and Allied Health II</td>
<td>0.5</td>
</tr>
<tr>
<td>Optional Elective</td>
<td>NRN 60.3</td>
<td>Simulation for Nursing and Allied Health III</td>
<td>0.5</td>
</tr>
<tr>
<td>Optional Elective</td>
<td>NRN 60.4</td>
<td>Simulation for Nursing and Allied Health IV</td>
<td>0.5</td>
</tr>
</tbody>
</table>

***Elective courses offer nursing and allied health students the opportunity to participate in inter-professional high to low fidelity simulation experiences.

---

**ACCEPTANCE TO THE VOCATIONAL NURSING PROGRAM**

The Vocational Nursing Program requires separate application and screening procedures that must be completed independently from regular admission. Entrance to the program is subject to an annual application process. Because the VN program is impacted, completion of program prerequisites does not guarantee admission to the Hartnell College Vocational Nursing Program. Information can be obtained from the website [http://www.hartnell.edu/nursing-and-allied-health](http://www.hartnell.edu/nursing-and-allied-health), the Nursing and Allied Health Office (831.770.6146), or the Hartnell College Nursing and Allied Health Program academic counselor (831.755.6820).

Application forms for the VN Program and informational materials are available on the Hartnell College Nursing Program website [http://www.hartnell.edu/nursing-and-allied-health](http://www.hartnell.edu/nursing-and-allied-health). Application forms are available in December of each year for the following summer semester (June) admission. Completed application forms and all official documents of verification must be submitted by the deadline date as stated on the application. Additional costs for uniforms, clinical and skills supplies, and standardized tests are required. Students accepted for entry into the VN Program are required to attend a mandatory orientation. At the orientation, admission packets with health/drug screening and background check materials are distributed.

Admission to the VN program is based on overall college GPA and multi-criteria screening factors including healthcare experience, educational history, and a personal essay. Drug screening and a background check are required and completed after conditional acceptance into the program. Questions regarding these screenings should be directed to the Dean of Academic Affairs: Nursing and Allied Health.

**Minimum Requirements for Admissions Eligibility:**

1. Hartnell College enrollment or a Hartnell College Application for Admission on file in the Office of Admissions and Records
2. Completion of High School or equivalent: official high school transcripts or equivalent required. (Board of Vocational Nursing /Psychiatric Technician, Rules and Regulations, Article 5 Section 2530)
3. Completion of all prerequisite courses with a minimum of a “C” grade as documented on official transcripts. In-progress courses will not be accepted for admission. Science GPA Requirement: 2.5
4. Ability to meet the Essential Capabilities and Functional Requirements
5. Current American Heart Association Healthcare Provider Basic Life Support certification (required prior to entry into the program)

Success in the Vocational Nursing Program is based upon theoretical knowledge, nursing skills proficiency, professional behaviors, and their application in the clinical setting. To progress and graduate from the vocational nursing program, students must achieve at least “C” grades in all nursing courses/modules. Additionally, students entering the VN Program must have essential abilities and skills in five categories: Cognitive-Conceptual, Behavioral and Social Attributes, Communication, Sensory, and Motor. A student should be able to perform in a reasonably independent manner without the use of a surrogate. To practice safely and effectively, these capabilities must be demonstrated in the clinical, laboratory, and classroom settings. A full account of Essential Capabilities and Functional requirements can be requested.

**FOR MORE INFORMATION, CONTACT:** Hartnell College Nursing and Allied Health: 831.770.6146
Hartnell College Counselor: 831.755.6820
Email: nursingandalliedhealth@hartnell.edu
PHOTOGRAPHY—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

Photography is an omnipresent, integral part of life in the 21st Century. It is the basis of visual media such as film making, video and digital imaging. The study of photography involves both the development of a technical, skill based knowledge, as well as an appreciation for how the medium has changed and continues to shape the values, the cultures and the lives of everyone globally. Photography is more than a means to make a visual record; it has also become a tool of change; a form of art; a means of learning, and platform for communicating ideas.

The photography faculty are committed to empowering students with the ability to apply photo imaging to their lives for practical, professional and artistic purpose. Hartnell photo instruction prepares students for advancement to college and university study, to achieve personal enrichment and development, to acquire abilities needed to produce photographic art of high aesthetic value, and to develop or hone professional skills. Photography offers careers in the following areas: advertising; photographic art; fashion photography; commercial portrait; digital effects; photo journalism; editorial, wedding and special event photography; industrial photography; travel, adventure, and pet photography; scientific photography; forensic photography; and documentary photography.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty on how best to complete the program in which you are enrolled. For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Eric Bosler at (831) 755-6792, ebosler@hartnell.edu, J-208B

PROGRAM OUTCOMES

Upon successful completion of the Photography program, a student should be able to:

- demonstrate effective technical proficiency with film and digital media.
- structure visual information to produce images of intermediate level aesthetic quality.
- interpret and produce photographs that communicate intellectually and emotionally.
- demonstrate an intermediate knowledge of the history of photography.
- demonstrate an awareness of the influence of photography on the lives of individuals, cultures, and societies.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>PRO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PRO-2</td>
<td>Beginning Black and White Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PRO-3</td>
<td>Advanced Photography Lab</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PRO-4</td>
<td>Portfolio Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-80</td>
<td>Introduction to Digital Photography and Photographic Imaging</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-70</td>
<td>Graphic Design/Computer Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ART-1A</td>
<td>Art History Survey I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-1B</td>
<td>Art History Survey II</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-3F</td>
<td>Drawing and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-6A</td>
<td>Watercolor and Gouache</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-6B</td>
<td>Oils</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-8C</td>
<td>Acrylics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-10F</td>
<td>Art Appreciation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-71</td>
<td>Introduction to 2D Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-72</td>
<td>Introduction to Digital Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-77</td>
<td>Digital Video, Audio Editing, &amp; Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Humanities (Select at least a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written Composition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
</tbody>
</table>

General Education 21.0

Photography Required Major Courses and Restricted Major Electives 24.0

ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0 15.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

These courses also satisfy General Education Requirements

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
PHOTOGRAPHY—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-2</td>
<td>Beginning Black and White Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-3</td>
<td>Advanced Photography Lab</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-4</td>
<td>Portfolio Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-70</td>
<td>Graphic Design/Computer Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>ART/PHO-80</td>
<td>Digital Photographic Imaging</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (21.0)**

### RESTRICTED MAJOR ELECTIVES (Select a minimum of 3 units from the following)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-77</td>
<td>Digital Video, Audio Editing and Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-1A</td>
<td>Art History Survey I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-1B</td>
<td>Art History Survey II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (3.0)**

### OTHER REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ESL-101*</td>
<td>Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>BUS-151**</td>
<td>Business Mathematics</td>
<td>(3.0)</td>
</tr>
<tr>
<td>MAT-151L1, L2, and L3**</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (24.0)**

*Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better also satisfies this requirement.
**PHYSICAL EDUCATION—KINESIOLOGY—ASSOCIATE OF SCIENCE DEGREE**

**PROGRAM DESCRIPTION**

The Physical Education, Kinesiology, Health and Athletics program provides formalized educational opportunities for the development and acquisition of motor skills, improved physical fitness and their application to sports and physical activities. This Associate of Science Degree covers a broad knowledge base that represents several disciplines that include traditional physical education, exercise science, athletic training, coaching, and health science. The Health Education Program provides the student with the knowledge and skills to develop a healthy lifestyle. The Adaptive Physical Education Program parallels the concepts and programs of the Physical Education and Kinesiology discipline includes a broad range of movement skills specifically designed for the special needs individual, with the objective of making a noticeable difference in their daily lives. These programs help prepare students to transfer as Physical Education and Kinesiology majors to four-year institutions.

Four-year graduates in Physical Education and Kinesiology are qualified for positions in coaching, education, industry wellness centers and allied medical fields.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

**FOR MORE INFORMATION, CONTACT:**
- Daniel Teresa, Athletic Director at (831) 755-6837, dteresa@hartnell.edu, H-115
- Rich Givens, Student Athlete Counselor at (831) 755-6840, rgivens@hartnell.edu, H-107

**FOR MORE INFORMATION ON ADAPTIVE PHYSICAL EDUCATION CONTACT:** Tracy Carpenter at (831) 755-6876, tcarpenter@hartnell.edu, G-144

**PROGRAM OUTCOMES**

Upon successful completion of the Kinesiology/ Physical Education, Health and Athletics program, a student should be able to:

- demonstrate competence in performing a variety of skill-related behaviors.
- describe health and physical activity concepts that will enable him or her to make informed decisions concerning health.
- recognize health issues, understanding the similarities and contrasts among cultures.
- demonstrate sensitivity to cultural and physical diversity.
- explain the value and significance of physical activity for human development, human interaction and quality of life and its relationship to their particular disability.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>BIO-11*(or BIO-5, BIO-6 and BIO-6L)*</td>
<td>Introductory Human Anatomy and Physiology</td>
<td>4.0 to 9.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PETH-1</td>
<td>Introduction to Kinesiology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PETH-2</td>
<td>Care and Prevention of Athletic Injuries</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-13*</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HED-6</td>
<td>Multicultural Health Beliefs</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>FCS-23</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-22 or PHY-10 or PHY-2A</td>
<td>The Science of Chemistry or Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (28.0-33.0)**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 6.0 units from at least two of the following Activities:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-59,60</td>
<td>Racquet Activities</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-42, 44, 61,62, 65, 62</td>
<td>Aquatic Activities</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-40, 52, 54, 55, 64, 65, 70, 72, 74, PEIN-17, 18, 19, 20, 21, 22, 23, 24, 25, 26</td>
<td>Team Activities</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-32, 34, 36, 43, 45, 46, 47, 49, 50, 51, 56, 66, 67, 69</td>
<td>Fitness Activities</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 1.0 unit from Theory and Analysis of Sports:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>PETH-10A, 10B, 10C, 10D</td>
<td>Theory and Analysis of Sports</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (1.0)**

<table>
<thead>
<tr>
<th>RECOMMENDED MAJOR ELECTIVES (Select from list; none required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>HED-55</td>
<td>Advanced First Aid</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PETH-4</td>
<td>Mental Skills for Sports Performance</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>ENG-2</td>
<td>Critical Thinking and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BIO-5</td>
<td>Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BIO-6</td>
<td>Introductory Physiology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BIO-6L</td>
<td>Physiology Laboratory</td>
<td>2.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PETH-3</td>
<td>Concepts of Fitness and Wellness</td>
<td>3.0</td>
</tr>
</tbody>
</table>
### CON’T OF PHYSICAL EDUCATION—KINESIOLOGY—ASSOCIATE OF SCIENCE DEGREE

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences</td>
<td>BIO-11, or BIO-5, BIO-6 and BIO-6L‡</td>
<td>Introductory Human Anatomy and Physiology</td>
<td>(4.0)</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>PSY-2‡</td>
<td>General Psychology</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>HED-6‡</td>
<td>Multicultural Health Beliefs</td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A‡ or ENG-2</td>
<td>College Composition and Reading or Critical Thinking and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-13*</td>
<td>Elementary Statistics</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**General Education**

| Physical Education—Kinesiology Required Major Courses and Restricted Major Electives | 35-40.0 |

**Electives (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0**

| TOTAL UNITS | 60.0-61.0 |

‡These courses also satisfy General Education Requirements.

*NCAA athletes who wish to continue in their sport must have MAT-13 to transfer to CSU or UC.

**TRANSFER STUDENTS:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.
PHYSICS—ASSOCIATE IN SCIENCE IN PHYSICS FOR TRANSFER (AS-T)

PROGRAM DESCRIPTION

Physics is the natural science involving a general analysis of nature, conducted in order to understand how the universe behaves. It involves the study of matter and its motion through space and time, along with related concepts such as energy and force. Physics overlaps with many interdisciplinary areas such as astronomy, biology, chemistry, and geology. Physics also makes significant contributions through advances in new technologies that arise from theoretical breakthroughs. Research in physics includes the following specialty areas: condensed matter physics; solid-state physics; atomic, molecular, and optical physics; particle physics, astrophysics; geophysics and biophysics. Some positions for which four-year graduates in physics are qualified are in research, teaching, engineering, medicine, and industry.

The Associate in Science degree in Physics for Transfer provides a clearly articulated curricular track for students who wish to transfer to baccalaureate degree programs at a California State University (CSU) campus. For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Laura Fatuzzo at (831) 770-7017, lfatuzzo@hartnell.edu , N-10

PROGRAM OUTCOMES

Upon successful completion of the Associate in Science in Physics for Transfer Degree, a student should be able to:

- Apply fundamental physics laws, principles, and widely accepted theories.
- Demonstrate proficiency in solving problems that are appropriate to first-year-university students of calculus-level physics courses.
- Collect and analyze data effectively using basic laboratory equipment, and present results and conclusions in formally structured laboratory reports.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   1. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   2. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Earning a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-4B</td>
<td>General Physics/Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light and Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
<td>4.0</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>✓ RECOMMENDED MAJOR ELECTIVES (Select from list; none required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>CHM-1A</td>
<td>General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>CHM-1B</td>
<td>General Chemistry II</td>
<td>5.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>CSS-4</td>
<td>Introduction to Scientific Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units): OR</td>
<td></td>
<td></td>
<td>39.0</td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td></td>
<td></td>
<td>34.00-37.00</td>
</tr>
<tr>
<td>Electives/Courses numbered 1-99 required when degree units plus GE units total fewer than 60.0</td>
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<td></td>
<td>5-7.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>60.0</td>
</tr>
</tbody>
</table>

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
POLITICAL SCIENCE—ASSOCIATE IN ARTS IN POLITICAL SCIENCE FOR TRANSFER (AA-T)

PROGRAM DESCRIPTION

The Associate in Arts in Political Science for Transfer allows students to focus their major course work and required electives in a social science concerned with the description and analysis of political, and especially governmental, institutions and processes. Increasingly, the emphasis is placed on how governments deal with specific policy problems such as war and peace, poverty, crime, education, energy, pollution, or inter-group relations, and on the factors that affect these problems. The study of political science provides one with the concepts, theories and methods necessary to analyze these problems scientifically.

Fields for which BA graduates in political science are qualified are government work in the legislative or executive branches, the legal field as an attorney or paralegal, the military as an officer, a professional sales representative, or marketing professional.

FOR MORE INFORMATION, CONTACT:  Larry Adams, ladams@hartnell.edu, (831) 755-6778, E-307

PROGRAM OUTCOMES

Upon successful completion of the Associate in Arts in Political Science for Transfer Degree, a student should be able to:

- demonstrate an ability to evaluate the governmental structures established by the Constitution of the United States of America and the California State Constitution.
- apply critical thinking skills in reading, comprehending, and interpreting political science scholarship.
- employ political science research methods to address political questions using primary and secondary sources.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree.

California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

"(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtaining of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>POL-1</td>
<td>American Political Institutions</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>POL-2</td>
<td>Contemporary Governments Abroad</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>POL-3</td>
<td>Introduction to International Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>POL-6</td>
<td>Introduction to Contemporary Political Thought</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (17.0)

<table>
<thead>
<tr>
<th>✓ REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
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</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science Required Major and Restricted Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives(Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (6.0)

Students can double-count required degree courses and courses for General Education.

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
PSYCHOLOGY—ASSOCIATE IN ARTS IN PSYCHOLOGY FOR TRANSFER DEGREE (AA-T)

PROGRAM DESCRIPTION

The Associate in Arts degree in Psychology for Transfer provides a clearly articulated curricular track for students who wish to transfer to baccalaureate psychology degree programs at a California State University (CSU) campus. This degree provides the lower division psychology major courses required at many CSUs while exposing students to the core principles and practices of the psychology field. The AA-T degree will enable students to develop a strong foundation in research methods, statistics, and biological aspects of behavior and will offer a variety of elective courses to help students develop their knowledge of human behavior, critical thinking, communication and problem-solving skills. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT:  Yoshiko Matsushita-Arao, PhD at (831) 755-6781; yarao@hartnell.edu; E-316  Carol Kimbrough, MA, MFT at (831) 755-6656; ckimbrough@hartnell.edu; E-308  Alicia Samis, MA at (831) 755-6918; asamis@hartnell.edu; D-384

PROGRAM OUTCOMES

Upon successful completion of the Associate in Arts in Psychology for Transfer Degree, a student should be able to:

- demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- apply knowledge of basic research methods in psychology, including research design, data analysis, and interpretation.
- use critical and creative thinking, skeptical inquiry, and the scientific approach to solving problems related to behavioral and mental processes.
- apply psychological principles to personal, social, and organizational issues.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Sciences (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY-8</td>
<td>Research Methods in Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY-10</td>
<td>Introduction to Biological Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (14.0)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY-25</td>
<td>Developmental Psychology – Lifespan OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY-14</td>
<td>Child Psychology</td>
<td>3.0</td>
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</table>

**SUBTOTAL UNITS (3.0)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY-6</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY-15</td>
<td>Human Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY-22</td>
<td>Abnormal Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (3.0)**

**REQUIRED GENERAL EDUCATION COURSES (Students can double count)**

General Education courses with major courses.

Students can double-count required degree courses and courses for General Education

**TRANSFER STUDENTS:** Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.
PSYCHOLOGY—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

Psychology is the scientific discipline concerned with the study of the mind. It is a natural and a social science concerned with the study of human behavior. As such, it is a broad discipline which involves both pure science and practical application of science to matters of everyday living.

The Psychology AA degree program provides students with a basic understanding of motivation and behavior that is valuable to many careers in business, government, education, and health care. Becoming a "psychologist," however, requires graduate level training. Psychologists with graduate degrees and professional certificates have a broad range of employment opportunities including clinical practice, research, and teaching. Hartnell College offers lower division transfer courses to meet the requirements for most baccalaureate majors offered by accredited colleges and universities. Psychology and counseling faculty are excellent resources for additional career information.

FOR MORE INFORMATION, CONTACT: Yoshiko Matsushita-Arao, PhD, at (831) 755-6781, yarao@hartnell.edu, E-316
Alicia Samis, MA at (831) 755-6918; asamis@hartnell.edu, D-354

PROGRAM OUTCOMES

Upon successful completion of the Psychology program, a student should be able to:

- demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- apply knowledge of basic research methods in psychology, including research design, data analysis, and interpretation.
- use critical and creative thinking, skeptical inquiry, and the scientific approach to solving problems related to behavioral and mental processes.
- apply psychological principles to personal, social, and organizational issues.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-8</td>
<td>Research Methods in Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-10</td>
<td>Introduction to Biological Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-14</td>
<td>Child Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-15</td>
<td>Human Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-22</td>
<td>Abnormal Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BIO-11‡</td>
<td>Intro. to Human Anatomy &amp; Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-13‡</td>
<td>Elementary Statistics</td>
<td>5.0</td>
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</table>

<table>
<thead>
<tr>
<th>✓ RECOMMENDED MAJOR ELECTIVES (Select from list; none required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-4</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-12</td>
<td>Theories of Personality</td>
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</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-30</td>
<td>Forensic Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-33</td>
<td>Personal &amp; Social Adjustment</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-41</td>
<td>Psychology of Human Relationships</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-42</td>
<td>Psychology of Women</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>ANT-1</td>
<td>Introduction to Biological Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>ANT-2</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>SOC-1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>SOC-41</td>
<td>Marriage and the Family</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>BIO-11‡</td>
<td>Introduction to Human Anatomy &amp; Physiology</td>
<td>(4.0)</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-13‡</td>
<td>Elementary Statistics</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Courses</td>
<td>27.0</td>
</tr>
<tr>
<td>Total Program Units</td>
<td>60.0</td>
</tr>
</tbody>
</table>

1 These courses satisfy both Major and General Education requirements

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.

TRANSFER STUDENTS: Students intending to transfer should consult a counselor and complete the CSU-GE or IGETC general education pattern as advised. Students are required to complete the 27 required major units. When completing the general education requirements, they should include a minimum of 6 units from the list of restricted major electives which are included in the CSU-GE and IGETC patterns.

Hartnell College Catalog/2016-2017
RESPIRATORY CARE PRACTITIONER—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Hartnell College Respiratory Care Practitioner (RCP) program is a defined group of prerequisite and corequisite courses, and a four-semester course of study consisting of classroom, high-fidelity simulation, skills laboratory, seminar, and clinical experiences. Clinical experiences are obtained in Monterey, Santa Clara, Santa Cruz, and San Luis Obispo counties. Upon successful completion of program requirements, graduates are eligible to take the National Board of Respiratory Care’s Registry Examination (RRT, CRT, CSE). After passing, graduates may practice as respiratory care practitioners in a variety of acute and community-based settings. The Hartnell College RCP program holds provisional accreditation from the Commission on Accreditation for Respiratory Care.

PROGRAM OUTCOMES:

The Respiratory Care Practitioner (RCP) Program at Hartnell College will provide skilled graduates to the healthcare community who have obtained their professional license (RCP) and credentials (CRT and RRT). Graduates will demonstrate competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).

Upon successful completion of the Respiratory Care Practitioner (RCP) program a student will
1. comprehend, apply, and evaluate information necessary to practice as a respiratory care practitioner (cognitive) as evidenced by their ability to
   a. analyze and evaluate patient’s subjective and objective data from the patient’s record to formulate or revise a respiratory care plan.
   b. educate patients and their families about disease states, treatment and health promotion.
   c. pass the licensure examination accepted by the California State Respiratory Care Board (National Board for Respiratory Care Entry Level Examination) and qualifying for licensure as a California Respiratory Care Practitioner. Graduates will also successfully pass the National Board for Respiratory Care Advanced Practitioner Written and Simulation Registry Examination within one year of program completion.
2. perform the skills competently as a respiratory care practitioner (psychomotor) as evidenced by their ability to
   a. assess patients in the health care setting and document findings and interventions.
   b. implement respiratory therapeutic interventions in a timely manner consistent with patient safety and infection control standards.
   c. communicate clearly and professionally in interpersonal interactions with patients, family members, and the health care team.
3. practice professional attitudes and behavior (affective) as evidenced by their ability to
   a. practice within the legal and ethical scope of practice.
   b. work effectively as a health care team member.
   c. ensure safe and supportive care by building cross-cultural relationships, addressing the physical and psychosocial needs of the patient.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Some courses have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Prerequisite Course for RCP Program</td>
<td>BIO-6</td>
<td>Introductory Physiology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Prerequisite Course for RCP Program</td>
<td>BIO-5L</td>
<td>Physiology Laboratory</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Prerequisite Course for RCP Program</td>
<td>BIO-27</td>
<td>Principles of Microbiology</td>
<td>4.0</td>
</tr>
<tr>
<td>REQUIRED GENERAL EDUCATION COURSES</td>
<td>Course No.</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>BIO-5</td>
<td>Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>CHM 1A or CHM 22 or CHM 60</td>
<td>General Chemistry</td>
<td>5.0 or 4.0 or 4.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Humanities</td>
<td>ANT-2</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Ethnic Groups (see catalog for courses)</td>
<td>COM-1 or COM-3</td>
<td>Introduction to Public Speaking or Survey of Human Communication</td>
<td>3.0 or 3.0</td>
</tr>
<tr>
<td>Language and Rationale</td>
<td>HES-120</td>
<td>American Heart Association Basic Life Support for Health Care Providers</td>
<td>0.5</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (90)  
SUBTOTAL UNITS (25-29.5)

1. Required General Education Course.
2. Required General Education Course.
3. Required General Education Course.

Please note: Additional Required Prerequisites for Respiratory Care Practitioner Program admission are listed below under Required General Education Courses.

1. SOC-1 Introduction to Sociology is acceptable in lieu of ANT-2; however, a separate course is required to satisfy the Humanities general education requirement.
2. Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better or a score of 70% or greater on the mathematics competency exam.
3. Or any American Heart Association Healthcare Provider Basic Life Support certification course.
CON’T OF RESPIRATORY CARE PRACTITIONER—ASSOCIATE OF SCIENCE DEGREE

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES AFTER ACCEPTANCE INTO RCP PROGRAM</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-110</td>
<td>Foundations for Success</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-50</td>
<td>Respiratory Care Practitioner Responsibilities</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-51</td>
<td>Pharmacology and Medication Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-52</td>
<td>Cardiopulmonary Anatomy and Physiology</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-53</td>
<td>Foundational Skills</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-54</td>
<td>Supervised Practice: Foundations</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-60</td>
<td>Diagnostic Studies and Respiratory Care</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-61</td>
<td>Respiratory Therapeutics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-62</td>
<td>Cardiopulmonary Pathophysiology</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-63</td>
<td>Beginning Clinical Experience</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-64</td>
<td>Supervised Practice: Beginning</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-70</td>
<td>Neonatal and Pediatric Respiratory Care</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-71</td>
<td>Basic Mechanical Ventilation</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-72</td>
<td>Neurological and Traumatic Conditions</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-73</td>
<td>Intermediate Clinical Experience</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-74</td>
<td>Supervised Practice: Intermediate</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-80</td>
<td>Advanced Life Support</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-81</td>
<td>Advanced Mechanical Ventilation</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-82</td>
<td>Clinical Reasoning Seminar</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-83</td>
<td>Advanced Clinical Experience</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP-84</td>
<td>Supervised Practice: Advanced</td>
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</tr>
<tr>
<td><strong>General Education Units</strong></td>
<td></td>
<td>25-29.5</td>
<td></td>
</tr>
<tr>
<td><strong>RCP Required Major Courses Units</strong></td>
<td></td>
<td>53.5</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td>78.83</td>
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</table>

**NURSING AND ALLIED HEALTH ELECTIVES**

<table>
<thead>
<tr>
<th>Optional Elective</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional Elective</td>
<td>NRN 60.1</td>
<td>Simulation for Nursing and Allied Health I</td>
<td>0.5</td>
</tr>
<tr>
<td>Optional Elective</td>
<td>NRN 60.2</td>
<td>Simulation for Nursing and Allied Health II</td>
<td>0.5</td>
</tr>
<tr>
<td>Optional Elective</td>
<td>NRN 60.3</td>
<td>Simulation for Nursing and Allied Health III</td>
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</tr>
<tr>
<td>Optional Elective</td>
<td>NRN 60.4</td>
<td>Simulation for Nursing and Allied Health IV</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Transfer students:

- Completing the AS degree does not meet all requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems is available online at http://www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
- Hartnell College counselor to review transfer requirements.

Application forms for the Respiratory Care Practitioner Program and informational materials are available on the Hartnell College Respiratory Care Practitioner Program website (http://www.hartnell.edu/nursing-and-allied-health). Application forms are posted in December of each year for the following Fall semester admission. Completed application forms and all official documents of verification must be submitted by the deadline date as stated on the application. Additional costs for uniforms, clinical and skills supplies, and standardized tests are required. Students are responsible for all travel costs to clinical sites which are in Monterey, Santa Clara, and San Louis Obispo counties. Students accepted for entry into the RCP Program are required to attend the mandatory RCP Orientation Session. At the orientation, admission packets with health/drug screening and background check materials are distributed. Drug screening and a background check are required and completed after conditional acceptance into the program. Questions regarding these screenings should be directed to the Dean of Academic Affairs: Nursing and Allied Health.

Minimum Requirements for Admissions Eligibility:

1. Hartnell College enrollment or a Hartnell College Application for Admission on file in the Office of Admissions and Records
2. Completion of High School or equivalent. Official high school transcripts or equivalent required.
3. Completion of all prerequisite courses with a minimum of a "C" grade as documented on official transcripts. In-progress courses will not be accepted for admission GPA purposes.
4. Science GPA Requirement: 2.5
5. Current American Heart Association Healthcare Provider Basic Life Support certification (required prior to entry into the program)

Success in the Respiratory Care Practitioner Program is based upon theoretical knowledge, RCP skills proficiency, clinical reasoning, professional behaviors, and their application in the clinical setting. To progress and graduate from the RCP Program, students must achieve at least "C" grades in all RCP major courses. Additionally, students entering the RCP Program must have abilities and skills in five (5) categories: Cognitive-Conceptual, Behavioral and Social Attributes, Communication, Sensory, and Motor. A student should be able to perform in a reasonably independent manner without the use of a surrogate. To practice safely and effectively, these capabilities must be demonstrated in the clinical, laboratory, and classroom settings. A full account of Essential Capabilities and Functional Requirements can be requested.

**FOR MORE INFORMATION, CONTACT:**
- Hartnell College Nursing and Allied Health Program: (831) 770-6146
- Email: nursingandalliedhealth@hartnell.edu
- Hartnell College Counselor: (831) 755-6820
SOCIAL SCIENCES—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The program in Social Sciences represents an interdisciplinary group of studies encompassing the disciplines of anthropology, geography, sociology and history. It is designed as a general preparation for a career in social programs that include education, human resources, law, and forensics.

The program is based on the belief that it is important for an individual who plans to work with or for people cross-culturally (anthropologically), over a prescribed region or regions (geographically), within a social context (sociologically), and across time (historically).

FOR MORE INFORMATION, CONTACT: Jorge Sanchez at (831) 755-6780, jsanchez@hartnell.edu, E-314

PROGRAM OUTCOMES

Upon successful completion of the Social Sciences program, a student should be able to:

- Evaluate the nature of complex social phenomenon as it relates to contemporary U.S. politics, international relations, and diverse cultures, both past and present.
- Self-reflect by assessing the complexity of human behavior at individual and group levels and comprehend how individuals can affect policy and in turn how policy affects individuals.
- Appraise the processes of evolution and social dynamics by which individuals and social structures have evolved.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ANT-2</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>GEG-1</td>
<td>Introduction to Geography: Physical Elements</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-17A</td>
<td>History of the United States A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>POL-1</td>
<td>American Political Institutions</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>SOL-1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (15.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 18.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-2</td>
<td>Community Relations and the Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-1</td>
<td>Introduction to Biological Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-3</td>
<td>Introduction to Archaeology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-10</td>
<td>California Indians</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-15</td>
<td>North American Indians</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-20</td>
<td>Cultures of Mexico</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-32</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-10</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-17B</td>
<td>History of the United States B</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>POL-2</td>
<td>Contemporary Governments Abroad</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>POL-3</td>
<td>International Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>POL-5</td>
<td>Chicano Politics and the American Political System</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (18.0)

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education 21.0

Social Science Required Major Courses and Restricted Major Electives 33.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 6.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.
†These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalences and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
SOCIOLGY —ASSOCIATE IN ARTS IN SOCIOLGY FOR TRANSFER DEGREE (AA-T)

PROGRAM DESCRIPTION

Sociology is the scientific study of human behavior in society. It uses a variety of research and theoretical perspectives to analyze and explain human social behavior and social change. Sociology students examine a wide range of human interactions including marriage and family units, crime and deviance, culture and social change, group processes and interactions having to do with class, race and gender, diversity and globalization, social stratification and mobility and social movements. Program courses will help develop the student’s ability to examine the broader connections between personal life, public issues and social structure. Sociology provides a valuable major for a diverse range of career paths including teaching, social work, probation officer, employment counseling, urban planning and others.

FOR MORE INFORMATION, CONTACT: Hortencia Jimenez at (831) 770-6182, hjimenez@hartnell.edu, E306

The Associate in Arts in Sociology for Transfer degree provides a clearly articulated curricular track for students who wish to transfer to baccalaureate degree programs at a California State University (CSU) campus. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their major.

PROGRAM OUTCOMES

Upon successful completion of the Associate in Arts in Sociology for Transfer Degree, a student should be able to:

- demonstrate a working knowledge of the core concepts of sociology including: social structure; culture, social stratification and inequality; race, ethnicity, and gender; and globalization
- apply their understanding of sociology to their professional, personal and civic lives.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

- (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
  - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

- (2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
**SPANISH—ASSOCIATE IN ARTS IN SPANISH FOR TRANSFER (AA-T)**

**PROGRAM DESCRIPTION**

The Spanish degree program includes four semesters of the study of Spanish, one of the world's most influential languages and the fastest growing language in California. It provides students with the communication skills in understanding, speaking, reading, and writing, and prepares them to enter the workforce in many industries where knowledge of Spanish is valuable and imperative. In addition, it highlights the linguistic, literary, artistic, cultural, and historical contributions of the Spanish speaking world. Courses in this degree program meet the language requirements at many four-year universities, as well as general education and transfer requirements.

**FOR MORE INFORMATION, CONTACT:** Aurelia Vaccaflor at 831-755-6786, avacaflor@hartnell.edu, D371  
Janet Flores at 831-755-6934, jflores@hartnell.edu, D373

**PROGRAM OUTCOMES**

Upon successful completion of the *Associate in Arts in Spanish for Transfer Degree*, a student should be able to:

- converse and write in Spanish at the intermediate level with effective use of grammar, vocabulary, comprehensible pronunciation, and syntax on a range of topics such as personal and family lives, school or work, and current events.
- read and understand authentic texts in Spanish such as letters, essays, newspaper articles, poems, and/or short stories.
- demonstrate knowledge and understanding of the linguistic, literary, and cultural contributions of the Spanish speaking world.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 1 or SPA 1S or SPA 1X</td>
<td>Elementary Spanish or Elementary Spanish Speakers or Elementary Spanish for Chicano Students</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 2 or SPA 2S or SPA 2X</td>
<td>Elementary Spanish or Elementary Spanish Speakers or Elementary Spanish for Chicano Students</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 3 or SPA 3S</td>
<td>Intermediate Spanish or Intermediate Spanish Speakers</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 4 or SPA 4S</td>
<td>Intermediate Spanish or Intermediate Spanish Speakers</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (20)**

### RESTRICTED MAJOR ELECTIVES (Select a minimum of 3 units from the following:)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-26</td>
<td>Chicano Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-8</td>
<td>History of Mexico</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-48A</td>
<td>Chicano History</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (23)**

### REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)

Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:

- **A.** Minimum units to meet CSU-GE breadth certification requirements (39 units) OR 
  - Minimum units to meet IGETC (34-37.00 units) certification requirements 34.00–37.00
- **B.** Spanish Required Major and Restricted Electives 23.0

**Electives(Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0**

**TOTAL** 60.0

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.
SPANISH—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The Spanish degree program includes four semesters of the study of Spanish, one of the world’s most influential languages and the fastest growing language in California. It provides students with the communication skills in understanding, speaking, reading, and writing, and prepares them to enter the workforce in many industries where knowledge of Spanish is valuable and imperative. In addition, it highlights the linguistic, literary, artistic, cultural, and historical contributions of the Spanish speaking world. Courses in this degree program meet the language requirements at many four-year universities, as well as general education and transfer requirements.

FOR MORE INFORMATION, CONTACT: Aurelia Vacaflor at (831) 755-6786, avacaflor@hartnell.edu, D-371
Janet Flores at (831) 755-6934, jflores@hartnell.edu, D-373

PROGRAM OUTCOMES

Upon successful completion of the Spanish program, a student should be able to:

- converse and write in Spanish at the intermediate level with effective use of grammar, vocabulary, comprehensible pronunciation, and syntax on a range of topics such as personal and family lives, school or work, and current events.
- read and understand authentic texts in Spanish such as letters, essays, newspaper articles, poems, and/or short stories.
- demonstrate knowledge and understanding of the linguistic, literary, and cultural contributions of the Spanish speaking world.

A minimum of **60.0 semester** units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>SPA-1 or SPA-1S or SPA-1X</td>
<td>Elementary Spanish or Elementary Spanish Speakers or Elementary Spanish for Chicano Students</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>SPA-2 or SPA-2S or SPA-2X</td>
<td>Elementary Spanish or Elementary Spanish Speakers or Elementary Spanish for Chicano Students</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>SPA-3 or SPA-3S</td>
<td>Intermediate Spanish or Intermediate Spanish Speakers</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>SPA-4 or SPA-4S</td>
<td>Intermediate Spanish or Intermediate Spanish Speakers</td>
<td>5.0</td>
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</table>

**SUBTOTAL UNITS (20.0)**

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 9.0 units from the following:</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-10</td>
<td>California Indians</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-20</td>
<td>Cultures of Mexico</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-1</td>
<td>Intro to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-2</td>
<td>Chicano Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-3</td>
<td>Chicanos in American Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-4</td>
<td>Chicano Culture</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-5</td>
<td>Chicano Politics and the American Political System</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-6</td>
<td>La Chicana</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-12</td>
<td>Chicano Cinema</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-53</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-10</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-49A</td>
<td>Chicano History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-49B</td>
<td>Chicano History B</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MUS-5</td>
<td>Ethnic Music</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>SOC-42</td>
<td>Sociology of Minority Relations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (9.0)**
### CON’T OF SPANISH—ASSOCIATE OF ARTS DEGREE

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.

**TRANSFER STUDENTS:** Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.

**TOTAL UNITS**  
60.0

**Spanish Required Major Courses and Restricted Major Electives**  
29.0

**ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0**  
10.0

**TOTAL UNITS**  
60.0

**TRANSFER STUDENTS:** Students intending to transfer should consult a counselor and complete the CSU-GE or IGETC general education pattern as advised. Students are required to complete the 29 required major units. When completing the general education requirements, they should include a minimum of 9 units from the list of restricted major electives which are included in the CSU-GE and IGETC patterns.

Total Program Units: 29
IGETC or CSU/GE Units: 34-39
Electives (as needed)

60 units
STUDIO ARTS —ASSOCIATE IN ARTS IN STUDIO ARTS FOR TRANSFER (AA-T)

PROGRAM DESCRIPTION

Art is the study of communicating concepts and ideas visually. The Associate in Arts in Studio Arts for Transfer degree provides students with an introductory foundation in art principles and practices while providing a clearly articulated curricular track for students who wish to transfer to baccalaureate degree programs at a California State University (CSU) campus. This degree provides the lower division art courses required at many CSUs while exposing students to the core principles of the studio arts field. Selected courses will include study in art history and studio practice in the creation of both two- and three-dimensional works of art. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Jerri Nemiro at (831) 755-6797; jnemiro@hartnell.edu
Eric Bosler at (831) 755-6792; ebosler@hartnell.edu

PROGRAM OUTCOMES

Upon successful completion of the Associate in Arts in Studio Arts for Transfer Degree, the student should be able to:

- demonstrate a working knowledge of the core aesthetic principles of studio arts through visual problem solving in areas of two-dimensional and three-dimensional fine art;
- apply their understanding of studio arts to their professional, personal, and civic lives.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ART-1A</td>
<td>Art History Survey I</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-1B</td>
<td>Art History Survey II</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-3</td>
<td>Drawing &amp; Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-13</td>
<td>Three-Dimensional Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (15.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 9 units from the following)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ART-6A</td>
<td>Watercolors &amp; Gouache</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-15A</td>
<td>Ceramics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-70</td>
<td>Introduction to Graphic Design &amp; Computer Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-71</td>
<td>Introduction to 2D Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-72</td>
<td>Introduction to Digital Art</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PHO-1 AND</td>
<td>Introduction to Photography</td>
<td>6.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PHO-2</td>
<td>Beginning Black and White Photography</td>
<td>6.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9.0)

<table>
<thead>
<tr>
<th>✓ REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units); OR</td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units); certification requirements</td>
</tr>
<tr>
<td>Studio Arts Required Major and Restricted Electives</td>
</tr>
<tr>
<td>Electives(Courses numbered 1-89) required when degree units plus GE units total fewer than 60.0</td>
</tr>
</tbody>
</table>

TOTAL 60.0

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
THEATRE ARTS —ASSOCIATE IN ARTS IN THEATRE ARTS FOR TRANSFER (AA-T)

PROGRAM DESCRIPTION

The Associate in Arts degree in Theatre Arts for Transfer provides a clearly articulated curricular track for students who wish to transfer to baccalaureate Theatre Arts degree programs at a California State University (CSU) campus. This degree provides the lower division theatre major courses required at many CSUs while exposing students to the core principles of the theatre arts field. For detailed requirements for individual four-year institutions, students should contact the transfer institution and meet with a counselor for specific transfer course requirements in their major.

The Hartnell College Theatre Arts program is unique in that a professional theatre company is in residence at Hartnell College: The Western Stage. The collaboration between Hartnell College and The Western Stage provides students the opportunity to learn their craft within a professional context. Courses are designed to the community, for the general education student and for those who may pursue theatre as a major or as a career. Career options include actor, teacher or professor, director, agent, announcer, casting director, critic, or model. Careers with a technical emphasis include theatre technician, concert venue technician, theme park technician, stage manager, designer, art director, facilities manager, or technical direct.

FOR MORE INFORMATION, CONTACT: Marnie Glazier at (831) 755-6980, mgglazier@hartnell.edu, K-114

PROGRAM OUTCOMES

Upon successful completion of the Associate in Arts in Theatre Arts for Transfer Degree, the student should be able to:

- Demonstrate proficiency in theatre terminology and performance skills, its basic theories, history and techniques, culminating in a live performance on stage.
- Conduct and apply analysis and research skills of dramatic texts and instructional materials.
- Work effectively as an ensemble member in a fully produced production formulating alternative solutions to theatrical production situations.
- Analyze, interpret, and evaluate their own and others’ work in the theatre as a patron and participant.

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

1. Complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is not an acceptable grade for courses in the major.

✓ REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAC-1</td>
<td>Introduction to Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-3</td>
<td>History of Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-10</td>
<td>Acting</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-20</td>
<td>Intro to Ensemble Play Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-21</td>
<td>Intro to Modern Play Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-22</td>
<td>Intro to Musical Theatre Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-24</td>
<td>Intro to World Theatre Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-25</td>
<td>Intro to Revival Play Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-26</td>
<td>Scenic Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-28</td>
<td>Make-up/Hair Techniques for the Stage</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-29</td>
<td>Stage Light and Sound</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-40</td>
<td>Stage Costuming Practicum</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9.0)

RESTRICTED MAJOR ELECTIVES (Select a minimum of 9 units from the following)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAC-11</td>
<td>Intermediate Acting</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-20</td>
<td>Intro to Ensemble Play Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-21</td>
<td>Intro to Modern Play Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-22</td>
<td>Intro to Musical Theatre Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-24</td>
<td>Intro to World Theatre Production</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-25</td>
<td>Intro to Revival Play Production</td>
<td>3.0</td>
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<td>TAC-26</td>
<td>Scenic Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-28</td>
<td>Make-up/Hair Techniques for the Stage</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-29</td>
<td>Stage Light and Sound</td>
<td>3.0</td>
</tr>
<tr>
<td>TAC-40</td>
<td>Stage Costuming Practicum</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9)

✓ REQUIRED GENERAL EDUCATION COURSES (Students can double-count General Education courses with major courses.)

Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:

A. Minimum units to meet CSU-GE breadth certification requirements (39 units): OR

- Minimum units to meet IGETC (34-37.00 units) certification requirements

B. Minimum units to meet IGETC (34-37.00 units) certification requirements

AA-T Theatre Arts Required Major and Restricted Electives

Electives(Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0

TOTAL 60.0

Students can double-count required degree courses and courses for General Education

TRANSFER STUDENTS: Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalences and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
THEATRE ARTS—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTIONS

The Theatre Arts or Drama is the study of human expression culminating in a live performance on stage. Theatre Arts includes the study of literature, as well as the disciplines and technologies required for performance. Above all, theatre is the in-depth study of the human condition whose purpose is to promote sensitivity and deeper understanding of oneself and others. Theatre Arts at Hartnell College celebrates drama and encourages participation by students of all ages and experience. Courses include traditional classroom experiences as well as dynamic and hands-on production environments. Students will develop their imagination and creative abilities.

The Hartnell College Theatre Arts program is unique in that a professional theatre company is in residence at Hartnell College: The Western Stage. The collaboration between Hartnell College and The Western Stage provides students the opportunity to learn their craft within a professional context. Courses are designed to the community, for the general education student and for those who may pursue theatre as a major or as a career. Career Options include actor, teacher or professor, director, agent, announcer, casting director, critic, or model. Careers with a Technical Emphasis include Theatre technician, concert venue, technician, theme park technician, stage manager, designer, art director, facilities manager, or technical director.

FOR MORE INFORMATION, CONTACT: Marnie Glazier at (831) 755-6980, mglazier@hartnell.edu, K-114

PROGRAM OUTCOMES

Upon successful completion of the Theatre Arts program, a student should be able to:

- Be proficient in theatre and performance, its basic theories, history and techniques, culminating in a live performance on stage.
- Demonstrate competency in theatrical design and technologies required for a live theatrical performance applying correct terminology.
- Comprehend human condition whose purpose is to promote sensitivity and deeper understanding of oneself.
- Conduct and apply analysis and research skills of dramatic texts and instructional materials.
- Work effectively as an ensemble member in a fully produced production formulating alternative solutions to theatrical production situations.
- Apply audition and job interview skills.
- Analyze, interpret, and evaluate their own and others’ work in the theatre as a patron and participant.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>TAC-1</td>
<td>Introduction to Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>TAC-3</td>
<td>History of Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>TAC-10</td>
<td>Acting I</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>TAC-11</td>
<td>Acting II</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ENG-17</td>
<td>The Contemporary Shakespeare</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (18.0)

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General Education 21.0

Theatre Arts Required Major Courses and Restricted Major Electives 18.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 18.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.

†These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
WELDING TECHNOLOGY—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Welding Technology program provides students with entry- and advanced-level employment skills in welding and metalworking techniques that are relevant to the needs of local employers and industries.

The program provides training in a variety of welding methods including SMAW, GTAW, GMAW and FCAW. Advanced level courses in plate and pipe welding prepare students for AWS welding certification testing. The program offers courses in Sheet Metal Fabrication and Welding Fabrication that focus on print reading and metalworking skills. In addition courses are offered in Architectural/Ornamental Ironwork fabrication and Toolmaking and Hardfacing techniques that are used in the construction and agriculture industries.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty on how best to complete the program in which you are enrolled.

FOR MORE INFORMATION, CONTACT: Michael Davis, (831) 755-6964, mldavis@hartnell.edu Alisal Campus, AC-B117

PROGRAM OUTCOMES

Upon successful completion of the Welding Technology Program, a student should be able to:

- demonstrate the use of welding and metal cutting processes safely and correctly.
- perform welding procedures in two or more methods on steel test plates in two or more welding positions.
- interpret and analyze fabrication prints, develop parts and cutting lists, and select and calibrate welding and cutting methods to fabricate assigned projects.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>AIT-169</td>
<td>Hazardous Materials and Industrial Safety</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-52</td>
<td>Sheet Metal Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-53</td>
<td>Welding Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-54</td>
<td>Advanced Arc Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-57</td>
<td>Pipe Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-58</td>
<td>Hardfacing and Surfacing</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-151</td>
<td>Gas and TIG Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-155</td>
<td>Ornamental Ironwork</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-156</td>
<td>Toolmaking</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (23.0)**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 10.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-50</td>
<td>Introduction to Drafting and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-52</td>
<td>Introduction to AutoCAD</td>
<td>2.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>EGN-1</td>
<td>Introduction to Engineering or Agricultural Equipment Fabrication</td>
<td>4.0 or 3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>AIT-172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>WLD-99</td>
<td>Cooperative Work Experience</td>
<td>1.0-4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (10.0)**

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td>General Education</td>
<td>21.0</td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td>Welding Required Major Courses and Restricted Major Electives</td>
<td>33.0</td>
</tr>
<tr>
<td>Language and Rationality (9 Units) A. Written Composition</td>
<td></td>
<td>ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td></td>
<td>TOTAL UNITS</td>
<td>60.0</td>
</tr>
</tbody>
</table>

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better also satisfies this requirement.

‡ These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalences and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
**WELDING TECHNOLOGY—CERTIFICATE OF ACHIEVEMENT**

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>AIT-169</td>
<td>Hazardous Materials and Industrial Safety</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-52</td>
<td>Sheet Metal Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-53</td>
<td>Welding Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-54</td>
<td>Advanced Arc Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-57</td>
<td>Pipe Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-58</td>
<td>Hardfacing and Surfacing</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-145</td>
<td>Special Projects</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-151</td>
<td>Gas and TIG Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-155</td>
<td>Ornamental Ironwork</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-156</td>
<td>Toolmaking</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (23.0)**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 6.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-50</td>
<td>Introduction to Drafting and Design Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-52</td>
<td>Introduction to AutoCAD</td>
<td>2.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>EGN-1</td>
<td>Introduction to Engineering</td>
<td>4.0</td>
</tr>
<tr>
<td>or</td>
<td>AIT-172</td>
<td>or Agricultural Equipment Fabrication</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>WLD-99</td>
<td>Cooperative Work Experience</td>
<td>1.0-4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101* or ESL-101*</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-151L1, L2, and L3**</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (29.0)**

*Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.
HOW TO READ THIS CATALOG

Course Title

MAT3A. Analytic Geometry and Calculus I (4)

Prerequisite: MAT-24 and MAT-25 with a grade of “C” or better or placement by Hartnell’s assessment.

Offered: *

Advisory:

Lec 4 Hrs

The first course in a three-course series. A study of limits, differentiation, differentials, integration, and applications of differentiation and integration. This course is primarily for students majoring in mathematics, physics, chemistry, biology, computer science, and engineering.

[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]

[C-ID MATH 210]

Units

Course Grading

- If no grading system is specified for a course, a letter grade will be issued.
- If Pass/No Pass only is specified, a P or NP will be issued.
- If Pass/No Pass option is indicated, a letter grade will be issued unless the student files a petition to complete the course with the P/NP option.
- No grades will be issued for non-credit courses.

Offered: Fall, Spring, Summer, Fall-even, Spring-even, Fall-odd, Spring-odd annotations indicate the semester(s) during which Hartnell College plans to offer this course. For courses not offered in 2016-2017:

1. If an annotation of 2017-2018 or 2018-2019 indicates the year during which Hartnell College plans to offer this course.
2. If a course has no offering annotation it indicates the course is under review and course offerings will be limited.

Many factors influence course offerings, including state wide budgetary and policy making decisions, industry trends, and other unpredictable factors. We are providing semesters and years of planned offering to the best of our knowledge in support of educational planning, access, success and completion. Such annotations should not be seen as guarantees of course offerings sequences. Please check the schedule of classes for any given semester to confirm and finalize schedule planning and readjust education plans as needed.

DE/HYBRID ADVISORY:

Students taking web-based and hybrid courses must have basic computer skills for operating Microsoft Word and e-mail, including sending attachments and files. Students also need access to the Internet and must have adequate hardware and software capabilities. Access to computers is also available at the Hartnell College Library/LRC.
Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system used for transfer courses that is independent of the actual course numbers assigned. Each C-ID number identifies a lower-division, transferable course commonly articulated between the California community colleges and CSU, and independent colleges/universities. The C-ID number conveys that any course at another college bearing the same C-ID number will be accepted by that institution. In other words the C-ID designation can be used to identify comparable courses at different institutions. Students should check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the ASSIST database at www.assist.org for specific information on C-ID course designations and to confirm how each course will be accepted at a particular four-year institution. Counselors can always help them interpret or explain this information.

Each campus retains its own course number prefix and numbers. An example of the C-ID numbering system is Hartnell College’s English 1A (C-ID ENGL 100). The number 1A is Hartnell College’s number; C-ID ENGL 100 is the designation that is used to number the equivalent articulated course in the C-ID numbering system. Many of the C-ID numbered courses will be found in the Associate Degree for Transfer (AA-T or AS-T) degrees.

C-ID Courses at Hartnell

<table>
<thead>
<tr>
<th>C-ID</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-52</td>
<td>Sales and Service in Agribusiness</td>
</tr>
<tr>
<td>ABT-57</td>
<td>Agriculture Computer Applications</td>
</tr>
<tr>
<td>ABT-90</td>
<td>Soil Science</td>
</tr>
<tr>
<td>ABT-92</td>
<td>Plant Science</td>
</tr>
<tr>
<td>ADJ-1</td>
<td>Introduction to Administration of Justice</td>
</tr>
<tr>
<td>ADJ-2</td>
<td>Community Relations and the Justice System</td>
</tr>
<tr>
<td>ADJ-3</td>
<td>Concepts of Criminal Law</td>
</tr>
<tr>
<td>ADJ-4</td>
<td>Criminal Evidence</td>
</tr>
<tr>
<td>ADJ-5</td>
<td>Criminal Court Process</td>
</tr>
<tr>
<td>ADJ-8</td>
<td>Criminal Investigation</td>
</tr>
<tr>
<td>ADJ-10</td>
<td>Juvenile Procedures</td>
</tr>
<tr>
<td>ADJ-50</td>
<td>Introduction to Corrections</td>
</tr>
<tr>
<td>ADJ-51</td>
<td>Control and Supervision in Corrections</td>
</tr>
<tr>
<td>ART-1</td>
<td>Physical Anthropology</td>
</tr>
<tr>
<td>ART-1A</td>
<td>Art History Survey I</td>
</tr>
<tr>
<td>ART-1B</td>
<td>Art History Survey II</td>
</tr>
<tr>
<td>ART-3</td>
<td>Drawing and Composition</td>
</tr>
<tr>
<td>ART-10</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td>ART-12A</td>
<td>Design</td>
</tr>
<tr>
<td>ART-13</td>
<td>Three-Dimensional Design</td>
</tr>
<tr>
<td>ART-15A</td>
<td>Ceramics A</td>
</tr>
<tr>
<td>ART-33</td>
<td>Weaving as an Art Form</td>
</tr>
<tr>
<td>ART-72</td>
<td>Introduction to Digital Arts</td>
</tr>
<tr>
<td>BIO-1</td>
<td>Fundamental Biological Concepts</td>
</tr>
<tr>
<td>BIO-1 + BIO-2 + BIO-3</td>
<td>Fundamental Biological Concepts + General Zoology + General Botany</td>
</tr>
<tr>
<td>BIO-2</td>
<td>General Zoology</td>
</tr>
<tr>
<td>BIO-3</td>
<td>General Botany</td>
</tr>
<tr>
<td>BIO-5</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>BIO-6+</td>
<td>Introduction to Physiology and Physiology Laboratory</td>
</tr>
<tr>
<td>BUS-1A</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>BUS-1B</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>BUS-18</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>BUS-32</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>CHM-1A</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHM-1A + CHM-1B</td>
<td>General Chemistry I + General Chemistry II</td>
</tr>
<tr>
<td>CHM-12A</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHM-12B</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHM-22</td>
<td>The Science of Chemistry</td>
</tr>
<tr>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
</tr>
<tr>
<td>COM-2</td>
<td>Argumentation and Debate</td>
</tr>
<tr>
<td>COM-3</td>
<td>Survey of Human Communication</td>
</tr>
<tr>
<td>COM-8</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>COM-9</td>
<td>Oral Interpretation of Literature</td>
</tr>
<tr>
<td>COM-35</td>
<td>Intercultural Communications</td>
</tr>
<tr>
<td>CSS-1</td>
<td>Introduction to Computer Science &amp; Programming Fundamentals</td>
</tr>
<tr>
<td>CSS-1</td>
<td>Introduction to Computer Science &amp; Programming Fundamentals</td>
</tr>
<tr>
<td>CSS-3</td>
<td>Computer Architecture and Assembly Language Programming</td>
</tr>
<tr>
<td>CSS-44</td>
<td>Computer Science &amp; Information Systems</td>
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<tr>
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<td>EGN-7</td>
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<td>GEL-6</td>
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Hartnell College Catalog/2016-2017
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ADJ-1. Introduction to Administration of Justice (3)

Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring, Summer
Lec 3 Hrs
Provides an overview of the American criminal justice system and the various subsystems. Focuses on the roles and role expectations of criminal justice agencies in their interrelationships in society and emphasizes the concepts of criminal law and its effect on policing, crime causation, the Constitution and its effect on law enforcement, punishment and rehabilitation. Also discusses ethics, education and training for professionalism in the social system.

[CSU; UC; CSU-GE; AREA D0, IGETC AREA 4]
[C-ID AJ 110]

ADJ-2. Community Relations and the Justice System (3)

Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring
Lec 3 Hrs
A theoretical and conceptual overview of multicultural issues, including those relating to ethnicity, race relations, gender, age and sexual preference. The course focuses on cultural/ethnic groups in California and their relationship with law enforcement and justice administration, including courts and corrections. Explores the interaction of the criminal justice agents and the community; theoretical and conceptual overview of multicultural issues affecting human relations; effects of prejudice, bias, and discrimination; awareness of individual and cultural differences affecting human interaction and peacekeeping strategies in a diverse society.

[CSU; UC] [C-ID AJ 160]

ADJ-3. Concepts of Criminal Law (3)

Advisory: DE/Hybrid advisory: See page 145.
Offered: Fall, Spring, Summer
Lec 3 Hrs
An introduction to the legal system, the differences between civil and criminal law, the sources of law, and the court system. The course focus will be classifying, defining, and identifying crimes. Also explores defenses to crimes, and parties to crimes.

[CSU; UC; CSU-GE; AREA D8; IGETC, AREA 4]
[C-ID AJ 120]

ADJ-4. Criminal Evidence (3)

Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring
Lec 3 Hrs
An introduction to the legal system, the sources of law, the criminal court system, and the trial process. The course focuses in particular on the classifications and rules of evidence. Includes a thorough overview of legal issues in criminal evidence such as admissibility, constitutional protections including the Fourth Amendment, and the burden of proof. Also covered are general considerations in evidence such as inferences and presumptions, privilege, judicial notice, expert testimony, scientific, and demonstrative evidence.

[CSU] [C-ID AJ 124]

ADJ-5. Criminal Court Process (3)

Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring
Lec 3 Hrs
An introduction to the sources of law, the legal system, the criminal court trial process, the purposes of punishment, and participants in the criminal justice system. An in-depth analysis of the Constitution and its relationship to criminal procedure. Explores the laws of search, arrest, interrogation, arraignment, preliminary hearing, motion practice, trial procedure, sentencing, and post-conviction remedies.

[CSU] [C-ID AJ 122]

ADJ-8. Criminal Investigation (3)

Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring, Summer
Lec 3 Hrs
A course designed to teach the fundamentals of investigation; crime scene preservation of evidence; scientific aids; modus operandi; sources of information, interviews and interrogation; ethical challenges; surveillance; follow-up and case preparation; constitutional issues; and the role of the investigator in the trial process.

[CSU] [C-ID AJ 140]

ADJ-10. Juvenile Procedures (3)

Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Summer, Spring
Lec 3 Hrs
Discussion of the theories of juvenile delinquency and juvenile justice. Introduction to the functions, organization and jurisdiction of juvenile agencies. Study of juvenile crime, laws and social issues relating to youthful offenders. Examination of child abuse, domestic violence and gang membership. Examination of the Law Enforcement responses to juvenile issues.

[CSU] [C-ID AJ 220]

ADJ-11. Law Enforcement Report Writing (3)

Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring, Summer
Lec 3 Hrs
An introductory course emphasizing the practical aspects of organizing and preparing law enforcement written reports.

[CSU]

ADJ-12. Legal Aspects of Corrections (3)

Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall
Lec 3 Hrs
An overview of the historical framework, concepts and precedents that guide correctional practice. Topics include the corrections environment, civil rights of prisoners and liability of correctional officers.

[CSU]
ADJ-21A. Narcotics and Dangerous Drugs (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring
Lec 3 Hrs
History, definition, identification, characteristics and treatment strategies of legal and illegal drugs and the enforcement of laws relating to them.
[CSU]

ADJ-25. Introduction to Paralegal/Legal Assistantship (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall
Lec 3 Hrs
Provides an overview of the legal assistant profession, and a general introduction to the legal environment and foundational skills necessary to succeed in legal specialty courses. Course includes a perspective of the role of the legal assistant in the modern law office, beginning legal research and analysis, issues related to our legal system and the courts, law office administration, and ethical considerations.
[CSU]

ADJ-30. Sexual Assault Investigation (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring
Lec 3 Hrs
An introduction to the legal system and in-depth study of the institutional response to victims of sexual assault. Covers the elements of the most commonly encountered sex crimes, current and recommended investigative techniques, community and institutional response to victims of sex crimes, and methods of improving services with a focus on the needs of the victim.
[CSU]

ADJ-33. Constitutional Law for Criminal Justice Professionals (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring
Lec 3 Hrs
Focuses on the United States Constitution and its relevance to criminal justice issues. Beginning with an overview of our legal system and some instruction in basic legal research, the course examines constitutional amendments influencing the criminal justice system such as freedom of speech and the press, gun control, constitutional search and seizure, the exclusionary rule, due process of law and confessions, the right to counsel and a fair trial, bail, fines, and punishment. Students will also appraise the impact of constitutional principles in the fields of law enforcement, corrections, and the practice of law.
[CSU]

ADJ-34. Civil Litigation (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring
Lec 3 Hrs
This course will provide students with a fundamental understanding of how to prepare a civil case for trial. Topics include California procedural statutes and court rules governing civil litigation, the attorney-client relationship, court organization, the steps in case preparation, and the post-litigation concerns. Students will practice client interviewing, drafting of pleadings and motions, deposition summaries, evidence gathering and discovery procedures.
[CSU]

ADJ-36. Legal Research and Writing (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Summer
Lec 3 Hrs
This course provides an overview of the fundamentals of legal research and writing. Topics include online legal research, law library references such as Shepard's Citations, West Digest system and key numbers, American Law Reports, legal periodicals, and annotated state and federal statutes. The course also focuses on the development of written communication skills essential to any law-related correspondence, memoranda, pleadings, motions, and discovery documents.
[CSU]

ADJ-50. Introduction to Correctional Science (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring
Lec 3 Hrs
This introductory course provides a historical overview of adult and juvenile corrections philosophy. The focus is on legal issues, operations procedure, general laws, and different populations at federal, state, and local correctional facilities. In addition, alternatives to incarceration will be analyzed and the relationship between corrections and other components of the judicial system will be examined.
[CSU] [C-ID AJ 200]

ADJ-51. Criminology (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring
Lec 3 Hrs
An examination of the theories of the psychological and social factors underlying crime and criminal behavior, crime statistics, patterns of antisocial behavior, treatment and preventative measure.
[CSU; UC; CSU-GE, AREA D0; IGETC, AREA 4] [C-ID SOCI 160]
ADJ-61. Control and Supervision in Corrections (3)
**Pass/No Pass Option**
*Advisory: DE/Hybrid advisory: See page 145*
*Offered: Fall*
**Lec** 3 Hrs
An overview of inmate supervision in local, state and federal correctional institutions. Covers institutional daily living, communication, crisis situations, inmate subculture, violence, and the use of force on inmates. Also describe the roles the offender and the correctional officer play.
[CSU]

ADJ-76. Introduction to Forensics (3.5)
**Pass/No Pass Option**
*Advisory: DE/Hybrid advisory: See page 145*
*Offered: Fall, Spring*
**Lec** 3 Hrs; **Lab** 1.50 Hrs
Overview of forensic science in collecting and evaluating evidence as a component of the criminal justice system. This course provides an introduction to the role of forensics and criminal investigations. It examines the methods utilized in the forensic analysis of crime scenes, pattern evidence, instruments, firearms, questioned documents, and controlled substances.
[CSU] [C-ID AJ 150]

ADJ-102. PC 832 Arrest and Firearms (3.5)
**Pass/No Pass Option**
*Prerequisite: Prior to the start of ADJ-102, the California Commission for Peace Officers Standards and Training (POST) and the California Penal Code 1311.5 requires from each student Department of Justice written certification stating that the student has no criminal history that would disqualify him/her from using a firearm.*
*Offered: Fall, Spring*
**Lec** 2.75 Hrs; **Lab** 2.25 Hrs
Designed to satisfy the curriculum standards of the Commission on Peace Officer Standards and Training (POST) as required by Penal Code 832 for peace officers. Topics include: professional orientation; introduction to criminal law with particular attention paid to Laws of Arrest, evidence, search and seizure; investigation; community relations; verbal and written communication; arrest and control techniques; firearms; and Cultural Diversity/Discrimination, the use of firearms, situational use of deadly force, and arrest techniques. There will be a fee associated with the fingerprint clearance from the Department of Justice that is required prior to starting the firearms portion of the class.

ADJ-101. Engine Repair (4)
*Offered: Fall, Spring*
**Lec** 2 Hrs **Lab** 6 Hrs
Students will learn principles of operation, system service procedures for systems found in today's automotive engines. Course will emphasize shop and personal safety, proper use of hand and precision engine measurement tools, operation of general shop equipment, research to locate pertinent information to perform repairs, as well as how to utilize vehicle specifications on service manuals, and computer diagnostic software during hands-on repair practice. Students will also conduct engine disassembly and assembly, operation, diagnosing engine problems, engine removal, inspection, and in-chassis repairs. Formerly AUT-103. Not open to students who have completed AUT-103 with a grade of "C" or better.

AAT-100. Introduction to Automotive Repair (4)
*Offered: Fall*
**Lec** 2 Hrs **Lab** 6 Hrs
An introduction to automotive mechanics and technology for students beginning study as an automotive technician or who desire in-depth knowledge regarding today’s automobiles. Covers principles of operation and system servicing procedures for systems found on today’s cars. Provides instruction in shop and personal safety, proper use of tools and equipment, completion of basic service and analysis procedures, and review of repairs and specifications from computer based service manuals. Formerly AUT-50. Not open to students who have completed AUT-50 with a grade of "C" or better.

AAT-101. Engine Repair (4)
*Offered: Fall, Spring*
**Lec** 2 Hrs **Lab** 6 Hrs
Students will learn principles of operation, system service procedures for systems found in today’s automotive engines. Course will emphasize shop and personal safety, proper use of hand and precision engine measurement tools, operation of general shop equipment, research to locate pertinent information to perform repairs, as well as how to utilize vehicle specifications on service manuals, and computer diagnostic software during hands-on repair practice. Students will also conduct engine disassembly and assembly, operation, diagnosing engine problems, engine removal, inspection, and in-chassis repairs. Formerly AUT-103. Not open to students who have completed AUT-103 with a grade of "C" or better.

AAT-110. Climate Control (4)
*Advisory: ENG-101 or ESL-101 and MAT-121 and Successful completion of AAT-120, or prior practical experience in an automotive shop environment is recommended.*
*Offered: Fall-even*
**Lec** 2 Hrs **Lab** 6 Hrs
This course is a study of heating, ventilation, and air conditioning (HVAC) systems, which are designed to maintain a comfortable climate in automotive vehicles.
AAT-120. Electrical and Electronic Systems (4)

Advisory: ENG-101 or ESL-101 and MAT-121 and AAT-120
Offered: Fall, Spring
Lec 2 Hrs Lab 6 Hrs

Course is designed to give students a solid foundation in the fundamental concepts of electricity and electronics as they relate to automotive technology. Students will study automotive electrical and electronic systems, essential theories of electricity, function and design of electrical components, wiring and circuit diagrams, automotive batteries, starting systems, lighting circuits, electrical accessories, introduction to the body computer, vehicle communication networks, advanced lighting circuits, instrumentation and warning lamps, ignition systems, electronic chassis control and accessory systems, and passive restraint systems. This course introduces several fundamental theories and skills that will be used in other courses in the AAT Program. Students with no previous automotive technology knowledge may find it helpful to enroll in this course upon initial entry to the AAT program.

AAT-121. Electronic Systems and Controls (4)

Advisory: ENG-101 or ESL-101 and MAT-121 and AAT-120
Lec 2 Hrs Lab 6 Hrs

Course will review automotive electrical and electronic systems, related theories, electrical components, wiring and circuit diagrams, automotive diagnostics of batteries, starting systems, electrical accessories, electronic systems, body computer. Students will advance to vehicle communication networks, advanced lighting circuits, instrumentation and warning lamps, ignition systems, electronic chassis control and accessory systems, and passive restraint systems. The use of digital storage oscilloscope (DSO) and strategies for on-board diagnostics will also be discussed.

AAT-130. Engine Performance (4)

Advisory: ENG-101 or ESL-101 and MAT-121 and AAT-100 and AAT-120
Offered: Fall-odd
Lec 2 Hrs Lab 6 Hrs

Course covers diagnosis and repair of internal combustion engines, including ignition system diagnosis, repair procedures, valve adjusting, fuel system testing, turbochargers and superchargers, exhaust and intake systems diagnosis and repair, emission controls diagnosis and repair. Emphasis will be placed on proper use of tools and literature to perform adjustments and troubleshooting to maintain proper engine performance.

AAT-131. Fuel Systems and Emission Control (4)

Advisory: ENG-101 or ESL-101 and MAT-121 and AAT-130
Offered: Fall-odd
Lec 2 Hrs Lab 6 Hrs

A comprehensive study of engine management systems that include fuel, ignition, emissions control systems, and networked accessories. Students will learn the theory of operation, diagnosis, adjustments and repair of engine management systems to include current generation onboard diagnostics (OBD II). Use of the oscilloscope, dynamometer, scanners, and infrared gas analyzer is stressed. Students will be introduced to hybrid vehicle operation and service precautions, as well as to the California Smog Check Program. Formerly AUT-72. Not open to students who have completed AUT-72 with a grade of "C" or better.

AAT-140. Brake Systems (4)

Advisory: ENG-253 or ESL-165 and MAT-201
Offered: Spring
Lec 2 Hrs Lab 6 Hrs

Course covers theory of brake systems, and provides hands-on experience in the service and repair of conventional ABS brake systems. Automotive repair exercises develop skills with equipment commonly used in servicing automotive brake systems. Students will learn to identify and interpret brake system concerns; determine necessary repair action; research applicable vehicle and service information, such as brake system operation, vehicle service history, service precautions, and technical service bulletins. Formerly AUT-71. Not open to students who have completed AUT-71 with a grade of "C" or better.

AAT-141. Steering and Suspension Systems (4)

Offered: Spring-odd
Lec 2 Hrs Lab 6 Hrs

Course covers toe, camber, caster, axle inclination, turning radius, and axle alignment affecting tire wear, directional stability and handling; inspection and adjustment of manual steering gear, preload and backlash. Additionally, course content analyses the power steering system, operation of an electronically variable power steering system, tire and wheel theory and service, hydraulic shock absorbers and McPherson strut suspensions theory. Formerly AUT-83. Not open to students who have completed AUT-83 with a grade of "C" or better.

AAT-150. Manual Transmission and Drive Train (4)

Advisory: ENG-253 or ESL-165 and MAT-201 and AAT-101
Offered: Fall-even
Lec 2 Hrs Lab 6 Hrs

A comprehensive study of power drive train systems found in automotive vehicles. Topics the class will cover include: drive train theory, drive trains and axles, clutches, front wheel drive (FWD), rear wheel drive (RWD) and four wheel drive (4WD); manual transmissions systems; drive shafts and universal joints; differentials and drive train axles; drive train electrical and electronic systems. Formerly AUT-81. Not open to students who have completed AUT-81 with a grade of "C" or better.

AAT-151. Automatic Transmission(4)

Prerequisites: AAT-120 with a grade of "C" or better.
Advisory: ENG-253 or ESL-165 and MAT-201
Offered: Fall-even
Lec 2 Hrs Lab 6 Hrs

Covers automatic transmission drive train theory, fundamentals and repair; electronic controls; transmission designs; torque converters and oil pumps; hydraulic circuits and controls; gears and shafts, as well as reaction and friction units. Formerly AUT-82. Not open to students who have completed AUT-82 with a grade of "C" or better.
ADVANCED DIESEL TECHNOLOGY

ADT-100. Diesel Engine Technology (4)

Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Fall, Spring
Lec 2 Hrs; Lab 6 Hrs
This course explores principles, systems service, and troubleshooting for today's heavy-duty diesel engines and equipment. Students will learn to troubleshoot, service and repair diesel engines and equipment using varied diagnostic sources in print and electronic formats. The course will cover industry standards of personal and environmental safety practices, including personal protective equipment (PPE), proper lifting practices, proper handling of hand tools, precision engine measurement tools, and power equipment. Students will learn how to properly handle, store, and dispose of hazardous waste and materials in accordance with Federal, State, and local laws and regulations.

ADT-101. Diesel Engine Rebuild (4)

Advisory: ENG-101 or ESL-101 and MAT-121
Offered: Fall, Spring
Lec 2 Hrs; Lab 6 Hrs
This course will guide students through the comprehensive steps to rebuilding a heavy-duty engine. Students will learn theory of engine operation systems. Topics include: study of diesel engine construction; engine removal; disassembly; inspection; engine operation; diagnosing engine problems; in-chassis repairs.

ADT-110. Electrical and Electronic Systems (4)

Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Fall, Spring
Lec 2 Hrs; Lab 6 Hrs
This course is designed to give students a strong foundation in the fundamental concepts of electricity and electronics as they relate to advanced diesel technology vehicles and equipment. Students will study basic theories of electricity, electrical components function and design, wiring and circuit diagrams, introduction to vehicle control modules and their role in the electronic controls, as well as vehicle communication networks and chassis controllers and accessory system.

ADT-111. Electrical Systems and Controls (4)

Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Fall
Lec 2 Hrs; Lab 6 Hrs
This course will cover electrical theories, electrical troubleshooting and service, wiring and circuit diagrams, electronic engine controls system diagnosis and service, computers and computer controlled engine systems, electronic diesel fuel injection diagnosis and service.

ADT-120. Climate Control (4)

Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Fall-odd
Lec 2 Hrs; Lab 6 Hrs
This course is a study of heating, ventilation, and air conditioning (HVAC), which is designed to maintain a comfortable temperature in heavy duty vehicles and equipment.

ADT-121. Preventive Maintenance (4)

Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Fall, Spring
Lec 2 Hrs; Lab 6 Hrs
This course will cover the full spectrum of systems found in diesel trucks and equipment, including the electrical, lubrication, heating, cooling, exhaust, and transmission systems. Students will learn essential maintenance and servicing tasks performed on heavy-duty diesel trucks and equipment. The tasks performed by students in this course correspond to guidelines set by the U.S. Department of Transportation, Rules and Regulations, Section 396.

ADT-130. Brake Systems (4)

Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Spring-even
Lec 2 Hrs; Lab 6 Hrs
This course is a study of brake systems in heavy-duty diesel vehicles and equipment. Students will examine air brake, hydraulic brake, and drum brake systems, as well as hydraulic and air brake parking systems, and anti-lock brake theory and maintenance. Students will learn to service and repair wheel bearing and seals.

ADT-131. Steering and Suspension Systems (4)

Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Fall
Lec 2 Hrs; Lab 6 Hrs
This course is a comprehensive study of heavy-duty diesel steering and suspension systems. Students will examine alignment and service; suspension systems and service; chassis system and service; front wheel drive axles fundamentals and service. Students will learn how to properly handle, store and dispose of hazardous waste and materials in accordance with Federal, State, and local regulations.

ADT-140. Power Drive Train (4)

Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Spring
Lec 2 Hrs; Lab 6 Hrs
This course is a comprehensive study of the heavy-duty diesel power drive train found in diesel powered equipment and vehicles. Topics the class will cover include; drive train theory, drive trains and axles, clutches manual transmissions, drive shafts and universal joints, differentials and drive train axles, drive train electrical and electronic systems.
ADT-141. Automatic Transmission (4)
Advisory: ENG-101 or ESL-101 and MAT-121 with a grade of "C" or better.
Offered: Fall, Spring
Lec 2 Hrs; Lab 6 Hrs
This course will cover automatic transmissions drive train theory, fundamentals and repair; electronic controls; transmission designs, torque converters and oil pumps; hydraulic circuits and controls; gear and shafts, as well as reaction and friction units. Students will be expected to master personal and environmental safety practices that are standard in the heavy-duty diesel industry.

AGRICULTURAL AND INDUSTRIAL TECHNOLOGY

AIT-70. Introduction to Mechanized Agriculture (3)
Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
This course involves basic mechanical skills in woodworking, cold metal, electricity, plumbing, concrete, and project construction skills as related to farm maintenance and repair. Hand and power tool use skills will be developed. Safety practices for all mechanical areas will be covered. Formerly AGR-56. Not open to students who have completed AGR-56 with a grade of "C" or better.

[CSU] [C-ID AG MA 104L]

AIT-71. Agricultural and Industrial Equipment Operation (3)
Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
Design principles, selection, maintenance, adjustment, and safe operation of wheel and track type tractors used in agriculture and in the construction industry. Students will operate a variety of equipment. Principles and application of safety will be stressed. Includes field trips.

[CSU]

AIT-75. Agricultural Machinery Management (3)
Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
Use, maintenance, adjustment, calibration, and repair of the equipment commonly used in California agriculture. Emphasis on primary and secondary tillage, planting, chemical application, and harvesting equipment. The selection and operation of both machinery and tractors will be practiced. Safety will be stressed throughout. Formerly AGR-94. Not open to students who have completed AGR-94 with a grade of "C" or better.

[CSU; UC]

AIT-130. Introduction to Metal Fabrication (3)
Prerequisite: AIT-70 with a grade of "C" or better.
Lec 1.50 Hrs; Lab 4.50 Hrs
Introduction to metal fabrication; use of shop tools and equipment; and to the principles of safe setup, planning, layout and fabrication of projects.

AIT-169. Hazardous Materials and Industrial Safety (1)
Offered: Fall, Spring
Lec 1 Hr
A basic course in all aspects of safety as it relates to industry. The course will cover the following topics: Hazardous Materials as it pertains to the specific trades. Examples are construction, welding, auto repair, electronics, auto collision repair, health care services, personal protective equipment, materials handling and storage, industrial hygiene, safety inspections, and general industrial safety of proper use of tools and machines. Formerly MEC 169 and AGR 169. Not open to students who have completed AGR 169 or MEC 169 with a grade of "C" or better.

AIT-172. Agricultural Equipment Fabrication (3)
Offered: Fall, Spring
Lec 2 Hrs; Lab 3 Hrs
Involves the design and fabrication of agricultural and industrial equipment. Students will design equipment, select materials, estimate costs and fabricate a project. Principles and application of safety will be stressed. May include field trips.

AIT-173. Agricultural Structures (3)
Lec 2 Hrs; Lab 3 Hrs
Introductory course in planning, designing and building small buildings, fences, gates and other structures necessary to agricultural enterprises. Topics to include characteristics and types of structures used in agriculture, as well as fabrication techniques and costs of materials. A practical course in building using metal, wood and other materials from planning to completion.

AIT-174. Ag Machinery Service & Safety (3)
Lec 2 Hrs; Lab 3 Hrs
An applied study of equipment service and safety practices. Covers equipment service and basic troubleshooting, accident causation and prevention in the shop with a variety of tractors and machinery. Normal safety practices will be stressed. Supervised field operation and field trips will be required.

AIT-176. Hydraulics & Pneumatics (3)
Offered: Spring
Lec 3 Hrs
Basic fundamentals of hydraulic and pneumatic systems: components, applications, troubleshooting malfunctions, maintenance and repair. Formerly MEC-56. Not open to students who have completed MEC-56 with a grade of "C" or better.

[CSU]

AIT-178. Industrial Electricity (3)
Offered: Spring
Lec 3 Hrs
A study of electrical maintenance in plant operations. Stresses safety, proper use of tools, principles of electricity, basic electrical circuits, electrical conductors, grounding techniques, wiring practices and layouts. Includes electrical codes, motor controls, safety switches and relays. Formerly MEC-53. Not open to students who have completed MEC-53 with a grade of "C" or better.
AIT-180. Industrial Workplace Skills (1)

Offered: Fall, Spring

Lec 1 Hr

Covers basic work and personal skills needed for success on the job in an industrial environment.

AGRICULTURE BUSINESS AND TECHNOLOGY

ABT-41. Pesticide Applicator Certification Training (3)

Offered: Spring

Lec 3 Hrs

Common pests and their management, pesticide labels, mixing and applying pesticides, safety, and additional laws and regulations relating to pesticides. Protecting the environment will also be covered. Special category certifications will be covered depending on class need/interest. Designed to prepare students for the state pesticide laws and regulations exam.

[CSU]

ABT-49. Introduction to Agriculture Business (3)

Offered: Fall

Lec 3 Hrs

A survey and basic understanding of the business and economics of the agriculture industry. It is an introduction to the economic aspects of agriculture and their implications to the agricultural producer, consumer and the food system. The management principles encountered in the day-to-day operation of an agricultural enterprise are stressed as they relate to the decision making process.

[CSU; UC]

ABT-52. Sales and Service in Agribusiness (3)

Offered: Spring

Lec 3 Hrs

Involves the study of principles and practices of the selling process: selling strategies and approaches, why and how people buy, prospecting, territory management, and customer service. Self-management, communication, and interpersonal skills necessary in developing managerial abilities, leadership qualities, and facilitating teamwork within the agribusiness sector will be explored.

[CSU; UC] [C-ID AG AB 112]

ABT-53. Agribusiness Economics (3)

Offered: Fall

Lec 3 Hrs

Designed to further a student's understanding of how agriculture and agricultural production systems work within global economic systems, including basic economic concepts, supply and demand, pricing and marketing considerations, production factors, resource allocation, cost analysis, problem specific to agriculture, plus state and federal farm programs affecting the economic positions of agriculture companies.

[CSU; UC]

ABT-54. Agriculture Marketing (3)

Offered: Spring

Lec 3 Hrs

Survey of marketing aspects of the agricultural industry. An overview of the structure and institutional aspects of the marketing system including global agricultural markets. Industry studies of the marketing of selected locally grown commodities will be made. Course designed for students interested in Agriculture Business and Agriculture Production major.

[CSU]

ABT-57. Agriculture Computer Applications (3)

Advisory: Students should have basic familiarity with the use of computers (email, word processing) prior to taking this course.

Offered: Fall

Lec 2 Hrs; Lab 3 Hrs

Computer use in the workplace with emphasis on agribusiness situations. Computer applications including word-processing, spreadsheets, databases, and presentation managers will be covered. Specific applications of database systems in agriculture will be discussed: traceback systems, field and facilities monitoring, inventory control, financial tracking. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design and other software appropriate to agribusiness.

[CSU; UC] [C-ID AG AB 108]

ABT-58. Agriculture Laws & Regulations (3)

Offered: Spring

Lec 3 Hrs

An introduction to the laws and regulations affecting the agriculture industry. Topics include government agencies and their functions, public and employee safety, insurance, agriculture organizations, labor and land issues, and water and air quality issues.

[CSU]

ABT-66. Introduction to Geographic Information Systems (GIS) (3)

Offered: Fall-even

Lec 2 Hrs; Lab 3 Hrs

Introduction to the fundamentals of Geographic Information Systems including data collection and input, data management, spatial query and analysis. Defining of a problem to study, analyze and develop solutions using GIS Technology.

[CSU]

ABT-67. Intermediate GIS with Applications to Agriculture (3)

Prerequisite: ABT-66 with a grade of "C" or better.

Offered: Spring-even

Lec 2 Hrs; Lab 3 Hrs

Intermediate topics in GIS with application to agricultural problems. Students will have the opportunity to expand on the skills learned in previous GIS courses through instructor and student-led discussions, literature readings, and labs. Course content will cover intermediate topics on surface analysis, remote sensing, spatial database design, and building geoprocessing models. Project design, implementation and management.

[CSU]
ABT-80. Introduction to Sustainable Agriculture and Food (3)

*Offered: Spring

Lec 2 Hrs; Lab 3 Hrs

This course introduces the topic of environmental and social sustainability in agriculture emphasizing a multi-disciplinary analysis of food and farming systems. Students will learn the history of agricultural development and the influence of agricultural technologies and land use practices on agro-ecosystem functioning, environmental quality, and human health. The course examines the ecology, environmental science, sociology and economics of agricultural systems. The course concludes with an assessment of the social, economic and political obstacles, opportunities and enabling environments for the widespread adoption of more environmentally sustainable and socially equitable food and farming systems.

[CSU]

ABT-81. Integrated Pest Management Principles in Entomology (3)

*Offered: Spring

Lec 2 Hrs; Lab 3 Hrs

Introduction to insects and mites of economic importance to agriculture. Covers the morphology, taxonomy, identification, life cycles, host, habitat relationships, and control methods of insects of economic importance. Collection and labeling of specimens will be required. Field trips required.

[CSU]

ABT-82. Integrated Pest Management Principles in Weed Science (3)

*Advisory: BIO-10 or ABT-92 is strongly advised.

*Offered: Fall

Lec 2 Hrs; Lab 3 Hrs

Introduction to the classification, identification, and life cycle of common and poisonous weeds in California which are detrimental to cultivated crops, grasslands, animals, and humans. Management practices include: prevention, mechanical, biological, and chemical methods. Weed establishment and chemical resistance are also covered. Collection and labeling of specimens are required. Field trips required.

[CSU]

ABT-83. Integrated Pest Management Principles in Plant Pathology (3)

*Offered: Spring

Lec 2 Hrs; Lab 3 Hrs

The course is a study of agents, disease cycles, symptomology, and management of plant diseases. Management practices include prevention, cultural, chemical, and biological methods.

[CSU]

ABT-84. Agriculture Enterprise Project (2)

*Advisory: Students should have some basic familiarity with safe farming practices.

*Offered: Spring

Lec 1 Hr; Lab 3 Hrs

Students will gain practical field experience in vegetable or horticultural crop production. Projects may be developed with an emphasis on organic or conventional production systems. Working cooperatively in small groups, students will learn to develop a small scale production plan and complete the entire production cycle. Field projects will include exposure to the entire range of field operations: planting, pest management, and harvest. Greenhouse projects will include exposure to a complete cycle of greenhouse operations: planting, pest management, and harvest. Designed for students with a high level of commitment to agriculture.[CSU]

ABT-90. Soil Science (3)

*Offered: Fall, Spring

Lec 2 Hrs; Lab 3 Hrs

Provides a basic knowledge of the genetic, physical, chemical, and biological properties of soils. Explores principles involved in the interpretation of soils information for land use management, (including agricultural production and non-agricultural uses), and conservation. Includes a weekly laboratory activity.

[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]

[C-ID AG PS-128L]

ABT-91. Irrigation Practices and Materials (3)

*Offered: Spring

Lec 2 Hrs; Lab 3 Hrs

Principles and practices of California water delivery including: plant-soil-moisture relationships and water movement in the soil; water quality, water law, measurement of water; evaluation of irrigation methods, systems, wells and pumps. Laboratory required.

[CSU]

ABT-92. Plant Science (3)

*Offered: Spring

Lec 2 Hrs; Lab 3 Hrs

An introduction to plant science including structure, growth processes, propagation, physiology, growth media, biological competitors, and post-harvest factors of food, fiber, and ornamental plants.

[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

[C-ID AG PS 106L]

ABT-93. Product Processing & Cooling (3)

*Offered: Fall

Lec 3 Hrs

Introduction to the specializations of post harvest technology and cold chain management. Focuses on post-harvest handling, processing and cooling of fresh vegetable and fruit products as well as the cooling systems and equipment involved. Topics include post-harvest biology and physiology, harvesting systems, preparation for the fresh market, packaging, cooling systems and product processing. Food safety and sanitation will be introduced.

[CSU]

ABT-94. Agriculture Enterprise Project (2)

*Offered: Spring

Lec 1 Hr; Lab 3 Hrs

Students will gain practical field experience in vegetable or horticultural crop production. Projects may be developed with an emphasis on organic or conventional production systems. Working cooperatively in small groups, students will learn to develop a small scale production plan and complete the entire production cycle. Field projects will include exposure to the entire range of field operations: ground preparation, planting, irrigation, fertility management, pest management, and harvest. Greenhouse projects will include exposure to a complete cycle of greenhouse operations: planting, climate control systems, irrigation systems, fertility management, pest management, and sale or harvest of the finished crop. Designed for students with a high level of commitment to agriculture.[CSU]
ABT-95. Introduction to Small Fruit Science (3)
   **Offered:** Spring
   **Lec** 2 Hrs; **Lab** 3 Hrs
The botany, taxonomy, and plant development of small fruit crops in California including variety selection, climatic requirements and culture, production practices including site selection establishment, fertilization, pollination, irrigation, harvest, storage, processing, marketing, pest management, and pruning. Laboratory required.

[CSU]

ABT-96. Vegetable Crop Production (3)
   **Offered:** Spring
   **Lec** 2 Hrs; **Lab** 3 Hrs
Involves the study of vegetable production covering the botany, cultural aspects, harvesting, processing, growth characteristics, fertility, pests, and marketing of the major vegetable crops of the Central Coast and throughout California. Field trips to local vegetable production fields and the Hartnell East Campus facilities will be required. Formerly AGR-96. Not open to students who have completed AGR-96 with a grade of "C" or better.

[CSU]

ABT-97. Vineyard Production and Management (3)
   **Offered:** Fall
   **Lec** 2 Hrs; **Lab** 3 Hrs
Production and management practices of grapes and berries will be presented. Topics will include climate zones, soil selection, financing, farm organization, irrigation systems, field layout, varietal selection, nutritional needs, harvesting, labor management, marketing and budgeting. Students will be required to prepare a budget and calendar of operations.

[CSU; UC]

ABT-98. Fertilizers and Plant Nutrition (3)
   **Offered:** Spring
   **Lec** 2 Hrs; **Lab** 3 Hrs
Covers the composition, value, selection, and use of fertilizer materials and soil amendments. Soil, plant, and fertilizer relationships will be covered. Application practices currently being used in California will be discussed. Includes field trips.

[CSU]

ABT-99. Occupational Cooperative Work Experience Education (1 - 8)
   **Offered:** Fall, Spring
Occupational Work Experience is designed to assist students employed in a field related to their college major or career goals to develop on the job through structured opportunities for skill development and increased responsibilities.

[CSU]

ABT-101. Organic Vegetable Production (1.5)
   **Offered:** Fall
   **Lec** 1 Hr; **Lab** 1.50 Hrs
Intended for Agricultural Production majors and entrepreneurial students with interest in organic farming operations and organic production methods. Covers the practical aspects of developing a crop plan that meets USDA organic certification requirements and insures sustainable production for long-term farm viability. Students will develop a crop plan that includes the following areas of detail: choosing appropriate crops and cultivars, establishing crop rotations, planting annual cover crops, and managing soil fertility in organic systems.

ABT-102. Organic Field Production Methods (1.5)
   **Offered:** Fall
   **Lec** 1 Hr; **Lab** 1.50 Hrs
Intended for Agricultural Production majors and entrepreneurial students with interest in organic farming operations and organic production methods. Covers the practical field methods involved in soil preparation, nutrient management, farm equipment management and maintenance, plant disease management, irrigation set-up and management, weed control, and integrated pest management that insures sustainable production for long-term farm viability. Students will complete field designs for a model 0.5-acre organic farm with descriptions of all inputs, potential control methods, and monitoring methods for crop health.

ABT-103. Agriculture Whole Farm Planning and Recordkeeping for Small Farmers (1.5)
   **Offered:** Summer
   **Lec** 1 Hr; **Lab** 1.50 Hrs
Intended for Agricultural Production majors and entrepreneurial students with interest in organic farming operations and organic production methods. Covers the practical aspects of daily farm management with an emphasis on record-keeping and whole farm management. Students have a chance to actively manage organic and food safety certification as part of a student enterprise.

ABT-104. Agriculture Business Development for New Organic Farmers (1.5)
   **Offered:** Spring
   **Lec** 1 Hr; **Lab** 1.50 Hrs
Intended for Agricultural Production majors and entrepreneurial students with interest in starting their own farming operation and beginning the process of business planning. Covers the legal obligations, state regulations, and federal laws governing agricultural operations with a focus on developing a business and marketing plan. Students will incorporate business-planning concepts into a presentation at the end of the course sequence.
ABT-105. Marketing Opportunities and Growth for Organic Farming (1.5)
Offered: Spring
Lec 1 Hr; Lab 1.50 Hrs
Intended for Agricultural Production majors and entrepreneurial students with interest in organic farming operations and organic production methods. Covers the marketing and sales options for organic produce with a focus on diverse marketing options available to small growers. Students will research the advantages and disadvantages of different marketing channels, sales strategies, and pricing in a growing vegetable market that will be summarized into a presentation.

ABT-110. Careers in Agriculture and Technology (2)
Offered: Fall, Spring
Lec 2 Hrs
Introduction to educational opportunities and career development in agriculture and related fields. Includes portfolio and educational plan development and curriculum requirements that pertain to educational goals as they relate to agriculture majors. Assists students in setting goals and developing interpersonal and intrapersonal skills necessary for life-long success in obtaining, maintaining, and advancing in agriculture careers. Current events that impact agriculture and society will be discussed.

ABT-130. Introduction to Food Safety (1.5)
Offered: Spring
Lec 1.50 Hrs
An introductory course in food safety for those in agriculture majors and others interested in exploring career options. Covers conditions and practices that cause food borne illnesses, organisms responsible, elements of a food safety control system, worker sanitation, an introduction to best practices at the processing, retail and home kitchen. Field trips may be required.

ABT-131. Agricultural Practices for Food Safety (1.5)
Offered: Spring
Lec 1.50 Hrs
Focuses on establishing agricultural practices as they relate to the production of farm products from a food safety standpoint. Covers the specific guidelines for some key agricultural commodities, regulating and monitoring food safety guidelines, writing standard operating procedures, employee training, and technologies to assist in production of safe food. Field trips may be required.

ABT-132. Food Safety Management (1.5)
Offered: Spring
Lec 1.50 Hrs
Covers the creation and management of a food safety program including: evaluating current practices, creating and implementing a food safety program, documentation, pathogen behavior, and crisis management. Field trips may be required.

ABT-133. Facility Management for Food Safety (1.5)
Offered: Spring
Lec 1.50 Hrs
Covers food safety issues and concerns in the manufacturing facility including such: facility sanitation, recognizing potential hazards, analysis of problems in the cold chain, developing improved practices, HACCP principles, employee training, and the inspection process. Field trips may be required.

ABT-134. Environment Effects on Food Borne Pathogens (1.5)
Offered: Fall
Lec 1.50 Hrs
Potential environmental sources and transport mechanisms of food borne pathogens. Students will learn how to make informed decisions about the potential effects of local site conditions on food safety. Covers the role of site conditions in pathogen transport such as: livestock proximity, wildlife behavior and habitat, rainfall and irrigation runoff, soil types, slope, aspect, climate, soil erosion and deposition by water and wind, flooding, vegetation and the behavior of pathogens in the environment. Field trips may be required.

ABT-135. Introduction to Food Microbiology (1.5)
Advisory: Introductory course in Biology.
Offered: Fall
Lec 1 Hr; Lab 1.50 Hrs
An introduction to the principles of food microbiology and food safety. Investigation of the beneficial and harmful effects of microorganisms on food. Survey of the types of microbes found in various types of food, as well as methods for their detection. Evaluation of methods of microbial control and mechanisms of disease of important food microorganisms, as well as sources of food contamination. Examination of implementation and effectiveness of food safety programs. Field trips may be required.

ABT-160. Introduction to Agriculture (3)
Offered: Fall
Lec 3 Hrs
A survey of agriculture products and the businesses that produce, service, and supply those products. Focuses on Central Coast fresh vegetable, viticulture and berry production. A broad view of California, United States, and world production will also be covered. The skill sets required in those businesses will be discussed. Surveys some of the career choices in the agriculture specialty areas.

ABT-258. Agriculture Ambassadors (2)
Offered: Spring-odd
Lec 1 Hr; Lab 3 Hrs
Agriculture leadership training through application of individual and group leadership techniques. Requires participation as an Agriculture Ambassador team member in college recruitment activities, including giving recruitment presentations at off campus sites, hosting prospective student groups for on-campus visitations, and sponsoring recruitment activities for the local Agriculture industry.
AOD-1. Fundamentals of Chemical Dependency (3)
   Offered: Fall, Spring
   Lec 3 Hrs
   An introduction and overview of basic concepts of chemical dependency including the history of alcohol and other mood-altering substances in the U.S. Myths and stereotypes of alcohol and drug use will be examined as well as sociocultural factors that contribute to the use of drugs. Theories of chemical dependency and an overview of the effects of various drug categories on human behavior, treatment and recovery approaches will be included. Designed for students interested in obtaining CAADAC certification.
[CSU]

AOD-2. Pharmacology and Physiology of Alcohol and Other Drugs (3)
   Offered: Spring –odd, Fall-even
   Lec 3 Hrs
   An in-depth look at the physiologic action and effects of alcohol and other psychoactive drugs on the body and behavior. Emphasis is placed on the pharmacologic and neurobiological effects and medical consequences of abuse and addiction. Includes the pharmacologic basis of medications used for various psychiatric disorders as well as treatment considerations for substance abuse and dependency. Designed for students interested in obtaining CAADAC certification.
[CSU]

AOD-3. Intervention, Treatment and Recovery (3)
   Offered: Spring
   Lec 3 Hrs
   An introduction to the theory and practice of chemical dependency counseling with special emphasis on treatment planning, implementation and documentation. The core functions of the chemical dependency counselor in the early intervention, assessment and treatment planning phases of recovery counseling will be introduced and developed. The need to interface with others in the medical and mental health community in developing a multi-dimensional approach to treatment will be included. Designed for students interested in obtaining CAADAC certification.
[CSU]

AOD-4. Counseling Diverse Populations (3)
   Advisory: AOD-1
   Offered: 2017-2018
   Lec 3 Hrs
   A counseling course that introduces the student to special population subgroups in alcohol and drug counseling and the unique helping skills used to support these populations. Particular focus is placed on gender, race, culture, age and sexual orientation as it relates to addiction and recovery.
[CSU]

AOD-5. Legal/Ethical Considerations and Professional Growth (3)
   Offered: Fall-odd
   Lec 3 Hrs
   Explores the legal, ethical, professional and personal issues involved in the treatment of chemical dependency. Emphasis is placed on professional responsibility and patient rights as well as issues of the work place and professional growth.
[CSU]

AOD-6. Prevention, Education and Relapse Prevention (3)
   Offered: 2017-2018
   Lec 3 Hrs
   Conceptual frameworks, major research, epidemiology, environmental risk factors and the effectiveness of various prevention strategies will be examined. In addition, client education strategies used in the treatment and relapse prevention phases of chemical dependency will be highlighted.
[CSU]

AOD-7. Individual Counseling Skills in Chemical Dependency (3)
   Prerequisite: AOD-1 with a grade of "C" or better.
   Advisory: Eligibility for ENG-1A; Completion of AOD-2 through AOD-5.
   Offered: Fall
   Lec 3 Hrs
   An introduction to the basic skills and techniques of counseling for chemical dependency counselors. This course describes characteristics of an effective counselor, explores several theoretical models of counseling, and assists the individual to develop skills in active listening, building trust, reflecting feelings and content, and using motivational interviewing techniques. Stages of therapy and life span issues will receive special attention.
[CSU]

AOD-8. Family and Group Counseling (3)
   Prerequisite: AOD-1 with a grade of "C" or better.
   Advisory: Eligibility for ENG-1A Completion of AOD-2 through AOD-5.
   Offered: Fall
   Lec 3 Hrs
   A focus on family dynamics and group processes as they relate to chemical dependency. The dynamics of chemical dependency within family systems will be explored and interventions designed to assist family members to understand and cope with chemical dependency will be examined. In addition, group processes and dynamics will be examined with an emphasis on developing skills for group leadership.
[CSU]
AOD-9. Co-Occurring Disorders (3)
Prerequisite: AOD-1 with a grade "C" or better.
Advisory: Eligibility for ENG-1A Completion of AOD-2 through AOD-5.
Offered: Fall
Lec 3 Hrs
An introduction to the treatment needs of those who have one or more psychiatric disorders in combination with a chemical dependency disorder. Focus is placed on identification, assessment, current treatment approaches, medication, referral procedures, and interface with the professional mental health community.

[CSU]

AOD-10. Chemical Dependency Practicum Seminar (3)
Prerequisite: AOD-1, AOD-2, AOD-3, AOD-4, AOD-5, AOD-6, AOD-7, AOD-8, AOD-9 or PSY-22 with a grade of "C" or better.
Corequisite: AOD-99
Offered: Spring
Lec 3 Hrs
Designed for students in their final semester of the AOD curriculum, this course is designed to support students as they complete the practicum/work experience requirements of the program. Emphasis is placed on developing the skills and abilities needed to work as a chemical dependency counselor.

[CSU]

AOD-99. Practicum in Chemical Dependency (4)
Prerequisite: AOD-1, AOD-2, AOD-3, AOD-4, AOD-5, AOD-6, AOD-7, AOD-8, AOD-9 or PSY-22 with a grade of "C" or better.
Corequisite: AOD-10
Offered: Spring
Lab 14 Hrs
Designed for students in their last semester of the AOD program, this course provides students with a hands-on learning experience via a directed field study. Emphasis is placed on enabling the student to experience and perform the work of a chemical dependency counselor. Students must complete at least 255 hours of volunteer experience or 300 hours of paid work experience in an approved facility to meet unit requirements and CAADAC/CCBADC accreditation standards for practicum experience. Instructor will facilitate internship/job placement and development of individualized goals.

[CSU]

AMERICAN SIGN LANGUAGE

ASL-1. American Sign Language I (3)
Pass/No Pass Option
Offered: Fall, Spring
Lec 3 Hrs
An introductory sign language course in American Sign Language (ASL). Essentials of ASL syntax, classifiers, non-manual markers, and facial expression. Expressive and receptive signing ability including the manual alphabet, fingerspelling, and signs. Introduction to the history of Deaf culture and American Sign Language in the United States. Skill development and practice. Not open to students who have completed COU-80 with a grade of "C" or better.

[CSU; UC; IGETC AREA 6]

ASL-2. American Sign Language II (3)
Pass/No Pass Option
Prerequisite: COU-80 or ASL-1 with a grade of "C" or better.
Offered: Fall, Spring
Lec 3 Hrs
Continuation of skill building towards effective communication in American Sign Language (ASL). Drill and exercises at the intermediate level of sign language structure, form, usages, and conversation. Continued exploration and understanding of Deaf history and culture, including the American Deaf perspective, social norms and current issues in the Deaf community. Participation in Deaf cultural event required. Not open to students who have completed COU 81 with a grade of "C" or better.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 6]

ASL-3. American Sign Language III (3)
Pass/No Pass Option
Prerequisite: COU-81 or ASL-2 with a grade of "C" or better.
Offered: Fall
Lec 3 Hrs
Intermediate to advanced level syntax, grammar, history, and vocabulary of American Sign Language. Emphasis on increasing proficiency in conversational situations. Increasing understanding of Deaf culture and its influence on language structures, conversation, context, and usage. Special emphasis on oral presentation. Not open to students who have completed COU 83 with a grade of "C" or better.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 6]
ANTHROPOLOGY

ANT-1. Introduction to Biological Anthropology (3)
Advisory: Eligibility for ENG-1A; DE/Hybrid advisory: See page 145
Offered: Fall, Spring, Summer
Lec 3 Hrs
An introductory survey in biological or physical anthropology. The course provides an overview of the basic data, methodology and theories of the principal subdivision of the field—population genetics, primatology, paleoanthropology, and human variability and adaptation—to understand the process of human evolution. It is designed to fit the needs and interests of both beginning anthropology majors and general education students. Students taking this course must have basic computer skills for operating Microsoft Word and e-mail, including sending attachments and files. Students also need access to the Internet and must have adequate hardware and software capabilities. Access to computers is also available at Hartnell College Library/LRC.
[CSU; UC; CSU-GE, AREA B2, D1; IGETC, AREA 5] [C-ID ANTH 110]

ANT-2. Introduction to Cultural Anthropology (3)
Advisory: Eligibility for ENG-1A; DE/Hybrid advisory: See page 145
Offered: Fall, Spring, Summer
Lec 3 Hrs
A survey of the range of cultural phenomena including language, patterns of subsistence, economic organization, marriage and the family, kinship, political organization, religion, the arts, and culture change. Examples taken from a wide range of foraging, tribal, and complex state societies are employed to illustrate the methodology, concepts, and theories of anthropological science. It is intended for both beginning anthropology majors and general education students. Students taking this course must have basic computer skills for operating Microsoft Word and e-mail, including sending attachments and files. Students also need access to the Internet and must have adequate hardware and software capabilities. Access to computers is also available at Hartnell College Library/LRC.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]

ANT-3. Introduction to Archeology (3)
Offered: Fall
Lec 3 Hrs
An examination of pre-history and the methods and theory of modern archeology; the contributions of archeology toward an understanding of the development of human culture from man's emergence as a culture-bearing animal to the beginnings of written history.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]

ANT-10. California Indians (3)
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring
Lec 3 Hrs
This course offers a survey of the Native American societies of the region of California. It is a course designed to provide an introduction to the cultural evolution of Native Californians from prehistoric times to the present. As such, it is intended to discuss the archaeological, ethnohistorical and historical data in order to understand the cultural experiences of modern-day indigenous communities.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]

Offered: Fall
Lec 3 Hrs
A survey of the native peoples and cultures of North America including the northern part of Mexico. Designed to provide an introduction through an ethnohistorical approach that considers aspects of traditional ethnography as well as the impact of historical events on American Indians extending to contemporary issues.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]

ANT-20. Cultures of Mexico (3)
Advisory: DE/Hybrid. See page 145
Offered: Fall, Summer
Lec 3 Hrs
A survey of the origin and development of the cultures of Mesoamerica (Central and Southern Mexico, Guatemala, Belize, El Salvador and parts of Honduras and Nicaragua) and the Chichimec and Greater Chichimec areas (Northern Mexico and the Southwest U.S.A.), also known as "Oasis America." The course will encompass prehistoric and historic periods, beginning with the first settlers to the present indigenous communities.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]

APPRENTICESHIP

APP-120. 1st Year Commercial Electrical Appr I (4)
Advisory: Successful completion of: one full credit of high school algebra with a passing grade, or one post high school algebra course (e.g. Adult Education, Continuing Education, Community College, etc.) with a passing grade, or successful completion of the NJATC Online Tech Math Course.
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 4 Hrs
First semester of the first year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.
APP-121. 1st Year Commercial Electrical Appr II (4)
Prerequisite: APP-120 with a grade of "C" or better and Student is a registered State indentured apprentice.
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 4 Hrs
Second semester of the first year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.

APP-122. 2nd Year Commercial Electrical App I (4)
Prerequisite: APP-121 with a grade of "C" or better and Student is a registered State indentured apprentice.
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 4 Hrs
First semester of the second year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.

APP-123. 2nd Year Commercial Electrical Apprentice II (4)
Prerequisite: APP-122 with a grade of "C" or better and Student is a registered State indentured apprentice.
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 4 Hrs
Second semester of the second year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.

APP-124. 3rd Year Commercial Electrical Appr. I (4)
Prerequisite: APP-123 with a grade of "C" or better and Student is a registered State indenture apprentice.
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 4 Hrs
First semester of the third year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.

APP-125. 3rd Year Commercial Elec App II (4)
Prerequisite: APP-124 with a grade of "C" or better and Student is a registered State indentured apprentice
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 4 Hrs
Second semester of the third year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.

APP-126. 4th Year Commercial Electrical Apprentice I (4)
Prerequisite: APP-125 with a grade of "C" or better and Student is a registered State indentured apprentice.
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 5 Hrs
First semester of the fourth year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.

APP-127. 4th Year Commercial Electrical Apprentice II (4)
Prerequisite: APP-126 with a grade of "C" or better and Student is a registered State indentured apprentice.
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 4 Hrs
Second semester of the fourth year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.

APP-128. 5th Year Commercial Electrical Apprentice I (4)
Prerequisite: APP-127 with a grade of "C" or better and Student is a registered State indenture apprentice.
Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.
Lec 4 Hrs
First semester of the fifth year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.
APP-129. 5th Year Commercial Electrical Apprentice II (4)

Prerequisite: APP-128 with a grade of "C" or better and Student is a registered State indenture apprentice

Other: Section 3074.3 of the State Labor Code authorizes limitation of this course to students who have been accepted into the Inside Apprenticeship program of the Tri-County Electrical JATC.

Lec 4 Hrs

Second semester of the fifth year in the five-year Commercial/Industrial Electrical Apprenticeship Program leading to Journeyman Electrician certification in the electrical construction industry.

ART

ART-1A. Art History Survey I (3)

Advisory: Completion of or concurrent enrollment in ENG-1A

Offered: Fall, Spring

Lec 3 Hrs

A survey of the major monuments, styles, artists and historical periods of painting, sculpture and architecture from Mediterranean prehistory through Egypt, Mesopotamia, Greece, Rome and the Middle Ages of Western Europe.

[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

[C-ID ARTH 110]

ART-1B. Art History Survey II (3)

Advisory: Completion of or concurrent enrollment in ENG-1A

Offered: Fall, Spring

Lec 3 Hrs

A survey of the major monuments, styles, artists and historical periods of painting, sculpture and architecture of Western Europe and America from early Renaissance to the contemporary period.

[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

[C-ID ARTH 120]

ART-3. Drawing and Composition (3)

Offered: Fall, Spring

Lec 2 Hrs; Lab 4 Hrs

Surveys and applies the fundamentals of observation, drawing, and composition through the study of contour, shape, line, perspective, value, basic rendering, and creative applications of drawing. Students will provide pencils, charcoal, ink, drawing tools, and paper.

[CSU; UC] [C-ID ARTS 110]

ART-6A. Watercolors and Gouache (3)

Offered: Fall, Spring

Lec 2 Hrs; Lab 4 Hrs

The development of ideas, theory and techniques as applied to painting in watercolor and gouache media. Emphasis on color and value composition, as well as special and linear composition. Students will provide paint, brushes, and painting surfaces.

[CSU; UC]

ART-6B. Oils (3)

Offered: Fall, Spring

Lec 2 Hrs; Lab 4 Hrs

The study of oil painting in transparent and opaque media. Techniques of media manipulation and application, compositional development, the effect of color on content and meaning, and preservation and handling of finished works are examined. Students will provide paint, brushes, and painting surfaces.

[CSU; UC]

ART-6C. Acrylics (3)

Offered: Fall, Spring

Lec 2 Hrs; Lab 4 Hrs

Study of painting in opaque and transparent acrylics. Students will provide paint, brushes, and painting surfaces.

[CSU; UC]

ART-10. Art Appreciation (3)

Offered: Fall, Spring

Lec 3 Hrs

An introductory study of art examining the styles, elements and techniques as well as the painting, sculpture and architecture of various historical periods and cultures.

[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

[C-ID ARTH 100]

ART-12A. Design (3)

Offered: Fall, Spring

Lec 2 Hrs; Lab 4 Hrs

Introduction to the fundamentals of basic visualization, conceptualization, applications and historical references in art studio theory and practice. Emphasis will be on the exploration of two-dimensional composition incorporating color, value, line and form. Students will be charge a lab fee of $90. The lab fee covers the cost of illustration board and paint. Students will provide their own brushes, pencils, and paper.

[CSU; UC] [C-ID ARTS 100]

ART-13. Three-Dimensional Design (3)

Offered: Fall

Lec 2 Hrs; Lab 4 Hrs

An introduction to the concepts, applications, and historical references related to three-dimensional design and spatial composition using plastic, metal, wood and other materials.

[CSU; UC] [C-ID ARTS 101]

ART-15A. Ceramics A (3)

Offered: Fall, Spring, Summer

Lec 2 Hrs; Lab 4 Hrs

An introductory study of clay and ceramic materials and their use in the creation of art objects by slab and coil methods; introduction to the potter's clay, clay tools, and optional materials (aprons, sponges, towels, etc.)

[CSU; UC] [C-ID ARTS 230]
ART-15B. Ceramics B (3)
Prerequisite: ART-15A with a grade of "C" or better.
Offered: Fall, Spring, Summer
Lec 2 Hrs; Lab 4 Hrs
Further study of clay and ceramic materials and their use in the creation of art objects by slab and coil methods, the potter's wheel and the use and mixing of glazes and firing methods. Students will provide clay, clay tools, and optional materials (aprons, sponges, towels, etc.)
[CSU; UC]

ART-50. Gallery Management (3)
Lec 2 Hrs; Lab 3 Hrs
A study and practice of gallery operations in organizing, preparing and installing exhibitions in various media.
[CSU]

ART-51. Gallery Methods and Installation Procedures (3)
Lec 2 Hrs; Lab 3 Hrs
A study and practice of gallery operations including conservation, funding, institutional and private galleries, evaluation of exhibitions and exhibition proposals, electronic galleries, and promotions.
[CSU]

ART-52. Portfolio Development (3)
Advisory: Completion of at least two studio classes in one specific medium (for example, ART-15A and 15B)
Lec 2 Hrs; Lab 4 Hrs
Examines techniques and materials needed by art students planning on transferring to institutions for upper division study in the arts by portfolio admission. Students will develop appropriate written materials and a cohesive body of studio work in a single medium that emphasizes their level of technical skill and personal style. Aspiring artists develop a portfolio for presentation to a gallery to obtain professional representation.
[CSU]

ART-71. Introduction to 2D Digital Illustration (3)
Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
This introductory course will examine the historic and artistic expressions of Western civilization art and translate the visual experience into a contemporary digital art medium. Students will study the aesthetic principles of drawing through two-dimensional digital vector and pixel-oriented illustration. Students will acquire hands-on experience with the illustration concepts of visual weight, solidity, depth, balance, eye flow, color theory, angle of view, composition placement, using tonal values to indicate a light source and 1, 2, and 3 point perspective.
[CSU; UC]

ART-72. Introduction to Digital Arts (3)
Offered: Fall, Spring, Summer
Lec 2 Hrs; Lab 3 Hrs
An introduction to the fundamentals of digital arts, including history, social impact, career options and industry trends. Students will apply visual and aural aesthetic design principles in the hands-on exploration of the digital art tools of typography, graphics, digital imaging, animation, full motion video, and digital media interface design. Students will analyze the essential topics of interactivity, media development process, and the applications and future directions of the digital arts.
[CSU; UC] [C-ID ARTS 250]

ART-73. Introduction to Digital Illustration for Animation (3)
Lec 2 Hrs; Lab 3 Hrs
An introduction to the historic study of the visual representation of animated motion in both Eastern and Western civilization art and the translation into a contemporary digital art medium. Students will examine digital illustration with an emphasis on the preparation of visual imagery for animation. Concentration will be placed on illustrating gesture and movement, storyboarding, skeletal framework, and anatomical details. Students will have hands on experience with figure characters, object models and two-dimensional sequential movement illustration.
[CSU]

ART-74. Digital 3-D Design and Modeling (3)
Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
A visual and hands-on analysis of historical and contemporary designs, primarily concerned with the visual dialogue between form and space in the three-dimensional composition. Students will develop the ability to process visual information into digital three-dimensional projects of both additive and subtractive sculptural methods using computer-based 3D applications. Line, plane, and volume are utilized in a problem-solving format in order to develop the ability to create expressive objects within the digital 3D art interface.
[CSU]
ART-76. Introduction to 3D Digital Animation (3)

**Offered:** Spring

**Lec 2 Hrs; Lab 3 Hrs**

An introduction to the field of 3D animation, including history, aesthetic principles, social impact, career options and industry trends. Students will explore the use of 3D animation in both Eastern and Western civilization and the progression into contemporary digital applications. Students will develop an animation from original concept to the planning of a written and visual storyboard and into a finalized movie output. Students will utilize 3D computer-based applications for hands-on experience with digital keyframe animation with an emphasis on the visual aesthetics of gesture and movement. Emphasis will also involve the exploration the visual representation of a 3D environment through the critical decisions of camera angle, lighting and surface qualities.

[CSU]

ART-77. Introduction to Digital Video and Video Editing (3)

**Offered:** Spring

**Lec 2 Hrs; Lab 3 Hrs**

An introduction to the field of digital video and video editing, including the history and overview of analog and digital video, analysis of the social impact of commercial and fine art videos, exploration of digital video career options and industry trends and the application of non-linear video editing. Students will work hands-on on creating digital video.

[CSU]

ART-78. Motion Graphics & Design Principles (3)

**Offered:** Spring

**Lec 2 Hrs; Lab 3 Hrs**

Motion graphics is a form of visual communication used for a variety of applications such as film, television, web, communication design, branding and advertising. This course introduces students to the principles and aesthetics of motion graphics. Students will conceptualize, design and produce visual communication solutions using kinetic and time-based design techniques. Students will experience the process of project management as it applies to a motion graphic project. Students will create and construct original motion graphics projects with vector and pixel imagery, typography, 2D animation and 2d and 3D visual effects utilizing such tools as Adobe After Effects.

[CSU]

ART-80. Introduction to Digital Photography and Photographic Imaging (3)

**Offered:** Fall

**Lec 2 Hrs; Lab 3 Hrs**

An introduction to the field of digital photographic media, including history, social impact, career options and industry trends. Students will explore the use of digital photographic tools in the design and production of digital photographic media. Students will work hands-on with Adobe Photoshop, the industry standard for digital photo imaging, retouching, design and web creation. Students will learn to create, scan and manipulate images for graphic and fine arts.

[CSU; UC]

ART-84. Digital Art Portfolio & Business Practices (3)

**Prerequisite:** ART-70, ART-72, ART-77 and ART-80 with a grade of "C" or better.

**Offered:** Spring

**Lec 2 Hrs; Lab 3 Hrs**

Designed for intermediate and advanced level students wishing to pursue a career in the digital art areas of: digital illustration, 3D modeling and animation, graphic design, video, web design, game design, motion graphics, digital photography and photo imaging. Topics include selection of work, sequencing, presentation formats (demo reels, online portfolios, interactive portfolios and print portfolios). Includes professional business practices (proposals, billing, copyright, resumes etc.), and social media as a mobile marketing tool for use by digital artists. Students will develop and assemble individual portfolios for application for employment in the field or to transfer to four-year colleges. Strongly recommended for digital art majors.

[CSU]

ART-85. Interactive Digital Media Interface Design (3)

**Offered:** Spring

**Lec 2 Hrs; Lab 3 Hrs**

Hands-on instruction in the design of an interface for an interactive multimedia product for web development or CD/DVD distribution. Students will integrate text, audio, video, graphics and animation to create productions for art media portfolios, corporate marketing, instructional presentations or business demonstrations. Students will choose a theme, determine a premise, structure a story board and create a multimedia production. Not open to students who have completed CIS-85 or CSS-85 with a grade of "C" or better.

[CSU]

ART-100. Ceramics: European Folk Traditions (3)

**Offered:** Summer

**Lec 2 Hrs; Lab 4 Hrs**

A study of ceramic three-dimensional forms and skill building production methods with emphasis on the European folk tradition. Students may only take four of the following courses: ART-15A, ART-15B, ART-100, ART-101, ART-102, ART-103, ART-150, ART-219, and ART-220. Each course is not repeatable. Students will be charged a lab fee of $40 to cover clay, glaze and other items.


**Offered:** Summer

**Lec 2 Hrs; Lab 4 Hrs**

Introduction to Ceramic Forms methods with Emphasis on Chinese and Korean Traditions. Students may only take four of the following courses: ART-15A, ART-15B, ART-100, ART-101, ART-102, and ART-103. Each course is not repeatable. Students will be charged a lab fee of $40 to cover clay, glaze and other items.

ART-102. Ceramics: Japanese Traditions (3)

**Offered:** Fall

**Lec 2 Hrs; Lab 4 Hrs**

Introduction to Ceramic Forms and Methods with Emphasis on Japanese Traditions. Students may only take four of the following course: ART-15A, ART-15B, ART-100, ART-102 and ART-103. Each course is not repeatable. Students will be charged a lab fee of $40 to cover clay, glaze and other items.
ART-103. Ceramics: Pre-Columbian Traditions (3)

*Offered: Fall*

**Lec 2 Hrs; Lab 4 Hrs**

Introduction to Ceramic Forms and Methods with Emphasis on Pre-Columbian Mesoamerican and Peruvian Traditions. Students may only take four of the following courses: ART-15A, ART-15B, ART-100, ART-101, ART-102, and ART-103. Each course is not repeatable. Students will be charged a lab fee of $40 to cover clay, glaze and other items.

ART-150. Low-Fire Ceramics (1)

**Lec 0.50 Hrs; Lab 1.50 Hrs**

Forming and firing clay emphasizing traditional and experimental low-fire processes. Students will provide clay, clay tools, and optional materials (aprons, sponges, towels, etc.)

ART-219. Primitive Firing (1)

**Lec 0.50 Hrs; Lab 1.50 Hrs**

Forming and firing clay emphasizing traditional and experimental primitive firing process. Students will provide clay, clay tools, and optional materials (aprons, sponges, towels, etc.)

ART-220. Raku Workshop (1)

**Lec 0.60 Hrs; Lab 1.40 Hrs**

Forming and firing clay emphasizing traditional and experimental raku processes. Students will provide clay, clay tools, and optional materials (aprons, sponges, towels, etc.)

AST-1. Introduction to Astronomy (3)

*Advisory: DE/ Hybrid advisory: See page 145*

**Offered: Fall, Spring**

**Lec 3 Hrs**

A comprehensive survey of modern astronomy with an emphasis on the scientific method and the interpretation of astronomical data in discovering the nature of the solar system and the universe. Planetarium demonstrations are included. Suitable for students from all majors and acceptable for physical science credit at any state college or university. Lab requirement can be satisfied when combined with AST-IL.

[CSU; UC; CSU GE, AREA B1; IGETC, AREA 5]

AST-1L. Astronomy Laboratory (1)

*Corequisite: AST-1*

*Other: Completion of or concurrent enrollment in AST-1 is required.*

**Offered: Fall, Spring**

**Lab 3 Hrs**

Laboratory course in astronomy that uses a combination of experiments, NASA data, and computer software to teach the basic principles and methods of modern astronomy. Students will make their own measurements and use astronomical data to identify objects in the night sky and to learn about the properties of light, telescopes, stars, and galaxies. A field trip to an observatory and extensive use of the digital Planetarium is included.

[CSU; UC; CSU GE, AREA B3; IGETC, AREA 5]

AUT-51. Auto Engine Performance and Diagnostics (4)

*Offered: Spring-even*

**Lec 2 Hrs; Lab 6 Hrs**

Diagnosis and repair of gasoline engines, including ignition system diagnosis, repair procedures, valve adjusting, fuel system testing, servicing turbochargers, exhaust and intake systems diagnosis and repair emission controls diagnosis and repair. Proper use of tools and literature to perform adjustments and troubleshooting to maintain proper engine performance.

[CSU]

AUT-73. Automotive Electricity and Electronics (4)

*Offered: Fall, Spring*

**Lec 2 Hrs; Lab 6 Hrs**

Provides a strong background in basic automotive electricity and electronic concepts. Includes automotive electrical and electronic systems, basic theories, electrical components, wiring and circuit diagrams, automotive batteries, starting systems, lighting circuits, electrical accessories, electronic systems, introduction to the body computer, vehicle communication networks, advanced lighting circuits, instrumentation and warning lamps, ignition systems, electronic chassis control and accessory systems, and passive restraint systems.

[CSU]

AUT-86. Automotive Electronics and Engine Performance (4)

*Offered: Spring-odd*

**Lec 2 Hrs; Lab 6 Hrs**

Covers safety, basic electrical theories, electrical and electronic components, basic electrical troubleshooting and service, wiring repair, automotive batteries, battery diagnosis and service, starting system, charging systems, lighting circuits repair and diagnosis, electronic ignition systems, and basic ignition system diagnosis and service. Also covers introduction to computers, computer controlled ignition systems, electrical fuel injection diagnosis and service, on-board diagnostic scanners and digital storage oscilloscopes, and strategies of on-board diagnostics.

[CSU]

AUT-110. Automotive Climate Control Systems (4)

*Offered: Fall-even*

**Lec 2 Hrs; Lab 6 Hrs**

Covers automotive comfort, pressure and temperature climate control systems, refrigerants and lubricants, special service tools, moisture and moisture removal, the refrigeration system, compressors and clutches, compressor service, system components and metering devices, electricity and electronics review, electrical circuits, control devices, engine cooling and comfort heating, troubleshooting and repair, retrofit R-12 to R-134a; utilizes MACS certification training manual.
AUT-120. Introduction to Alternative Fuel and Electric Hybrid Vehicles (2)

Offered: Summer

Lec 2 Hrs

Covers the technology of alternative fuels, electric hybrid vehicles, and fuel cells. Students learn how alternative fuels influence changes in vehicle engine and electrical systems, emission systems, and components. Utilizes Toyota, Honda, or Chrysler-specific materials as well as other current hybrid technology demonstration materials.

AUT-121. Hybrid, Electric and Fuel-Cell Vehicles (2)

Offered: Summer

Lec 2 Hrs

Introduces the student to electric vehicles, electrical basics, motor and generator basics, battery basics, and the basics of a battery-operated electric vehicle. Covers HEV basics, mild and assist hybrids, fuel hybrids maintenance and service, fuel cell and other possible vehicles.

AUT-179. Automotive Business and Shop Management (4)

Lec 2 Hrs; Lab 6 Hrs

Covers the service manager and the business structure, ownership, types of facilities and the service manager’s job, strategic business planning, preparing formatted systems, human resources management, recruitment and selection of new employees, introduction and personnel development, evaluation of employee performances and basic business practices. Also covers the accounting process and financial statements, paying employees and the labor sales worksheet, sale of parts, financial management of a parts profit center, and basics of business law.

AUT-251. Automotive Inspection, Service and Maintenance (3)

Lec 1.50 Hrs; Lab 4.50 Hrs

Introduces students to the basic maintenance, diagnosis, and servicing of all automotive systems, from tool and shop safety through the steps necessary to maintain a modern motor vehicle. Course coverage spans the spectrum of automotive servicing, examining basic systems such as electrical, lubrication, heating, cooling, exhaust, and transmission systems. Provides students with the foundation necessary to deal with the more complex maintenance problems.

AUT-271. California BAR Clean Air Car Course (5)

Lec 5 Hrs

Covers fundamental principles of motor emission inspection and maintenance. Provides the legal background necessary to analyze malfunctions, repair, assemble, and adjust those systems and devices of the automobile covered by legal standards and limitations. Covers various techniques and applications of sound shop and/or agency practices. Provides overview of all modules of the complete Clean Air Car Course. (To be eligible for the California BAR Clean Air Car state licensing exam at completion of the course, the following experience in addition to course completion is required: One year or more of trade experience in emissions/tune up, or a minimum of 9 semester units (13 quarter units), or 180 hours at an accredited school, registered Automotive Apprentice.)

BIOLOGY

BIO-1. Fundamental Biological Concepts (5)

Prerequisite: MAT-123 and CHM-22 or CHM-60 or CHM-1A, or completion of any college-level chemistry course. All prerequisites must be completed with a grade of "C" or better.

Offered: Fall, Spring

Lec 3 Hrs; Lab 6 Hrs

An introduction to the study of the structure and function of living systems with an emphasis on the molecular and cellular levels of organization and the roles of DNA, genetics and evolution as the unifying concepts of biology. Recommended for biology, pre-medical, pre-dental and pre-veterinary majors. [CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5] [C-ID BIOL 190] [C-ID BIOL 135S with BIO-2 and BIO-3]

BIO-2. General Zoology (5)

Prerequisite: MAT-123 with a grade of "C" or better or placement by Hartnell's assessment.

Offered: Fall, Spring

Lec 3 Hrs; Lab 6 Hrs

An introduction to the study of animals and their diversity of form and function. An emphasis will be made on comparative morphology, physiology and behavior and on the application of evolutionary and ecological principles to animal populations. This course will also explore the historical development of animal sciences and current innovations in zoological research. Laboratory and field activities will introduce students to methods of systematics and ecological study and to the diversity of the animal groups. [CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5] [C-ID BIOL 140 with BIO-2] [C-ID BIOL 135S with BIO-1 and BIO-3]
BIO-3. General Botany (5)
**Prerequisite:** MAT-123 with a grade of "C" or better or placement by Hartnell's assessment.
**Advisory:** A college-level biology course.
**Offered:** Fall, Spring
**Lec 3 Hrs; Lab 6 Hrs**
An introduction to the principles of plant biology with emphasis on their structure, reproduction, genetics, taxonomy and systematics, physiology, and ecology. Required for biology majors.

[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

[C-ID BIOL 140 with BIO-2]

[BIO-5. Human Anatomy (4)]
**Prerequisite:** ENG-1A with a grade of "C" or better.
**Advisory:** Completion of any college-level biology course, with a grade of "C" or better, is strongly recommended before attempting BIO-5.
**Offered:** Fall, Spring, Summer
**Lec 3 Hrs; Lab 3 Hrs**
A survey of the structure of the human body including the integumentary, skeletal, muscular, digestive, nervous, lymphatic, cardiovascular, endocrine, respiratory, urinary, and reproductive systems. The course is designed primarily for physical education/kinesiology and nursing majors but will benefit any student interested in the form and function of the human body.

[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

[C-ID BIOL 110B]

[BIO-6. Introductory Physiology (3)]
**Prerequisite:** BIO-1 or BIO-5 and CHM-1A or CHM-22 or CHM-60 or completion of any college-level chemistry course. All prerequisites must be completed with a grade of "C" or better.
**Offered:** Fall, Spring, Summer
**Lec 3 Hrs**
An introduction to the study of the structure and function of human systems with an emphasis on the contribution of cellular and tissue structure and function to homeostasis. Recommended for health-related certificate programs, registered nursing, biology, physical education, pre-med, pre-dental, and pre-veterinary majors.

[CSU; UC; CSU-GE, AREA B2; IGETC, AREA 5]

[C-ID BIOL 120B with BIO 6I]

[BIO-6L. Physiology Laboratory (2)]
**Corequisite:** BIO-6
**Offered:** Fall, Spring, Summer
**Lab 6 Hrs**
An introduction to the laboratory study of the structure and function of human systems with an emphasis on the collection and analysis of chemical and physical data which relate to the concept of homeostasis in the human body. Recommended for health-related certificate programs, physical education, biology, pre-med, pre-dental, and pre-veterinary majors.

[CSU; UC; CSU-GE, AREA B3; IGETC, AREA 5]

[C-ID BIOL 120B with BIO 6I]

BIO-10. General Biology (4)
**Offered:** Fall, Spring, Summer
**Lec 3 Hrs; Lab 3 Hrs**
An introduction to the principles of general biology with emphasis on diversity, morphology, cellular and organismal physiology, heredity, evolution, and ecology of living organisms. This is a general education course intended for students not majoring in biology.

[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

[BIO-11. Introductory Human Anatomy and Physiology (4)]
**Offered:** Fall, Spring, Summer
**Lec 3 Hrs; Lab 3 Hrs**
An introduction to the biology of the human being. The structure and function of the organ systems of the human body, and their contributions to homeostasis will be emphasized in lecture and laboratory.

[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

[BIO-12. Introduction to Genetics (3)]
**Pass/No Pass Option**
**Advisory:** Completion of one-year of beginning algebra (high school or college) with a grade of "C" or better.
**DE advisory see page 145**
**Offered:** Spring
**Lec 3 Hrs**
An introduction to the fundamental principles of genetics and heredity. Students will investigate the transmission of traits from one generation to the next, the molecular structure of genes and gene products, the regulation of gene expression, and factors affecting gene frequencies in populations. Students will also analyze the social, legal and ethical implications of advances in genetic technology as applied to medicine, agriculture and biotechnology. The course is designed for all students interested in the science and application of genetics.

[CSU; UC; CSU-GE, AREA B2; IGETC AREA 5]

[BIO-13. Introduction to Forensic DNA Analysis (3)]
**Pass/No Pass Option**
**Advisory:** DE/Hybrid advisory: See page 145
**Offered:** Fall
**Lec 3 Hrs**
An introduction to forensic DNA analysis with emphasis on biology. Students will develop an appreciation for forensic DNA methodologies and an understanding of their limitations in solving crime. Designed for students interested in learning the basic principles of molecular human identification.

[CSU; UC; CSU-GE, AREA B2]

[BIO-18. Introduction to Pathophysiology (3)]
**Prerequisite:** BIO-11 with a "C" grade or better or BIO-6, BIO-6L, and BIO-5 with a "C" grade or better
**Offered:** Spring
**Lec 3 Hrs**
Introduction to concepts and principles of disease processes of the human body. The course will utilize the format of detection, diagnosis, treatment, etiology, pathogenesis, and prevention of diseases in all major body systems.

[CSU; UC; CSU-GE, AREA B2; IGETC AREA 5]
BIO-20. Field Biology/Natural Science (4)
Offered: Fall, Spring
Lec 3 Hrs; Lab 3 Hrs
An introduction to the natural history of bacteria, fungi, protists, plants and animals. Identification, classification, life histories, and ecological relationships will be investigated. Recommended for students interested in outdoor biological studies.
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

BIO-27. Principles of Microbiology (4)
Prerequisite: Completion of any college level chemistry course with a grade of "C" or better.
Advisory: Completion of any college-level biology course with a grade of "C" or better. For nursing students, completion of coursework in human anatomy and physiology (i.e., BIO-5 and BIO-6/6L) is strongly recommended.
Offered: Fall, Spring
Lec 3 Hrs; Lab 3 Hrs
A general introduction to the study of bacteria, viruses, fungi, algae protozoa and helminthes, with major emphasis on the study of bacteria. Aspects of microbiology important in health, sanitation, food processing, and biotechnology are emphasized in lecture and laboratory. This course is designed for students majoring in biological sciences, nursing, and other health science majors.
[CSU, UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

BIO-30. Marine Biology (4)
Offered: Fall, Spring
Lec 3 Hrs; Lab 3 Hrs
An introduction to the study of marine life. Emphasis on the fundamentals of biology, with a survey of the prokaryotes, algae, invertebrates, vertebrates and their physiology and ecology. Recommended for non-science majors who desire a general knowledge and appreciation of life in the sea.
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

BIO-42. Human Biology (3)
Advisory: DE advisory. See page 145
Offered: Fall, Spring, Summer
Lec 3 Hrs
Introduction to human biology, including biochemistry, cytology, histology, organ systems, and genetics. Behaviors related to health and diseases are presented, as well as advances in biotechnology and the impact of humans on the environment. Will benefit non-major as well as students interested in health careers.
[CSU; UC; CSU-GE, AREA B2, E; IGETC, AREA 5]

BIO-47. Ecology (4)
Offered: Spring
Lec 3 Hrs; Lab 3 Hrs
Introduction to the relationships between organisms and their environments. Emphasis on habitats, organismal biology, energy flow, nutrient cycles, natural populations, communities, and human interactions with natural ecosystems. Field trips will be scheduled. Recommended for anyone who desires a general knowledge and appreciation of ecosystems. Students should consult transfer agreements to determine whether the course fulfills a requirement for an environmental studies program at a specific university.
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

BIO-48. Environmental Science (3)
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall
Lec 3 Hrs
An introductory and multidisciplinary study of the biology of our environment and its interrelationships. Emphasis is on the impact of human population and policies in regard to air, water, land use, resources and waste management.
[CSU; UC; CSU-GE, AREA B2 IGETC AREA 5]

BIO-48L. Environmental Science Laboratory (1)
Corequisite: BIO-48
Offered: Fall
Lab 3 Hrs
Introduction to the study of the environment through hands-on field and laboratory experiments. Emphasis on ecological principles, populations, natural resources, energy use, and lifestyle choices.
[CSU; UC; CSU-GE; AREA B3, IGETC AREA 5]

BIO-59. Biological Research Methods (3)
Advisory: MAT-121 or placement by Hartnell's assessment. Completion of a chemistry class at either the high school or college level
Offered: Spring
Lec 1.50 Hrs; Lab 4.50 Hrs
This course provides training in research methods in the biological sciences. It is intended to prepare students for work on independent projects in a professional laboratory environment. Students will learn how to develop a project, collect and record data using appropriate techniques, conduct and analyze experiments, and communicate their findings. This course provides intensive training in research methods used in biology, chemistry, agriculture, and other disciplines in which living organisms are studied in a laboratory setting. Lecture and lab experiences include laboratory safety, data collection and record keeping, use and maintenance of laboratory equipment, aseptic technique, calculation and preparation of solutions and media, fundamentals of measurement, separation technologies, and specialized methods in field studies and biotechnology. This course is recommended for students seeking to acquire skills that can be applied in the workplace or in advanced studies.
[CSU; UC]
BUSINESS

BUS-1A. Financial Accounting (4)
   Pass/No Pass Option
   Advisory: Completion of BUS-152, and BUS-32. Eligibility for ENG-1A; and, MAT-123.
   Offered: Fall, Spring
   Lec 3.50 Hrs; Lab 1.50 Hrs
This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics.
[CSU; UC] [C-ID ACCT 110]

BUS-1B. Managerial Accounting (4)
   Pass/No Pass Option
   Prerequisite: BUS-1A with a grade of "C" or better.
   Offered: Fall, Spring
   Lec 3.50 Hrs; Lab 1.50 Hrs
This is the study of how managers use accounting information in decision-making, planning, directing operations and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Includes issues relating to cost systems, cost control, profit planning, and performances analysis in manufacturing and service environments.
[CSU; UC] [C-ID ACCT 120]

BUS-18. Legal Environment of Business (4)
   Pass/No Pass Option
   Advisory: DE/Hybrid advisory: See page 145
   Offered: Fall, Spring, Summer
   Lec 4 Hrs
Provides the student with a comprehensive understanding of the law and its relationship to business. An introduction to the sources of law, the legal system, the court system, antitrust law, administrative agencies, and business ethics. Content includes business torts and crimes, contracts, agency, employment discriminations, business organization formats, the legal aspects of partnerships and corporations, securities regulations, and domestic and international governmental relations.
[CSU; UC] [C-ID BUS 120]

BUS-32. Introduction to Business (3)
   Pass/No Pass Option
   Offered: Fall, Spring, Summer
   Lec 3 Hrs
A survey in business providing a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy and practices within the U.S. and a global society. Demonstrates how these influences impact the primary areas of business including: organizational structure and design; leadership, human resource management, organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, financial practices; the securities market; and therefore affect a business' ability to achieve its organizational goals.
[CSU; UC; CSU-GE, AREA D2] [C-ID BUS 110]

BUS-34. Entrepreneurship: Small Business Management (3)
   Pass/No Pass Option
   Offered: Fall, Spring
   Lec 3 Hrs
Introduces students to the risks and rewards of entrepreneurship. Illustrates the functions of small business management by surveying the concepts of organizing, planning, financing, staffing, marketing and operations. Students will create a business plan and build practical knowledge and skills to help ensure success in owning and/or managing a small business.
[CSU]

BUS-43. Business Information Systems and Information Literacy (4)
   Prerequisite: Eligibility for ENG-1A
   Advisory: DE/Hybrid advisory: See page 145
   Offered: Fall, Spring, Summer
   Lec 3 Hrs; Lab 3 Hrs
Examination of business information systems and their role in business. Focus on business information systems, database management systems, networking, e-commerce, ethics and security, information processing cycle, and associated hardware and software. Skill development in the use of business application software and the use of technology tools for research. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems. Not open to students who have completed CSS-43 with a grade of "C" or better.
[CSU; UC] [C-ID BUS 140]

BUS-50. Introduction to PC Applications (4)
   Advisory: Keyboarding speed of 25 words a minute recommended.
   Offered: Fall, Spring
   Lec 3.50 Hrs; Lab 1.50 Hrs
An introduction to computer hardware, operating systems, application software (word processing, spreadsheet, database, presentation, and e-mail), and the Internet. This course is designed for students with limited or no knowledge of computer applications. Not open to students who have completed BUS-109 or CSS-109 with a grade of "C" or better.
[CSU; UC]
BUS-100. Introduction to Basic Computer Applications (0.5 - 2)
Pass/No Pass Only
Offered: Fall, Spring, Summer
Lab 6 Hrs
Provides introductory computer application skills instruction in a lab environment. Designed to develop and improve computer skills in one-half unit modules in word processing, spreadsheet, and presentation software. Students will consult with an instructor regarding the scheduling of their hours and the computer application skills they wish to acquire and/or improve.

BUS-110. Beginning Keyboarding and Document Formatting (3)
Pass/No Pass Option
Offered: Fall, Spring
Lec 2 Hrs; Lab 3 Hrs
Introduction to keyboarding and basic techniques using the touch system on the computer as well as basic document processing. Emphasis on speed and accuracy on straight copy and proper formatting procedures in the preparation of business letters, memos, tables, and reports using a word processing program. Not open to students who have completed BUS-110A, 110B, 111, or 112.

BUS-110A. Beginning Keyboarding (1)
Pass/No Pass Option
Offered: Fall, Spring
Lab 3 Hrs
Introduction to keyboarding and basic techniques using the touch system on the computer. Not open to students who have completed BUS-110, 111, 140A, or 140B with a grade of "C" or better.

BUS-110B. Beginning Formatting and Document Processing (2)
Advisory: BUS-110A or keyboarding skill using the touch system.
Offered: Fall, Spring, Summer
Lec 1.50 Hrs; Lab 1.50 Hrs
Basic document processing using the touch system. Emphasis on speed and accuracy on straight-copy material. Proper formatting procedures in the preparation of business letters, memos, tables, and reports using a word processing program. Not open to students who have completed BUS-110.

BUS-111. Intermediate Office Skills (3)
Pass/No Pass Option
Prerequisite: BUS-110 or BUS-110A and BUS-110B. All prerequisites must be completed with a grade of "C" or better.
Offered: Spring
Lec 2 Hrs; Lab 3 Hrs
Continued improvement of keyboarding speed and accuracy by "touch"; continued development of formatting techniques used in business documents (letters, reports, tables and forms). Emphasis on organizing materials, establishing work priorities, and determining efficient office production procedure and the integration of basic office skills.

BUS-128. Professionalism in the Workplace (2)
Pass/No Pass Option
Offered: Spring
Lec 2 Hrs
Designed to assist potential employees develop the personal qualifications, interpersonal skills, and values that are in demand in the workplace.

BUS-129. Practical Customer Service Skills (2)
Pass/No Pass Option
Offered: Spring
Lec 2 Hrs
Introduction to customer service skills and their applications as required in the workplace.

BUS-131. Business English (3)
Pass/No Pass Option
Offered: Fall
Lec 3 Hrs
Study of grammar and application of word usage, punctuation, and syntax using the Standard Business English language model, as accepted in modern business office transactions, for use in preparing written business documents.

BUS-140A. Keyboarding Speed and Accuracy (0.5)
Pass/No Pass Option
Advisory: BUS-110 and/or BUS-110A.
Offered: Fall, Spring
Emphasizes speed and accuracy improvement on straight-copy material. Students may enroll at any time during the first half of the semester. Students will progress at an individual pace.

BUS-140B. Keyboarding Speed and Accuracy (0.5)
Pass/No Pass Option
Prerequisite: BUS-140A with a grade of "C" or better.
Offered: Fall, Spring
Continuation in the development of keyboarding skills focusing on speed and accuracy improvement on straight-copy material. Students may enroll at any time during the first half of the semester. Student will progress at an individual pace.

BUS-150. Basic Computer Applications (2)
Pass/No Pass Option
Offered: Fall, Spring
Lec 1.50 Hrs; Lab 1.50 Hrs
Introduction to computer terminology, office applications and file management. Topics covered include hardware, software, word processing, spreadsheets, presentation software, file management, email and the Internet.

BUS-150.15. Word Processing (3)
Pass/No Pass Option
Advisory: Keyboarding speed of 25 words a minute recommended.
Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
The use of word processing software features and commands to create, design, and edit business documents using a computer.
BUS-150.25. Electronic Spreadsheets (3)  
**Pass/No Pass Option**  
*Advisory:* Keyboarding speed of 25 words a minute recommended. DE/ Hybrid advisory: See page 145  
**Offered:** Spring  
Lec 2 Hrs; Lab 3 Hrs  
Use of spreadsheet features/commands to create and edit electronic spreadsheets using a computer. Not open to students who have completed CSS-150.25.  

[CSU]  

BUS-151. Business Mathematics (3)  
**Pass/No Pass Option**  
**Offered:** Fall  
Lec 3 Hrs  
Study of the principles of arithmetic and their business applications, including a review of whole numbers, fractions, decimals, and percents. Current business applications in the areas of interest, discounts, markup, and installment credit will be emphasized.  

BUS-152. Introduction to Accounting (4)  
**Pass/No Pass Option**  
**Offered:** Fall  
Lec 3.50 Hrs; Lab 1.50 Hrs  
This course introduces the basic accounting cycle for a service concern. This is a slow-paced introduction to basic bookkeeping transactions. These transactions are introduced, first in a manual format, and then a review of the basics is accomplished on the computer. This course does not meet the accounting requirement for business transfers.  

BUS-154. Computerized Accounting (3)  
**Pass/No Pass Option**  
**Prerequisite:** BUS-1A or BUS-152A with a grade of "C" or better.  
**Offered:** Spring  
Lec 2 Hrs; Lab 3 Hrs  
Provides instruction in computer assisted accounting, including the simulation of the accounting cycle. Topics include general ledger, accounting receivable, accounts payable, transactions and reports, financial statements analysis, depreciation, payroll, and program setup.  

BUS-172. Business Machine Calculations Microcomputer (1)  
**Pass/No Pass Option**  
*Advisory:* Completion of BUS-151 is strongly recommended.  
**Offered:** Fall, Spring  
Lab 3 Hrs  
Use of the 10-key machine calculator to develop speed and accuracy by touch and proficiency in solving practical business problems.  

BUS-173. Filing Procedures & Records Management (3)  
**Pass/No Pass Option**  
**Offered:** Spring  
Lec 3 Hrs  
Introduction to filing procedures and rules; emphasizes principles and practices of effective records management for manual and computerized records systems.  

BUS-175. Business Communications (3)  
**Pass/No Pass Option**  
*Advisory:* Minimum keyboarding skill of 25 words per minute is recommended.  
**Offered:** Fall  
Lec 3 Hrs  
Development and adaptation of communication skills in business. Emphasizes listening, speaking, and the public relations aspect of business correspondence in the preparation of various business documents.  

BUS-177. Proofreading and Editing Skills (3)  
**Pass/No Pass Option**  
**Offered:** Spring  
Lec 3 Hrs  
Proofreading and text editing skill development; with emphasis on proficient use of a reference manual and the development of Standard Business English vocabulary usage.  

BUS-190. Career Management (2)  
**Pass/No Pass Option**  
**Offered:** Fall, Spring  
Lec 2 Hrs  
Emphasis on career planning, the job application process and documents, job application skills, and career planning.  

BUS-194. Human Relations in Business (3)  
*Advisory:* DE/Hybrid advisory: See page 145  
**Offered:** Fall, Spring  
Lec 3 Hrs  
The study of the behavior of individuals and groups in organizations for the purpose of satisfying both organizational goals and personal goals.  

BUS-200. Computer Basics (0.5 - 2)  
**Pass/No Pass Only**  
**Offered:** Fall, Spring, Summer  
Lab 6 Hrs  
Provides introductory, entry-level computer skills instruction in a lab environment. Designed to develop and improve computer skills in one-half unit modules in computer concepts, terminology and Windows; Internet and Email basics; file and disk management basics; and keyboarding basics. Students will consult with an instructor regarding the scheduling of their hours and the computer skills they wish to acquire and/or improve.  

BUS-210. Computers for ESL Students (0.5)  
**Pass/No Pass Only**  
**Offered:** Fall, Spring  
Lab 1.50 Hrs  
Focuses on introductory computer concepts for ESL students. Topics covered include the Basics of Computers, Windows Concepts, file management, word processing, email and the Internet. Students will progress at an individual pace. This course does not meet the Business Office Technology certificate or degree requirements.
CHM-1A. General Chemistry I (5)
Prerequisite: MAT-123 with a grade of "C" or better and CHM-22 with a grade of "C" or better or Completion of one year of high school chemistry with a grade of "C" or better. Students may complete a prerequisite clearance process in lieu of CHM-22.
Advisory: Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs; Lab 6 Hrs

CHM-1B. General Chemistry II (5)
Prerequisite: CHM-1A with a grade of "C" or better.
Offered: Fall, Spring
Lec 3 Hrs; Lab 6 Hrs

CHM-12A. Organic Chemistry I (5)
Prerequisite: CHM-1B with grade of "C" or better
Offered: Fall
Lec 3 Hrs; Lab 6 Hrs

CHM-12B. Organic Chemistry II (5)
Prerequisite: CHM-12A with grade of "C" or better
Offered: Spring
Lec 3 Hrs; Lab 6 Hrs

CHM-22. The Science of Chemistry (4)
Prerequisite: MAT-121 with a grade of "C" or better.
Advisory: Eligibility for ENG-1A
Offered: Fall, Spring, Summer
Lec 3 Hrs; Lab 3 Hrs

CHM-23. Organic and Biological Chemistry for Health Sciences (4)
Prerequisite: CHM-22 (with a grade of "C" or better) or CHM-1A (with a grade of "C" or better) or high school chemistry (with a grade of "B" or better.)
Advisory: One year of high school chemistry with a grade of "B" or better.
Offered: Spring
Lec 3 Hrs; Lab 3 Hrs

CHM-60. Principles of Chemistry (4)
Advisory: Eligibility for MAT-121.
Offered: Fall
Lec 3 Hrs; Lab 3 Hrs

[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]
[C-ID CHEM 101]

[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]
[C-ID CHEM 110] [C-ID CHEM 120S with CHM-1B]

[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]
[C-ID CHEM 160S]

[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]
COMMUNICATION STUDIES

COM-1. Introduction to Public Speaking (3)
Prerequisite: Eligibility for ENG-1A
Offered: Fall, Spring, Summer
Lec 3 Hrs
Covers theory and techniques of public speaking in democratic society. Discovery, development, and criticism of ideas in public discourse through research, reasoning, organization, composition, presentation, and evaluation of various types of speeches including extemporaneous, impromptu, informative and persuasive speeches. Creating visual aids using emerging technologies will be required. Not open to students who have completed SPE-1A with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA A1; IGETC, AREA 1]
[C-ID COMM 110]

COM-2. Argumentation and Debate (3)
Prerequisite: Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
Introduces skills in critical analysis and query to promote advocacy. Students will analyze, present, and evaluate oral and written arguments by identifying fallacies, testing evidence and evidence sources, advancing reasoned positions, and defending and refuting arguments. Topics will focus on domestic and international current events, with an emphasis on social justice issues. Not open to students having completed COM-20 with a "C" or better.
[CSU; UC; CSU-GE, AREAS A1, A3; IGETC AREA 1C]
[C-ID COMM 120]

COM-3. Survey of Human Communication (3)
Prerequisite: Eligibility for ENG-1A
Offered: Fall, Spring, Summer
Lec 3 Hrs
This introductory communication course focuses on the basic foundations of interpersonal communication, small group communication and public speaking. Students will be introduced to the breadth of the communication discipline. Additionally, students will examine and practice human communication principles and theories, at a basic level, to develop critical thinking and communication competencies in a variety of contexts. The student will be responsible for creating and presenting three public speeches, including extemporaneous or impromptu, informative and persuasive. Not open to students having completed SPE-3 with a "C" or better.
[CSU; UC CSU-GE, AREA A1; IGETC, AREA 1]
[C-ID COMM 115]

COM-4. Intercultural Communication (3)
Prerequisite: Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
Introduces intercultural communication in domestic and global contexts. Students will study intercultural communication among people in the United States as well as various cultures around the world. Emphasis is placed on the influence of cultures, languages, and social patterns on group member relationships among themselves and with members of different ethnic and cultural groups. Theory and knowledge of effective communication within and between cultures will be discussed. Not open to students who have completed SPE-35, COU-35 or COM-35 with a "C" or better.
[CSU; UC; CSU-GE, AREA D7; IGETC AREA 4]
[C-ID COMM150]

COM-5. Professional & Leadership Communication (3)
Prerequisite: Eligibility for ENG-1A
Offered: Fall
Lec 3 Hrs
Introduction to communication in organizational, career, and leadership contexts. Areas of study include communication theory in dyads, small group, leadership styles, leaderless groups and business presentations. Topics also include: sexual harassment, meeting organization, problem solving and negotiations, interviewing, and cultural issues in the workplace. Not open to students who have completed SPE-5 with a grade of "C" or better.
[CSU; CSU-GE, AREA A1]

COM-6. Small Group Communication (3)
Prerequisite: Eligibility for ENG-1A
Offered: Spring
Lec 3 Hrs
Principles of communication in a variety of group contexts. Theory, application, and evaluation of group communication processes, including problem solving, conflict management, decision making, and leadership.
[CSU] [C-ID COMM 140]

COM-7. Introduction to Persuasion (3)
Prerequisite: Eligibility for ENG-1A
Offered: Fall
Lec 3 Hrs
Examines historical and contemporary approaches to persuasive messages throughout time. It will also focus on the presentation of persuasive appeals, and learning to construct, deliver, and critique persuasive messages.
[CSU] [C-ID COMM 190]
COM-8. Interpersonal Communication (3)
**Prerequisite:** Eligibility for ENG-1A
**Offered:** Fall, Spring
**Lec** 3 Hrs
This course explores interpersonal communication elements including listening, perception, language usage, non-verbal communication, and conflict management. Students will learn new skills to overcome communication barriers and enhance their interpersonal relationships, including friendships, family, romantic, small group and workplace. Not open to students who have completed SPE-8 with a grade of "C" or better.

[CSU; UC; CSU-GE AREA D7; IGETC, AREA 4]
[CSU] [C-ID COMM 130]

COM-9. Oral Interpretation of Literature (3)
**Prerequisite:** Eligibility for ENG-1A
**Offered:** Fall
**Lec** 3 Hrs
Introduction to performance studies, including analysis, appreciation, and application of theories of interpretive performance of various forms of literature. Genres will include poetry, prose, and drama (plays, scripts, and screenplays).

[CSU; UC; CSU-GE AREA C2] [C-ID COMM 170]

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**COMPANY SCIENCE AND INFORMATIOL SYSTEMS**

CSS-1. Intro to Computer Science & Programming Fundamentals (4)
**Pass/No Pass Option**
**Prerequisite:** Eligibility for MAT-123
**Advisory:** DE/Hybrid advisory: See page 145
**Offered:** Fall, Spring, Summer
**Lec** 3 Hrs; **Lab** 3 Hrs
Introduces the fundamental concepts of procedural programming. Topics include data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. Hands-on experiences with a full-range of computer science topics, demonstrate practical use of computers, and the scope and substance of the Computer Science Discipline. The course also offers an introduction to the historical and social context of computing and an overview of computer science as a discipline. Appropriate for liberal arts majors and students preparing for Computer Science and Information Systems course sequences. (This course is equivalent to the Association of Computing Machinery CS101r Programming Fundamentals course. The first course in a three course programming sequence.) Not open to students who have completed CIS-5.

[CSU; UC] [C-ID COMP 112] [C-ID ITIS 130]

CSS-2A. Object Oriented Programming (4)
**Pass/No Pass Option**
**Prerequisite:** CSS-1 with a grade of "C" or better.
**Advisory:** DE/Hybrid advisory: See page 145
**Offered:** Fall, Spring
**Lec** 3 Hrs; **Lab** 3 Hrs
Introduces the concepts of object-oriented programming, focusing on the definition, and use of classes along with the fundamentals of object-oriented design. Other topics include an overview of programming language principles, analysis of algorithms, basic searching and sorting techniques, and an introduction to software engineering issues. Appropriate for computer science and computer engineering majors. (The second course in a three course programming sequence.)

[CSU; UC]

CSS-2B. Data Structures and Algorithms (4)
**Pass/No Pass Option**
**Prerequisite:** CSS-2A with a grade of "C" or better.
**Offered:** Fall, Spring, Summer
**Lec** 3 Hrs; **Lab** 3 Hrs
Fundamental concepts of data structures and the algorithms that proceed from them. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), the basics of algorithmic analysis, and an introduction to the principles of language translation. Appropriate for computer science and computer engineering majors.

[CSU; UC]

CSS-3. Computer Architecture and Assembly Language Programming (4)
**Pass/No Pass Option**
**Prerequisite:** CSS-1 with a grade of "C" or better.
**Advisory:** DE/Hybrid advisory: See page 145
**Offered:** Fall
**Lec** 3 Hrs; **Lab** 3 Hrs
Introduces students to the organization and architecture of computer systems, and assembly language programming. Includes study and application of digital logic, data representation, and assembly level organization. Appropriate for computer science and computer engineering majors. (This course is equivalent to the Association of Computing Machinery CS220 Computer Architecture Course.)

[CSU; UC] [C-ID COMP 142]

CSS-4. Programming for Scientists and Engineers (4)
**Prerequisite:** MAT-3A with a grade of "C" or better.
**Offered:** Fall, Spring
**Lec** 3 Hrs; **Lab** 3 Hrs
Essentials of software development for science, engineering, and mathematical applications using a high level programming language. Introduction to interface of software with the physical world, including the use of sensors in hardware system development.

[CSU; UC]
CSS-7. Discrete Structures (4)
Pass/No Pass Option
Prerequisite: MAT-25 and CSS-1 with a grade of "C" or better.
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring
Lec 3 Hrs; Lab 3 Hrs
Introduction to the mathematical elements of computer science. Topics include propositional logic, predicate logic, sets, functions and relations, combinatorics, mathematical induction, recursion, algorithms, matrices, graphs, trees and Boolean logic.
[CSU; UC]

CSS-25. Multimedia Integration (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
A focus on the integration of various forms of media used to create a multimedia object. Basic concepts such as text, audio, video, and user interface will be examined. Technical and design principles will be covered. Students will develop the appropriate skill necessary to integrate and apply multiple applications or include online design, mobile devices, and multimedia projects.
[CSU]

CSS-27. Management and Content Development (4)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall
Lec 3 Hrs; Lab 3 Hrs
This course will give students a hands-on approach to working with clients who need projects designed and developed. Students will learn to work collaboratively with peers from the beginning of a project to the final client sign-off of a project. Students will be involved in a step-by-step process that starts with defining project management, project planning, storyboards, modification of existing projects, timeline creation, communications strategies, client relationships and project maintenance.
[CSU]

CSS-29. Programming for Multimedia (3)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring
Lec 2 Hrs; Lab 3 Hrs
The course will introduce students to programming for multimedia. A brief history of programming and its uses in today's society will be discussed. Students will learn the basic concepts and components of programming for multimedia using scripting language. Technical and design ideas will be examined for each component of multimedia design. Students will develop the appropriate skill necessary to integrate programming into multimedia projects. Technical and design ideas will be examined for each component of multimedia programming, focusing on CSS, javascripting, and databases.
[CSU]

CSS-31. Database Management (4)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring
Lec 3 Hrs; Lab 3 Hrs
Introduces the fundamental concepts of database management. Topics include the database environment, development, entity-relationship model, object-oriented modeling, logical database design, physical database design, client/server and middleware, SQL, database access, distributed databases, administration, and warehousing. Hands-on experiences with a full-range of database topics demonstrate practical use of databases.
[CSU]

CSS-41. Operating Systems (4)
Prerequisite: CSS-1 with a grade of "C" or better.
Advisory: DE/Hybrid advisory: See page 145
Lec 3 Hrs; Lab 3 Hrs
Introduces the fundamentals of operating systems design and implementation. Topics include an overview of the components of an operating system, mutual exclusion and synchronization, implementation of processes, scheduling algorithms, memory management, file systems, basic concepts of operating systems and system programming, virtual memory, program loading and linking, file and I/O subsystems and utility programs. Appropriate for students preparing for Computer Science and Information Systems course sequences. Hands-on exercises with Windows, UNIX, Linux and Mac OS. (This course is equivalent to the Association of Computing Machinery Operating Systems course.)
[CSU; UC]

CSS-44. Computer Science and Information Systems (4)
Pass/No Pass Option
Prerequisite: Eligibility for ENG-1A
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring
Lec 3 Hrs; Lab 3 Hrs
Examination of computer information systems and their role in computer science. Focus on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware, software development life cycle, algorithms, and elementary programming concepts. Application of these concepts and methods through hands-on projects developing computer-based solutions to computer systems problems.
[CSU; UC] [C-ID ITIS 120]

CSS-60A. 2-D Game Development (4)
Pass/No Pass Option
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring
Lec 3 Hrs; Lab 3 Hrs
An introduction to 2-dimensional computer game design. Topics include criticism, analysis and history of 2-D games, games and society, principles and methodologies behind the rules and play of games, visual and audio design, programming concepts, interactive storytelling and game production. Course contents follow the IDGA Curriculum Framework.
[CSU]
CSS-78. Beginning Flash Game Design and Programming (4)
  Pass/No Pass Option
  **Advisory:** DE/Hybrid advisory: See page 145
  **Offered:** Spring
  Lec 3 Hrs; Lab 3 Hrs

Introduction to beginning game programming using Flash. A brief history of game programming and its uses in today's society will be discussed. Students will learn the basic concepts and components of game programming using action-scripting language. Technical and design ideas will be examined for each component of game design. Students will develop the appropriate skill necessary to develop basic games.

[CSU]

CSS-84. Beginning Digital Cartooning in Flash (4)
  Pass/No Pass Option
  **Advisory:** DE/Hybrid advisory: See page 145
  **Offered:** Spring
  Lec 3 Hrs; Lab 3 Hrs

A hands-on approach to designing and developing basic digital cartoons in Flash. Students will be involved in a step-by-step process that starts with storyboarding, basic animation principles, character design and development, and designing basic animation in Flash.

[CSU]

CSS-110. Computer Science and Information Systems Topics (2 - 4)
  **Pass/No Pass Option**
  **Prerequisite:** CSS-1 with a grade of "C" or better.
  Lec 4 Hrs

Explores current issues and special topics in the areas of Computer Science and Information Systems. Topics vary by semester. Examples of topics: graphics programming, internet security, geographic information systems, and data warehousing.

CSS-120A. Introduction to Networks (4)
  **Pass/No Pass Option**
  **Prerequisite:** CSS-120A with a grade of "C" or better.
  Lec 3 Hrs; Lab 3 Hrs

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. (Equivalent to CCNA (Routing and Switching) Curriculum Course: Network Fundamentals) Not open to students who have completed CSS-121A with a grade of "C" or better.

[CSU]

CSS-120B. Routing & Switching Essentials (4)
  **Pass/No Pass Option**
  **Prerequisite:** CSS-120A with a grade of "C" or better.
  **Advisory:** DE/Hybrid advisory: See page 145
  **Offered:** Spring
  Lec 3 Hrs; Lab 3 Hrs

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. (Equivalent to CCNA (Routing and Switching) Curriculum Course: Routing and Switching)

[CSU]

CSS-120C. Scaling Networks (4)
  **Pass/No Pass Option**
  **Prerequisite:** CSS-120B with a grade of "C" or better.
  **Advisory:** DE/Hybrid advisory: See page 145
  **Offered:** Fall
  Lec 3 Hrs; Lab 3 Hrs

Describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. (Equivalent to CCNA (Routing and Switching) Curriculum Course: Scaling Networks)

[CSU]

CSS-120D. Connecting Networks (4)
  **Pass/No Pass Option**
  **Prerequisite:** CSS-120C with a grade of "C" or better.
  **Advisory:** DE/Hybrid advisory: See page 145
  **Offered:** Spring
  Lec 3 Hrs; Lab 3 Hrs

This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network. (Equivalent to CCNA (Routing and Switching) Curriculum Course: Connecting Networks) Not open to students who have completed CSS-121C with a grade of "C" or better.

[CSU]
CSS-122. Computer Security Principles (4)  
Advisory: DE/Hybrid advisory: See page 145  
Offered: Fall  
Lec 3 Hrs; Lab 3 Hrs  
Covers the essentials of computer and network security. Includes security objectives and the role of policy deployment while practicing to defend against network attacks. Additional topics: cryptography, public key infrastructure, standards and protocols, impact of physical security on network security, infrastructure security, remote access, wireless and instant messaging, intrusion detection and network baselines. Coverage of both CompTIA's Security+ which focuses on best practices, roles, and responsibilities of security experts, is integral to the course.  
[CSU]

CSS-123. Network Security Principles (4)  
Advisory: DE/Hybrid advisory: See page 145  
Offered: Spring – odd  
Lec 3 Hrs; Lab 3 Hrs  
Provides an in-depth exploration of the essentials of computer network security. Analyze security objectives and the role of policy deployment while defending against network attacks. Covers attacks and malware, E-mail, web components, software development, disaster recovery, risk, change and privilege management, forensics and legal issues. Scenario-based curriculum describing a start-up company in which the students are employed with specific roles will also be incorporated in the class. Coverage of both CompTIA's Security+ certification exam and the (ISC) 2 SSCP certification, is integral to this course.  
[CSU]

CSS-124. System and Network Administration (4)  
Pass/No Pass Option  
Advisory: CSS-44  
Offered: Spring – even  
Lec 3 Hrs; Lab 3 Hrs  
This course will provide a student with the knowledge and skills required to build, maintain, troubleshoot and support server hardware and software technologies. The student will be able to identify environmental issues; understand and comply with disaster recovery and physical / software security procedures; become familiar with industry terminology and concepts; understand server roles / specializations and interaction within the overall computing environment. Not open to students who have completed CSS-170B with a grade of "C" or better.  
[CSU]

CSS-125. Storage Management and Virtualization (4)  
Pass/No Pass Option  
Advisory: CSS-120A  
Offered: Spring – even  
Lec 3 Hrs; Lab 3 Hrs  
An overview of storage management and management concepts and administration, including tasks and operations involved in the daily management and ongoing support of a network. Additionally, characteristics and limitations of current storage architectures is presented, paired with discussion and implementation in a virtualized environment. Hands-on experience is provided for familiarization with networking and virtualization configurations. Not open to students who have completed CSS-170A with a grade of "C" or better.  
[CSU]

CSS-126. Dreamweaver (4)  
Pass/No Pass Option  
Advisory: DE/Hybrid advisory: See page 145  
Offered: Spring  
Lec 3 Hrs; Lab 3 Hrs  
A focus on the student's use of Dreamweaver, web authoring, and its accompanying components to construct complex web projects and its versatile uses for the Internet. Subjects to be covered are web site design, content creation, and editing. Maintaining websites including JavaScript, image maps, mobile website design and other complex components of Dreamweaver and web authoring.  
[CSU]

CSS-127. Flash Design (4)  
Pass/No Pass Option  
Advisory: DE/Hybrid advisory: See page 145.  
Offered: Fall  
Lec 3 Hrs; Lab 3 Hrs  
The course will focus on the skills necessary for the effective use of Flash. Students will create Flash websites, movies, applications for mobile devices and multimedia. Subjects to be covered are vector-based graphics, interactivity design, and basic animation techniques, audio and video, interactive media, action scripting, and movies and other complex ideas using Flash  
[CSU]

CSS-169. Computer Maintenance and Repair (4)  
Offered: Fall, Spring  
Lec 3 Hrs; Lab 3 Hrs  
An introduction and hands-on approach to the concepts and practices of how to install, set-up and maintain a computer system. Topics covered include hardware, software, procedures, components and configuration for newly constructed and repaired computer systems.
CSS-170A. Networking Administration and Storage Management (4)

Pass/No Pass Option
Lec 3 Hrs; Lab 3 Hrs

An overview of networking operating systems concepts and administration, including tasks and operations involved in the daily management and ongoing support of a network. Additionally, characteristics and limitations of current storage architectures is presented, paired with discussion and implementation in a virtualized environment. Hands-on experience is provided for familiarization with networking and virtualization configurations.

CSS-205. Introduction to Microcomputers (1)

Pass/No pass Option
Lec 0.50 Hrs; Lab 1.50 Hrs

An introduction to microcomputers and their use. Topics include operation of a microcomputer and peripheral equipment, brief introduction to keyboarding skills, and an introduction to the use of Windows, Internet, and microcomputer applications.

CONSTRUCTION

The Construction program is undergoing revision. For more information contact Robert Burton Ward at rward@hartnell.edu

CONS-61. Construction Methods: Foundations and Framing (6)

Prerequisite: CONS-101 and MAT-201 with a grade of "C" or better or placement by Hartnell's assessment. Eligibility for ENG-101

Lec 2 Hrs; Lab 6 Hrs

Covers first phases of residential and light commercial construction processes with focus placed on rough framing principles, techniques, and skills. Students will construct simple structures on campus from basic architectural plans, beginning with building layout, foundations, ground floor construction, including both raised foundations, and slabs on grade, progressing through floor framing, walls, door and window openings, stairs, second floor framing, and conclude with roof framing of hip, valley, gable and eave details.

[CSU]

CONS-101. Introduction to Sustainable Construction (3)

Pass/No Pass Option
Offered: Fall
Lec 3 Hrs

The first required core course of the Sustainable Construction Program offering an overview of the construction industry. Provides fundamental skills in construction safety, terminology, tool use, calculations, print reading, communications skills and job readiness. Green building definitions, careers, design, materials, certifications systems, and other aspects are introduced. Not open to students who have completed CON-101 and/or CON-120 with a grade of "C" or better.

CONS-104. Print Reading and Modeling (3)

Pass/No Pass Option
Offered: Spring
Lec 3 Hrs

Covers blueprints, specifications, and other construction documents, from which students will build scale models. Students will also review and practice basic measurement, calculation, layout, free-hand drawing, and computer uses. Not open to students who have completed CON-74 with a grade of "C" or better.

[CSU]

CONS-121. Principles of Sustainable Design (3)

Pass/No Pass Option
Lec 3 Hrs

Introduces fundamental concepts and principles of Sustainable Design that can be applied to products, processes, systems, organizations, or buildings. Suitable for students considering a wide spectrum of careers.

CONS-123. Sustainable Design Studio (3)

Pass/No Pass Option
Prerequisite: CONS-121 with a grade of "C" or better
Lec 2 Hrs; Lab 3 Hrs

Studio class to practice the application of Sustainable Design principles to real world design challenges, including products, processes, systems, buildings and organizations. Suitable for students considering a wide range of career options.

CONS-125. Green Bldg Materials and Methods (3)

Pass/No Pass Option
Advisory: CONS-101 (If CONS-101 has NOT been taken, the student should have adequate preparation for this advanced class through previous exposure to or experience in Green Building.)
Offered: Fall
Lec 3 Hrs

In this advanced Green Building course students will learn more about environmentally preferable materials, methods, and systems for both residential and commercial projects. Products, planning, and performance compose the systems students will study. The class will take a field trip to a green building materials supplier. Not open to students who have completed CON-130 with a grade of "C" or better.

CONS-126. Green Bldg Remodel and Retrofit (3)

Pass/No Pass Option
Advisory: CONS-101, CONS-104 and CONS-125
Lec 3 Hrs

Examines "green" options to remodel and retrofit existing buildings vs. new building to meet environmental standards. Study of both commercial and residential green remodeling principles and techniques.
CONS-128. Sustainable Bldg Design (3)  
*Pass/No Pass Option*  
**Advisory:** CONS-101, CONS-104 and/or CONS-125  
**Offered:** Fall  
**Lec** 2 Hrs; **Lab** 3 Hrs  
Use of integrated design systems to maximize efficiency and aesthetic qualities. Students will design several simple systems, and one integrated vision of their own. Covers both residential and commercial buildings.

CONS-132. Masonry and Concrete (3)  
*Pass/No Pass Option*  
**Offered:** Fall  
**Lec** 2 Hrs; **Lab** 3 Hrs  
Fundamentals of the masonry and concrete industries, including principles, project layout, tools, materials, finishing, new green innovations, and commercial/civil jobs.

CONS-134. Plumbing and HVAC (3)  
*Pass/No Pass Option*  
**Offered:** Fall  
**Lec** 2 Hrs; **Lab** 3 Hrs  
Covers traditional plumbing and HVAC principles and skills such as piping materials and joining methods, and also innovative systems such as solar hot water and geothermal HVAC. Not open to those who have completed CON-70 with a grade of "C" or better.  
[CSU]

CONS-136. Electrical (3)  
*Pass/No Pass Option*  
**Offered:** Spring  
**Lec** 2 Hrs; **Lab** 3 Hrs  
An introductory study of electrical techniques and practices used in both commercial and residential construction. Topics include safety, tools, principles, circuits, conductors, grounding, wiring, layout, lighting, codes and licenses. Energy conserving products and solar electric installation are also discussed. Not open to those who have completed CON-71 with a grade of "C" or better.  
[CSU]

CONS-140. Construction Management and Scheduling (3)  
*Pass/No Pass Option*  
**Offered:** Spring  
**Lec** 3 Hrs  
Covers construction management decision-making fundamentals including resource, cost, and quality control, as well as documentation, planning, scheduling and negotiation. One field trip required.

CONS-142. Construction Estimating (3)  
*Pass/No Pass Option*  
**Advisory:** CONS-140  
**Offered:** Fall  
**Lec** 3 Hrs  
A study of the basic approaches to commercial and residential construction estimating. Topics include bid preparation and procedures, materials and labor pricing, and unique green building calculations. Not open to students who have completed CON-63 with a grade of "C" or better.  
[CSU]

CONS-144. Construction Law and Contracts (3)  
*Pass/No Pass Option*  
**Advisory:** CONS-140  
**Offered:** Spring  
**Lec** 3 Hrs  
Topics included are construction contracts, labor issues, insurance, costs, damages, environmental concerns, inspections, and dispute avoidance and resolution. Not open to students who have completed CON-62 with a grade of "C" or better.  
[CSU]

CONS-149. Commercial Construction (3)  
*Pass/No Pass Option*  
**Advisory:** CONS-101, CONS-104, CONS-125  
**Offered:** Spring  
**Lec** 3 Hrs  
Examines the principles and practice of commercial construction and explores the special aspects of green office complexes, retail spaces, school campuses, and hospitals, using case studies. Topics include distinct materials, methods, standards, and testing, and special certifications for sustainable projects.

CONS-150. Construction Field Practice I (6)  
*Pass/No Pass Option*  
**Offered:** Fall, Spring, Summer  
**Lec** 2 Hrs; **Lab** 12 Hrs  
Practical applications of construction skills in a field project that provides students with practical on-the-job experience. Focus on introductory building basics, tool handling, job site etiquette, and trade skills. Projects may include any or all phases of construction from excavation to final finish work, depending upon the specific stage of the project when students join the class. Class meetings are at a specified building site. Not open to students who have completed CON-50 with a grade of "C" or better.  
[CSU]

CONS-151. Construction Field Practice II (6)  
*Pass/No Pass Option*  
**Prerequisite:** CONS-150 with a grade of "C" or better.  
**Offered:** Fall, Summer  
**Lec** 2 Hrs; **Lab** 12 Hrs  
Continuation of practical applications of construction skills in a field project. Focus on building techniques, job organization, plans, and materials. Projects may include any or all phases of construction from excavation to final finish work, depending upon the specific stage of the project when students join the class. Class meetings are at a specified building site. Not open to students who have completed CON-51 with a grade of "C" or better.  
[CSU]
CONS-152. Construction Field Practice III (6)
Pass/No Pass Option
Prerequisite: CONS-151 with a grade of "C" or better.
Offered: Fall, Summer
Lec 2 Hrs; Lab 12 Hrs
Continuation of practical applications of field construction skills. Advanced students will focus on leadership and supervisory roles on the job by scheduling and organizing work sessions, procuring appropriate materials, communicating with inspectors, and solving problems. Projects may include any or all phases of construction from excavation to final finish work, depending upon the stage of the project when students join the class. Class meetings are at a specified building site.
[CSU]

CONS-154. Technology Tools for Construction (3)
Pass/No Pass Option
Offered: Spring
Lec 3 Hrs
Exploration of construction management technical software products including Building Information Modeling (BIM), Sketch-up, project management, green materials procurement, scheduling, and estimating tools. Students should be familiar with standard computer functions prior to enrolling in this course. Advisory Students should be familiar with standard computer functions prior to enrolling in this course.

CO-OP WORK EXPERIENCE

CWE-99. General Cooperative Work Experience Education (1 - 4)
Lab 1 Hr
Designed for students employed or volunteering to assist them in the development of skills and responsibilities related to the work environment. Structured objectives are developed and agreed upon by the student, college instructor, and employer.
A maximum of 6 units may be earned during one term in general work experience education in combination with CO-OP 99. A total of 16 units may be earned in combination with CO-OP 99.
[CSU]

COUNSELING

COU-23. Student Skills for Success: Career Development (3)
Pass/No Pass Option
Offered: Fall, Spring
Lec 3 Hrs
Designed to assist students create and implement a plan for optimal career and personal development. Students will create a personal and career profile by assessing interests, aptitudes, skills, values, personality, and life and personal circumstances; as well as develop educational options and pathways that occur during a typical life span.
[CSU; CSU-GE, AREA E]

COU-27. Life Planning (3)
Pass/No Pass Option
Offered: Spring
Lec 3 Hrs
Comprehensive life and career planning course with a focus on key lifespan issues. Importance of relationship and appreciation of divergent cultural values will be explored. Action steps will be explored and identified to enable student’s success and to select a college major.
[CSU; CSU-GE, AREA E]

COU-28. Career and Ability Assessment (1)
Pass/No Pass Only
Offered: Fall, Spring
Lec 1 Hr
An exploration of personal interests, aptitudes, experiences and values to assist students in their individual career decision-making process. Appropriate for students seeking to determine a major as well as adults in career transitions. This course may be scheduled in a lecture format or self-paced format.
[CSU]

COU-30. Career Interest and Ability Assessment (1)
Pass/No Pass Only
Offered: Fall, Spring
Lec 1 Hr
An exploration of personal interests, aptitudes, experiences and values to assist students in their individual career decision-making process. Appropriate for students seeking to determine a major as well as adults in career transitions. This course may be scheduled in a lecture format or self-paced format.
[CSU; CSU-GE, AREA E]

COU-38. Student Leadership in Higher Education (2)
Pass/No Pass Option
Offered: Spring, Summer
Lec 2 Hrs
Designed to prepare students for effective leadership roles on campus and in future organizational structures. Student government members, general club members, and any student interested in gaining valuable leadership skills will benefit.
[CSU]

DRAFTING

DRA-50. Introduction to Drafting and Design (3)
Pass/No Pass Option
Offered: Spring, Summer
Lec 2 Hrs; Lab 3 Hrs
This course introduces graphics as a communication tool used in a variety of industries such as, architecture, engineering, interior design, and construction. Emphasis placed on design principles and processes involved in engineering and architectural fields. Topics include technical sketching, lettering, line types, applied geometry for graphic representation, problem solving, orthographic projection and pictorial projections including: perspective, axonometric and oblique. Basic dimensioning and sectioning with adherence to drafting standards will be covered.
[CSU]
DRA-52. Introduction to AutoCAD (3)

**Advisory:** Concurrent enrollment in or completion of DRA-50 is recommended.

**Offered:** Fall, Summer

**Lec** 2 Hrs; **Lab** 3 Hrs

Introduces computer-aided drafting (CAD) and examines the hardware that makes up a CAD workstation. Covers the operating system (Microsoft Windows) that enables the equipment to function as a unit. The course shows how to use Auto-CAD to set up drawings and construct lines, circles, arcs, other shapes, geometric constructions, dimensions, and text. Students will use display and editing techniques as well, to obtain information about their drawings, and work with drawing files. This course also covers recommended drafting standards required for proper drawings with AutoCAD.

[CSU]

DRA-53. Advanced AutoCAD (3)

**Advisory:** DRA-52 with a grade of "C" or better.

**Offered:** Spring

**Lec** 2 Hrs; **Lab** 3 Hrs

Builds on the knowledge acquired in Introduction to AutoCAD. Examines advanced dimensioning, blocks and attributes, section views, external references, multi-view layouts, command aliases, scripts, and object linking and embedding. Students will learn how to apply advanced dimensioning, create section lines and graphic patterns, design symbols and attributes for multiple uses, and create sheet sets. Covers recommended drafting standards and practices, for the proper drawing preparation with AutoCAD.

[CSU]

DRA-54. AutoCAD 3D Modeling (3)

**Pass/No Pass Option**

**Prerequisite:** DRA-52 with a grade of "C" or better.

**Offered:** Spring

**Lec** 2 Hrs; **Lab** 3 Hrs

Focuses on three-dimensional concepts and features. AutoCAD software is used to generate wire-frames, surface models and solid models for engineering analysis and presentation. Provides a comprehensive study of the details and procedures used to transform two-dimensional drawings into three-dimensional models. Also includes the procedures for converting models into two-dimensional detail drawings required for the manufacturing or construction industry.

[CSU]

DRA-55. Engineering Drawing with Solidworks (3)

**Pass/No Pass Option**

**Advisory:** DRA-50 with a grade of "C" or better.

**Offered:** Spring

**Lec** 2 Hrs; **Lab** 3 Hrs

Introduces students to essential features of the SolidWorks 3-D computer-aided design modeling application software. Students will construct parts, solid models, assemblies, as well as generate orthographic drawings, add dimensions and plot to produce engineering documentation packages. (Formerly EGN-12. Not open to students who have completed EGN-12 with a grade of "C" or better.)

[CSU; UC]

DRA-58. Computer-Aided Mechanical Drawing (3)

**Pass/No Pass Option**

**Advisory:** Concurrent enrollment or completion of DRA-50, DRA-52.

**Offered:** Fall

**Lec** 2 Hrs; **Lab** 3 Hrs

An advanced study of orthographic projection with precision dimensioning. Includes tolerance and fit, geometric tolerance, different types of sectional views, and fastening devices for manufacturing industries. Emphasis is placed on modern and applied drafting and methods established by the American National Standard Institute (ANSI). Computer aided drafting and design tools such as SolidWorks, Autodesk’s Inventor or similar will be used.

[CSU]

DRA-64. Industrial Print Reading (2)

**Pass/No Pass Option**

**Offered:** Fall

**Lec** 2 Hrs

This course covers the fundamentals of interpreting and understanding of drawings used in engineering, industry and manufacturing.

[CSU]

DRA-70. Architectural Design and Visual Communication I (3)

**Advisory:** DRA-50 with a grade of "C" or better.

**Offered:** Spring

**Lec** 2 Hrs; **Lab** 3 Hrs

Fundamental issues, concepts, and processes, involved in two- and three-dimensional architectural drafting and design are introduced. Emphasis is placed upon acquisition of architectural visualization and graphic skills necessary to solve architectural design problems. Students prepare and present design solutions in drawings, using freehand diagrams, gesture sketches, and hard-line drawings, in multi-view, paraline, and perspective systems. A range of techniques and media are employed to comprehend, generate and visually communicate three-dimensional forms, spaces, and environments in two-dimensional architectural drawings. Integration of traditional manual design methods is introduced in development and refinement of a digital three dimensional architectural model.

[CSU]

DRA-71. Architectural Design and Visual Communication II (3)

**Pass/No Pass Option**

**Advisory:** DRA-70 or ART-70 or ART-80 with a grade of "C" or better.

**Offered:** Spring

**Lec** 2 Hrs; **Lab** 3 Hrs

Course will extend and add to competency achieved in two- and three-dimensional architectural drafting and design communication in DRA-70, using a variety of media including digital drawing and design tools. Drawing and design content will include architectural visual and experiential complexity, spatial definition, structural stability, color theory, shadow casting, digital model building, and representation of materials, transparency, and reflection.

[CSU]
DRA-72. Architectural Design and Visual Communication III (3)

Pass/No Pass Option

Advisory: ART-70 or ART-80 or DRA-70 or DRA-71 with a grade of "C" or better.

Offered: Spring

Lec 2 Hrs; Lab 3 Hrs

Covers a range of various media, including both manual and digital drawing and design tools used as part of architectural design and visual communication processes. The expressive qualities of architecture, communication design, diagramming, building analysis, site analysis, response to context, and accommodation of human activities will be explored. Students will create an annotated final architectural design presentation utilizing a 3D digital model.

[CSU]

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EARLY CHILDHOOD EDUCATION

ECE-1. Principles and Practices of Teaching Young Children (3)

Offered: Fall, Spring

Lec 3 Hrs

An examination of the underlying philosophies and theoretical principles of developmentally appropriate practices as they apply to programs and environments. Emphasis on the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative, and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics, and professional identity.

[CSU] [C-ID ECE 120]

ECE-2. Home, School & Community Relations (3)

Offered: Fall, Spring

Lec 3 Hrs

An examination of the developing child within a societal context that focuses on the interrelationship of family, school, and community. Emphasis is on historical, socio-economic, and cultural factors which influence the family and the processes of socialization which show importance of respectful, reciprocal relationships that support and empower families.

[CSU; UC; CSU-GE, AREA D7; IGETC, AREA 4] [C-ID CDEV110]

ECE-4. Introduction to Curriculum (3)

Offered: Fall, Spring

Lec 3 Hrs

Designed for students to develop and implement ECE curriculum and environments for young children from birth to age 6 which is emergent, individually and culturally appropriate, and inclusive. Students will examine basic principles and developmentally appropriate strategies and teachers’ role to plan content areas of language and literacy, social and emotional learning, sensory learning, art and creativity, math and science based on observation and assessment documentation.

[CSU] [C-ID ECE 130]

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ECE-10. Observation and Assessment (3)

Prerequisite: Eligibility for ENG-1A and FCS-14 with a grade of "C" or better.

Offered: Fall

Lec 2 Hrs; Lab 3 Hrs

Provides a framework regarding appropriate use of a variety of assessment and observation strategies to document children's developmental growth, play, and learning to join with families and professionals in promoting children's success. Child observations will be conducted and analyzed using anecdotal records, recording techniques, rating systems, portfolios, and multiple assessment tools. Students will use assessments to identify developmentally appropriate teaching strategies, curriculum, and accurate reports.

[CSU; UC; CSU-GE, AREA D2; IGETC AREA 4]

ECE-11. Cognitive Activities and Materials (3)

Offered: Fall

Lec 3 Hrs

Explores the implementation of cognitive theories and methods to develop learning experiences and activities to foster intellectual development among young preoperational children and to promote their interest and respect for learning.

ECE-12A. Preschool Theory and Practicum (4)

Prerequisite: FCS-14, ECE-4, ECE-10, ECE-1 with a grade of "C" or better.

Advisory: ENG-101 or ESL-101

Other: TB Clearance

Offered: Spring, Summer

Lec 2 Hrs; Lab 6 Hrs

Designed for ECE students to demonstrate developmentally appropriate early childhood teaching competencies and program planning under the guided supervision of ECE instructor at the college child development center or mentor site. Emphasis will be on making connections between theory and practice from practical classroom experiences to promote positive development, learning, comprehensive understanding for all children and their families, and to develop professional behaviors. Child centered, play-oriented approaches to teaching, learning, and assessment; and knowledge of curriculum content areas will be emphasized as student teachers design, implement and evaluate experiences that promote positive development and learning for all young children. TB clearance must be completed before the first day of class.

[CSU] [C-ID ECE 210]
ECE-12B. Advanced Theory and Practicum in ECE (4)
Prerequisite: ECE-12A with a grade of "C" or better.
Offered: Spring, Summer
Lec 2 Hrs; Lab 6 Hrs
Designed for advanced ECE students to demonstrate developmentally appropriate early childhood teaching competencies under the guided supervision of ECE instructor at the college child development center or mentor site. Emphasis will be on making connection between theory and practice to promote positive development and learning for all children, ages 0 - 5 years old. Students will develop competencies in designing, implementing, and evaluating experiences for all children and families using child-centered, play-oriented approaches to teaching and learning. TB clearance must be completed before the first day of class.
[CSU]

ECE-16. Preschool Curriculum: Music (1)
Offered: Fall, Spring
Lec 1 Hr
Course designed for students interested in providing musical experiences for preschool children of diverse backgrounds. Emphasis on activities to promote language development, critical thinking skills, creativity and multicultural appreciation.
[CSU]

ECE-17. Preschool Curriculum: Movement (1)
Offered: Fall, Spring
Lec 1 Hr
Designed for students interested in providing movement experiences for children of diverse backgrounds in preschool settings. Emphasis on activities that promote socio-emotional growth, language development, critical thinking skills, creativity and appreciation of movement.
[CSU]

ECE-19. Safety Health and Nutrition in the Child Care Setting (3)
Offered: Fall, Spring
Lec 3 Hrs
An examination of the laws, regulations, standards, policies, and procedures and early childhood curriculum in relation to child health, safety, and nutrition. Topics include key components to ensure physical health, mental health, and safety for children and staff, strategies to establish collaboration with families and health professionals, and basic safety, health, and nutrition concepts integrated in daily planning and program development for all children.
[CSU] [C-ID ECE 220]

ECE-20. Infant and Toddler Development (3)
Advisory: FCS-14
Offered: Fall, Spring
Lec 3 Hrs
Designed for students interested in working with infants and toddlers of diverse needs and backgrounds. Focus is on developmental stages, social/emotional development, motor milestones, gender development, temperament issues, culture, language acquisition, parenting styles, and their relationships to quality care and early education of infants and toddlers.
[CSU]

ECE-21. Infant/Toddler Group Care (1)
Offered: Fall-odd
Lec 1 Hr
Focus on infants and toddlers in group settings using the Program for Infant/Toddler Caregiving (PITC) model. The course will examine the philosophy, principles, and caregiving strategies needed to organize primary care for all infants and toddlers with concentration on continuity of care through positive adult-child relations, environments and routines.
[CSU]

ECE-22. Infant/Toddler: Family Relations of Diverse Backgrounds (1)
Offered: Fall-odd
Lec 1 Hr
Focuses on principles and strategies that develop effective working relationships with families of diverse backgrounds. Emphasis on how partnerships with parents impact the quality of infant/toddler program, parent involvement, Parent education, staff/parent relationships, and caregiver/parent coping skills.
[CSU]

ECE-23. Infant/Toddler Education: Cognitive and Language Learning (2)
Offered: Spring-odd
Lec 2 Hrs
Focuses on cognitive and language development of all infants and toddlers. Description of cognitive theories and demonstrations of strategies and appropriate activities that promote cognitive and language development for infants and toddlers in group settings.
[CSU]

ECE-24. Infant/Toddler: Special Needs (3)
Advisory: It is recommended that students complete ECE-20 and/or ECE-26 before enrolling in this course.
Offered: Spring-even
Lec 3 Hrs
Designed for students interested in increasing their skills and knowledge to work effectively with infants and toddlers with special needs in an inclusive environment. Focus of early intervention includes laws, regulations, rights of families and young children with special needs, theories, research, and best practices of early childhood education.
[CSU]

ECE-26. Children with Special Needs (3)
Offered: Spring
Lec 3 Hrs
An introduction and overview of the history of special education, landmark legislation, and federal mandates protecting the rights of children with special needs. Focus will include characteristics and diverse educational needs of children with special needs, theories, research, and practical applications of best practices from the fields of ECE and Early Intervention.
[CSU]

**Offered:** Fall-even  
**Lec** 3 Hrs

Designed for students interested in the basic principles and practices for guiding children with diverse needs and behaviors in early childhood settings. Emphasis on the guidance and discipline techniques most effective in supporting all children through their social/ emotional development, self regulation and adaptations to group care settings.  

[CSU]

ECE-53. Teaching in a Diverse Society (3)

**Offered:** Fall, Spring  
**Lec** 3 Hrs

An examination of the major social, economic, and psychological factors and theories involving interactions and relationships of personal and group differences and how these factors affect young children, families, programs, teaching, education, and schooling. Various strategies and anti-bias approaches for working with diversity issues in the classroom will be explored to support all children in becoming competent members of a diverse society. The course involves self-reflection of one’s own understanding of bias, discrimination, and systemic oppression, and deeper understanding of educational principles and practices to best support all children's social identities and program development in our culturally and linguistically diverse society.  

[CSU] [C-ID ECE 230]

ECE-54. Language and Early Literacy Curriculum (3)

**Offered:** Spring-odd  
**Lec** 3 Hrs

Designed for students interested in understanding theories of language acquisition and for monolingual, English learners, and children with special needs. Focus on methods and materials to promote emerging language and literacy for all young children in a culturally diverse society.

ECE-70A. Supervision and Administration in ECE (3)

**Prerequisite:** ECE-1, ECE-2, ECE-4, ECE-101, and FCS-14 with a grade of “C” or better.  
**Advisory:** Eligibility for ENG-1A or equivalent.  
**Offered:** Spring-odd  
**Lec** 3 Hrs

Designed for students interested in the philosophy and principles of early childhood education management systems in planning, organization, budgeting, program evaluations, personnel, and other operations in the context of a diverse society.  

[CSU]

ECE-70B. Advanced Administration of Child Development Programs (3)

**Prerequisite:** ECE-70A with a grade of “C” or better.  
**Offered:** Spring-even  
**Lec** 3 Hrs

Advanced students of Early Childhood Education, supervisors and administrators of child development programs will expand skills and knowledge in program funding, organizational systems, program management and leadership skills. Focus on profit and non-profit programs, program funding, grant writing, program evaluation, program improvement, advocacy and professionalism in the Child Development field.  

[CSU]

ECE-71. Supervision of Adults in an ECE Setting (2)

**Prerequisite:** Eligibility for ENG-1A.  
**Advisory:** Must possess or be eligible for the teacher permit issued by the Commission on Teacher Credentialing. Must complete ECE core courses plus 12 ECE units.  
**Offered:** Spring  
**Lec** 2 Hrs

Designed for supervisors and administrators coordinating early childhood programs. Emphasis on methods and principles of implementing a strong staff component in a licensed program or agency. Meets the licensing requirement for teachers, site supervisors and directors. Students must present a copy of Child Development Teacher permit on the first day of school.  

[CSU]

ECE-101. Orientation to E.C.E. (1)

**Offered:** Fall, Spring  
**Lec** 1 Hr

An exploration of student needs, interests, and capabilities in relation to job expectations, job opportunities, and levels of education needed to qualify for various career levels in the fields of early childhood education (ECE).
ECE-103. Child Growth and Development/ El Crecimiento y Desarrollo Del Nino (3)

Advisory: When the course is taught in Spanish, reading and writing skills in Spanish will be necessary.

Other: When the course is taught in Spanish, students must also enroll in English and ESL course.

Other: Course counts as a core course for Child Development Permit.

Offered: Spring-odd

Lec 3 Hrs

An examination of major developmental milestones for children, both typical and atypical, from conception through adolescence. Emphasis is on the interactions between maturational processes and environmental factors in the areas of physical, cognitive, and psychosocial development. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. When the course is offered in Spanish concurrent enrollment in any ESL or English course.

Un análisis de los hitos principales del desarrollo típico y atípico para los niños desde la concepción hasta la adolescencia. Se hace énfasis en la interacción entre los procesos de maduración y factores ambientales en las áreas del desarrollo físico, cognitivo, y psicosocial. Con el estudio de la teoría del desarrollo y los métodos de investigaciones científicas, los estudiantes observarán a los niños, evaluarán las diferencias individuales, y analizarán los rasgos del desarrollo en las distintas etapas. Cuando se ofrece este curso con la instrucción en español, inscripción concurrente requerida en un curso de ESL o inglés.

ECE-193A. Topics in ECE: Early Childhood Leadership, Advocacy, Parent Relations, and Management (0.5)

Pass/No Pass Only

Offered: Fall

Designed to address current trends in ECE leadership, advocacy, parent relations, and management. Includes updates on government mandates, laws, and regulations affecting ECE Programs and workforce training.

ECE-194A. Topics in ECE: Early Childhood Philosophies, Curriculum and Innovative Teaching Methodologies (0.5)

Pass/No Pass Only

Offered: Spring

Designed to address current trends in ECE philosophies, curriculum, and innovative teaching methodologies. This course will reflect updates of government mandates and regulations affecting curricular trends.

ECE-195A. Topics in ECE: Curriculum (0.5)

Pass/No Pass Only

Offered: Spring

Topics organized as workshops, conferences, and/or seminars that center on specific philosophies, approaches, and current trends in curriculum and learning environments to meet the current early education and child care workforce regulations and competencies.

ECE-196A/J. Topics in ECE: Program Management (0.5 - 3)

Pass/No Pass Only

Offered: Spring

Topics organized as workshops, conferences, and/or seminars center on program management responding to, current training needs and interests of early childhood educators, students, and community employers. A. Working with parents B. Working with children and families at high risk C. Staff relations D. Learning Environments E. Dealing with stress-related situations F. Staffing issues in ECE programs G. Emergency preparedness H. Budgets and finances of ECE programs I. Facilities: Health and Safety, Design, Playgrounds J. Safety Reviews

ECE-197A/G. Topics in ECE: Guidance, Observation, Assessment of Children (0.5 - 3)

Pass/No Pass Only

Offered: Spring

Topics organized as workshops, conferences, and/or seminars center on guidance, discipline, observations, assessments, evaluations that respond to current training needs and interests of ECE educators, students, and community employers. A. Authentic Assessment B. Desired Results C. Behavior Management and Conflict Resolution D. Working Effectively with children with special needs. E. Helping Children Cope with Stress F. How and When to Make Referrals for community resources and agencies G. Child Developmental needs of children from diverse backgrounds.

ECE-198A. Topics in ECE: Program & Curriculum Options (0.5)

Pass/No Pass Only

Offered: Spring

Emphasis in describing research-based approaches in ECE programs and curriculum for students, educators, supervisors, and administrators.

ECE-199. Selected Topics in E.C.E. (0.5 - 2)

Pass/No Pass Only

Offered: Spring

In-service workshops or seminars of selected topics to provide knowledge and skills of important contemporary issues about methodology, curricular activities, child development and parenting for ECE educators, students, and parents. Seminars may be offered for 0.5 unit, 1.0 or 2.0 units depending on the content of the selected topic, community demand, or ECE workforce development need.

ECE-200. Parent Enrichment (0.3 - 1)

Pass/No Pass Only

Offered: Fall, Spring, Summer

This course serves to introduce parents to the Child Development Center as a facilitator of healthy intellectual and psychosocial development of children. Each student will become familiar with the developmental growth of the child during the early years with methods to enhance this growth.
**ECONOMICS**

ECO-1. Principles of Macroeconomics (3)
- **Prerequisite:** MAT-123 with a grade of "C" or better.
- **Advisory:** Eligibility for ENG-1A; DE/Hybrid advisory: See page 145.
- **Offered:** Fall, Spring, Summer
  
  **Lec 3 Hrs**

Introduces national income, employment, inflation, economic growth, government economic policy, banking and the Federal Reserve System and international economics.

[CSU; UC; CSU-GE, AREA D2; IGETC, AREA 4]
[C-ID ECON 202]

ECO-5. Principles of Microeconomics (3)
- **Prerequisite:** MAT-123 with a grade of "C" or better.
- **Advisory:** Eligibility for ENG-1A; DE/Hybrid advisory: See page 145.
- **Offered:** Fall, Spring, Summer
  
  **Lec 3 Hrs**

Examines the workings of the marketplace, the economics of the consumer, the business firm, the distribution of income, and the allocation of resources.

[CSU; UC; CSU-GE, AREA D2; IGETC, AREA 4]
[C-ID ECON 201]

ECO-10. Introduction to Economics (3)
- **Advisory:** Eligibility for ENG-1A; DE/Hybrid advisory: See page 145.
- **Offered:** Fall
  
  **Lec 3 Hrs**

A broad survey of the development of economic ideas and theories in the context of economic schools of thought. Both microeconomic and macroeconomic topics are covered including scarcity, opportunity costs, supply and demand (both individual and aggregate), market structures, labor markets, the business cycle, government intervention including regulations, fiscal policy and monetary policy, and international issues such as international trade and global income distribution. Not open to students who have completed ECO-1 and ECO-5 with a "C" or better.

[CSU; UC]

**EDUCATION**

EDU-1. Multicultural Perspectives of Education (3)
- **Prerequisite:** ENG-1A with a grade of "C" or better.
- **Offered:** Fall
  
  **Lec 3 Hrs**

An introduction to education, this course reviews the historical, sociological, philosophical and psychological perspectives, which form the context of the American educational system. Designed to encourage prospective teachers to reflect on their decision to enter the teaching profession, particularly at the K-12 level, this course will focus on analyzing the multicultural dynamics in the historical and social structure of school and society, while providing opportunities to analyze a variety of teaching perspectives, and to gain and develop the cultural knowledge of self and others necessary to teach in a multicultural society. As such, it includes an observation or service-learning component that requires 30 hours of supervised participation at a school site and TB and LifeScan reviews as required by their school site.

[CSU; UC; CSU-GE, AREA D3, D7] [C-ID EDUC 200]

EDU-110. Foundations of Success (3)
- **Pass/No Pass Only**
- **Offered:** Fall, Spring
  
  **Lec 2.50 Hrs; Lab 1.50 Hrs**

Introduction to professional behaviors, attitudes and values that lead to academic and career success in the information economy. Topics include building self-managed teams, creating effective teams composed of individuals with different work/learning styles, identifying opportunities and threats to success, and exploring the culture of knowledge work.

EDU-111. Team Self-Management (2)
- **Prerequisite:** EDU-110 with a grade of "C" or better.
- **Advisory:** Eligibility for ENG-101 or Accuplacer Reading Comprehension score of 40+
- **Offered:** Fall, Spring
  
  **Lec 2 Hrs**

Fundamentals of project management with a self-managed team. Course explores the connections of the student's purposes, intentions, and behaviors to improve self-management skills. The student develops personal and academic objectives: time management, educational plans, heightened self-awareness, and consideration for others in a professional/academic environment.

EDU-112. Social Justice Research Methods (3.5)
- **Corequisite:** EDU-111; ENG-101; BUS-150; COU-30
- **Offered:** Fall, Spring
  
  **Lec 3 Hrs; Lab 1.50 Hrs**

Students develop project management skills in team leadership. Topics include learning to delegate tasks and supervise project development, problem solving, data analysis, presentation and research skills in the context of a survey-based primary research project on a community issue related to social justice. Students analyze community needs and propose innovative solutions. Course includes overview and critical analysis of historical and contemporary social justice issues.
EMERGENCY MEDICAL TECHNOLOGY

EMT-53. Emergency Medical Technician (7)
Prerequisite: HES-120 or American Heart Association "BLS for the Health Care Provider" CPR card
Offered: Fall, Spring, Summer
Lec 5 Hrs; Lab 6 Hrs
The EMT course follows the state-mandated curriculum. The classroom setting and clinical rotations provide opportunities to gain proficiency in the theoretical knowledge and in the application of basic life support skills required to function as an EMT. Upon completion of course requirements, students will be issued a Course Completion Certificate that is required for EMT certification through the California Emergency Medical Services Agency.

ENGINEERING

EGN-1. Introduction to Engineering (3)
Offered: Fall, Spring
Lec 2 Hrs; Lab 3 Hrs
The course explores the branches of engineering, the functions of an engineer, and the industries in which engineers work. Explains the engineering education pathways and explores effective strategies for students to reach their full academic potential. Presents an introduction to the methods and tools of engineering problem solving and design including the interface of the engineer with society and engineering ethics. Develops communication skills pertinent to the engineering profession.

[CSU; UC] [C-ID ENGR 110]

EGN-2. Engineering Graphics and Design (4)
Pass/No Pass Option
Prerequisite: MAT-24 with a grade of "C" or better.
Offered: Fall, Spring
Lec 3 Hrs; Lab 3 Hrs
This course covers the principles of engineering drawings in visually communicating engineering designs and introduction to computer-aided design (CAD). Topics include the development of visualization skills; orthographic projections; mechanical dimensioning and tolerancing practices; and the engineering design process. Assignments develop sketching and 2-D and 3-D CAD skills. The use of the CAD software is an integral part of the course. This course will also cover the engineering design process and project management.

[CSU; UC] [C-ID ENGR 150]

EGN-4. Materials Science and Engineering (4)
Prerequisite: CHM-1A and PHY-4A with a grade of "C" or better
Offered: Fall
Lec 3 Hrs; Lab 3 Hrs
This course presents the internal structures and resulting behaviors of materials used in engineering applications, including metals, ceramics, polymers, composites, and semiconductors. The emphasis is upon developing the ability both to select appropriate materials to meet engineering design criteria and to understand the effects of heat, stress, imperfections, and chemical environments upon material properties and performance. Laboratories provide direct observations of the structures and behaviors discussed in the course, experience with the operation of testing equipment, and the preparation of experimental reports.

[CSU; UC] [C-ID ENGR 140B]

EGN-5. Programming and Problem-Solving in MATLAB (3)
Prerequisite: MAT-3A with a grade of "C" or better.
Offered: Spring
Lec 2 Hrs; Lab 3 Hrs
This course utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to science and engineering. It introduces the fundamentals of procedural and object-oriented programming, numerical analysis, and data structures. Examples and assignments in the course are drawn from practical applications in engineering, physics and mathematics.

[CSU; UC]

EGN-6. Circuit Analysis (4)
Prerequisite: PHY-4B with a grade of "C" or better.
Corequisite: MAT-5
Offered: Spring
Lec 3 Hrs; Lab 3 Hrs
An introduction to the analysis of electrical circuits. Use of analytical techniques based on the application of circuit laws and network theorems. Analysis of DC and AC circuits containing resistors, capacitors, inductors, dependent sources, operational amplifiers, and/or switches. Natural and forced responses of first and second order RLC circuits; the use of phasors; AC power calculations; power transfer; and energy concepts. Basic use of electrical test and measurement instruments including multimeters, oscilloscopes, power supplies, and function generators. Use of circuit simulation software. Interpretation of measured and simulated data based on principles of circuit analysis for DC, transient, and sinusoidal steady-state (AC) conditions. Elementary circuit design. Practical considerations such as component value tolerance and non-ideal aspects of laboratory instruments. Construction and measurement of basic operational amplifier circuits.

[CSU; UC] [C-ID ENGR 260; 260L]
EGN-7. Programming for Scientists and Engineers (4)

Prerequisite: MAT-3A with a grade of "C" or better.

Offered: Fall, Spring, Summer

Lec 3 Hrs; Lab 3 Hrs

Essentials of software development for science, engineering, and mathematical applications using a high-level programming language. Introduction to interface of software with the physical world, including the use of sensors in hardware system development. EGN-7 is identical to CSS-4. Not open to students who have completed CSS-4 with a grade of "C" or better. It is recommended that students majoring in Engineering enroll in EGN-7. Students in other STEM majors should enroll in CSS-4.

[CSU; UC] [C-ID ENGR 120]

EGN-8. Statics (3)

Prerequisite: PHY-4A and MAT-3B with a grade of "C" or better.

Offered: Fall

Lec 3 Hrs

A first course in engineering mechanics: properties of forces, moments, couples and resultantants; two- and three-dimensional force systems acting on engineering structures in equilibrium; analysis of trusses, and beams; distributed forces, shear and bending moment diagrams, center of gravity, centroids, friction, and area and mass moments of inertia. Optional additional topics include fluid statics, cables, Mohr's circle and virtual work.

[CSU; UC] [C-ID ENGR 130]

EGN-11. Surveying (4)

Prerequisite: MAT-24 with a grade of "C" or better.

Offered: Spring

Lec 3 Hrs; Lab 3 Hrs

The course applies theory and principles of plane surveying: office computations and designs; operation of surveying field equipment; and production of engineering plans/maps. Topics include distances, angles, and directions; differential leveling; traversing; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; land description techniques, and GPS. Extensive field work using tapes, levels, transits, theodolites, total stations, and GPS.

[CSU; UC] [C-ID ENGR 180]

ENG-1B. College Literature and Composition (3)

Prerequisite: ENG-1A with a grade of "C" or better.

Advisory: DE/Hybrid advisory: See page 145

Offered: Fall, Spring, Summer

Lec 3 Hrs

And introductory literature course with and emphasis in both literacy composition and critical thinking. The course provides instruction and practice in critical thinking and forming literature based arguments through the close study of the major genres of literature: poetry, fiction, drama, and the novel. Students receive instruction in analytical and argumentative writing by studying literature, criticism, and identification of sound and fallacious reasoning in assessments of literature and literary criticism. Students will write a total of 6,000 words.

[CSU; UC; CSU-GE AREAS A3, C2; IGETC, AREAS 1B] [C-ID ENGL 120]

ENG-2. Critical Thinking and Writing (3)

Prerequisite: ENG-1A with a grade of "C" or better.

Advisory: DE/Hybrid advisory: See page 145

Offered: Fall, Spring, Summer

Lec 3 Hrs

Students will use critical reading, thinking, and writing skills beyond the level achieved in ENG-1A to develop argumentative essays in conjunction with predominantly nonfiction prose and discussion of readings. Students will write a total of 6,000 words comprised of short essays, a research paper, and homework assignments.

[CSU; UC; CSU-GE, AREA A3, IGETC, AREA 1] [C-ID ENGL 105]

ENG-17. The Contemporary Shakespeare (3)

Prerequisite: Eligibility for ENG-1A

Offered: Spring-even

Lec 3 Hrs

An examination of Shakespeare's poetry and plays, involving close study of representative works. Focuses include the cultural context of Shakespeare's life and works, his lasting literary influence, and the interpretation of Shakespeare in performance on stage and in film adaptations.

[CSU; UC; CSU-GE; AREA C3; IGETC, AREA 3]

ENG-22. Studies in Poetry (3)

Offered: Spring-odd

Lec 3 Hrs

The study of major short poems from 1600 to the present time, with an emphasis on different critical approaches, historical context, and literary appreciation. Includes lectures, discussions, related reading, writing of critical papers, and developing the art of writing poetry.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

ENG-24. The Short Story (3)

Prerequisite: ENG-1A with a grade of "C" or better.

Offered: Fall-even

Lec 3 Hrs

Reading, discussing, and writing about a diverse selection of classics and contemporary short fiction. Analysis of a spectrum of voices, styles, formal structures, and themes.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]
ENG-26. Chicano Literature (3)
Prerequisite: ENG-1A with a grade of "C" or better.
Offered: Spring-odd
Lec 3 Hrs
An introduction to the study of Chicano Literature from the oral tradition, "el cuento," to the written contemporary works of authors such as Valdez, Cisneros, Villasenor, and Soto.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

ENG-31. Beginning Creative Writing (3)
Prerequisite: Eligibility for ENG-1A
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall-even
Lec 3 Hrs
Designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing and publishing fiction, poetry, and essays. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. Readings will focus on the critical analysis of short stories and literature in order to achieve a better understanding of the interrelationship between creative arts, humanities, and the individual.
[CSU; UC; CSU-GE, AREA C2] [C-ID ENGL 200]

ENG-32. Intermediate Creative Writing (3)
Prerequisite: ENG-31 with a grade of "C" or better.
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall -even
Lec 3 Hrs
The course focuses on continuing to apply the techniques and structures of writing fiction and poetry introduced in ENG 31. Emphasis is placed on writing and publishing fiction, poetry, and essays. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. Readings will focus on the critical analysis of short stories and literature in order to achieve a better understanding of the interrelationship between creative arts, humanities, and the individual.
[CSU; UC; CSU-GE, AREA C2]

ENG-33. Advanced Creative Writing (3)
Prerequisite: ENG-32 with a grade of "C" or better.
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall-evens
Lec 3 Hrs
This course focuses on continuing to apply the techniques and structures of writing fiction and poetry introduced in ENG 32. Emphasis is placed on writing and publishing fiction and poetry and essays. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. Readings will focus on the critical analysis of short stories and literature in order to achieve a better understanding of the interrelationship between creative arts, humanities, and the individual.
[CSU; UC; CSU-GE; AREA C2]

ENG-41. Art of Steinbeck (3)
Prerequisite: Eligibility for ENG-1A
Offered: Fall-even
Lec 3 Hrs
A close study of John Steinbeck’s California novels that best exemplify his themes, style, and use of setting.
[CSU; UC; CSU-GE AREA C2; IGETC, AREA 3]

ENG-44A. World Literature (3)
Prerequisite: ENG-1A with a grade of "C" or better.
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall-odd
Lec 3 Hrs
This course is a study of world literature from ancient times through the Renaissance. Readings will include poetry and prose and the course will consider the literary, cultural, and historical significance of literature from Western and Non-Western traditions.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3] [C-ID ENGL 140]

ENG-44B. World Literature II (3)
Prerequisite: ENG-1A with a grade of "C" or better.
Advisory: DE/Hybrid advisory: See page 145
Offered: Spring-even
Lec 3 Hrs
This course is a study of world literature from the Renaissance to the present time. Readings will include poetry and prose and the course will consider the literary, cultural, and historical significance of literature from Western and Non-Western traditions.
[CSU; UC; CSU-GE; AREA C2; IGETC, AREA 3] [C-ID ENGL 145]

ENG-46A. Survey of British Literature I (3)
Prerequisite: ENG-1A with a grade of "C" or better.
Offered: Spring-even
Lec 3 Hrs
A survey of English literature from early works in Old English to approximately 1785. Readings will include poetry, prose, drama, and religious writing of this period, chosen for their literary, historical, and cultural significance.
[CSU; UC; CSU-GE; AREA C2; IGETC, AREA 3] [C-ID ENGL 160]

ENG-46B. Survey of British Literature II (3)
Prerequisite: ENG-1A with a grade of "C" or better.
Offered: Fall-even
Lec 3 Hrs
A survey of English literature from romanticism to the present. Readings will include poetry, prose and dramatic works chosen for their literary, historical, and culture significance.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3] [C-ID ENGL 165]
ENG-47A. Survey of American Literature I (3)
Prerequisite: ENG-1A with a grade of "C" or better.
Offered: Spring-odd
Lec 3 Hrs
Survey of American literature from its origins to the late 19th century. Readings will include poetry, prose, drama, and religious writings of this period, chosen for their literary, historical, and cultural significance.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]
[C-ID ENGL 130]

ENG-47B. Survey of American Literature II (3)
Prerequisite: ENG-1A with a grade of "C" or better.
Offered: Fall-odd
Lec 3 Hrs
Survey of American literature from the late 19th century to the present. Readings will include poetry, prose, and drama of this period, chosen for its literary, historical, and cultural significance.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

ENG-48. Introduction to Children's Literature (3)
Prerequisite: ENG-1A with a grade of "C" or better.
Offered: Fall-odd
Lec 3 Hrs
A study of children's literature from ancient origins to contemporary fiction. It examines the various genres of children's literature from picture books, traditional literature, fantasy, poetry, realistic and historical fiction from such writers as Aesop, Grimm, Lewis, Sandburg, Sendak, White, Woodson, Rowling, Alexi, Alvarez, and Adams through close critical reading and analytical writing consisting of at least 6,000 words.
[CSU; UC; CSU-GE, AREA C2; IGETC AREA 3B]
[C-ID ENGL 180]

ENG-50. Introduction to Film: History up to the 1960’s (3)
Offered: Fall-odd
Lec 3 Hrs
Introduces film as both an art form and a technological development through the study of representative examples of foreign and domestic films from the beginning of the cinema to 1960. The course will develop students’ understanding of cinematic developments over time and in different regions, as well as basic concepts of film study photography and mise-en-scene, editing, and sound.
[CSU, UC; CSU-GE, AREA C1, IGETC, AREA 3]

ENG-51. Film Appreciation 1960 to the Present (3)
Offered: Spring-odd
Lec 3 Hrs
An introduction to film as both an art form and a technological development through the study of representative examples of foreign and domestic films from 1960 to the present. The course will develop students’ understanding of cinematic developments over time and in different regions, as well as basic concepts of film study: photography and mise-en-scene, editing, and sound.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

ENG-101. Intermediate Composition and Reading (3)
Prerequisite: ENG-253 or ESL-265 with a grade of "C" or better or placement by Hartnell's assessment.
Offered: Fall, Spring, Summer
Lec 3 Hrs
Development of reading writing skills including critical analysis of texts with emphasis on sentence, paragraph, and essay elements. Students will write a minimum of 6,000 words in graded assignments.

ENG-253. Fundamentals of Composition and Reading (5)
Offered: Fall, Spring, Summer
Lec 5 Hrs
Development of reading writing skills with emphasis on elements of the sentence, paragraph, and the short essay.

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ENGLISH AS A SECOND LANGUAGE

ESL-101. Academic Writing and Reading II (5)
Prerequisite: ESL-265 or ENG-253 with a grade of "C" or better or placement by Hartnell's assessment.
Offered: Fall, Spring
Lec 5 Hrs
Development of college reading and composition skills for multilingual and ESL students. Emphasis on writing essays from readings, using sources, and revising. Prepares students for ENG-1A.

ESL-225. Grammar and Writing I (6)
Advisory: Students should be literate enough in their native language to write a note to a friend or read a newspaper in their native language. They should have enough English language competency to speak and/or write understandable simple sentences despite making grammatical errors.
Offered: Spring
Lec 5 Hrs; Lab 3 Hrs
Course emphasizes grammar and writing for high-beginning level ESL students. Simple present and past verb tenses, question forms, parts of speech, and simple sentence writing skills are stressed. Listening and speaking will also be practiced. Course includes three weekly hours of lab. Formerly ESL 125. Not open to students who have completed ESL 125 with a grade of "C" or better.

ESL-227A. Low Beginning Speaking & Listening (3)
Pass/No Pass Option
Offered: Fall
Lec 3 Hrs
A low-beginning level, grammar-based speaking and listening course. Students develop listening and speaking skills in a variety of communicative activities focusing on present and present continuous tenses, adjectives/adverbs, and production and understanding of words/phrases. Not open to students who have completed ESL 226 with a grade of "C" or better.

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ESL-227B. Beginning Speaking & Listening (3)
**Pass/No Pass Option**
**Offered:** Spring, Summer

Lec 3 Hrs
A beginning level, grammar-based speaking and listening course. Students develop listening and speaking skills in a variety of communicative activities focusing on past and future tenses, the modal "can" prepositions, and production and understanding of main points/details.

ESL-228. Reading and Vocabulary I (4)
**Pass/No Pass Option**
**Advisory:** Students should be literate enough in their native language to write a note to a friend or read a newspaper in their native language. They should have enough English language competency to speak and write simple sentences despite making grammatical errors.

**Offered:** Spring
Lec 4 Hrs
Reviews basic literacy, introduces general and academic vocabulary, and develops basic reading comprehension skills for high-beginning level ESL students. Formerly ESL-128. Not open to students who have completed ESL-128 with a grade of "C" or better.

ESL-233. Grammar, Vocabulary, and Reading 2 (7)
**Prerequisite:** ESL-225 with a grade of "C" or better or placement by Hartnell's assessment.

**Offered:** Fall
Lec 6 Hrs; Lab 3 Hrs
Emphasizes the development of writing, vocabulary, and reading skills for low-intermediate level ESL students. Includes three hours/week of lab instruction.

ESL-237A. High-Beg Speaking & Listening (3)
**Pass/No Pass Option**
**Offered:** Spring, Summer
Lec 3 Hrs
A high-beginning level, grammar-based speaking and listening course. Students develop listening and speaking skills in a variety of communicative activities focusing on verbs plus infinitives, questions, and note-taking strategies.

ESL-237B. Low-Intermediate Speaking & Listening (3)
**Pass/No Pass Option**
**Offered:** Spring
Lec 3 Hrs
A low-intermediate level, grammar-based speaking and listening course. Students develop listening and speaking skills in a variety of communicative activities focusing on modals, comparative & superlative adjectives & adverbs, and note-taking strategies.

ESL-243. Grammar, Vocabulary, and Reading 3 (7)
**Prerequisite:** ESL-233 with a grade of "C" or better or placement by Hartnell's assessment

**Offered:** Fall, Spring
Lec 6 Hrs; Lab 3 Hrs
Emphasizes grammar, vocabulary and reading comprehension skills for intermediate level ESL students. Includes three hours of lab per week.

ESL-246. Listening and Speaking 3 (3)
**Pass/No Pass Option**
**Offered:** Fall
Lec 3 Hrs
Listening and conversation practice, at the advanced level, to promote the development of listening and speaking competency. Formerly ESL-146. Not open to students who have completed ESL-146 with a grade of "C" or better.

ESL-252. English Pronunciation and Spelling (3)
**Offered:** Spring, Summer
Lec 3 Hrs
Focuses on English pronunciation and spelling. Includes practice of the sounds, rhythm, and intonation of spoken English. Analyzes English spelling rules and sound-to-letter relationships. Appropriate for all language levels.

ESL-255. Grammar and Writing 4 (6)
**Prerequisite:** ESL-243 with a grade of "C" or better, or placement by Hartnell's Assessment.

**Offered:** Fall, Spring
Lec 5 Hrs; Lab 3 Hrs
Emphasizes grammar and writing for high-intermediate level ESL students. Verb tenses, conditionals, complex sentences, and paragraph writing skills are stressed. Course includes three weekly hours of lab. Formerly ESL-155. Not open to students who have completed ESL-155 with a "C" or better.

ESL-258. Reading and Vocabulary 4 (4)
**Offered:** Fall, Spring, Summer
Lec 4 Hrs
Develops the vocabulary and critical reading abilities of high-intermediate to low-advanced students, using contemporary and literary texts that emphasize critical reading skills. Formerly ESL-158. Not open to students who have completed ESL-158 with a grade of "C" or better.

ESL-265. Academic Writing and Reading I for ESL (5)
**Prerequisite:** ESL-255 and ESL-258 with grades of "C" or better.

**Offered:** Fall, Spring
Lec 5 Hrs
Introduction to college reading and composition for ESL students. Emphasis on the paragraph and short essay. Includes focus on classroom participation skills. Prepares students for ESL-101. Formerly ESL 165. Not open to students who have completed ESL-165 with a grade of "C" or better.

ESL-290A. English in the Lab A (1)
**Pass/No Pass Only**
**Offered:** Fall, Spring, Summer
Lab 3 Hrs
This self-paced lab course will provide students competency-based interactive whole-language assignments using multimedia and computers under the guidance of an instructor. Grammar reinforcement activities include reading, listening, and pronunciation exercise. Topics include simple present, present continuous, future, simple past tenses, imperatives, parts of speech, possessive forms, and count/non-count nouns.
ESL-290B. English in the Lab B (1)
Pass/No Pass Only
Offered: Fall, Spring, Summer
Lab 3 Hrs
This self-paced lab course will provide students competency-based interactive whole-language assignments using multimedia and computers under the guidance of an instructor. Topics include past tense sequences, the past continuous tense, gerunds and infinitives, comparatives and superlatives, definite and indefinite articles, an introduction to the present perfect tense and subjunctive clauses.

ESL-290C. English in the Lab C (1)
Pass/No Pass Only
Offered: Fall, Spring, Summer
Lab 3 Hrs
This self-paced lab course will provide students competency-based interactive whole-language assignments using multimedia and computers under the guidance of an instructor. Grammar reinforcement activities include reading, listening, and pronunciation exercises. Topics include the past continuous tense, the present perfect and present perfect continuous tenses, modals of advice, ability, request, possibility, preference, permission and necessity, and future time clauses.

ESL-290D. English in the Lab D (1)
Pass/No Pass Only
Offered: Fall, Spring, Summer
Lab 3 Hrs
This self-paced lab course will provide students competency-based interactive whole-language assignments using multimedia and computers under the guidance of an instructor. Grammar reinforcement activities include reading, listening, and pronunciation exercises. Topics include the passive voice, the conditional, past perfect, reported imperatives and statements, and adjective clauses.

ESL-410. Conversation and Vocabulary I (0)
No Grade
Offered: Fall, Spring, Summer
Develops vocabulary and conversation skills for low-beginning English. It provides the tools to participate in personal and professional daily life interactions.

ESL-420. Conversation and Vocabulary II (0)
No Grade
Offered: Fall, Spring, Summer
Develops vocabulary and conversation skills for beginning level English. It provides the tools to participate in personal and professional daily life interactions.

ETH-1. Introduction to Ethnic Studies (3)
Advisory: Eligibility for ENG-1A.
Offered: Fall, Spring, Summer
Lec 3 Hrs
A historical and interdisciplinary approach to the study of ethnic and racial groups in the United States. African Americans, Asian Americans, Mexican/Latino Americans, and Native American experiences are examined.
[CSU; UC; CSU-GE, AREA D3, IGETC, AREA 4]

ETH-2. Chicano Leadership (3)
Offered: Spring
Lec 3 Hrs
Multidisciplinary survey of Chicano leadership by examining theories of Chicano leadership, how historical events have affected the development of Chicano leadership to an examination of local, state, and national political leaders and organizations. Local Chicano leadership formation is also examined.
[CSU; UC; CSU-GE, AREA D3, IGETC, AREA 4]

ETH-3. Chicanos in American Society (3)
Advisory: Eligibility for ENG-1A.
Offered: Fall
Lec 3 Hrs
A multi-disciplinary approach designed to acquaint students with Chicano history and problems in contemporary society. The course considers social institutions in shaping the experiences of Chicanos. Topics include colonization, politics, family, education, culture and religion, health and Chicano activism.
[CSU; UC; CSU-GE, AREA D3, IGETC, AREA 4]

ETH-4. Chicano Culture (3)
Offered: Spring
Lec 3 Hrs
A multidisciplinary approach to the study of the Chicano experience and culture as expressed in everyday life. Reading and discussion focus will range from gender, race, class, Chicano values, norms, and language, to creative culture and political activism. Diversity of the Chicano experience is also examined.
[CSU; UC; CSU-GE, AREA D3, IGETC, AREA 4]

ETH-5. Chicano Politics and the American Political System (3)
Offered: Fall
Lec 3 Hrs
A survey of U.S. and California political institutions, including the U.S. Constitution as it relates to Chicanos. Contemporary events in politics at the local, state and national level will be presented from a Chicano perspective. Chicano organizations, political models, ideology, political participation, and leadership will be studied. The role of race, class, immigration status, sex, gender, identity and the struggle for social justice, equality and political participation will be examined. The role of the media and polling will also be examined. Not open to students who have completed POL-5 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA D3, D8; IGETC, AREA 4]
ETH-6. La Chicana (3)  
**Offered:** Spring  
**Lec 3 Hrs**  
A survey of La Chicana in American society as viewed through a historical and sociological perspective including a discussion of her role in Chicano culture, family, religion, education, and economics. Contemporary problems and conditions will be considered.  
[CSU; UC; CSU-GE, AREA D3, D4; IGETC, AREA 4]

ETH-12. Chicano Cinema (3)  
**Offered:** Fall  
**Lec 3 Hrs**  
A survey of the experiences of Chicanos in the United States including Chicano culture, identity, resistance, social reality and history as portrayed in film and video. A series of films, including Hollywood commercial and Chicano made films, will be screened as part of an analysis of Chicano images and their impact on American popular culture.  
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

ETH-25. American Indian Literature (3)  
**Prerequisite:** ENG-1A with a grade of "C" or better.  
**Offered:** Fall  
**Lec 3 Hrs**  
Introduction to American Indian literature from the oral tradition to contemporary authors such as Momaday, Erdrich and Silko. The course focuses on literary themes and issues concerning the mythology, heritage, race, traditions, and culture of American Indians. ETH-25 is identical to ENG 25, American Indian Literature. ETH-25 is not open to students who have completed ENG-25 with a grade of "C" or better.  
[CSU; UC; CSU-GE, AREA C2, D3, IGETC, AREA 3]

FCS-14. Child Development (3)  
**Advisory:** Eligibility for ENG-1A  
**Offered:** Fall, Spring  
**Lec 3 Hrs**  
An examination of major developmental milestones for children, both typical and atypical, from conception through adolescence. Emphasis is on the interactions between maturational processes and environmental factors in the areas of physical, cognitive, and psychosocial development. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages.  
[CSU; UC; CSU-GE, AREA E; IGETC, AREA 4]  
[C-ID CDEV 100]

FCS-22. Essentials of Nutrition (3)  
**Advisory:** Eligibility for ENG-1A, Basic math computations (percentages and fractions)  
**DE/Hybrid advisory:** See page 145  
**Offered:** Fall, Spring, Summer  
**Lec 3 Hrs**  
Basic nutrition principles are presented with an emphasis on practical application. A broad overview of the relationship between diet and health, the importance of physical activity and which foods offer benefits for weight management. Required for LVN applicants; suggested for ECE majors and general public.  
[CSU]

FCS-23. Nutrition (3)  
**Advisory:** Eligibility for ENG-1A, Basic math computations (percentages and fractions)  
**DE/Hybrid advisory:** See page 145  
**Offered:** Fall, Spring, Summer  
**Lec 3 Hrs**  
Basic nutrition principles are presented, with an emphasis on nutrition needs throughout the life cycle. An in-depth description of the body's essential nutrients, including the relationship of medical nutrition therapy to a variety of diseases. Also addressed are food safety practices and the challenges of global nutrition. Required for nursing and Family and Consumer Studies majors.  
[CSU; UC; CSU-GE, AREA E]  
[C-ID NUTR 110]

GEOGRAPHY

GEG-1. Introduction to Geography: Physical Elements (3)  
**Offered:** Fall-odd  
**Lec 3 Hrs**  
A study of the Earth's dynamic physical systems and processes. Topics include: Earth-sun geometry, weather, climate, water, landforms, soil, and the biosphere. Tools of geography (maps, remote sensing, and Geographic Information Systems) are introduced and applied. Additional emphasis is placed on the relationship between environmental and human processes and systems.  
[CSU; UC; CSU-GE, AREA B1, D5; IGETC, AREA 5]  
[C-ID GEOG 110]

GEG-10. Geography and World Affairs: A Regional Approach (3)  
**Advisory:** Eligibility for ENG-1A  
**Offered:** Spring  
**Lec 3 Hrs**  
Surveys the world's geographic regions as interpreted by geographers, including physical, cultural, and economic features. Emphasizes spatial and historical influences on population growth, transformation networks, and natural environments. Highlights environmental issues and significant features of world regions.  
[CSU; UC]  
[C-ID GEOG 125]
GEOLOGY

GEL-1. Physical Geology (4)

Offered: Fall
Lec 3 Hrs; Lab 3 Hrs
The nature and structure of the materials composing the earth and the various processes which have shaped or are shaping its surface. Includes plate tectonics, earthquakes, volcanoes, landforms, minerals, rocks, and geologic maps.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]
[C-ID GEOL 101]

GEL-2. Introduction to Geology (3)

Offered: Fall, Spring
Lec 3 Hrs
Introduction to phenomena and basic principles of geology emphasizing plate tectonics. Includes demonstrations illustrating the nature of minerals, rocks, landforms, volcanoes, fossils, and geological maps. Discussion of earthquake hazards, mass wasting, climate change, and importance of geology to modern society.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]
[C-ID GEOL 100]

GEL-6. History of the Earth (4)

Offered: Spring
Lec 3 Hrs; Lab 3 Hrs
An introduction to Earth's history and the life it supports. Subjects include geologic dating, plate tectonics, stratigraphy, fossils, biological evolution, the planet's origin and the processes that have influenced paleogeography during the past 4.6 billion years. The laboratory component includes geologic dating, plate tectonics, stratigraphy, fossils, biological evolution, the planet's origin and the processes that have influenced paleogeography during the past 4.6 billion years. Students will supply: calculator, scale, protractor, colored pencils, 10X hand lens.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]
[C-ID GEOL 111]

GEL-25. Environmental Geology (3)

Offered: Fall
Lec 3 Hrs
An introduction to the fundamentals of Environmental Geology including the interactions between and impacts of humans with the environment in geologic context. Course emphasizes the Earth system and connections between the geosphere, biosphere, atmosphere, and hydrosphere. Application to Monterey County is emphasized.
[CSU; UC; CSU-GE, AREA B1, E; IGETC, AREA 5]
[C-ID GEOL 130]

HEALTH EDUCATION

HED-2. Individual Health & Wellness (3)

Advisory: DE/Hybrid advisory: See page 145.
Offered: Fall, Spring, Summer
Lec 3 Hrs
The exploration of major health issues and behaviors in the various dimensions of health. Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors. Topics include mental health, stress, drugs, alcohol, smoking, exercise, nutrition, chronic and infectious diseases, sexuality, and consumer health.
[CSU; UC; CSU-GE, AREA E] [C-ID PHS 100]

HED-6. Multicultural Health Beliefs (3)

Offered: Fall, Spring, Summer
Lec 3 Hrs
Designed to help the student develop an awareness of the cultural aspects of health beliefs and the influence of culture on health beliefs and behaviors. Special attention will be given to exploring how ethnicity, culture of origin, and socio-economic status influence health and quality of life, particularly among Latinos(as), African-Americans, Asian-Americans, Native-Americans, and European-Americans in the United States.
[CSU; UC; CSU-GE, AREA E]

HED-7. Women's Health (3)

Advisory: DE/Hybrid advisory: See page 145.
Offered: Fall
Lec 3 Hrs
The status of women's health examined from a cultural, political, and social perspective. A forum through which a presentation of issues regarding women's health care can be understood and viewed as important and significant in and of themselves.
[CSU; UC; CSU-GE, AREA D4; E; IGETC, AREA 4]

HED-8. Weight Management through Fitness and Nutrition (3)

Offered: Spring
Lec 3 Hrs
Healthy weight management through understanding the physical, emotional and psychological components for establishing proper energy balances and the obstacles we face as consumers in our current culture. The course emphasizes a holistic approach with an assessment of personal goals and values that will in turn strengthen and build improved lifestyle choices for the future. Students also need access to the Internet and must have adequate hardware and software capabilities. Access to computers is also available at the Hartnell College Library/LRC.
[CSU]
HED-55. Health Education Advanced First Aid (3)
  Offered: Spring
  Lec 3 Hrs
Advanced fundamentals of first aid that will include theory and
demonstration of adult, child and infant CPR/AED and the first
aid of the injured. Bandaging, splinting, and responding to
emergencies are included. Standard first aid, CPR, and AED
certification will be granted upon successful completion of
requirements. (There is an additional fee for the American Red
Cross Professional Rescuer CPR card.)
[CSU; UC] [C-ID KIN 101]

HEALTH SERVICES

HES-1. Introduction to Public Health (3)
  Advisory: Eligibility for ENG-1A; DE/Hybrid advisory: See
  page 145
  Offered: Fall, Spring
  Lec 3 Hrs
An introduction to the discipline of public health. An overview of
terminologies and basic concepts of public health, public health
professions, institutions, and public health disciplines will be
provided. Areas of public health such as epidemiology,
prevention and control of diseases in the community, analysis
of social determinants of health, health disparities, community
health promotion programming, environmental health and
safety, global health, and health, and healthcare policy will be
covered.
[CSU; UC; CSU-GE AREAS D7, E] [C-ID PHS 101]

HES-2. Health and Social Justice (3)
  Advisory: Eligibility for ENG-1A; DE/Hybrid Advisory: See
  page 145
  Offered: Fall, Spring
  Lec 3 Hrs
An introduction to the health inequities in the United States due
to unequal living conditions. Socioeconomics, race and gender
as topics of health inequality in the United States will be
covered. Students will research current policy proposals to
reduce health inequality and gain information and skills for
health and social justice advocacy.
[CSU; UC; CSU-GE, AREA D7] [C-ID PHS 102]

HES-3. Drugs, Health, and Society (3)
  Advisory: Eligibility for ENG-1A; DE/Hybrid advisory: See
  page 145
  Offered: Fall, Spring
  Lec 3 Hrs
An overview on substance abuse and its relevance to personal
and public health. The definition of licit and illicit drug use as
well as the concept of substance abuse and dependence will
be introduced. The pharmacology of selected substances and
their neurologic and physiologic effects will be reviewed.
Political, social, and economic factors involved in the supply
and demand for drugs will be discussed. Epidemiologic data on
the incidence, prevalence, and trends of smoking, alcohol,
prescription, and other drug dependencies in the U.S. will be
covered as well as risk factors associated with the use and
abuse of these substances. Treatment options for recovery
and prevention will be reviewed.
[CSU; UC] [C-ID PHS 103]

HES-80. Medical Terminology (3)
  Offered: Fall, Spring
  Lec 3 Hrs
Introduces the foundations of medical word-building principles
as essential tools for effective communication in the health
services industry. This course is not open to students who
have completed BUS-180 with a grade of "C" or better.
[CSU]

HES-120. CPR For Health Care Providers (0.5)
  Offered: Fall, Spring, Summer
  Lec 0.50 Hrs
Provides the student with knowledge required of the health
care professional to perform basic life support in any setting.
Upon successful completion, students will acquire Basic Life
Support for Health Care Providers certification. A fee will be
required for the CPR card.

HISTORY

HIS-4A. Western Civilization A (3)
  Offered: Fall
  Lec 3 Hrs
A survey of Western Civilization from prehistoric times through
the Reformation of the 16th Century, with special emphasis on
the social, political, economic, cultural, and Intellectual forces
that have served to define western civilization.
[CSU; UC; CSU-GE, AREA D5, D6, IGETC AREA 3]
[C-ID HIST 170]

HIS-4B. Western Civilization B (3)
  Offered: Spring
  Lec 3 Hrs
A survey of Western Civilization from the 16th century and
absolutism to the present with special emphasis placed on the
political structures, social structures, forms of cultural
expression, and patterns of change during key periods of
Western history.
[CSU; UC; CSU-GE, AREA D6, IGETC AREA 3]
[C-ID HIST 180]

HIS-5A. World History A (3)
  Offered: Fall
  Lec 3 Hrs
An examination of world history from the ancient era to 1500's
from a global perspective. This course examines the growth of
civilizations and the interrelationships of peoples of Europe,
Asia, Africa and the Americas with special emphasis on social,
intellectual, economic, and political history.
[CSU; UC; CSU-GE, AREA C2, D6; IGETC, AREA 3B, 4]
[C-ID HIST 150]
HIS-5B. World History B (3)  
**Offered:** Spring  
**Lec** 3 Hrs  
An examination of world history from the 1500's to the present from a global perspective. This course examines the growth of civilizations and the interrelationships of peoples of Europe, Asia, Africa and the Americas with special emphasis on social, intellectual, economic, and political history.  
[CSU; UC; CSU-GE, AREA C2, D6; IGETC, AREA 3B, 4]  
[C-ID HIST 160]

HIS-6. History of Mexico (3)  
**Offered:** Fall, Spring  
**Lec** 3 Hrs  
A survey of the history of Mexico from the Indigenous period to the present with emphasis on the political, economic, cultural, and social institutions of Mexico.  
[CSU; UC; CSU-GE, AREA C2, D6; IGETC, AREA 3B, 4]

HIS-8A. Colonial History of Latin America (3)  
**Offered:** Fall  
**Lec** 3 Hrs  
This course will survey the history of Latin America from pre-Columbian times to the independence movements of Spanish America and Portuguese Brazil. The major topics that will be discussed include: First Peoples culture, the encounter between Europeans and the First People (otherwise known as the Conquest), the rise and fall of colonial empires and colonial society, and the civil wars of independence. Emphasis will be placed on the interaction between the different cultures that encounter each other in the Americas, how these relationships shaped colonial societies, and how elements of this complex interaction persisted and/or were contested by different social groups before and after independence.  
[CSU; UC; CSU-GE, AREA D6; IGETC AREA 4]

HIS-8B. Modern Latin American History (3)  
**Offered:** Spring  
**Lec** 3 Hrs  
This course surveys the history of Latin America from the period of the Wars for Independence in the early nineteenth century until the present. The class will explore the racial, class, and gender hierarchies that emerged out of the region's colonial and pre-colonial past and their impact on the lives of Latin American people.  
[CSU; UC; CSU-GE, AREA D6; IGETC AREA 4]

HIS-10. History of California (3)  
**Advisory:** DE/Hybrid advisory: See page 145.  
**Offered:** Fall, Spring, Summer  
**Lec** 3 Hrs  
The history of California from the Indigenous period to the present focusing on the experiences of Peoples of Color including the Indigenous People of California, Chicanos/Latinos, African Americans, Asian Americans and Pacific Islanders. Local history considered in depth.  
[CSU; UC; CSU-GE, AREA D6, IGETC AREA 3]

HIS-17A. United States History A (3)  
**Offered:** Fall, Spring, Summer  
**Lec** 3 Hrs  
A survey of United States history from the Indigenous period through Reconstruction, including the development of the major political, social, and economic institutions and ideals in the entire area which is now the United States, with a special emphasis on the roles of major ethnic and social groups.  
[CSU; UC; CSU-GE, AREA D6, IGETC AREA 3]  
[C-ID HIST 130]

HIS-17B. United States History B (3)  
**Offered:** Fall, Spring, Summer  
**Lec** 3 Hrs  
Historical survey of the United States from the end of the Civil War to the present.  
[CSU; UC; CSU-GE, AREA D6, IGETC AREA 3]  
[C-ID HIST 140]

HIS-40. History of Women in the U.S. (3)  
**Offered:** Spring  
**Lec** 3 Hrs  
A survey of women in American history from the Indigenous period to the present in the entire area which is now the United States with special emphasis on the roles of women in the major ethnic and social groups.  
[UC; CSU; CSU-GE, AREA C2; IGETC, AREA 3 & 4]

HIS-46A. Race and Ethnicity in American History A (3)  
**Offered:** Fall  
**Lec** 3 Hrs  
A survey of the historical, social, political, economic, and cultural experiences of African Americans, Chicanos/Latinos, Asian Americans, Pacific Islanders, and Native Americans in the United States from the Indigenous period through the Civil War.  
[CSU; UC; CSU-GE, AREA D3, D6; IGETC, AREA 4]

HIS-46B. Race and Ethnicity in American History B (3)  
**Offered:** Spring  
**Lec** 3 Hrs  
A survey of the historical, political, social economic and cultural experiences of African Americans, Chicanos/Latinos, Asian Americans, Pacific Islanders, and Native Americans in the United States from Reconstruction to the present.  
[CSU; UC; CSU-GE, AREA D3, D6; IGETC, AREA 4]

HIS-47. Religions of the World (3)  
**Offered:** Fall, Spring  
**Lec** 3 Hrs  
A survey of the world's major religions with emphasis on the origins, historical developments and basic teachings of Indigenous religious beliefs, Hinduism, Buddhism, Confucianism, Judaism, Christianity and Islam and their political, social and economic impact on the world.  
[CSU; UC; CSU-GE, AREA C2, D6; IGETC AREA 3]
HIS-49A. Chicano History A (3)
Offered: Fall
Lec 3 Hrs
A history of the Chicano experience and culture from the Indigenous cultures of Mexico, and the Spanish, Mexican and United States periods to 1848.
[CSU; UC; CSU-GE, AREA D6, IGETC AREA 3]

HIS-49B. Chicano History B (3)
Offered: Spring
Lec 3 Hrs
A survey of Chicano history and culture from 1848 to the present emphasizing the social, cultural, political, and economic roles of Chicanos in the United States.
[CSU; UC; CSU-GE, AREA D6, IGETC AREA 3]

HIS-51. Women in History (3)
Offered: Fall
Lec 3 Hrs
An exploration of the cultural, religious, political and economic role played by women in various civilizations since ancient times.
[CSU, UC; CSU-GE, AREA D6, IGETC, AREA 3]

HIS-55. U.S. History Through Film (3)
Offered: Fall
Lec 3 Hrs
A study, overview, introduction, and survey of American feature films as historical documents relevant to United States history since the end of the Civil War. The course emphasizes a historical analysis of how films, as cultural and historical documents, add to our understanding of the time period during which they were made. Students in this course examine how films from the past have commented upon race, gender, war, class, politics, and other important topics.

INS-250. Tutor Training (0.3 - 1)
Pass/No Pass Only
Offered: Fall, Spring, Summer
Lec 1 Hr
Course provides an introduction to the theories and methods of effective tutoring, including interviewing, identification of learning problems, the study and development of effective communication techniques, and the use of learning theories and methods of effective individualized and group instruction. Opportunities will be provided for evaluation of and experience in tutoring situations. The course is offered on an open entry/open exit basis.

INS-301. Supervised Tutoring (NC)
No Grade
Offered: Fall, Spring, Summer
Provides tutoring support services and offers opportunities for study skills assessment and development, individual and group instruction under peer tutors, and other assistance to help students fulfill their course requirements for a variety of college courses. Counselor or instructor referral required.

IDS-1. Boronda Study Group (3)
Pass/No Pass Only
Offered: Spring
Lec 3 Hrs
Preparatory study of the host site selected for the annual Boronda Study Travel Program. Study of the history, culture and artistic traditions of the site or country.
[CSU]

IDS-2. Boronda Study Program - Life and Culture (3)
Pass/No Pass Only
Prerequisite: IDS-1 with a grade of “C” or better.
Advisory: Selection by the Boronda Scholarship Committee.
Offered: Summer
Lec 3 Hrs
A survey of the history, culture and civilization of the host country with emphasis on art, music, and literature.
[CSU]
PATHWAY TO LAW

LAW-41. Street Law (3)
  Lec 3 Hrs
Designed to promote civic involvement by providing students with practical information about areas of the law that affect the daily lives of all U.S. residents. Students will participate in activities designed to develop analytic and advocacy skills. Students are introduced to fundamental civil, criminal, and constitutional law principles that provide a platform for guided discussions of important public policy issues concerning topics such as crime, discrimination, and immigration. This course is recommended for students interested in pursuing a legal career, especially students interested in becoming attorneys, but any student who wants a better understanding of the law and how it impacts their lives will benefit from this course. Required course for the Community College Pathway to Law School Initiative.
[CSU; UC]

LEARNING SKILLS, LEARNING DISABLED

LSK-90. Memory Skills (1)
  Pass/No Pass Only
  Offered: Fall
  Lec 1 Hr
Basic principles of memory improvement with an emphasis on brain functions in relation to memory and applied memory methods. Designed for students with identified memory and concentration deficits, learning disabilities, and other learning challenges. Applications to college coursework, study skills, test taking as well personal and social situations.

LSK-105. Emotional Management Skills (1.5)
  Pass/No Pass Only
  Offered: Fall, Spring
  Lec 1.50 Hrs
Introduction to specific behavioral approaches designed to identify and manage negative feelings. Positive peer support and self-talk skills designed to manage life disrupting problems, emotions, and events. Designed for students with ongoing and identified behavioral and emotional challenges. Not open to students who have completed COU 105 with a grade of "CR".

LSK-126. Learning Strategies (1.5)
  Pass/No Pass Only
  Offered: Fall, Spring
  Lec 1.50 Hrs
Assists students with disabilities to succeed in college through a better understanding of their own individual learning styles, aptitudes, and behaviors. Students gain exposure to a variety of "best practice" study skills to succeed in college. Identification and analysis of individual learning barriers such as learning disabilities, emotional management, or physical challenges.

LIBRARY INSTRUCTION

LIB-2. Introduction to the Academic Library and Information Competency (1)
  Advisory: Eligibility for ENG-1A;
  DE/Hybrid advisory: See page 145.
  Offered: Fall, Spring
  Lab 3 Hrs
An introduction to the college library, its resources, and information competency skills necessary for student success and lifelong learning.
[CSU; UC]

LIB-5. Information Competency in the Sciences and Applied Technology (1)
  Advisory: Eligibility for ENG-1A;
  DE/Hybrid advisory: See page 145.
  Offered: Spring
  Lec 1 Hr
An introduction to the information competency skills required to locate, evaluate, and cite materials in the sciences and applied technology.
[CSU; UC]

LIB-6. Information Competency in the Social Sciences (1)
  Advisory: Eligibility for ENG-1A; DE/Hybrid advisory: See page 145.
  Offered: Fall
  Lec 1 Hr
An introduction to the information competency skills required to locate evaluate, and cite materials in the social sciences.
[CSU; UC]

LIB-7. Information Competency in the Arts and Humanities (1)
  Advisory: Eligibility for ENG-1A; DE/Hybrid advisory: See page 145.
  Offered: Summer
  Lec 1 Hr
An introduction to the information competency skills required to locate, evaluate, and cite materials in the arts and humanities.
[CSU; UC]

MATHEMATICS

MAT-2. Calculus for Managerial, Life, and Social Sciences (4)
  Prerequisite: MAT-123 with a grade of "C" or better or by placement Hartnell’s assessment.
  Advisory: MAT-25
  Offered: Spring
  Lec 4 Hrs
Linear and quadratic models, introduction to limits, the derivative and its applications, the integral and its applications, methods of integration, and differential equations. Applications from the management sciences, life sciences, and social sciences are considered throughout the course. This course is primarily for students in business, social sciences, and biological sciences.
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]
[C-ID MATH 140]
MAT-3A. Analytic Geometry and Calculus I (4)  
**Prerequisite:** MAT-24 and MAT-25 with a grade of "C" or better or placement by Hartnell's assessment.  
**Offered:** Fall, Spring, Summer  
**Lec 4 Hrs**  
The first course in differential and integral calculus of a single variable: functions; limits and continuity; techniques and applications of differentiation and integration; Fundamental Theorem of Calculus. Primarily for Science, Technology, Engineering & Math Majors.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 210]

MAT-3B. Analytic Geometry and Calculus II (4)  
**Prerequisite:** MAT-3A with a grade of "C" or better.  
**Offered:** Fall, Spring  
**Lec 4 Hrs**  
A second course in differential and integral calculus of a single variable: integration; techniques of integration; infinite sequences and series; polar and parametric equations; applications of integration. Primarily for Science, Technology, Engineering & Math Majors.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 220]

MAT-3C. Analytic Geometry and Calculus III (4)  
**Prerequisite:** MAT-3B with a grade of "C" or better.  
**Offered:** Fall, Spring  
**Lec 4 Hrs**  
The third course in a three-course series. Vector valued functions, calculus of functions of more than one variable, partial derivatives, multiple integration, Green's Theorem, Stokes' Theorem, divergence theorem.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 230]

MAT-4. Linear Algebra (3)  
**Prerequisite:** MAT-3B with a grade of "C" or better.  
**Advisory:** MAT-3C  
**Offered:** Fall, Spring  
**Lec 3 Hrs**  
This course develops the techniques and theory needed to solve and classify systems of linear equations. Solution techniques include row operations, Gaussian elimination, and matrix algebra. Investigates the properties of vectors in two and three dimensions, leading to the notion of an abstract vector space. Vector space and matrix theory are presented including topics such as inner products, norms, orthogonality, eigenvalues, eigenspaces, and linear transformations. Selected applications of linear algebra are included.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 250]

MAT-5. Differential Equations (3)  
**Prerequisite:** MAT-3C with a grade of "C" or better.  
**Offered:** Fall, Spring  
**Lec 3 Hrs**  
Differential equations of the first, second, and higher order, simultaneous, linear, homogeneous equations; solutions by power series, numerical methods, Fourier series, LaPlace transforms; applications.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 240]

MAT-10. Math for Liberal Arts (3)  
**Prerequisite:** MAT-123 with a grade of "C" or better or placement by Hartnell's assessment.  
**Offered:** Fall-odd  
**Lec 3 Hrs**  
An overview of fundamental concepts of modern mathematics for liberal arts students. Introduces non-science majors to a variety of mathematical ideas, methods, and historical trends. Core topics are logic, set theory, enumeration systems, number systems, number theory, axiomatic theories and models, and methods of proof. Additional topics may include: history of mathematics, geometry, counting techniques, probability and statistics, and calculus concepts.  
[CSU; UC; CSU-GE AREA B4; IGETC, AREA 2]

MAT-12. Number Systems (3)  
**Prerequisite:** MAT-123 with a grade of "C" or better or placement by Hartnell's assessment.  
**Offered:** Spring  
**Lec 3 Hrs**  
Intended primarily for prospective elementary school teachers. The emphasis is on problem solving strategies, the structure of mathematical systems, and the ideas underlying the common arithmetic algorithms taught to children. Topics include number theory, sets and relations, number systems, and geometric concepts.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 120]
MAT-13. Elementary Statistics (5)

**Prerequisite:** MAT-123 with a grade of "C" or better or placement by Hartnell's assessment.

**Advisory:** Access to a graphic calculator similar to Ti-84 made by Texas Instrument.

**Other:** DE Hybrid advisory. See page 145

**Offered:** Fall, Spring, Summer

**Lec** 5 Hrs

A study of the measures of central tendency, dispersion and position, graphic presentation, sampling, frequency distributions, discrete and continuous probability distributions, expected values, sampling distribution, Central Limit Theorem, sample variability, statistical inferences, confidence intervals, hypothesis testing, t-tests, Chi-Square tests, analysis of variance (ANOVA), linear correlation and regression analysis, decision making using predictive models, and non-parametric tests. This course is primarily for students in business, social sciences, biological sciences, education and humanities. Use of technology, including graphing calculators or computers will be extensively integrated as a tool in the description and analysis of data.

[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]
[C-ID MATH 110]

MAT-16. Finite Mathematics (3)

**Prerequisite:** MAT-123 with a grade of "C" or better or placement by Hartnell's assessment

**Offered:** Spring

**Lec** 3 Hrs

A study of sets and logic including Venn Diagrams, probability, counting techniques including combinations and permutations, linear programming, mathematics of finance, linear functions, systems of linear equations and inequalities, and matrices with applications to business, economics, social sciences, and computer science. This course is primarily for students in business, social science, and computer science.

[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]
[C-ID MATH 130]

MAT-24. Trigonometry (3)

**Prerequisite:** MAT-123 or MAT-123L4 with a grade of "C" or better or placement by Hartnell's assessment.

**Advisory:** MAT-122 or students should be familiar with high school level Geometry.

**Offered:** Fall, Spring, Summer

**Lec** 3 Hrs

Trigonometric functions, inverse trigonometric functions and their graphs, solutions to right and oblique triangles, identities and conditional trigonometric equations, analytic trigonometry, introduction to vectors, and complex numbers. This course, along with MAT-25, is designed to prepare students for Calculus.

[CSU; CSU-GE AREA B4]

MAT-25. Pre-Calculus (4)

**Prerequisite:** MAT-123 with a grade of "C" or better or placement by Hartnell's assessment.

**Offered:** Fall, Spring, Summer

**Lec** 4 Hrs

A study of polynomial functions, rational functions, exponential functions and logarithmic functions, graphing techniques, systems of equations, matrices, determinants, parametric equations. This course is designed to prepare students for Calculus I.

[CSU; UC; CSU-GE, AREA B4; IGETC AREA 2]

MAT-121. Elementary Algebra (5)

**Prerequisite:** MAT-201 or MAT-201L3 or BUS-151, with a grade of "C" or better or placement by Hartnell's assessment.

**Offered:** Fall, Spring, Summer

**Lec** 5 Hrs

Topics include operations with real numbers, simplifying expressions, solving equations, linear graphing techniques, linear equations and inequalities (both one and two variables), polynomials, factoring, rational expressions, exponents, radicals, and applications. Not open to students who have completed, with a grade of "C" or better, MAT-121L2.

MAT-121L1. Elementary Algebra Level 1 (1.25)

**Prerequisite:** MAT-121L1 with a grade of "C" or better.

**Offered:** Fall, Spring, Summer

**Lab** 3.75 Hrs

The first course in a four-course sequence that is equivalent to MAT 121. A study of the arithmetic of real numbers, algebraic expressions and equations, and their applications. Not open to students who have completed MAT-121 with a grade of "C" or better.

MAT-121L2. Elementary Algebra Level 2 (1.25)

**Prerequisite:** MAT-121L2 with a grade of "C" or better.

**Offered:** Fall, Spring, Summer

**Lab** 3.75 Hrs

The second course in a four-course sequence that is equivalent to MAT-121. A study of linear equations and inequalities in one variable, linear equations in two variables, and applications. Not open to students who have completed MAT-121 with a grade of "C" or better.

MAT-121L3. Elementary Algebra Level 3 (1.25)

**Prerequisite:** MAT-121L3 with a grade of "C" or better.

**Offered:** Fall, Spring, Summer

**Lab** 3.75 Hrs

The third course in a four-course sequence that is equivalent to MAT-121. A study of exponents, polynomials, factoring, and applications. Not open to students who have completed MAT-121 with a grade of "C" or better.
MAT-121L4. Elementary Algebra Level 4 (1.25)
Prerequisite: MAT-121L3 with a grade of "C" or better.
Offered: Fall, Spring, Summer
Lab 3.75 Hrs
The fourth course in a four-course sequence that is equivalent to MAT 121. A study of rational expressions, roots and radicals, and applications. The final examination covers the content from all levels (121L1-121L4). Not open to students who have completed MAT-121 with a grade of "C" or better.

MAT-123. Intermediate Algebra (5)
Prerequisite: MAT-121 or MAT-121L4 with a grade of "C" or better or placement by Hartnell's assessment.
Advisory: DE/Hybrid advisory: See page 145
Offered: Fall, Spring, Summer
Lec 5 Hrs
Review of elementary algebra plus more advanced problems of factoring, rational expressions, linear and quadratic equations, functions and graphs, systems of equations and inequalities, exponents, radicals, exponential and logarithmic functions, conic sections, sequences, series and applications related to all the functions of intermediate algebra. Not open to students who have completed MAT-123L2, or its equivalent, with a grade of "C" or better.

MAT-123L1. Intermediate Algebra Level 1 (1)
Prerequisite: MAT-121 with a grade of "C" or better or MAT-121L4 with a grade of "C" or better
Offered: Fall, Spring, Summer
Lab 3 Hrs
The first course in a four-course sequence that is equivalent to MAT 123. Review of elementary algebra plus more advanced topics in graphing, systems of equations and inequalities, and applications. Not open to students who have completed MAT-123 with a grade of "C" or better.

MAT-123L2. Intermediate Algebra Level 2 (1)
Prerequisite: MAT-123L1 with a grade of "C" or better.
Offered: Fall, Spring, Summer
Lab 3 Hrs
The second course in a four-course sequence that is equivalent to MAT 123. A study of relations and functions, variation, polynomials and factoring, and solving equations by factoring. Not open to students who have completed MAT-123 with a grade of "C" or better.

MAT-123L3. Intermediate Algebra Level 3 (1.5)
Prerequisite: MAT-123L2 with a grade of "C" or better.
Offered: Fall, Spring, Summer
Lab 4.50 Hrs
The third course in a four-course sequence that is equivalent to MAT 123. Study of rational expressions and equations, radicals and radical equations, rational exponents, complex numbers, quadratic equations in one and two variables, and applications. Not open to students who have completed MAT-123 with a grade of "C" or better.

MAT-123L4. Intermediate Algebra Level 4 (1.5)
Prerequisite: MAT-123L3 with a grade of "C" or better.
Offered: Fall, Spring, Summer
Lab 4.50 Hrs
The last course in a four-course sequence that is equivalent to MAT 123. Study of exponential and logarithmic functions, conic sections, nonlinear systems of equations and inequalities, sequences, series, and applications. Final examination will include topics from all levels (L1-L4) of the course. Not open to students who have completed MAT-123 with a grade of "C" or better.

MAT-139A. Introduction to Mathematical Proofs (1)
Prerequisite: MAT-3B with a grade of "C" or better.
Offered: Fall - odd
Lec 1 Hr
An introduction to mathematical proof techniques used in math courses that require proofs, such as Math 4 (linear algebra). It includes mathematical induction, proof by contradiction, direct proof, and other techniques.

MAT-151L1. Technical Mathematics Level 1 (1)
Lab 3 Hrs
A study of technical mathematics. Topics include: addition, subtraction, multiplication and division of whole numbers, fractions, and decimals; ratio, proportion, and percent; conversion between decimals and fractions; applications involving arithmetic, ratio, proportion, and percent; and problem solving techniques. A calculator is used to assist in the solution of meaningful problems in technical fields. This is a course designed for students completing certificates in technical fields that do not require MAT-121, 122, or 123 or a math course numbered below 100.

MAT-151L2. Technical Mathematics Level 2 (1)
Prerequisite: MAT-151L1 with a grade of "C" or better.
Lab 3 Hrs
Further study of technical mathematics. Topics include: Measurement, including metric and English systems of measurement, unit conversions, use of real-world measurement devices; order of operations and evaluation of algebraic expressions; addition, subtraction, multiplication and division of positive and negative numbers and algebraic expressions; scientific notation; solving equations. A calculator is used to assist in the solution of meaningful problems in technical fields. This is a course designed for students completing certificates in technical fields that do not require MAT-121, 122, or 123 or a math course numbered below 100.
MAT-151L3. Technical Mathematics Level 3 (1)

**Prerequisite:** MAT-151L2 with a grade of “C” or better.

**Lab** 3 Hrs
Further study of technical mathematics. Topics include: Plane geometry, including angles, Pythagorean theorem, polygons, circles, area, perimeter, and circumference; basic trigonometry. A scientific calculator is used to assist in the solution of meaningful problems in technical fields. This is a course designed for students completing certificates in technical fields that do not require MAT-121, 122, or 123 or a math course numbered below 100.

MAT-200. Arithmetic of Whole Numbers (1)

**Lec** 1 Hr
Designed for students who need review of, and practice with, basic arithmetic operations. The topics include addition, subtraction, multiplication, division, prime factors, common multiples, exponents for whole numbers, and the order of operations. Not open to students who have completed MAT-200L with a grade of “C” or better.

MAT-200L. Arithmetic of Whole Numbers (1)

**Offered:** Fall, Summer, Spring

**Lab** 3 Hrs
Designed for students who need review of, and practice with, basic arithmetic operations. The topics include addition, subtraction, multiplication, division, prime factors, common multiples, exponents for whole numbers, and the order of operations. Not open to students who have completed MAT-200 with a grade of “C” or better.

MAT-201. Pre-Algebra (3)

**Offered:** Fall, Spring, Summer

**Lec** 3 Hrs
The arithmetic of signed numbers, fractions, one-step and two-step equations, decimals, ratio and proportion problems, percent problems, and unit conversions. This course is designed for those students who do not meet the entrance requirements for MAT-121 Elementary Algebra. Not open to students who have completed MAT-201L2 with a grade of “C” or better.

MAT-201L1. Pre-Algebra Level I (1)

**Offered:** Fall, Spring, Summer

**Lab** 3 Hrs
The first course in a three-course sequence that's equivalent to MAT 201. The arithmetic of integers, the arithmetic of fractions, exponents, the order of operations, perimeter, area, and volume. This course is designed for students who do not meet the entrance requirements for MAT-121. Not open to students who have completed MAT-201, MAT-201L2, or MAT-201L3 with a grade of “C” or better.

MAT-201L2. Pre-Algebra Level 2 (1)

**Prerequisite:** Completion of MAT-201L1 with a grade of “C” or better.

**Offered:** Fall, Spring, Summer

**Lab** 3 Hrs
The second course in a three-course sequence that is equivalent to MAT-201. The solution of one-step and two-step equations, and the arithmetic of decimals. This course is designed for those students who do not meet the entrance requirements for MAT-121. Not open to students who have completed MAT-201.

MAT-201L3. Pre-Algebra Level 3 (1)

**Prerequisite:** Completion of MAT-201L2 with a grade of “C” or better.

**Offered:** Fall, Spring, Summer

**Lab** 3 Hrs
The third course in a three-course sequence that is equivalent to MAT 201. The arithmetic of ratio and proportion problems, percent problems, and unit conversions. This course is designed for those students who do not meet the entrance requirements for MAT-121. Not open to students who have completed MAT-201.

METEOROLOGY

MET-1. Weather and Climate (3)

**Offered:** Fall-even

**Lec** 3 Hrs
Elementary survey of basic principles of weather phenomena, structure, and general circulation of the atmosphere, regional distribution and effects of weather, climate, and climatic cycles. A course designed for all students from all majors who desire a general knowledge and appreciation of weather and climate.

[CSU; UC; CSU-GE, AREA B1; IGETC, AREA 5]

MUSIC

MUS-1A. Music Appreciation-Historical Perspective (3)

**Offered:** Fall, Spring

**Lec** 3 Hrs
A survey of Western music from the 6th century C.E. until the present, covering the important style periods along with the composers who created them and the resources they used.

[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

MUS-2. Music Fundamentals (3)

**Offered:** Fall, Spring, Summer

**Lec** 3 Hrs
An introduction to the notation and primary elements of tonal music. Incorporates the following concepts: staff notation in treble and bass clefs, rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; and diatonic chords. Development of skills in handwritten notation and aural identification of musical phenomena is expected.

[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]
MUS-5. Ethnic Musics in the United States (3)
   Offered: Fall, Spring, Summer
   Lec 3 Hrs
Introduction to selected ethnic musics that flourish in the United States including: Hispanic/Latino, Chicano/Mexican-American, Black African-American, Native American, Asian-American, Pacific Islander, and European traditions. The course focuses on the relation of musical genres and movements to the history of the United States and to the society and culture of the country.
[CSU; UC CSU-GE, AREA C1; IGETC, AREA 3]

MUS-6. Hawaiian Music (3)
   Offered: Fall, Spring
   Lec 3 Hrs
Music of Hawaii from ancient to modern times. Covers chants and chanting styles, hula kahiko and auwana, and contemporary music. Incorporates elements of Hawaiian language, culture and dance (hula). Includes the impact of foreigners on Hawaiian music and culture, and Hawaii's impact on the musical world. Musical instruments are covered in depth, plus their impact on other music.
[CSU; UC CSU-GE, AREA C1; IGETC, AREA 3]

MUS-7. Jazz Appreciation (3)
   Offered: Fall, Spring, Summer
   Lec 3 Hrs
A survey of the history of vocal and instrumental jazz music from the late 1800's to the present covering the important jazz styles along with the artists who created them and the cultural, social, political, and economic factors which influenced the art form. The influence of such social themes as slavery, racial segregation, the civil rights movement, and immigration on jazz will be studied.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

MUS-8. American Popular Music (3)
   Offered: Fall, Spring
   Lec 3 Hrs
A historical survey of American popular music, tracing their development from roots in blues, jazz, gospel, and country music to the music of today including (but not limited to) top 40, rap, reggae, world music, heavy metal, soul and all types of rock. This course is intended to help you think creatively and critically about popular music. Themes explored will include: (1) the interaction of European American, African American, and Latin American traditions, (2) the role of popular music as an expression of racial and gender identity, and (3) the influences of mass media on popular culture.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

MUS-10. Applied Music - Voice (1)
   Offered: Fall, Spring
   Lec 1 Hr; Lab 2 Hrs
Class instruction in the art of singing. Topics include physical and mental poise, breathing, use of the organs of articulation, vowels, tone production, and vocal literature.
[CSU; UC]

MUS-11. Applied Music - Instrumental (0.5)
   Prerequisite: Audition is required.
   Offered: Fall, Spring
   Lab 1.50 Hrs
Provides opportunities for students to get feedback about their performance on a musical instrument in a supportive environment. Course may be repeated 3 times.
[CSU; UC] [C-ID MUS 160]

MUS-13A. Beginning Piano I (1)
   Advisory: MUS-2
   Offered: Fall, Spring
   Lec 1 Hr; Lab 2 Hrs
Beginning piano study including introduction to the keyboard and music reading. Piano classes may be repeated at the appropriate level, but total piano enrollments are limited to four.
[CSU; UC]

MUS-13B. Beginning Piano II (1)
   Prerequisite: MUS-13A with a grade of "C" or better.
   Advisory: MUS-2
   Offered: Fall, Spring
   Lec 1 Hr; Lab 2 Hrs
Continuation of beginning piano study. Piano classes may be repeated at the appropriate level, but total piano enrollments are limited to four.
[CSU; UC]

MUS-14. Intermediate Piano (1)
   Prerequisite: MUS-13B with a grade of "C" or better.
   Offered: Fall, Spring
   Lec 1 Hr; Lab 2 Hrs
Intermediate piano study covering the fundamentals of technique, style and interpretation. Solo and ensemble performance from standard piano literature. Piano classes may be repeated at the appropriate level, but total piano enrollments are limited to four.
[CSU; UC]

MUS-15. Advanced Piano (1)
   Prerequisite: MUS-14 with a grade of "C" or better.
   Offered: Fall, Spring
   Lec 1 Hr; Lab 2 Hrs
Advanced piano study, a continuation of MUS-14. Piano classes may be repeated at the appropriate level, but total piano enrollments are limited to four.
[CSU; UC]

MUS-17A. Beginning Guitar I (1)
   Offered: Fall, Spring
   Lec 1 Hr; Lab 2 Hrs
Class instruction on guitar at the beginning level. Covers position, right and left hand playing techniques, tuning, and the basics of musical notation. Students must bring their own unamplified guitar.
[CSU; UC]
MUS-17B. Beginning Guitar II (1)

Offered: Fall, Spring

Lec 1 Hr; Lab 2 Hrs

Continued instruction on the guitar with emphasis on note reading and the performance of chords and arpeggios. Students must bring their own unamplified guitar.

[CSU; UC]

MUS-17C. Intermediate Guitar I (1)

Prerequisite: MUS-17B with a grade of "C" or better.

Offered: Fall, Spring

Lec 1 Hr; Lab 2 Hrs

Instruction on guitar to include playing in 2nd and 3rd position, study of classical and contemporary solos and etudes, and an introduction to ensemble playing. Students must bring their own unamplified guitar.

[CSU; UC]

MUS-17D. Intermediate Guitar II (1)

Prerequisite: MUS-17C with a grade of "C" or better.

Offered: Fall, Spring

Lec 1 Hr; Lab 2 Hrs

Continued instruction on guitar at the upper intermediate level including 2nd and 3rd positions, vibrato, harmonics, classical and contemporary solos and etudes, and ensemble playing. Students must bring their own unamplified guitar.

[CSU; UC]

MUS-20. Hartnell College Choir (1)

Prerequisite: Audition is required.

Offered: Fall, Spring

Lab 3 Hrs

A performance group studying the choral literature ranging from works of the early masters to modern composers. This course is not limited to music majors. Students majoring in vocal music are expected to enroll in the choir for two years. May be repeated for credit to a maximum of 4 units.

[CSU; UC] [C-ID MUS 180]

MUS-21. Hartnell Chamber Singers (1)

Prerequisite: Audition is required.

Offered: Fall, Spring

Lab 3 Hrs

A vocal ensemble devoted to the study and performance of musical literature suited to a small group of singers. May be repeated for credit to a maximum of 4 units.

[CSU; UC] [C-ID MUS 180]

MUS-23.1. Hartnell Chorale-Renaissance/ Baroque Emphasis (1)

Prerequisite: Audition required.

Advisory: Intended for persons with previous choral experience.

Offered: Fall

Lab 3 Hrs

A choral group of mixed voices which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing Renaissance and Baroque music.

[CSU; UC][C-ID MUS 180]

MUS-23.2. Hartnell Chorale-Classic/Romantic Emphasis (1)

Prerequisite: Audition required.

Advisory: Intended for persons with previous choral experience.

Offered: Spring

Lab 3 Hrs

A choral group of mixed voices which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing Classic and Romantic music.

[CSU; UC] [C-ID MUS 180]

MUS-23.3. Hartnell Chorale-20th Century Emphasis (1)

Prerequisite: Audition required.

Advisory: Intended for persons with previous choral experience.

Offered: Fall

Lab 3 Hrs

A choral group of mixed voices which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 20th Century music.

[CSU; UC] [C-ID MUS 180]

MUS-23.4. Hartnell Chorale-20th Century "Pops" Emphasis (1)

Prerequisite: Audition required

Advisory: Members selected from the Hartnell Choir by audition.

Offered: Spring

Lab 3 Hrs

A choral group of mixed voices which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 20th Century "pops" music.

[CSU; UC][C-ID MUS 180]

MUS-23.5. Hartnell Chorale-21st Century Emphasis (1)

Prerequisite: Audition required.

Advisory: Intended for persons with previous choral experience.

Offered: Fall

Lab 3 Hrs

A choral group of mixed voices which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 21st Century music.

[CSU] [C-ID MUS 180]

MUS-24. Estudiantina Hartnell (1)

Prerequisite: Audition is required.

Offered: Fall, Spring

Lec 3 Hrs

A performance group in the manner of the Estudiantinas of Mexico and the Tunas of Spain. Open to all students. Instruction will be provided in singing and the playing of traditional Estudiantina instruments. Repertoire consists of traditional and play traditional instruments such as the guitar, contemporary music as performed by Estudiantinas/Tunas in the Spanish speaking world. Students will both sing in Spanish bandurria, mandolin, violin, string bass, and pandero. Some instruments are available for student use.

[CSU; UC] [C-ID MUS 180]
MUS-26. Jazz Ensemble (1)
Prerequisite: Audition is required.
Offered: Fall, Spring
Lab 3 Hrs
A performance group studying literature for the jazz ensemble. Performances include concerts and playing at college and community events. Open to all students who play piano, bass, drums, guitar, saxophone, trumpet or trombone. May be repeated for credit to maximum of 4 units. [CSU; UC] [C-ID MUS 180]

MUS-29.1. Symphonic Band-18th Century Emphasis (1)
Advisory: Intended for persons with previous band instrument experience.
Offered: Fall
Lab 3 Hrs
A symphonic band which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 18th century music. Some instruments are available for student use. [CSU; UC] [C-ID MUS 180]

MUS-29.2. Symphonic Band-19th Century Emphasis (1)
Advisory: Intended for persons with previous band instrument experience.
Offered: Spring
Lab 3 Hrs
A symphonic band which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 19th century music. Some instruments are available for student use. [CSU; UC] [C-ID MUS 180]

MUS-29.3. Symphonic Band-20th Century Emphasis (1)
Advisory: Intended for persons with previous band instrument experience.
Offered: Fall
Lab 3 Hrs
A symphonic band which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 20th century music. Some instruments are available for student use. [CSU; UC] [C-ID MUS 180]

MUS-29.4. Symphonic Band-20th Century "pops" Emphasis (1)
Prerequisite: Audition is required.
Advisory: Intended for persons with previous band instrument experience.
Offered: Spring
Lab 3 Hrs
A symphonic band which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 20th century "pops" music. Students may enroll in this course a maximum of four (4) times. Some instruments are available for student use. [CSU; UC] [C-ID MUS 180]

MUS-29.5. Symphonic Band-21st Century Emphasis (1)
Prerequisite: Audition is required.
Advisory: Intended for persons with previous band instrument experience.
Offered: Fall
Lab 3 Hrs
A symphonic band which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 21st century music. Students may enroll in this course a maximum of four (4) times. Some instruments are available for student use. [CSU] [C-ID MUS 180]

MUS-34.1. Symphony Orchestra-18th Century Emphasis (1)
Prerequisite: Audition required.
Advisory: Intended for persons with previous orchestral instrument experience.
Offered: Fall
Lab 3 Hrs
Students will rehearse and perform a wide range of musical literature with special emphasis on the study of techniques for performing 18th century music. [CSU; UC] [C-ID MUS 180]

MUS-34.2. Symphony Orchestra-19th Century Emphasis (1)
Prerequisite: Audition required.
Advisory: Intended for persons with previous orchestral instrument experience.
Offered: Spring
Lab 3 Hrs
Students will rehearse and perform a wide range of musical literature with special emphasis on the study of techniques for performing 19th century music. [CSU; UC] [C-ID MUS 180]

MUS-34.3. Symphony Orchestra-20th Century Emphasis (1)
Prerequisite: Audition required.
Advisory: Intended for persons with previous orchestral instrument experience.
Offered: Fall
Lab 3 Hrs
Students will rehearse and perform a wide range of musical literature with special emphasis on the study of techniques for performing 20th century music. [CSU; UC] [C-ID MUS 180]

MUS-34.4. Symphony Orchestra-20th Century "Pops" Emphasis (1)
Prerequisite: Audition required.
Advisory: Intended for persons with previous orchestral instrument experience.
Offered: Spring
Lab 3 Hrs
Students will rehearse and perform a wide range of musical literature with special emphasis on the study of techniques for performing 20th century "Pops" music. [CSU; UC] [C-ID MUS 180]
MUS-34.5. Symphony Orchestra-21st Century Emphasis (1)
Prerequisite: Audition required.
Advisory: Intended for persons with previous orchestral instrument experience.
Offered: Fall
Lab 3 Hrs
Students will rehearse and perform a wide range of musical literature with special emphasis on the study of techniques for performing 21st century music.
[CSU; UC] [C-ID MUS 180]

MUS-36. Jazz Combo (1)
Offered: Fall, Spring
Lab 3 Hrs
Performance of jazz literature in small ensembles.
[CSU]

MUS-37. Chamber Music Ensemble (1)
Advisory: Ability to play a musical instrument.
Offered: Fall, Spring
Lab 3 Hrs
Students will study and perform chamber music repertoire for strings, woodwinds, brass, percussion, and piano.
[CSU]

MUS-42. Electronic Music (2)
Offered: Fall, Spring
Lec 1.50 Hrs; Lab 1.50 Hrs
Introduction to music composition using electronic media. Includes basic acoustics, fundamentals of audio recording, basics of digital audio, multi-track recording, WAV/MIDI file creation, and microphone selection/placement. Creation of original "sound design" projects.
[CSU]

MUS-43. MIDI Sequencing (2)
Prerequisite: MUS-42 with a grade of "C" or better.
Offered: Fall, Spring
Lec 1.50 Hrs; Lab 1.50 Hrs
Introduction to MIDI sequencing using a computer. Includes hardware and software selection and set-up, click tracks, quantizing, looping, multi-timbral operations, step-time recording, CD creation, MIDI for web pages. Creation of original MIDI sequences.
[CSU]

MUS-46. Music Theory and Musicianship I (4)
Prerequisite: MUS-2 with a grade of "C" or better.
Advisory: Familiarity with musical notation and the piano keyboard.
Offered: Fall
Lec 2.50 Hrs; Lab 4.50 Hrs
The diatonic system of harmony from an analytical and practical point of view, including the basic elements of voice leading, musical analysis and chord usage, concentrating on the aesthetic and cultural qualities of the music. Students will do sight-singing and ear training using diatonic materials. Not open to students who have completed both MUS-50A and MUS-51A with a "C" grade or better.
[C-ID MUS 120 AND MUS 125]

MUS-47. Music Theory and Musicianship II (4)
Prerequisite: MUS-46 with a grade of "C" or better.
Offered: Spring
Lec 2.50 Hrs; Lab 4.50 Hrs
Continuation of MUS-46. The diatonic system of harmony from an analytical and practical point of view, including voice leading, musical analysis and chord usage, concentrating on the aesthetic and cultural qualities of the music. Students will continue to do sight-singing and ear training using diatonic materials. Not open to students who have completed both MUS-50B and MUS-51B with a "C" grade or better.
[C-ID MUS 130 AND MUS 135]

Prerequisite: MUS-47 with a grade of "C" or better.
Offered: Fall
Lec 2.50 Hrs; Lab 4.50 Hrs
Chromatic harmony, form, musical analysis, and orchestration. Students will do sight-singing and ear training using chromatic materials. Not open to students who have completed both MUS 52A and 53A with a "C" grade or better.
[C-ID MUS 140 AND MUS 145]

MUS-49. Music Theory and Musicianship IV (4)
Prerequisite: MUS-48 with a grade of "C" or better.
Offered: Spring
Lec 2.50 Hrs; Lab 4.50 Hrs
Continuation of chromatic harmony and introduction of 20th century harmonic techniques, form, musical analysis, and orchestration. Students will do sight-singing and ear-training using the literature of the music of the 19th and 20th centuries. Not open to students who have completed both MUS-52B and 53B with a "C" grade or better.
[C-ID MUS 150 AND MUS 155]

MUS-54. Introduction to Songwriting (3)
Prerequisite: MUS-46 with a grade of "C" or better.
Offered: Spring
Lec 2 Hrs; Lab 3 Hrs
Teaches introductory principles and techniques in songwriting to students with inspiration for musical expression. Examples of songs and student compositions are discussed in detail regarding the relationship between lyrics and music. Students will have the opportunity to have their works performed by themselves and/or classmates. Basics of copyright and publishing will also be reviewed.
[CSU]

NURSING-REGISTERED

NRN-30. Basics of Pharmacology for Nursing Practice (1)
Corequisite: NRN-41, NRN-41.1, NRN-41.2 and NRN-41.3
Offered: Fall
Lec 1 Hr
Introduction to the basic concepts of pharmacology for nursing practice. Emphasis is on promoting and understanding pharmacological principles and safe drug administration. Students are introduced to the value of competence in the safe administration of medications.
[CSU]
NRN-41. Nursing Theory I (4)
Prerequisite: Admission into the Hartnell College Registered Nursing Program
Corequisite: NRN-41.1, NRN-41.2, NRN-41.3, NRN-30 and NRN-110
Offered: Fall
Lec 4 Hrs
Application of the Nursing Process using the Doenges and Moorhouse Diagnostic Divisions as the framework for the study of nursing. The content focus is the response to health and non-life-threatening illness in the adult population.
[CSU]

NRN-41.1. Nursing Clinical I (4)
Pass/No Pass Only
Prerequisite: Admission into the Hartnell College Registered Nursing Program
Corequisite: NRN-41, NRN-41.2, NRN-41.3 and NRN-30
Offered: Fall
Lab 12 Hrs
Application of the nursing process using Doenges and Moorhouse Diagnostic Divisions while providing nursing care. Emphasis is on maintenance of health for adults with potential and actual non-life-threatening concerns in the acute care and community settings. The values of caring, curiosity, collaboration, and competence are conveyed.
[CSU]

NRN-41.2. Clinical Reasoning Seminar I (1)
Prerequisite: Admission into the Hartnell College Registered Nursing Program.
Corequisite: NRN-41, NRN-41.1, NRN-41.3 and NRN-30
Offered: Fall
Lec 1 Hr
Application of nursing theory and clinical reasoning strategies utilizing a case study approach. The content focus is the development of plans of care for adults with potential and actual non-life-threatening health problems. The values of curiosity and collaboration are emphasized.
[CSU]

NRN-41.3. Nursing Skills Lab I (1)
Prerequisite: Admission to the Hartnell College registered nursing program.
Corequisite: NRN-41, NRN-41.1, NRN-41.2, NRN-30 and NRN-50.41
Offered: Fall
Lab 3 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions for the study of fundamental nursing skills necessary for health maintenance for adults. The value of competency in the acquisition of nursing skills is demonstrated.
[CSU]

NRN-42. Nursing Theory II (4)
Prerequisite: NRN-41 with a grade of "C" or better.
Corequisite: NRN-42.1, NRN-42.2, NRN-42.3
Offered: Spring
Lec 4 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions for the study of nursing. Emphasis is on health promotion for the childbearing family, from preconception to middle adulthood. The values of curiosity, competency, and collaboration are integrated into the study of nursing.
[CSU]

NRN-42.1. Nursing Clinical II (4)
Pass/No Pass
Prerequisite: NRN-41.1 with a grade of "C" or better.
Corequisite: NRN-42, NRN-42.2, NRN-42.3
Offered: Spring
Lab 12 Hrs
Application of the nursing process using Doenges and Moorhouse Diagnostic Divisions while providing nursing care with emphasis on health promotion for the childbearing family, from preconception through middle adulthood. The values of caring, curiosity, collaboration, and competence are conveyed.
[CSU]

NRN-42.2. Clinical Reasoning Seminar II (1)
Prerequisite: NRN-41.2 with a grade of "C" or better.
Corequisite: NRN-42, NRN-42.1, NRN-42.3
Offered: Spring
Lec 1 Hr
Application of the Nursing Process and critical thinking strategies using Doenges and Moorhouse Diagnostic Divisions. Students actively participate employing a case study format. Emphasis is on health promotion for the childbearing family, from preconception to middle adulthood. The values of curiosity and collaboration are emphasized.
[CSU]

NRN-42.3. Nursing Skills Lab II (1)
Prerequisite: NRN-41.3 with a grade of "C" or better.
Corequisite: NRN-42, NRN-42.1, NRN-42.2
Offered: Spring
Lab 3 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions for the study of nursing skills necessary for health promotion for the childbearing family. Emphasis is on basic physical assessment and nursing skills necessary to provide care to children and the child-bearing family. The value of competency in nursing skills is demonstrated and reinforced.
[CSU]
NRN-43. Nursing Theory III (4)
Prerequisite: NRN-42 with a grade of "C" or better.
Corequisite: NRN-43.1; NRN-43.2; NRN-43.3
Offered: Fall
Lec 4 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions for the study of nursing. Emphasis is on the restoration of health for adult, geriatric, and mental health clients. The values of caring, competency, and collaboration are integrated into the study of nursing. [CSU]

NRN-43.1. Nursing Clinical III (4)
Pass/No Pass
Prerequisite: NRN-42.1 with a grade of "C" or better.
Corequisite: NRN-43; NRN-42.2; NRN-43.3
Offered: Fall
Lab 12 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions while providing nursing care in acute and community health care settings. Emphasis is on restoration of health for adults, older adults, and for those with mental health conditions. The values of caring, curiosity, collaboration, and competence are conveyed. [CSU]

NRN-43.2. Clinical Reasoning Seminar III (1)
Prerequisite: NRN-42.2 with a grade of "C" or better.
Corequisite: NRN-43; NRN-43.1; NRN-43.3
Offered: Fall
Lec 1 Hr
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions utilizing a case study approach. Emphasis is on restoration of physiological and psychological health for adults, geriatric, and mental health clients. The value of curiosity is emphasized. [CSU]

NRN-43.3. Nursing Skills Lab III (1)
Prerequisite: NRN-42.3 with a grade of "C" or better.
Corequisite: NRN-43; NRN-43.1; NRN-43.2;
Offered: Fall
Lab 3 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions for the study of nursing skills necessary to restore health for adult, geriatric, and mental health clients in acute, long term, and community health care settings. The value of competency in nursing skills is demonstrated. [CSU]

NRN-44. Nursing Theory IV (4)
Prerequisite: NRN-43 with a grade of "C" or better.
Corequisite: NRN-44.1; NRN-44.2
Offered: Spring
Lec 4 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions for the study of nursing. Emphasis is on nursing leadership and optimizing health for the adult with multi-system failure. The values of curiosity, competency, and collaboration are integrated into the study of nursing. [CSU]

NRN-44.1. Nursing Clinical IV (5)
Prerequisite: NRN-43.1 with a grade of "C" or better.
Corequisite: NRN-44; NRN-44.2; NRN-50.44
Offered: Spring
Lab 15 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions when providing nursing care. Emphasis is on nursing leadership and optimizing health for adults with multi-system failure in the acute care and community-based settings. The values of caring, curiosity, collaboration, and competence are conveyed. [CSU]

NRN-44.2. Clinical Reasoning Seminar IV (1)
Prerequisite: NRN-43.2 with a grade of "C" or better.
Corequisite: NRN-44; NRN-44.1
Offered: Spring
Lec 1 Hr
Application of the Nursing Process and critical thinking strategies using Doenges and Moorhouse Diagnostic Divisions. Students actively participate, employing a case study format. Emphasis is on nursing leadership and developing and evaluating plans of care designed to optimize health for the adult with multi-system failure. The value of curiosity and collaboration are emphasized. [CSU]

NRN-50.41. Supervised Nursing Skills Practice I (0.5)
Pass/No Pass Only
Corequisite: NRN-41.3
Offered: Fall
Lab 1.50 Hrs
Supervised practice for the mastery of basic nursing skills. Student performance is evaluated and documented through competency testing using established standardized criteria. [CSU]

NRN-50.42. Supervised Nursing Skills Practice II (0.5)
Pass/No Pass Only
Prerequisite: NRN-50.41 with a grade of "C" or better
Corequisite: NRN-42.3
Offered: Spring
Lab 1.50 Hrs
Supervised practice for the mastery of advanced nursing skills. Integration and mastery of skills learned in the previous semester is expected, ensuring the value of competence. Student performance is evaluated and documented through competency testing using established standardized criteria. [CSU]

NRN-50.43. Supervised Nursing Skills Practice III (0.5)
Pass/No Pass Only
Prerequisite: NRN-50.42 with a grade of "C" or better
Corequisite: NRN-43.3
Offered: Fall
Lab 1.50 Hrs
Supervised practice for the mastery of advanced nursing skills. Integration and mastery of skills learned in previous semesters is expected, ensuring the value of competence. Student performance is evaluated and documented through competency testing using established standardized criteria. [CSU]
NRN-50.44. Supervised Nursing Skills Practice IV (0.5)
   **Prerequisite:** NRN-50.43 with a grade of "C" or better
   **Corequisite:** NRN-44.1
   **Offered:** Spring
   **Lab** 1.50 Hrs
Supervised practice for the mastery of advanced nursing, leadership, and management skills. Integration and mastery of skills learned in previous semesters is expected, ensuring the value of competence. Student performance is evaluated and documented through competency testing using established standardized criteria.

[CSU]

NRN-60.1. Clinical Simulations for Nursing and Allied Health I (0.5)
   **Pass/No Pass Only**
   **Prerequisite:** HES-53/EMT-53 or NRN-110 or NVN-119B or RCP-110 with a grade of "C" or better.
   **Offered:** Fall, Spring
   **Lab** 1.50 Hrs
This course is designed so that nursing and allied health students may practice basic clinical skills and techniques, clinical judgment, critical thinking and decision-making skills in the safe environment of the college lab under the direction of a nurse faculty member. Emphasis is on teamwork and collaboration, evidence-based practice, safety, patient-centered care, informatics, and quality improvement while maintaining the health of adults with potential and non life-threatening conditions. High fidelity simulation is used as a means of providing students with scenarios they might not ordinarily encounter in the medical/surgical clinical setting. This is an elective course in the Nursing and Allied Health Programs. The values of caring, curiosity, competency, and collaboration are integrated into the practice of nursing.

[CSU]

NRN-60.2. Clinical Simulations for Nursing and Allied Health II (0.5)
   **Pass/No Pass Only**
   **Prerequisite:** HES-53/EMT-53 or NRN-110 or NVN-119B or RCP-110 with a grade of "C" or better.
   **Offered:** Fall, Spring
   **Lab** 1.50 Hrs
This course is designed so that nursing and allied health students may practice basic clinical skills and techniques, clinical judgment, critical thinking and decision-making skills in the safe environment of the college lab under the direction of a nurse faculty member. Emphasis is on teamwork and collaboration, evidence-based practice, safety, patient-centered care, informatics, and quality improvement while promoting health for the childbearing family, from preconception to middle adulthood. High fidelity simulation is used as a means of providing students with scenarios they might not ordinarily encounter in the maternal/child and pediatric clinical settings. This is an elective course in the Nursing and Allied Health Programs. The values of caring, curiosity, competency, and collaboration are integrated into the practice of nursing.

[CSU]

NRN-60.3. Clinical Simulations for Nursing and Allied Health III (0.5)
   **Pass/No Pass Only**
   **Prerequisite:** HES-53/EMT-53 or NRN-110 or NVN-119B or RCP-110 with a grade of "C" or better.
   **Offered:** Fall, Spring
   **Lab** 1.50 Hrs
This course is designed so that nursing and allied health students may practice basic clinical skills and techniques, clinical judgment, critical thinking and decision-making skills in the safe environment of the college lab under the direction of a nurse faculty member. Emphasis is on leadership and delegation skills, teamwork and collaboration, evidence-based practice, safety, patient-centered care, informatics, and quality improvement while restoring the physiological and psychological health of adult and older adult populations. High fidelity simulation is used as a means of providing students with scenarios they might not ordinarily encounter in the medical/surgical clinical settings. This is an elective course in the Nursing and Allied Health Programs. The values of caring, curiosity, competency, and collaboration are integrated into the practice of nursing.

[CSU]

NRN-60.4. Clinical Simulations for Nursing and Allied Health IV (0.5)
   **Pass/No Pass Only**
   **Prerequisite:** HES-53/EMT-53 or NRN-110 or NVN-119B or RCP-110 with a grade of "C" or better.
   **Offered:** Fall, Spring
   **Lab** 1.50 Hrs
This course is designed so that nursing and allied health students may practice basic clinical skills and techniques, clinical judgment, critical thinking and decision-making skills in the safe environment of the college lab under the direction of a nurse faculty member. Emphasis is on leadership and delegation skills, teamwork and collaboration, interprofessional education, evidence-based practice, safety, patient-centered care, informatics, and quality improvement while optimizing the health of the adult with multi-system failure and nursing leadership. High fidelity simulation is used as a means of providing students with scenarios they might not ordinarily encounter in the medical/surgical and critical care clinical settings. This is an elective course in the Nursing and Allied Health Programs. The values of caring, curiosity, competency, and collaboration are integrated into the practice of nursing.

[CSU]

NRN-70. Growth and Development Across the Lifespan (3)
   **Prerequisite:** PSY-2 with a grade of "C" or better.
   **Advisory:** ENG-1A with a grade of "C" or better.
   **Offered:** Fall, Spring
   **Lec** 3 Hrs
Promotion of wellness across the life span. Critical thinking skills are used emphasizing normal physical, cognitive, ethnic, socio-cultural, sexual, and personality development extending from conception to death. Focus on how accomplishment of developmental tasks is impacted by disease. Required for entry into the Hartnell College LVN Program and for students in a variety of disciplines including early childhood education and baccalaureate-level registered nursing programs.

[CSU]
NRN-99. Nurse Residency Education (3 - 8)
Pass/No Pass Only
Offered: Fall, Spring
Prerequisite: NRN-44.1 with a grade of "C" or better.
This course provides a structured first-work experience to bridge the transition from student to professional RN. A combination of classroom and acute care-clinical experience focuses on issues pertinent to the development of nursing practice skills and professional growth.

[NR]

NRN-110. Foundations for Success for Registered Nursing Students (1.5)
Pass/No Pass Only
Corequisite: NRN-41
Advisory: Admissions to the Registered Nursing Program.
Offered: Fall
Lec 0.75 Hrs; Lab 2.25 Hrs
Introduction to professional behaviors, attitudes, and values that lead to academic and professional success in nursing. Historical trends that influenced the role of the nurse as a knowledge-worker and current educational preparation will be explored. Test taking strategies, study skills, individual learning styles, communication, and stress reduction are explored. The learning environment is created to foster collaboration and curiosity.

NRN-225. Success Strategies for 1st Semester RN Students (0.5)
Pass/No Pass Only
Corequisite: NRN-41 and/or
Other: Approval of Director of Nursing following withdrawal or failure of NRN-41, NRN-41.2, NRN-41.3 or NRN-30
Offered: Fall
Lab 1.50 Hrs
Designed for first semester registered nursing students interested in reinforcing content presented in NRN-41 nursing courses. The course is individualized for each student based on identified learning needs. The values of curiosity and competency in nursing practice are emphasized.

NRN-226. Success Strategies for 2nd Semester RN Students (0.5)
Pass/No Pass Only
Corequisite: NRN-42 or
Other: Approval of Director of Nursing following withdrawal or failure of NRN-42, NRN-42.2, and/or NRN-42.3
Offered: Fall, Spring
Lab 1.50 Hrs
Designed for second semester registered nursing students interested in reinforcing content presented in NRN-42 nursing courses. The course is individualized for each student based on identified learning needs. The values of curiosity and competency in nursing practice are emphasized.

NRN-227. Success Strategies for 3rd Semester RN Students (0.5)
Pass/No Pass Only
Corequisite: NRN-43 or
Other: Approval of Director of Nursing following withdrawal or failure of NRN-43, NRN-43.2, and/or NRN-43.3.
Offered: Fall, Spring
Lab 1.50 Hrs
Designed for third semester registered nursing students interested in reinforcing content presented in NRN-43 nursing courses. The course is individualized for each student based on identified learning needs. The values of curiosity and competency in nursing practice are emphasized.

NRN-228. Success Strategies for 4th Semester RN Students (0.5)
Pass/No Pass Only
Corequisite: NRN-44 or
Other: Approval of Director of Nursing following withdrawal or failure of NRN-44 and/or NRN-44.2
Offered: Fall, Spring
Lab 1.50 Hrs
Designed for fourth semester registered nursing students interested in reinforcing content presented in NRN-44 nursing course. The course is individualized for each student based on identified learning needs. The values of curiosity and competency in nursing practice are emphasized.

NURSING-VOCATIONAL

NVN-70. Growth and Development Across the Lifespan (3)
Prerequisite: PSY-2 with a grade of "C" or better.
Advisory: ENG-1A with a grade of "C" or better.
Offered: Fall, Spring
Lec 3 Hrs
Promotion of wellness across the life span. Critical thinking skills are used emphasizing normal physical, cognitive, ethnic, socio-cultural, sexual, and personality development extending from conception to death. Focus on how accomplishment of developmental tasks is impacted by disease. Required for entry into the Hartnell College LVN Program and for students in a variety of disciplines including early childhood education and baccalaureate-level registered nursing programs.

[NV]

NVN-119A. Vocational Nursing: Theory I (3)
Prerequisite: Admission to the Vocational Nursing Program.
Corequisite: NVN-119B
Offered: Summer
Lec 3 Hrs
Application of the nursing process for the study of vocational nursing. The focus is on fundamental concepts.
NVN-119B. Vocational Nursing: Clinical Knowledge Practice I (4)
- **Prerequisite:** Admission into the Vocational Nursing Program. Students must meet the Essential Capabilities and Functional Requirements.
- **Offered:** Summer
- **Lab** 12 Hrs
  Application of the nursing process for the practice of fundamental vocational nursing skills.

NVN-120A. Vocational Nursing: Theory I (4)
- **Prerequisite:** NVN-119A with a grade of "C" or better.
- **Corequisite:** NVN-130B
- **Offered:** Fall
- **Lec** 3 Hrs
  Application of the nursing process for the study of vocational nursing. The content focus is on the older adult with chronic health conditions.

NVN-120B. Clinical Knowledge Practice II (2)
- **Prerequisite:** NVN-119B with a grade of "C" or better.
- **Corequisite:** NVN-120A; NVN-130B
- **Offered:** Fall
- **Lab** 6 Hrs
  Application of the nursing process for the practice of vocational nursing skills. The content focus is on the skills needed to care for the older adult with chronic health conditions.

NVN-120C. Vocational Nursing: Clinical II (2)
- **Prerequisite:** NVN-119B with a grade of "C" or better and Student must meet the Essentials Capabilities and Functional Requirements.
- **Corequisite:** NVN-120B; NVN-150.1
- **Offered:** Fall
- **Lab** 6 Hrs
  Application of the nursing process when caring for persons with chronic or stable health conditions.

NVN-121A. Vocational Nursing: Theory III (4)
- **Prerequisite:** NVN-119A and NVN-130A with a grade of "C" or better.
- **Offered:** Fall
- **Lec** 4 Hrs
  Application of the nursing process for the study of vocational nursing. The content focus is on the childbearing family from preconception to middle adulthood.

NVN-121B. Clinical Knowledge Practice III (2)
- **Prerequisite:** NVN-119B with a grade of "C" or better.
- **Corequisite:** NVN-121A
- **Offered:** Fall
- **Lab** 6 Hrs
  Application of the nursing process for the practice of vocational nursing skills. The content focus is on the skills needed to care for the childbearing family from preconception to middle adulthood.

NVN-121C. Vocational Nursing: Clinical III (2)
- **Prerequisite:** NVN-119B with a grade of "C" or better and Students must meet Essential Capabilities and Functional Requirements.
- **Corequisite:** NVN-121B; NVN-150
- **Advisory:** This clinical rotation may require travel for rotations in OB and OR. Additionally, students may be placed in obstetrical, family practice, and pediatric physician offices.
- **Offered:** Fall
- **Lab** 6 Hrs
  Application of the nursing process when caring for childbearing family from preconception to middle adulthood.

NVN-122A. Vocational Nursing: Theory IV (4)
- **Prerequisite:** NVN-120A with a grade of "C" or better and NVN-130B with a grade of "C" or better
- **Offered:** Spring
- **Lec** 4 Hrs
  Application of the nursing process for the study of vocational nursing. The content focus is on adults with acute, life-altering, and/or mental health conditions.

NVN-122B. Clinical Knowledge Practice IV (1)
- **Pass/No Pass Only**
- **Prerequisite:** NVN-120C with a grade of "C" or better.
- **Corequisite:** NVN-122A
- **Offered:** Spring
- **Lab** 3 Hrs
  Vocational Nursing Theory Application of the nursing process for the practice of vocational nursing skills. The content focus is on the skills needed to care for the adult with acute and/or mental health conditions.

NVN-122C. Vocational Nursing: Clinical IV (3)
- **Pass/No Pass Only**
- **Prerequisite:** NVN-119B, NVN-120C, NVN-121C and NVN-122C with a grade of "C" or better.
- **Corequisite:** NVN-123A and NVN-130C
- **Offered:** Spring
- **Lab** 9 Hrs
  Application of the nursing process when caring for adults with acute and/or mental health conditions.

NVN-123A. Vocational Nursing: Theory V (3)
- **Prerequisite:** NVN-122A with a grade of "C" or better
- **Corequisite:** NVN-130C
- **Offered:** Spring
- **Lec** 3 Hrs
  Application of the nursing process for the study of vocational nursing. The content focus is on the adult with complex health conditions and the study of vocational nursing leadership.

NVN-123B. Vocational Nursing: Clinical V (4)
- **Prerequisite:** NVN-119B, NVN-120C, NVN-121C and NVN-122C with a grade of "C" or better.
- **Corequisite:** NVN-123A and NVN-130C
- **Offered:** Spring
- **Lab** 12 Hrs
  Application of the nursing process when caring for adults with complex health conditions and when in the role of a vocational nurse leader.
NVN-130A. Basic Pharmacology A (1)  
**Prerequisite:** Admission into the Vocational Nursing program  
**Offered:** Summer  
Lec 1 Hr  
Application of the nursing process for the study of pharmacology for vocational nurses. Emphasis is on calculations required for medication administration and on variables that influence drug therapy.

NVN-130B. Basic Pharmacology B (1)  
**Prerequisite:** NVN-130A with a grade of "C" or better  
**Offered:** Fall  
Lec 1 Hr  
Application of the nursing process for the study of pharmacology for vocational nurses. Emphasis is on principles of safe and effective medication administration.

NVN-130C. Basic Pharmacology C (1)  
**Prerequisite:** NVN-130B with a grade of "C" or better  
**Offered:** Spring  
Lec 1 Hr  
Application of the nursing process for the study of pharmacology for vocational nurses. Emphasis is on understanding drug classifications in order to administer medications safely and effectively.

NVN-150.1. Supervised Vocational Nursing Practice I (0.3)  
**Pass/No Pass Only**  
**Other:** Enrollment in LVN Program first three modules.  
**Offered:** Fall  
This course is designed for the vocational nursing student during the first three modules of study. It facilitates the mastery of assessment, problem-solving, psychomotor, and other fundamental nursing skills in a low, medium, and high-fidelity simulated patient care environment through individual and group coursework, supervised practice and evaluation. It requires completion of course objectives and completion of 15 hours of attendance. Course objectives are verified by a checklist that includes medication administration, urinary catheter insertion, or other skills designated by nursing faculty.

NVN-210. Intravenous Therapy and Blood Withdrawal Techniques (2)  
**Prerequisite:** NVN-123C with a grade of "C" or better or status as a Licensed Vocational Nurse  
**Offered:** Fall, Spring  
Lec 1.70 Hrs; Lab 0.90 Hrs  
This course provides the licensed vocational nurse with the knowledge and skills to safely initiate venipuncture and blood withdrawal. Current concepts, techniques, and measures are emphasized. Course content has been approved by the California Board of Licensed Vocational Nursing for the issue of certificate to the LVN.

NVN-226. Success Strategies for Beginning VN Students (0.5)  
**Prerequisite:** Must be accepted into the vocational nursing program or Approval from the director of nursing to return to the vocational nursing program after previous course withdrawal or failure.  
**Offered:** Fall, Spring  
Lab 1.50 Hrs  
Designed for licensed vocational nursing students interested in reinforcing content presented in the vocational nursing program. The course is individualized for each student based on identified learning needs. The values of curiosity and competency in nursing practice are emphasized.

NVN-227. Success Strategies for Completing VN Students (0.5)  
**Prerequisite:** NVN-121A with a grade of "C" or better. Approval for readmission into the Vocational Nursing program.  
**Offered:** Fall, Spring  
Lab 1.50 Hrs  
Designed for licensed vocational nursing students taking one or both of the last two modules interested in reinforcing content presented throughout the vocational nursing program. NCLEX readiness and professional practice will be emphasized. The course is individualized for each student based on identified learning needs. The values of curiosity and competency in nursing practice are emphasized.

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**OCEANOGRAPHY**

OCN-1. Oceanography (3)  
**Offered:** Spring  
Lec 3 Hrs  
The geological, physical, chemical and biological aspects of the ocean environment. It includes the origin of the oceans, nature of the ocean basins, plate tectonics, causes and effects of currents, coastal geography, waves, tides and tidal currents, as well as the biological and environmental aspects of the oceans.  
[CSU; UC; CSU-GE, AREA B1; IGETC AREA 5]

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**PHILOSOPHY**

PHL-2. Introduction to Philosophy (3)  
**Offered:** Fall, Spring, Summer  
Lec 3 Hrs  
An introduction to some questions and methods of philosophy. Topics include Principles of Right Conduct (Ethics), Sources and Extent of Our Knowledge (Epistemology), The Nature of Reality, and The Existence of God (Metaphysics), Criteria of A Just Society (Social-Political Philosophy), and Criteria of Sound Reasoning (Logic).  
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]
PHL-10. Ethics (3)  
**Offered:** Fall, Spring  
**Lec** 3 Hrs  
Presents an in depth analysis of major ethical theories and their application to contemporary moral, social, and personal issues. Students will learn to analyze and differentiate the concepts, principles, and operational rules of major ethical theories. Analytically comparing and contrasting these theories, students will use this analytic framework to evaluate contemporary moral issues.  
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]  
[C-ID PHIL 120]  

PHL-15. Critical Thinking and Logic (3)  
**Pass/No Pass Option**  
**Offered:** Fall, Spring, Summer  
**Lec** 3 Hrs  
An introduction to the principles of sound reasoning with emphasis on deductive logic. Students are introduced to the basic techniques of categorical and truth-functional logics, and to inductive reasoning, common fallacies and to varieties of language use.  
[CSU; UC; CSU-GE AREA A3]  

PHOTOGRAPHY  

PHO-1. Introduction to Photography (3)  
**Offered:** Fall, Spring, Summer  
**Lec** 3 Hrs  
Introduces students to the technical knowledge, skill sets, and creative applications of all photographic media. A survey of the historic development of photography is included. Students will provide their own cameras.  
[CSU; UC; CSU-GE AREA C1; IGETC AREA 3]  

PHO-2. Beginning Black and White Photography (4)  
**Offered:** Fall, Spring  
**Lec** 3 Hrs; **Lab** 3 Hrs  
A course designed to teach the skills of Black and White photography through the production of prints of high technical and artistic value. It includes the study of film processing, contact printing, enlarging, composition, after-work, and mounting.  
[CSU; UC]  

PHO-3. Advanced Photography Lab (3)  
**Prerequisite:** PHO-2 with a grade of "C" or better.  
**Offered:** Fall, Spring  
**Lec** 2 Hrs; **Lab** 4 Hrs  
This course is an extension of PHO-2 with special emphasis on the study of photography as an art form and profession. Assignments are given in a wide variety of photographic topics, technologies, and methods in order to develop student skills and proficiencies in Black and White film as well as related issues in digital media.  
[CSU]  

PHO-4. Portfolio Photography (3)  
**Prerequisite:** PHO-3 with a grade of "C" or better.  
**Offered:** Fall, Spring  
**Lec** 2 Hrs; **Lab** 4 Hrs  
Emphasizes the development of a photographic portfolio in which the student establishes near professional level skills in their choice of photographic mediums.  
[CSU]  

PHO-46. Photography Practicum (1 - 3)  
**Lab** 3 Hrs  
Supervised lab, studio, and location work in photography.  
[CSU]  

PHYSICAL EDUCATION  

PEAC-32. Core Strengthening and Flexibility (1.5)  
**Pass/No Pass Option**  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Designed to increase muscle flexibility and physical movement. Balance, core strengthening and muscle awareness will be emphasized through a series of exercise and routines. Formerly PE-1.243. Not open to students who have completed PE-1.243.  
[CSU; UC]  

PEAC-34. Stability Ball Training (1 - 1.5)  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Designed to increase overall fitness using a Swiss stability ball. Emphasis on strengthening core muscles and on proper lifting techniques, strength, endurance and balance. Student will supply his/her own Swiss stability ball and mat. Formerly PE-1.238. Not open to students who have completed PE-1.238.  
[CSU; UC]  

PEAC-36. Yoga (1 - 1.5)  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Practice and philosophy of Yoga through yoga poses. Yoga exercises linked to movement, mind, and breath to bring about a feeling of balance, relaxation, and harmony. Students must supply their own Yoga mat. Formerly PE-1.235. Not open to student who have completed PE-1.235.  
[CSU; UC]  

PEAC-38. Advanced Baseball (1 - 1.5)  
**Advisory:** High school varsity baseball experience or previous collegiate baseball experience is highly recommended.  
**Offered:** Summer  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Instruction and practice in offensive and defensive fundamentals with emphasis on strategies and techniques of baseball.  
[CSU; UC]
PEAC-40. Speed Training and Conditioning (1 - 1.5)  
**Pass/No Pass Option**  
**Offered:** Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
The development of strategies and techniques to increase speed and improve agility utilizing the fitness components of cardiovascular/respiratory conditioning, muscular strength and endurance, and flexibility. Formerly PE-1.248. Not open to students who have completed PE-1.248.  
[CSU; UC]  

PEAC-42. Hydro-Fitness (1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Cardiovascular exercise program performed in the pool. The workouts will include a warm up, a series of arm and leg exercises using "Hydro-Fit" system apparatus, and a cool down. Formerly PE-1.229. Not open to students who have completed PE-1.299.  
[CSU; UC]  

PEAC-43. Strength Training (1 - 1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
A progressive weight training course designed to provide instruction in techniques and training of muscular strength, muscular endurance and muscle definition through the use of free weights and machines. Students may only take four of the following courses: PEAC-43, PEAC-46, PEAC-47, PEAC-49, PEAC-50 or PEAC-69. Each course is not repeatable. Formerly PE-1.228. Not open to students who have completed PE-1.228 with a grade of "C" or better  
[CSU; UC]  

PEAC-44. Water Jogging (1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
A water exercise class emphasizing cardiovascular endurance, muscular development and flexibility using Hydro-Fit jogging cuffs and Aqua jogger belts. Formerly PE-1.221. Not open to students who have completed PE-1.221.  
[CSU; UC]  

PEAC-46. Circuit Endurance Training (1 - 1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Circuit training to develop cardiovascular efficiency, strength, endurance and flexibility. Self-monitoring of heart rate emphasized throughout the class. Students may only take four of the following courses: PEAC-43, PEAC-46, PEAC-47, PEAC-49, PEAC-50 or PEAC-69. Each course is not repeatable. Formerly PE-1.204. Not open for credit to students who have completed PE-1.204 with a "C" or better.  
[CSU; UC]  

PEAC-47. Strength Conditioning Lab (1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
A progressive weight training and conditioning course involving the use of weight machines, free weights and cardiovascular equipment to develop muscular strength, endurance and general fitness. Formerly PE-1.200. Not open to students who have completed PE-1.200.  
[CSU; UC]  

PEAC-49. Aerobic Strength Conditioning (1 - 1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Develop cardiovascular efficiency, strength, endurance, and flexibility through the use of weight machines, free weights and cardiovascular equipment. Emphasis is placed on improving overall fitness while exercising safely. Students may enroll in PEAC-43, PEAC-46, PEAC-47, PEAC-49, PEAC-50 or PEAC-69 up to four times for credit. Each course is not repeatable. Formerly PE-1.198. Not open to students who have completed PE-1.198 with a grade of "C" or better.  
[CSU; UC]  

PEAC-50. Power Lifting (1 - 1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Power lifting utilizing primarily free weights. Emphasis is on lifting for strength and power by concentrating on the core power lifts and other multiple joint exercises. Course provides the opportunity for students to improve their flexibility, muscular definition and endurance. Formerly PE-1.197. Not open to students who have completed PE-1.197.  
[CSU; UC]  

PEAC-51. Wellness Through Walking (1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Fundamentals of walking are introduced for the student’s enhancement in cardiovascular fitness and weight control through exercise, stretching, and progressive endurance walks. Nordic walking sticks will be introduced. Formerly PE-1.193. Not open to students who have completed PE-1.193.  
[CSU; UC]  

PEAC-52. Volleyball (1.5)  
**Offered:** Fall, Spring  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Develop and improve fundamental volleyball skills including passing, setting, digging, serving, spiking, and blocking. Students practice offensive and defensive strategies and utilize these skills and strategies during game play. Formerly PE-1.186. Not open to students who have completed PE-1.186.  
[CSU; UC]  

PEAC-55. Soccer (1 - 1.5)  
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs  
Instruction in the fundamental skills of soccer including dribbling, heading, trapping, passing, and team play. Formerly PE-1.183. Not open to students who have completed PE-1.183.  
[CSU; UC]
PEAC-56. Self-Defense/Martial Arts (2)  
**Lec 1 Hr; Lab 3 Hrs**  
Course will examine the various methods of self-defense/martial arts for men and women that will have an emphasis on the protection from assaults and use of defensive techniques and strategies. Students will learn Katas required for belt promotion. Formerly PE-1.182. Not open to students who have completed PE-1.182 with a grade of "C" or better.  
[CSU; UC]

PEAC-58. Beginning Tennis (1 - 1.5)  
**Offered: Fall, Spring, Summer**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Develops basic skills necessary to play tennis. Emphasis is placed on the fundamental techniques, rules, scoring, history, and tennis etiquette. Students will supply their own tennis racquet and two cans of tennis balls.  
[CSU; UC]

PEAC-59. Intermediate Tennis (1 - 1.5)  
**Advisory: The student should have previous playing experience in high school or a United States Tennis Association (USTA) skill rating of 3.0 or higher according to the National Tennis Rating Program (NTSP) or completed PEAC-58, Beginning Tennis, with a grade of "C" or higher prior to enrolling in Intermediate Tennis.**  
**Offered: Fall, Spring, Summer**  
**Lec 0.75 Hrs; Lab 0.75 Hrs**  
Develops intermediate techniques necessary to play tennis. Emphasis on intermediate techniques, tennis terminology, scoring and rules of the game. Students will supply their own tennis racquet and two cans of tennis balls.  
[CSU; UC]

PEAC-60. Advanced Tennis (1.5)  
**Offered: Spring**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Develops advanced strategies necessary to play competitive tennis. Emphasis on advanced techniques and strategies for both singles and doubles play. Students will supply their own tennis racquet and two cans of tennis balls. Formerly PE-1.172. Not open to students who have completed PE-1.172.

PEAC-61. Beginning Swimming (1 - 1.5)  
**Offered: Fall, Spring**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Beginning skills and techniques introduced and practiced, allowing the student to become comfortable in the water.  
[CSU; UC]

PEAC-62. Intermediate Swimming (1 - 1.5)  
**Offered: Fall, Spring**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Intermediate skills and techniques introduced and practiced. Introduction to diving and the use of springboard will be covered. The students should be able to swim strokes such as the crawl.  
[CSU; UC]

PEAC-63. Advanced Swimming (1 - 1.5)  
**Advisory: Intermediate skill level competency or completed PEAC-62, with a "C" or higher prior to enrolling in Advanced Swimming.**  
**Offered: Fall, Spring**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Advanced skills and techniques introduced and practiced in both swimming and springboard diving. The students should be proficient in strokes such as the crawl, back stroke, butterfly and side stroke and also be skilled in jumping and diving into the pool from the deck, low and high boards.  
[CSU; UC]

PEAC-64. Beginning Golf (1 - 1.5)  
**Offered: Summer**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Course provides instruction in the fundamental skills and techniques of golf including, stance, grip, basic rules, and course etiquette. Formerly PE-1.150. Not open to students who have completed PE-1.150 with a grade of "C" or better.  
[CSU; UC]

PEAC-65. Advanced Golf (1.5)  
**Offered: Summer**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Course provides instruction in the advanced techniques and strategies of golf. Formerly PE-1.151. Not open to students who have completed PE-1.151 with a grade of "C" or better.  
[CSU; UC]

PEAC-66. Zumba Aerobics 1 (1.5)  
**Offered: Fall, Spring**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Zumba is a Latin-inspired, dance-fitness aerobics class that incorporates Latin and International music and dance movements. Zumba workouts are designed to increase cardiovascular efficiency, strength, endurance, and flexibility by incorporating nonstop rhythmic exercise to Latin and international music. Class activity includes a warm-up, aerobic activity and a cool down. Formerly PE-1.137. Not open to students who have completed PE-1.137.

PEAC-67. Aerobics II (1)  
**Offered: Summer**  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Cardiovascular exercise designed to gradually increase duration and intensity of aerobic exercise, incorporating strength, endurance, and flexibility. Formerly PE-1.138. Not open to students who have taken PE-1.138.  
[CSU; UC]
PEAC-68. Swim Fitness (1 - 1.5)  
**Offered:** Fall, Spring, Summer  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Intermediate swimming techniques practiced while improving endurance and cardiovascular fitness. Formerly PE-1.134. Not open for credit to students who have completed PE-1.1.34 with a grade of "C" or better.  
[CSU; UC]

PEAC-69. Introduction to Weight Training (0.5 - 1.5)  
**Offered:** Summer  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
A progressive weight training program to increase flexibility, strength, endurance and skills. Course will begin with a health screening and baseline or functional capacity fitness assessment. Formerly PE-1.131. Students may only take four of the following courses: PEAC-43, PEAC-46, PEAC-47, PEAC-49, PEAC-50 or PEAC-69.  
[CSU; UC]

PEAC-70. Basketball (1.5)  
**Offered:** Spring  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
A course designed to develop a thorough understanding of the game of basketball. Individual game skills, popular systems of play and strategy, and the rules of the game will be discussed and analyzed. Course will begin with a health screening and baseline or functional capacity fitness assessment. Formerly PE-1.110. Not open to students who have completed PE-1.110.  
[CSU; UC]

PEAC-72. Intermediate Basketball (1 - 1.5)  
**Offered:** Spring, Summer  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Designed to develop fundamental skills, techniques, and the physical conditioning necessary to play intermediate basketball. Students practice offensive and defensive strategies and use these skills and strategies during game play. Formerly PE-1.112. Not open to students who have completed PE-1.112 with a grade of "C" or better.  
[CSU; UC]

PEAC-74. Advanced Volleyball (1 - 1.5)  
**Advisory:** Intermediate skill level competency or completed PEAC-52, with a "C" or higher prior to enrolling in Advanced Volleyball.  
**Offered:** Fall, Spring  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Designed to give experienced volleyball players an opportunity to strengthen his/her skills. Emphasis will be placed on performance in competitive situations during class time as preparation for life-long fitness.  
[CSU; UC]

PEAC-81. Introduction to Water Polo (1.5)  
**Offered:** Spring, Summer  
**Lec 0.75 Hrs; Lab 2.25 Hrs**  
Fundamentals and rules of water polo are introduced with the use of innertubes for ease of learning and adaptability for the less proficient swimmers.  
[CSU; UC]
PEIN-22. Intercollegiate Volleyball (3)
**Offered:** Fall
**Lab** 9 Hrs
Advanced techniques and strategies of women's competitive intercollegiate volleyball competition. Approximately twenty-eight scheduled games. Formerly PE-3.516. May be taken up to four times for credit.
[CSU; UC]

PEIN-23. Intercollegiate Cross Country (3)
**Offered:** Fall
**Lab** 9 Hrs
Advanced course designed to develop techniques and strategies for intercollegiate cross country competition. Approximately ten intercollegiate meets are scheduled. Formerly PE-3.530. May be taken up to four times for credit.
[CSU; UC]

PEIN-24. Intercollegiate Track and Field (3)
**Offered:** Spring
**Lab** 9 Hrs
Intercollegiate track and field using advanced skills, techniques, and strategies. Eighteen intercollegiate competitions. Formerly PE-3.531. May be taken up to three times for credit.
[CSU; UC]

PEIN-25. Intercollegiate Sports Conditioning (1.5)
**Offered:** Fall, Spring
**Lab** 4.50 Hrs
Advanced strategies for competitive intercollegiate sports competition through the development of cardiovascular endurance, flexibility and strength through the use of weights and cardiovascular equipment with emphasis on specific strategies dependent on the sports activity. Formerly PE 1.146. May be taken up to four times for credit.
[CSU; UC]

PEIN-26. Intercollegiate Baseball (3)
**Offered:** Spring
**Lab** 9 Hrs
Advanced techniques and strategies of competitive intercollegiate baseball competition. Approximately thirty-two intercollegiate games. Formerly PE-3.510. May be taken up to three times.
[CSU; UC]

PEIN-30. Preseason Sport Conditioning, Basketball (1.5)
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs
Designed for the student who wishes to compete at the intercollegiate level. Course content will emphasize methods to give basketball players an opportunity to improve fitness, strength, and flexibility to minimize injury potential to men/women interested in intercollegiate basketball in a preseason setting. May be taken up to 4 times.
[CSU; UC]

PEIN-32. Pre-Season Sport Conditioning (1)
**Offered:** Spring, Summer
**Lec** 0.75 Hrs; **Lab** 0.75 Hrs
This course is designed for the student who wishes to compete at the intercollegiate level. Course content will emphasize pre-season conditioning for one of the following sports: baseball, track, cross country, soccer, softball, and volleyball. It is an intensive training program based upon improving basic skills, speed, flexibility, agility, reaction time, coordinated movement and cardiovascular endurance. Students should have previous organized athletic experience. Students will enroll in the appropriate conditioning class that corresponds to their sport participation. May be taken up to 4 times.
[CSU; UC]

PEIN-40. Nontraditional Season, Basketball (1)
**Offered:** Summer
**Lec** 0.75 Hrs; **Lab** 0.75 Hrs
Designed for the student who wishes to compete at the intercollegiate level and gives experienced basketball players an opportunity to improve skills, fitness levels, and tactical understanding of basketball. Emphasis will be placed on performance in competitive situations during class and participation in California Community College Athletic Association's Nontraditional Season of Basketball. Students must have a current medical physical on file to participate in nontraditional competitions. CCCAA Bylaws 3.17.1. May be taken up to 4 times for credit.
[CSU; UC]

PEIN-41. Nontraditional Season, Soccer (1.5)
**Offered:** Spring
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs
Designed for the student who wishes to compete at the intercollegiate level and gives experienced soccer players an opportunity to improve skills, fitness level, and tactical understanding of soccer. Emphasis will be placed on performance in competitive situations during class and participation in California Community College Athletic Association's Nontraditional Season of Soccer. Students must have a current medical physical on file to participate in nontraditional competitions. CCCAA Bylaw 3.17.1 May be taken up to 4 times.
[CSU; UC]

PEIN-42. Nontraditional Season, Volleyball (1.5)
**Offered:** Spring
**Lec** 0.75 Hrs; **Lab** 2.25 Hrs
Designed for the student who wishes to compete at the intercollegiate level and gives experienced volleyball players an opportunity to improve skills, fitness levels, and the tactical understanding of volleyball. Emphasis will be placed on performance in competitive situations during class and participation in California Community College Athletic Association's Nontraditional Season of Volleyball. Students must have a current medical physical on file to participate in nontraditional competitions. CCCAA ByLaw 3.17.1. May be taken up to 4 times.
[CSU; UC]
PEIN-43. Nontraditional Season, Baseball (1.5)

Offered: Fall
Lec 0.75 Hrs; Lab 2.25 Hrs

Designed for the student who wishes to compete at the intercollegiate level and gives experienced baseball players an opportunity to improve skills, fitness levels and tactical understanding of baseball. Emphasis will be placed on performance in competitive situations during class and participation in California Community College Athletic Association's Nontraditional Season of baseball. Students must have a current medical physical on file to participate in nontraditional competitions. CCCAA Bylaw 3.17.1. May be taken up to 4 times.
[CSU; UC]

PEIN-44. Nontraditional Season, Softball (1.5)

Offered: Fall
Lec 0.75 Hrs; Lab 2.25 Hrs

Designed for the student who wishes to compete at the intercollegiate level and gives experienced softball players an opportunity to improve skills, fitness levels and tactical understanding of softball. Emphasis will be placed on performance in competitive situations during class and participation in California Community College Athletic Association's Nontraditional Season of softball. Students must have a current medical physical on file to participate in nontraditional competitions. CCCAA Bylaw 3.17.1. May be taken up to 4 times.
[CSU; UC]

PEIN-45. Nontraditional Season, Track and Field (1.5)

Offered: Fall
Lec 0.75 Hrs; Lab 2.25 Hrs

Designed for the student who wishes to compete at the intercollegiate level and gives experienced track and field participants an opportunity to improve skills, fitness levels and tactical understanding of track. Emphasis will be placed on performance in competitive situations during class and participation in California Community College Athletic Association's Nontraditional Season of Track and Field. Students must have a current medical physical on file to participate in nontraditional competitions. CCCAA Bylaw 3.17.1. May be taken up to 4 times.
[CSU; UC]

PEIN-46. Nontraditional Season, Football (1.5)

Offered: Spring
Lec 0.75 Hrs; Lab 2.25 Hrs

Designed for the student who wishes to compete at the intercollegiate level and gives experienced football players an opportunity to improve skills, fitness levels and tactical understanding of football. Emphasis will be placed on performance in competitive situations during class and participation in California Community College Athletic Association's Nontraditional Season of Football. Students must have a current medical physical on file to participate in nontraditional competitions. CCCAA Bylaw 3.17.1. May be taken up to 4 times.
[CSU; UC]

PETH-1. Introduction to Kinesiology (3)

Offered: Fall, Spring
Lec 3 Hrs

Introductory course in the interdisciplinary approach to the study of human movement. Provides an overview of the importance of the sub-disciplines in kinesiology along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions. Formerly PE-20. Not open to students who have completed PETH-1 (PE-20) with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA E] [C-ID KIN 100]

PETH-2. Care and Prevention of Athletic Injuries (4)

Offered: Fall, Spring
Lec 3 Hrs; Lab 3 Hrs

This course is designed to prepare prospective coaches, athletic trainers, and physical educators in the recognition, evaluation and care of athletic injuries. Laboratory activities will be included that provide direct application of classroom content. Formerly known as PE 15. Not open to students who have completed PETH-2, (PE 15) with a "C" grade or better.
[CSU; UC]

PETH-2A. Introduction to Practical Field Experience in the Care and Prevention of Athletic Injuries (2)

Advisory: PETH-2
Offered: Fall, Spring
Lab 6 Hrs

Introduction to the field of Athletic training, designed to offer the prospective athletic trainer, physical therapist, or sports medicine practitioner practical experience in the care and prevention of athletic injuries in an athletic training room setting. Formerly PE-101A. Not open to students who have completed PE 101A or PE 116 with a grade of "C" or better.
[CSU]

PETH-3. Concepts of Fitness and Wellness (3)

Offered: Spring
Lec 3 Hrs

Basic concepts of fitness, nutrition, health promotion and disease prevention. The students will gain knowledge to make appropriate choices that contribute to a healthy lifestyle. The course will incorporate both lecture and physical activity laboratory assignments.
[CSU]

PETH-4. Mental Skills for Sports Performance (3)

Offered: Spring
Lec 3 Hrs

Students will learn techniques for developing and refining psychological skills to enhance athletic growth and performance. In addition, they will improve their coaching skills and establish a culture of providing positive instruction. Course topics will assist students to maximize their athletic skill and development as well as addressing such issues as confidence, attention, goal setting, coping with injury and injury prevention.
[CSU; UC; CSU-GE, AREA E]
PETH-5. Sport in Society (3)
Offered: Fall
Lec 3 Hrs
An overview of the historical development of sport and current roles of sport in society. Includes interaction of sport with societal values and ethics and outcomes affecting professional and collegiate sports.
[CSU; CSU-GE, AREA D7; UC]

PETH-10A. Theory and Analysis of Football I (2)
Offered: Fall
Lec 1.50 Hrs; Lab 1.50 Hrs
Beginning techniques and strategies of football as played at the intercollegiate and professional levels. Advanced skills, strategies and rules of the game are discussed and analyzed while engaging in supervised and repetitive play. Formerly PE-51A. Not open to students who have completed PETH-10A (PE-51A) with a grade of "C" or better.
[CSU; UC]

PETH-10B. Theory and Analysis of Football II (2)
Offered: Fall
Lec 1.50 Hrs; Lab 1.50 Hrs
Beginning and intermediate techniques and strategies of football as played at the intercollegiate and professional levels. Advanced skills, strategies, computer analysis, and rules of the game are discussed and analyzed while engaging in supervised and repetitive play. Formerly PE-51B. Not open to students who have completed PETH-10B (PE-51B) with a grade of "C" or better.
[CSU; UC]

COURSE LISTINGS

PHYSICS

PHY-2A. College Physics I (4)
Prerequisite: MAT-24 with a grade of "C" or better.
Offered: Fall
Lec 3 Hrs; Lab 4 Hrs
Lectures and laboratories covering vectors, motion, forces, gravity, work, energy, momentum, rotational motion, torque, oscillations, simple harmonic motion, fluids and heat. This course is intended for students not majoring in physics or engineering but needing a one-year course in physics as a requirement for their major program.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]
[C-ID PHYS 1005 with PHY-2B]

PHY-2B. College Physics II (4)
Prerequisite: PHY-2A with a grade of "C" or better.
Offered: Spring
Lec 3 Hrs; Lab 4 Hrs
A continuation of PHY-2A. Lectures and laboratories covering waves, sound, light electricity, magnetism, atomic and nuclear physics. This course is intended for students not majoring in physics or engineering but needing a one-year course in physics as a requirement for their major program.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]
[C-ID PHYS 110] [C-ID 100S with PHY 2A]

PHY-4A. General Physics/Mechanics I (4)
Prerequisite: MAT-3A with a grade of "C" or better
Offered: Fall, Spring
Lec 3 Hrs; Lab 4 Hrs
Vectors, particle kinematics and dynamics, work, energy, momentum, angular momentum, conservation laws, rotation of rigid bodies, torque, Newton's Law of Gravitation, oscillations, and dynamics of fluids. Required for engineering and physical science majors. Strongly recommended for math majors.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]
[C-ID PHYS 205]

PHY-4B. General Physics/Electricity and Magnetism (4)
Prerequisite: PHY-4A with a grade of "C" or better.
Corequisite: PHY-4B
Offered: Fall
Lec 3 Hrs; Lab 4 Hrs
Electric charges and currents, electric and magnetic fields, capacitance, inductance and resistance. Electric circuits, Kirchhoff's laws, Maxwell's equations, electromagnetic oscillations and waves. Required for engineering and physical science majors. Strongly recommended for math majors.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]
[C-ID PHYS 210]

PHY-4C. General Physics/Waves, Heat, Light, and Modern Physics (4)
Prerequisite: PHY-4A with a grade of "C" or better.
Corequisite: MAT-3B
Offered: Spring
Lec 3 Hrs; Lab 4 Hrs
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]
[C-ID PHYS 215]

PHY-10. Introduction to Physics (4)
Advisory: MAT-121 or MAT-151
Offered: Fall, Spring, Summer
Lec 3 Hrs; Lab 3 Hrs
An overview of some of the more important and interesting phenomena in physics including falling bodies, Newton's laws of motion, satellite and planetary motion, heat, light, sound, waves, atomic structure, nuclear physics, energy, electricity and magnetism. Emphasis is on developing a practical understanding of principles rather than a detailed mathematical treatment. Not open to students who are concurrently enrolled in or who have completed Physics 2A, 2B, 4A, 4B, or 4C with a grade of "C" or better.
[CSU; UC CSU-GE, AREA B1, B3; IGETC AREA 5]
PHY-32. Survey of Chemistry and Physics (4)
Prerequisite: MAT-121 with a grade of "C" or better.
Offered: Spring
Lec 3 Hrs; Lab 3 Hrs
An investigation of basic principles of physics and chemistry including matter, physical and chemical properties, energy, motion, light, atomic structure, bonding, solutions and chemical reactions. The inter-dependence of chemistry and physics will be emphasized. This course is intended for non-science majors including elementary education.
[CSU, UC; CSU-GE, AREAS B2, B3; IGETC AREA 5]
[C-ID PHYS 140]

POLITICAL SCIENCE

POL-1. American Political Institutions (3)
Advisory: DE/Hybrid advisory: See page 145.
Offered: Fall, Spring, Summer
Lec 3 Hrs
Introduction to the U.S. Constitution, American political institutions, and California state government. Topics include basic concepts from political philosophy, constitutional law, institutions of the federal government, political parties and elections, federalism, public opinion, the media, interest groups, and civil liberties and civil rights. Contemporary issues in political science will be presented from a variety of viewpoints.
[CSU; UC; CSU-GE, AREA D8; IGETC, AREA 4]
[C-ID POLS 110]

POL-2. Contemporary Governments Abroad (3)
Advisory: Eligibility for ENG-1A
Offered: Spring
Lec 3 Hrs
This course is focused on comparative studies regarding contemporary governments abroad and their role in the ongoing process of political and economic globalization. The forms of government studied in this course include parliamentary democracy, federal republic, direct democracy, authoritarian regime, and theocracy. Studies focus on a country's political economy and development, governance and policy-making, representation and participation, and politics in transition. Contemporary issues in comparative government will be presented from a variety of viewpoints.
[CSU; UC; CSU-GE, AREA D8; IGETC, AREA 4]
[C-ID POLS 130]

POL-3. Introduction to International Relations (3)
Advisory: Eligibility for ENG-1A
Offered: Fall
Lec 3 Hrs
Focused on the practice and theory of international relations within the framework of traditional orientations and alternative approaches to international politics. Traditional orientations and alternative approaches to international politics are utilized to analyze divergent political orientations, organizational structures, approaches to conduct, pursuing peace, and the global economy. Topics include the evolution of world politics, levels of analysis and foreign policy, nationalism, globalization and transnationalism, the nation-state, intergovernmental organizations, diplomacy, international law and human rights, and international political economy. Contemporary issues in international relations will be presented from a variety of viewpoints.
[CSU; UC; CSU-GE, AREA D8; IGETC, AREA 4]
[C-ID POLS 140]

POL-5. Chicano Politics and the American Political Systems (3)
Offered: Fall
Lec 3 Hrs
A survey of U.S. and California political institutions, including the U.S. Constitution as it relates to Chicanos. Contemporary events in politics at the local, state and national level will be presented from a Chicano perspective. Chicano organizations, political models, ideology, political participation, and leadership will be studied. The role of race, class, immigration status, sex, gender, identity and the struggle for social justice, equality and political participation will be examined. The role of the media and polling will also be examined. Not open to students who have completed ETH-5 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA D3, D8; IGETC, AREA 4]

POL-6. Introduction to Political Theory & Thought (3)
Offered: Spring
Lec 3 Hrs
This course is an introduction to various theoretical approaches to politics and basic political problems and proposed solutions as developed over the course of 2,500 years of Western political thought. Course topics include the correlation between ideology and democracy, liberalism, conservatism, socialism, and contemporary liberation ideologies as applied to the politics of identity. Contemporary issues in political theory will be presented from a variety of viewpoints.
[CSU; UC; CSU-GE; AREA D8; IGETC, AREA 4]
PSYCHOLOGY

PSY-2. General Psychology (3)
Advisory: Eligibility for ENG-1A
Offered: Fall, Spring, Summer
Lec 3 Hrs
Introduction to the fundamental principles and concepts of human behavior and mental processes. Topics include psychology as a science, biological bases of behavior, lifespan development, perception, conditioning and learning, memory, cognition, motivation and emotion, personality, psychological disorders, methods of therapy, and social and applied psychology. Recommended for college and university transfer students. Not open to students who have completed PSY-1A with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA D9; IGETC, AREA 4]
[C-ID PSY 110]

PSY-6. Social Psychology (3)
Advisory: PSY-2; Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
Survey of scientific theories and research on the nature, causes, and consequences of group and individual behavior within a social context. Topics include aggression, prejudice and stereotypes, interpersonal attraction, attitudes and attitude change, conformity, group phenomena, gender roles, cultural norms, person perception, social cognition, and altruism.
[CSU; UC; CSU-GE, AREA D0, D9; IGETC AREA 4]
[C-ID PSY 170]

PSY-8. Research Methods in Psychology (3)
Prerequisite: PSY-2 and MAT-13 with a grade of "C" or better.
Advisory: Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
Scientific methods of investigating behavior and mental processes. Students will understand and apply basic research methods in psychology, including research design, review of professional literature, data analysis, and interpretation. The ethics of research with human and animal subjects will be included.
[CSU; UC, CSU-GE, AREA D9] [C-ID PSY 200]

PSY-10. Introduction to Biological Psychology (3)
Prerequisite: PSY-2 with a grade of "C" or better.
Advisory: Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
An advanced consideration of the relationship between the brain and behavior emphasizing the structure and function of neurons and other components of the nervous system. The contributions, philosophy and ethics of research on humans and animals will be examined. Other topics include brain-behavior relationships underlying the psychological phenomena of sensation, perception, regulatory processes, emotion, motivation, learning, memory, language and cognition as well as disorders that arise from nervous system malfunctioning.
[CSU; UC; CSU-GE, AREA B2; IGETC, AREA 5]
[C-ID PSY 150]

PSY-12. Theories of Personality (3)
Advisory: PSY-2; Eligibility for ENG-1A
Offered: Fall
Lec 3 Hrs
A comparative analysis of the major theories of personality theory integrating research and assessment techniques. Theoretical perspectives will include psychoanalytic, psychodynamic, humanistic, behavioral, cognitive, trait, social learning, and cross-cultural approaches.
[CSU; UC]

PSY-14. Child Psychology (3)
Advisory: Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
A survey of the psychological growth from conception through adolescence. Particular emphasis is given to physical, cognitive, and emotional development as well as biological and social influences. Topics will include an analysis of classic and contemporary theories and issues within the field of child psychology.
[CSU; UC, CSU-GE, AREA D9, E; IGETC, AREA 4]

PSY-15. Human Sexuality (3)
Offered: Fall, Spring, Summer
Lec 3 Hrs
A current and comprehensive introduction to the topic of human sexuality from the psychological, biological, sociocultural, and historical perspectives. Laboratory and survey research, findings from clinical experience, and historical sources will be analyzed. Topics to be discussed include (but are not limited to) sexual anatomy, sexual beliefs, values and expression, and concerns related to human sexuality. The various methods of contraception and safer sex practices will be evaluated. Current sex norms and aspects of interpersonal and individual sexual adjustment will be explored.
[CSU; UC; CSU-GE, AREA D9, E; IGETC AREA 4]
[C-ID PSY 130]
PSY-22. Abnormal Psychology (3)
Prerequisite: PSY-2 with a grade of "C" or better.
Advisory: Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
An introduction to the research and theories regarding the major types of psychopathology, including schizophrenia, and the anxiety, mood, dissociative, somatoform, and personality disorders. Emphasis on understanding the symptoms, causes, treatments and prevention of the disorders as viewed from the psychological, social and biological perspectives.
[CSU; UC; CSU-GE AREA D9; IGETC, AREA 4] [C-ID PSY 120]

PSY-25. Developmental Psychology: Lifespan (3)
Advisory: Eligibility for ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
Investigates psychological development from conception through adulthood and end of life. Focus areas include physical, cognitive, social and personality development as well as the current theoretical and research approaches which contribute to an understanding of human development over the lifespan.
[CSU; UC; CSU-GE, AREA D9, AREA E1; IGETC, AREA 4] [C-ID PSY 180]

PSY-30. Forensic Psychology (3)
Offered: Spring
Lec 3 Hrs
Introduction to the fundamental principles and concepts of forensic psychology. Topics include the role of psychology in the criminal and civil courts, identifying criminal behavior, evaluating fitness for trial, the insanity defense, helping victims of crime, family violence, dealing with offenders, investigation and prosecution, evaluating civil matters including family court.
[CSU]

PSY-33. Personal and Social Adjustment (3)
Advisory: Eligibility of ENG-1A
Offered: Fall, Spring
Lec 3 Hrs
Designed for students interested in applications of psychology to everyday life situations. The course considers various psychological perspectives and theoretical foundations and how they are applied across the lifespan, taking into account the influence of culture, gender, ethnicity, historical context, and socio-economic status. Includes a broad understanding of how scientist, clinicians and practitioners study and apply psychology and how psychology is related to other social sciences.
[CSU; CSU-GE AREA D9, E] [C-ID PSY 115]

PSY-41. Psychology of Human Relations (3)
Offered: Fall, Spring
Lec 3 Hrs
A psychological study of human relations. Principles of communication will be emphasized as they relate to the development and maintenance of human relationships. Other topics include relationship dynamics, intimacy, managing difficult emotions, conflict resolution and relationships over the lifespan.
[CSU; CSU-GE; AREA D9, E]

PSY-42. Psychology of Women (3)
Offered: Spring
Lec 3 Hrs
An examination of the psychological, cultural, social and biological factors influencing women’s beliefs and behaviors across the life span. Topics include gender stereotypes, development of gender roles, gender comparisons, women and work, love relationships, women’s physical and mental health, violence against women, and women in later adulthood. Students who take this course will acquire an understanding of what it means to be female in the U.S.
[CSU; UC; CSU-GE, AREA D4, D7, E; IGETC, AREA 4]

RESPIRATORY CARE PRACTITIONER

RCP-50. Respiratory Care Practitioner Responsibilities (1.5)
Prerequisite: Admission to the Respiratory Care Practitioner Program
Corequisite: RCP-53
Offered: Fall
Lec 1.50 Hrs
Introduces the language of healthcare as professional communication skills are developed. The history of respiratory care as a discipline, the professional organizations that support the discipline, and ethical considerations are reviewed. Evidence-based medicine, critical thinking, healthcare reimbursements, infection control, and patient education are emphasized.
[CSU]

RCP-51. Pharmacology and Medication Administration (3)
Prerequisite: Admission to the Respiratory Care Practitioner Program
Corequisite: RCP-53
Offered: Fall
Lec 3 Hrs
Focuses on pharmacological principles related to respiratory care. Medications pertinent to cardiopulmonary function including therapeutic gases and inhaled medications are reviewed. Drug routes, adverse reactions, and responsibilities of administration are discussed. Specific delivery devices using oxygen and aerosol therapy are emphasized. Critical thinking strategies are introduced as patient outcomes are evaluated.
[CSU]
RCP-52. Cardiopulmonary Anatomy and Physiology (2)
Prerequisite: Admission to the Respiratory Care Practitioner Program
Corequisite: RCP-53
Offered: Fall
Lec 2 Hrs
Expands on specific concepts of normal cardiopulmonary anatomy and physiology. Focused cardiopulmonary physical assessment and health history will be introduced. Cardiopulmonary anatomy and the processes of ventilation and circulation are emphasized. Electrocardiogram tracings and other diagnostic tests are introduced and analyzed. [CSU]

RCP-53. Foundation Skills (1)
Prerequisite: Admission to the Respiratory Care Practitioner Program
Corequisite: RCP-50; RCP-51; RCP-52; RCP-54
Offered: Fall
Lab 3 Hrs
Basic cardiopulmonary patient assessment and respiratory care procedures are introduced and practiced in the skills laboratory. Hand washing, universal precautions, oxygen, humidity and aerosol therapy, and basic bronchodilator medication delivery methods are practiced. Cardiac and respiratory sounds are identified as cardiac arrhythmias are visualized. Assessment of general appearance and level of consciousness are practiced. Trouble shooting of equipment and maintenance of patient safety are emphasized. [CSU]

RCP-54. Supervised Practice Foundations (0.5)
Prerequisite: Entrance into the Respiratory Care Practitioner Program
Corequisite: RCP-53
Offered: Fall
Lab 1.50 Hrs
Application of the respiratory care process for the study of fundamental respiratory care skills required for bedside care. Emphasis is on basic physical assessment and cardiopulmonary assessment that is necessary to provide care for the hospitalized patient. The value of competence in cardiopulmonary assessment skills emphasized. [CSU]

RCP-60. Diagnostics Studies & Respiratory Care (3)
Prerequisite: RCP-50 with a grade of "C" or better.
Corequisite: RCP-63
Offered: Spring
Lec 3 Hrs
Cardiopulmonary assessment, cardiac monitoring and critical thinking skills are used to guide respiratory care. Diagnostic studies are analyzed as they relate to respiratory care. Invasive and non-invasive cardiopulmonary monitoring, nutritional assessment, polysomnography, pulmonary rehabilitation, and home care evaluation are presented. [CSU]

RCP-61. Respiratory Therapeutics (3)
Prerequisite: RCP-51 with a grade of "C" or better.
Corequisite: RCP-63
Offered: Spring
Lec 3 Hrs
Cardiovascular pharmacology utilizing inhaled medications and basic ventilation strategies are introduced. Arterial blood gas sampling and analysis are reviewed and emergency intubation and stabilization in various settings is described. Maximal lung expansion, sputum mobilization, and airway patency are emphasized, with the focus on patient safety. [CSU]

RCP-62. Cardiopulmonary Pathophysiology (2)
Prerequisite: RCP-52 with a grade of "C" or better.
Corequisite: RCP-63
Offered: Spring
Lec 2 Hrs
Various cardiopulmonary disorders including; infection, cancer, obstructive conditions, restrictive conditions and pulmonary vascular disease. Patient care plans for specific disease processes are discussed for use in multiple health care settings. [CSU]

RCP-63. Beginning Clinical Experience (4)
Prerequisite: RCP-53 with a grade of "C" or better.
Corequisite: RCP-60; RCP-61; RCP-62; RCP-64
Offered: Spring
Lab 12 Hrs
Beginning respiratory care procedures and therapeutics are introduced in lab and clinical settings. Oxygen delivery devices, aerosol therapy, sputum mobilization techniques, suctioning and airway inflation strategies are practiced. Utilizing professional communication and critical thinking skills, the student will assess the patient's clinical manifestations, pertinent history, laboratory and diagnostic data to plan patient care. [CSU]

RCP-64. Supervised Practice: Beginning (0.5)
Prerequisite: RCP-54 with a grade of "C" or better.
Corequisite: RCP-63
Offered: Spring
Lab 1.50 Hrs
Application of the respiratory care process for the study of beginning respiratory care skills required for bedside care. Emphasis is on cardiopulmonary assessment, and medication administration that is necessary to provide care for the hospitalized patient. The value of competence in cardiopulmonary assessment, ABG, oxygen delivery, intubation and medication administration are emphasized. [CSU]
RCP-70. Neonatal and Pediatric Respiratory Care Responsibilities (2)
- **Prerequisite:** RCP-60 with a grade of "C" or better.
- **Corequisite:** RCP-73
- **Offered:** Fall
  **Lec** 2 Hrs
Assessment and care of neonatal and pediatric patients are introduced. Fetal development, maternal high risk conditions and neonatal resuscitation is reviewed. Specific neonatal and pediatric cardiopulmonary disorders are identified. Invasive and non-invasive cardiopulmonary monitoring and diagnostic testing are discussed.

RCP-71. Basic Mechanical Ventilation (3)
- **Prerequisite:** RCP-61 with a grade of "C" or better.
- **Corequisite:** RCP-73
- **Offered:** Fall
  **Lec** 2 Hrs; **Lab** 3 Hrs
Mechanical ventilation is introduced as patient safety is emphasized. Indications for intubation and mechanical ventilation are discussed. Classifications of mechanical ventilators, modes of operation, and internal and external components of ventilators are introduced. Effects of positive pressure ventilation on body systems is reviewed. Patient management, mechanical ventilation and cardiopulmonary monitoring, mode selection with rationale, and trouble-shooting of mechanical ventilation are reviewed.

RCP-72. Neurologic & Traumatic Conditions (2)
- **Prerequisite:** RCP-62 with a grade of "C" or better.
- **Corequisite:** RCP-73
- **Offered:** Fall
  **Lec** 2 Hrs
Neurological effects on respiratory function are explored. The pathophysiology of motor and sensory injury to the cardiopulmonary system is reviewed. Patient assessment, respiratory interventions, pain management and Acute Respiratory Distress Syndrome (ARDS) are discussed. Emergency, acute and long-term cause and effects of pulmonary injury are evaluated. The role of the Respiratory Care Practitioner (RCP) in supporting oxygenation and ventilation in situations of neurological and traumatic injury is emphasized.

RCP-73. Intermediate Clinical Experience (4)
- **Prerequisite:** RCP-63 with a grade of "C" or better.
- **Corequisite:** RCP-70; RCP-71; RCP-72; RCP-74
- **Offered:** Fall
  **Lab** 12 Hrs
Intermediate respiratory care practitioner skills including intubation and mechanical ventilation are practiced in lab and clinical settings. Building on previously learned skills, clinical experiences include neonatal, pediatric and critical care areas.

RCP-74. Supervised Practice: Intermediate (0.5)
- **Prerequisite:** RCP-64 with a grade of "C" or better.
- **Corequisite:** RCP-73
- **Offered:** Fall
  **Lab** 1.50 Hrs
Application of the respiratory care process for the study of intermediate respiratory care skills required for bedside care. Emphasis is on pediatric and neonatal cardiopulmonary assessment, setting up a ventilator and ventilator monitoring that is necessary to provide care for the hospitalized patient. The value of competence in applying skills across the lifespan, and ventilator set up and monitoring is emphasized.

RCP-75. Advanced Life Support Responsibilities (1.5)
- **Prerequisite:** RCP-70, RCP-71 and RCP-72 with a grade of "C" or better.
- **Corequisite:** RCP-83
- **Offered:** Spring
  **Lec** 1 Hr; **Lab** 1.50 Hrs
Neonatal resuscitation, pediatric advanced life support, and advanced cardiac life support will be explained and demonstrated. Upon completion of each specialty class, the student will apply knowledge and skills to written and practical demonstration tests created by the American Heart Association and the American Academy of Pediatrics. Successful completion of both criteria will result in certification in each specific category.

RCP-76. Clinical Reasoning Seminar (2)
- **Prerequisite:** RCP-72 with a grade of "C" or better.
- **Corequisite:** RCP-83
- **Offered:** Spring
  **Lec** 2 Hrs
Critical thinking strategies are utilized as students actively participate in case study discussions. Emphasis is on developing and evaluating plans of care for patients with a variety of respiratory conditions encountered in multiple health care settings.
RCP-83. Advanced Clinical Experience (4)
Prerequisite: RCP-73 with a grade of "C" or better.
Corequisite: RCP-80; RCP-81; RCP-82; RCP-84
Offered: Spring
Lab 12 Hrs
Advanced respiratory care practitioner skills, including waveform analysis and ventilator adjustments, are practiced in the lab and clinical setting. Integration and mastery of skills learned in previous semesters is expected, ensuring competence. Communication, leadership, and management skills are demonstrated in a variety of clinical settings.

[CSU]

RCP-84. Supervised Practice: Advanced (0.5)
Prerequisite: RCP-74 with a grade of "C" or better.
Corequisite: RCP-83
Offered: Spring
Lab 1.50 Hrs
Fourth-semester respiratory care students reinforce content presented within the scope of the respiratory care program. The course is individualized for each student based on his/her identified learning needs. This course provides the student the opportunity to discuss theoretical concepts and practice clinical skills to increase student success within the respiratory care program.

[CSU]

RCP-99. Respiratory Care Residence Education (6)
Pass/No Pass Only
Prerequisite: RCP-83 with a grade of "C" or better.
Offered: Fall
Lab 360 Hrs
Designed to provide a structured clinical experience to bridge the transition from student to professional respiratory care practitioner. A combination of laboratory and clinical experience focuses on issues pertinent to the development of respiratory care practice and professional growth.

[CSU]

RCP-110. Foundations for Success (1.5)
Prerequisite: Admission to the Respiratory Care Practitioner Program
Offered: Fall
Lec 0.75 Hrs; Lab 2.25 Hrs
Introduction to professional behaviors, attitudes, and values that lead to academic and professional success as a respiratory care practitioner. Historical trends that influenced the role of the respiratory care practitioner as a knowledge-worker and current educational preparation will be explored. Test-taking strategies, study skills, individual learning styles, communication, and stress reduction are explored. The learning environment is created to foster collaboration and curiosity.

RCP-225. Success Strategies for 1st Semester RCP Students (0.5)
Other: Admission to the RCP program or permission of the Director of RCP program following withdrawal from a failure in any RCP 50 series course (RCP-50, 51, 52, 53, 54)
Lab 1.50 Hrs
Offered: Fall, Spring
Designed for first semester respiratory care practitioner students interested in reinforcing content presented in RCP 50 series courses. The course is individualized for each student based on identified learning needs. The value of competency based education in respiratory care practice is emphasized.

RCP-226. Success Strategies for 2nd Semester RCP Students (0.5)
Prerequisite: RCP-110, RCP-50, RCP-51, RCP-52, RCP-53 and RCP-54 with a grade of "C" or better.
Offered: Fall, Spring
Lab 1.50 Hrs
Designed for second semester respiratory care practitioner students interested in reinforcing content presented in RCP 60 series courses. The course is individualized for each student based on identified learning needs. The value of competency based education in respiratory practice is emphasized.

RCP-227. Success Strategies for 3rd Semester RCP Students (0.5)
Prerequisite: RCP-74
Other: Permission of the Director of RCP program following withdrawal or failure in RCP 70 series courses (RCP-70, 71, 72, 73, 74).
Offered: Fall
Lab 1.50 Hrs
Designed for respiratory care practitioner students interested in reinforcing content presented in RCP 70 series courses. The course is individualized for each student based on identified learning needs. The value of competency based education in respiratory practice is emphasized.

RCP-228. Success Strategies for 4th Semester RCP Students (0.5)
Corequisite: RCP-84
Offered: Spring
Lab 1.50 Hrs
Designed for respiratory care practitioner students interested in reinforcing content presented in RCP 80 series courses. The course is individualized for each student based on identified learning needs. The value of competency based education in respiratory practice is emphasized.
**SCI-124. Science, Technology, Engineering and Mathematics (STEM) Internship Preparation (1)**  
*Offered: Spring*  
*Lec 1 Hr*

This course provides assistance for students to develop knowledge, skills, and attitudes for success in Science, Technology, Engineering and Mathematics (STEM) internship programs. Student preparation will focus on identification of and application for internships, abstract writing, poster creation, data analysis, project management, presentation delivery, and discipline specific skills. Prospective interns will work to develop attitudes that promote discussion, observation, teamwork, network building, and personal confidence.

**SOCILOGY**

**SOC-1. Introduction to Sociology (3)**  
*Offered: Fall, Spring, Summer*  
*Lec 3 Hrs*

Sociology is the scientific study of the relationship between the individual and society. Sociological concepts, theoretical approaches, and methods are examined. Topics included the analysis and explanation of social structure, group dynamics, socialization, inequality, social stratification, globalization, social change, democracy and urbanization. Course objectives include the ability to make sociology relevant and applicable to students' everyday lives.

[CSU; UC; CSU-GE, AREA D0; IGETC, AREA 4]  
[C-ID SOCI 110]

**SOC-5. Introduction to Social Problems (3)**  
*Advisory: Eligibility for ENG-1A, SOC-1*  
*Offered: Fall, Spring, Summer*  
*Lec 3 Hrs*

This course is a sociological analysis of social problems in the United States. It analyzes how sociologists understand, identify, and address social problems. Social problems include racism, sexism, poverty, crime, immigration, health, aging, family, education, the environment to urbanization. Examination and evaluation of sociological perspectives are applicable to improve student's understanding of social problems.

[CSU; UC; CSU-GE, AREA D0, E; IGETC, AREA 4]  
[C-ID SOCI 115]

*Advisory: SOC-1, SOC-42 and Eligibility for ENG-1A*  
*Offered: Spring*  
*Lec 3 Hrs*

An introduction to the sociological study of immigration and settlement in the United States. Particular emphasis is given to the historical, social, economic, and political factors shaping migration, immigration, and transnationalism. Topics include acculturation, incorporation, assimilation, inter-ethnic relations, identity pressures, stereotypes and discrimination, immigration policy, struggles for equality, labor force participation, unauthorized immigrants, and unaccompanied children. Special attention is given to how race, age, gender, class, and immigration status shape immigrants identities and experiences.

[CSU; UC; CSU-GE, AREA D0; IGETC, AREA 4]

**SOC-20. Sociology of Gender and Society Community Development (3)**  
*Advisory: SOC-1; Eligibility for ENG-1A*  
*Offered: Fall*  
*Lec 3 Hrs*

A current and comprehensive sociological examination of masculinity and femininity as socially constructed from a macro-analysis of how institutions shape gender and micro-analysis of how individuals are socialized and "do" gender in the United States. Topics to be discussed may include socialization, gender and globalization, gender stereotypes, institutions on gendered experiences, women in leadership and social movements, gendered migration, and diaspora. An intersectional framework (gender, class, race, ethnicity, sexuality, age, disability, immigration status) is utilized in understanding gender relations. Contemporary issues in society will be presented from a variety of theoretical perspectives.

[CSU; UC; CSU-GE, AREAS D3, D0; IGETC, AREA 4]  
[C-ID SOCI 140]

**SOC-30. Sociology of Latina/Latino in U.S. Society (3)**  
*Advisory: SOC-1 or SOC-42 or SOC-15 and Eligibility for ENG-1A*  
*Offered: Fall, Spring*  
*Lec 3 Hrs*

Introduces students to the sociological examination of Latina/Latinos in the United States-tracing their development from its historical inception to contemporary experiences. Topics to be examined include legacy of conquest, identity and ethnic and racial labeling, media, culture and artistic expressions, gender and sexuality, racism, education, immigration, and family. Similarities and differences between Latina/Latinos are examined using an intersectional analysis of race, class, gender, sexuality, nationality, and immigration status.

[CSU; CSU-GE, AREAS D3, D0]

**SOC-41. Marriage and the Family (3)**  
*Offered: Spring*  
*Lec 3 Hrs*

Examines the family as a social institution with an emphasis on contemporary theory and research findings pertinent to family life. Topics include trends in family form, issues, problems, and functioning of the family in American society, as well as family organization in different ethnic, cultural, and historical settings.

[CSU; UC; CSU-GE, AREA D0, E; IGETC, AREA 4]  
[C-ID SOCI 130]

**SOC-42. The Sociology of Minority Relations (3)**  
*Offered: Fall, Spring, Summer*  
*Lec 3 Hrs*

An examination of dominant minority group relations in the United States, with emphasis on contemporary America. The experiences of minority groups, including Latinos, African-Americans, Asian-Americans, and Native Americans, will be considered from various sociological perspectives.

[CSU; UC CSU-GE, AREA D0, D1; IGETC, AREA 4]  
[C-ID SOCI 150]
SPANISH

SPA-1. Elementary Spanish (5)

Offered: Fall, Spring, Summer
Lec 5 Hrs

Fundamentals of Spanish with emphasis on the development of listening, speaking, reading, and writing skills, with Spanish as the primary language of instruction. Language acquisition will be enhanced by exposing students to the life, people, and cultures of the Spanish speaking world. Course designed for students with no prior background in Spanish. Not open to students who have completed SPA-1S or SPA-1X or SPA-1A and SPA-1B with a grade of "C" or better.

[CSU; UC; CSU-GE; AREA C2; IGETC, AREA 6]
[C-ID SPAN 100]

SPA-1S. Elementary Spanish for Spanish Speakers (5)

Offered: Fall, Spring, Summer
Lec 5 Hrs

A parallel SPA-1 course for Spanish speakers, conducted totally in Spanish with emphasis on grammar and writing. An oral command of the Spanish language required. Not open to students who have completed SPA-1 or SPA-1X with a grade of "C" or better.

[CSU; UC CSU-GE AREA C2; IGETC, AREA 6]
[C-ID SPAN 110]

SPA-1X. Elementary Spanish for Chicano Students (5)

Offered: Fall, Spring
Lec 5 Hrs

A parallel SPA-1 and SPA-1S course designed for English-dominant Chicano students whose home languages include Spanish. This course will serve any student who has an auditory comprehension and a basic oral command of Spanish. Course conducted primarily in Spanish with emphasis on speaking, reading, writing, and grammar. Not open to students who have completed SPA-1 or SPA-1X with a grade of "C" or better.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 6]

SPA-2. Elementary Spanish (5)

Prerequisite: SPA-1X or SPA-1S or SPA-1 or two years of high school Spanish with a grade of "C" or higher, or two year of high school Spanish or demonstration of language proficiency to level.

Offered: Fall, Spring, Summer
Lec 5 Hrs

Continuation of SPA-1 with further development of listening, speaking, reading, and writing skills, with Spanish as the primary language of instruction. Language acquisition will be enhanced by exposing students to the cultures of the Spanish speaking world. Not open to students who have completed SPA-2S or SPA-2X with a grade of "C" or better.

[CSU; UC; CSU-GE, AREA C2, IGETC AREA 6]
[C-ID SPAN 110]

SPA-2S. Elementary Spanish for Spanish Speakers (5)

Prerequisite: SPA-1S or SPA-1X or SPA-1, or demonstration of language proficiency to level. All prerequisites must be completed with a grade of "C" or better.

Offered: Fall, Spring, Summer
Lec 5 Hrs

A parallel SPA-2 and SPA-2X course designed for Spanish speakers. This course is conducted totally in Spanish with emphasis on reading, writing, and grammar. Not open to students who have completed SPA-2 or SPA-2X with a grade of "C" or better.

[CSU; UC; CSU-GE; AREA C2; IGETC, AREA 6]
[C-ID SPAN 110]

SPA-2X. Elementary Spanish for Chicano Students (5)

Prerequisite: SPA-1X or SPA-1S or SPA-1, or demonstration of language proficiency to level. All prerequisites must be completed with a grade of "C" or better.

Offered: Fall, Spring
Lec 5 Hrs

A parallel SPA-2 and SPA-2S course designed for English dominant Chicano students whose home languages include Spanish. This course will serve any student whose first language is not Spanish, but who has an oral command of Spanish. This course is conducted primarily in Spanish with emphasis on speaking, reading, writing, and grammar. Not open to students who have completed SPA-2 or SPA-2S with a grade of "C" or better.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 6]
[C-ID SPAN 110]

SPA-3. Intermediate Spanish (5)

Prerequisite: SPA-2 or SPA-2S or SPA-2X, or demonstration of proficiency to level. This proficiency is determined according to Hartnell College's Prerequisite Clearance and Challenge processes. All prerequisites must be completed with a grade of "C" or better.

Offered: Fall
Lec 5 Hrs

Course conducted totally in Spanish with further emphasis on grammar, reading, and writing, including a strong cultural and literary component. Not open to students who have completed SPA-3S with a grade of "C" or better.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3B, 6]

SPA-3S. Intermediate Spanish for Spanish Speakers (5)

Prerequisite: SPA-2S or SPA-2X or SPA-2, or demonstration of language proficiency to level. This proficiency is determined according to Hartnell College's Prerequisite Clearance and Challenge Processes. All prerequisites must be completed with a grade of "C" or better.

Offered: Fall, Spring
Lec 5 Hrs

A parallel SPA-3 course for Spanish speakers, conducted totally in Spanish with further emphasis on grammar, reading, and writing, including a strong cultural and literary component. Not open to students who have completed SPA-3 with a grade of "C" or better.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3B, 6]
COURSE LISTINGS

SPA-4. Intermediate Spanish (5)
Prerequisite: SPA-3 or SPA-3S, or four years of high school Spanish, or demonstration of proficiency to level. This proficiency is determined according to Hartnell College's Prerequisite Clearance and Challenge Processes. All prerequisites must be completed with a grade of "C" or better.
Lec 5 Hrs
Continuation of SPA-3. A course conducted totally in Spanish with further emphasis on oral proficiency, advanced grammar, reading and writing, including a strong cultural and literary component. Not open to students who have completed SPA-4S with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 6] [C-ID SPAN 210]

SPA-4S. Intermediate Spanish for Spanish Speakers (5)
Prerequisite: SPA-3S or SPA-3, or demonstration of proficiency to level. This proficiency is determined according to Hartnell College's Prerequisite Clearance and Challenge processes. All prerequisites must be completed with a grade of "C" or better.
Offered: Spring-even
Lec 5 Hrs
A parallel SPA-4 course for Spanish speakers conducted totally in Spanish with further emphasis on advanced grammar, intensive reading and writing, including a strong cultural and literary component. Not open to students who have completed SPA-4 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3B, 6] [C-ID SPAN 230]

THEATRE ARTS AND CINEMA

TAC-1. Introduction to Theatre (3)
Offered: Fall, Spring
Lec 3 Hrs
Provides the student with a basic definition of theatre, its historical foundations, genres, and current production practices leading to an appreciation of theatre. Students will be required to attend theatre performances for education and edification. Introduction to Theatre is required of all theatre arts majors. Formerly THA-1. Not open to students who have completed THA-1 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3] [C-ID THTR 111]

TAC-2. Script Analysis (3)
Offered: Spring-odd
Lec 3 Hrs
Introduces students to the essential elements of dramatic structure as manifest in the playscript. Students will learn how to read a play for its structure, scrutinizing the playwright's methods of creating theatre through plot, character and imagery, and understanding what scripts "mean" to the professional theatre artist and theatre-goer as distinct from other forms of literature. Students will undertake an in-depth study of dramatic play structure from both an historical and an aesthetic perspective, analyzing and understanding play scripts in a variety of genres and styles intended for production. Principles, theories and techniques of play script analysis for theatrical production will be the focus of the course. Not open to students who have completed THA-2 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3A] [C-ID THTR 114]

TAC-3. History of the Theatre (3)
Offered: Spring
Lec 3 Hrs
The study of the history of theatre from the Origins of Theatre through the 17th Century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. Not open to students who have completed THA-3 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3] [C-ID THTR 113]

TAC-10. Acting I (3)
Prerequisite: TAC-10 with a grade of "C" or better.
Offered: Fall, Spring, Summer
Lec 2 Hrs; Lab 3 Hrs
Prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text. Attendance of a live performance for the purpose of evaluation. Formerly THA-10. Not open to students who have completed THA-10 with a grade of "C" or better.
[CSU; UC] [C-ID THTR 151]

TAC-11. Acting II (3)
Prerequisite: TAC-10 with a grade of "C" or better.
Offered: Spring
Lec 2 Hrs; Lab 3 Hrs
Follows Acting I and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes. Attendance of a live performance for the purpose of evaluation.
[CSU; UC] [C-ID THTR 152]
TAC-14. Beginning Voice and Movement (3)

Offered: Spring
Lec 2 Hrs; Lab 3 Hrs
Introduces students to basic principles of stage voice and movement fundamental to the performing arts and essential to the contemporary professional environment. The course will focus on techniques and exercises derived from contemporary developments in the performing arts. Students will explore the ways in which voice and movement enhance the range of one’s vocal and expressive skills. Exercises will focus on mind, body awareness, on the creative process, and on the actor's primary tools. The course will culminate in application of lessons using both voice and body. Not open to students who have completed THA-4 with a grade of "C" or better. [CSU; UC]

TAC-15. Acting for the Camera (3)

Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
Introduces the theory and technique of acting for cinema and video, focusing on the differences between stage acting and acting for the camera. Scenes and commercials are enacted and played back on videotape for class critiquing. Field trips may be required. Not open to students who have completed THA-5 with a grade of "C" or better. [CSU; UC]

TAC-16. Improvisational Acting Techniques (3)

Offered: Spring
Lec 2 Hrs; Lab 3 Hrs
Explores theatre games and improvisational exercises designed to develop trust, cooperation, mental acuity, and physical and vocal range as an actor. Improvisation technique is built from the ground up, providing a strong foundation for advanced work in non-scripted performance as well as modern rehearsal techniques that involve extensive use of improvisation. Field trips may be included. Not open to students who have completed THA-5 with a grade of "C" or better. [CSU]

TAC-17. Devised Theatre Performance - Creation Workshop (3)

Offered: Fall-odd
Lec 2 Hrs; Lab 3 Hrs
Explores social needs and provides an overview of devising strategies in the theatre to address those needs. Students will explore the history of devised theatre, including happenings, creative collaboration, social-practice theatre/arts, and actor-generated theatre- and will study contemporary developments and applications of devised theatre methodologies. Students will develop skills and strategies for creating their own socially-conscious performance works. Course will culminate in an original, collaborative devised theatre production, with potential for service learning public presentation and with potential for entry in regional KCACDT Devised Theatre competition. Not open to students who have completed THA-7 with a grade of "C" or better.

TAC-18. Voice and Diction (3)

Lec 3 Hrs
Introductory course studying speech production designed to improve vocal quality and accurate diction. Emphasis on specific areas of speech production such as proper breathing, vocal production, rate, vocal flexibility, energy, volume, tone, articulation and foreign accents. This is a transfer course for Theatre Arts and Speech/Communication students. This course is not open to students who have completed SPE-18 or THA-18 with a grade of "C" or better. [CSU; UC]

TAC-20. Introduction to Ensemble Play Production (3)

Prerequisite: Audition
Offered: Fall, Spring, Summer
Lec 1 Hr; Lab 6 Hrs
An introduction, for the actor, to the production of the ensemble play in production, with attention to script analysis, design elements, rehearsal and performance techniques; culminating in participation in the ensemble itself in a fully realized theatrical production. Not open to students who have completed THA-20 with a grade of "C" or better. [CSU; UC [C-ID THTR 191]

TAC-21. Introduction to Modern Play Production (3)

Prerequisite: Audition needed.
Lec 1 Hr; Lab 6 Hrs
An introduction, for the actor, to the production of the modern play with attention to script analysis, design elements, rehearsal and performance techniques; culminating in participation in the performance itself in a fully realized theatrical production. Not open to students who have completed THA-21 with a grade of "C" or better. [CSU; UC [C-ID THTR 191]

TAC-22. Introduction to Musical Theatre Production (3)

Prerequisite: Audition needed.
Offered: Fall, Spring, Summer
Lec 1 Hr; Lab 6 Hrs
An introduction to the production of the musical play with attention to directorial concept, script analysis, design elements, and performance techniques; culminating in participation in performance of a fully realized musical theatre production. Not open to students who have completed THA-23 with a grade of "C" or better. [CSU; UC [C-ID THTR 191]

TAC-23. Introduction to Theatre for Social Change (3)

Offered: Spring
Lec 3 Hrs
Provides students with an understanding of the broad applications of theatre in the social sphere, as harbinger of change, justice, education, and civic engagement. Drawing from longstanding traditions in theatre and the arts, the course will survey a broad swath of artistic movements across time, culminating in the study of contemporary practices - local and global. [CSU; UC; CSU-GE, AREAS C1, D7; IGETC, AREAS 3A, 4]
TAC-24. Introduction to World Theatre Production: Concept and Development (3)

Prerequisite: Audition needed.
Offered: Fall, Spring, Summer
Lec 1 Hr; Lab 6 Hrs
An introduction, for the actor, to the production of the world theatre play with attention to directorial concept, script analysis, design elements, rehearsal and performance techniques; culminating in participation in a fully realized theatrical production. Not open to students who have completed THA-130A, THA-130B or THA-130C.
[CSU; UC]

TAC-25. Introduction to Revival Play Production (3)

Prerequisite: Audition needed.
Offered: Fall, Spring, Summer
Lec 1 Hr; Lab 6 Hrs
An introduction to the production of the revival play with attention to directorial concept, script analysis, design elements, rehearsal and performance techniques, and the ensemble itself; culminating in participation in a fully realized theatrical production. Not open to students who have completed THA-25 with a grade of "C" or better.
[CSU; UC]

TAC-26. Stage Scenic Construction (3)

Offered: Fall, Spring, Summer
Lec 1 Hr; Lab 6 Hrs
Designed to teach the basic skills, concepts, and methods of beginning and intermediate scenic construction execution for the stage, providing practical experience in the application of production responsibilities in stage scenic construction. Covers the theater plant, theater personnel, scene construction, and scene painting. Students will work on a series of projects which will culminate in finished scenery for fully realized play, musical or a series of the two. Not open to students who have completed THA-26 with a grade of "C" or better.
[CSU; UC]

TAC-27. Scenic Painting, Properties, and Technical Production Techniques (3)

Offered: Fall, Spring, Summer
Lec 1 Hr; Lab 6 Hrs
Designed to teach the basic skills, concepts, and methods of beginning and intermediate scenic painting and properties execution for the stage, providing practical experience in the application of production responsibilities in scenic painting, properties and technical theatre. Covers the theater plant, theater personnel, scenic painting and properties execution, technical theatre elements, and their applications. Students will work on a series of projects which will culminate in finished scenic painting and properties and technical production execution for a fully realized production of a play, musical or a series of the two. Not open to students who have completed THA-27 with a grade of "C" or better.
[CSU; UC] [C-ID THTR 192]

TAC-28. Makeup/Hair Techniques for the Stage (3)

Offered: Fall, Spring, Summer
Lec 1 Hr; Lab 6 Hrs
Designed to teach the basic techniques for the effective application of theatrical makeup and hair at the beginning level for the stage. The student will gain a practical, working knowledge of the principles of highlighting, shadowing, and contouring the human face with makeup. Explorations into the basic techniques involved in working with crepe hair, and various three-dimensional processes shall also be undertaken as the character and/or design requires. The relationships between the makeup designer, costume designer, wardrobe mistress, and makeup/dressing crew member will be emphasized. Students will work on a series of projects which will culminate in finished make-up design for a play, musical or a series of the two. Not open to students who have completed THA-28 with a grade of "C" or better.
[CSU; UC]

TAC-29. Stage Lighting and Sound (3)

Offered: Fall, Spring, Summer
Lec 1 Hr; Lab 6 Hrs
Designed to teach the basic skills, concepts, and methods of beginning and intermediate lighting, sound and rigging execution for the stage, with emphasis on equipment, control, color and their relationship to design. Students will work on a series of projects which will culminate in finished lighting, as well as sound, and/or rigging requirements for a play, musical or series of the two. The relationships between the lighting and sound designers, master electrician, and lighting and sound crew and technical director will be discussed. Not open to students who have completed THA-29 with a grade of "C" or better.
[CSU; UC]

TAC-30. Fundamentals of Theatre Design (3)

Offered: Spring
Lec 2 Hrs; Lab 3 Hrs
Students will be offered a survey and historical overview of scenery, lighting, sound, costumes, makeup, properties, theatrical equipment and construction techniques through demonstration, research, creative application and laboratory experience. Emphasis will be on contemporary developments in design and in formal theatrical applications. Not open to students who have completed THA-30 with a grade of "C" or better.
[CSU; UC]

TAC-31. Puppetry and Mask (3)

Offered: Fall
Lec 2 Hrs; Lab 3 Hrs
Explores puppetry and mask as dramatic mediums. Covers the history and development of puppetry and mask; puppet and mask design and creation; puppet manipulation and improvisation; and puppet and mask play production techniques and applications.
[CSU]
TAC-40. Stage Costuming Practicum (3)  
**Offered:** Fall, Spring  
**Lec 1 Hr; Lab 6 Hrs**  
Designed to teach the basic skills, concepts, and methods of beginning and intermediate costume construction and execution, through costuming for a fully realized theatrical production. The course will cover the theater plant, theater personnel, costume construction, and related technical and aesthetic applications. Students will work on a series of projects which will culminate in finished costume designs for a play, musical production or a series of the two. Not open to students who have completed THA-40 with a grade of "C" or better.  
[CSU; UC] [C-ID THTR 192]

TAC-41. Fundamentals of Costume Design (3)  
**Offered:** Spring  
**Lec 2 Hrs; Lab 3 Hrs**  
Designed to acquaint students with the fundamentals of costume history and design, and to introduce basic theatrical costuming and costume construction techniques. Students will be charged a lab fee of $40.00 for materials used in practicing costume construction. Final costume item, in the form of a bag, pair of pajama bottoms, or similar design, will be the student’s to keep upon course completion. Not open to students who have completed THA-41 with a grade of "C" or better.  
[CSU; UC] [C-ID THTR 174]

TAC-50. Introduction to Film: History Up to the 1960’s (3)  
**Advisory:** Eligibility for ENG-101 or ESL-101  
**Offered:** Fall, Summer  
**Lec 3 Hrs**  
This course introduces the history and close analysis of film and early television texts from 1849-1960. The course examines the broad questions of form and content, aesthetics and meaning, and history and culture within the context of film, cinematic, and television media. Students will explore the diverse possibilities presented by the cinematic art form through an examination of a wide variety of productions, national cinemas, and film movements. Topics include modes of production, narrative and non-narrative forms, acting styles, visual design, editing, sound, genre, ideology and critical analysis.  
[CSU; UC; CSU-GE AREA C1; IGETC, AREA 3]

TAC-52. Introduction to Stop-Motion Animation (3)  
**Offered:** Fall  
**Lec 2 Hrs; Lab 3 Hrs**  
This course will introduce students to the fundamentals of animation. Surveying the history of the stop-frame theatre and cinema, the course will provide a brief overview of animation history and contemporary applications.  
[CSU; CSU-GE, AREA C1] [C-ID FTEVE 105]

TAC-53. Playwriting and Screenwriting (3)  
**Advisory:** Eligibility for ENG-1A  
**Offered:** Fall  
**Lec 3 Hrs**  
An introduction to the fundamentals of the craft of dramatic writing. Elements of plot construction and character development are emphasized through writing exercises, superior models of drama, and drafting and revision of an original script for stage or screen. Attending an out-of-class live drama performance and viewing an original screenplay may be required. Formerly THA-52. Not open to students who have completed THA-52 with a grade of "C" or better.  
[CSU; UC; CSU-GE AREA, C1]

TAC-54. Video Production Lab - Single Camera (3)  
**Offered:** Spring  
**Lec 2 Hrs; Lab 3 Hrs**  
The course provides an introduction to the theory, terminology, and operation of single camera video production, including composition and editing techniques, camera operation, portable lighting, video recorder operation, audio control and basic editing. This course focuses on the aesthetics and fundamentals of scripting, producing, directing on location, postproduction, and exhibition/distribution.  
[CSU; UC]

TAC-55. Directing (3)  
**Advisory:** Eligibility for ENG-1A  
**Offered:** Spring  
**Lec 2 Hrs; Lab 3 Hrs**  
An introduction to theatrical directing. Includes the process of preparing and analyzing a script for production, casting the show, blocking and rehearsing actors, and dealing with technical and promotion needs. It also includes directing scenes and preparing a prompt book.  
[CSU; UC]

TAC-56. Introduction to Media Aesthetics and Contemporary Cinematic Arts (3)  
**Advisory:** Eligibility for ENG-101 or ESL-101  
**Offered:** Fall  
**Lec 3 Hrs**  
Introduces the history and close analysis of film and new media from 1960-today. The course examines the broad questions of form and content, aesthetics and meaning, and history and culture within the context of film, television, cinematic, and digital media. Students will explore the diverse possibilities presented by the cinematic art form through an examination of a wide variety of productions, national cinemas, and contemporary media movements. Topics include modes of production, narrative and non-narrative forms, acting styles, visual design, editing, sound, genre, ideology and critical analysis.  
[CSU; UC; CSU-GE AREA C1] [C-ID FTEVE 105]
TAC-90. Theatre Outreach Projects Development (4)
   Offered: Fall
   Lab 12 Hrs
Focuses on the initial stages of development of specific events, projects, and festivals; productions for youth (touring, on-campus, or in classroom residencies), senior adults, or other underserved groups; presentations for charity events, educational and social organizations; or programs that will assist other organizations with staging theatre events and festivals.
[CSU]

TAC-91. New Works Project: Implementation and Practice (0.5 - 4)
   Offered: Spring
This course will guide a previously identified concept/text for a new theatrical work through additional stages of drafting and revisions. Development may include adaptation of non-dramatic text into dramatic form, drafting of a play from an original idea; putting scenes from a dramatic text into workshops to determine its potential as a musical; improvisation to suggest new treatments, etc.
[CSU; UC]

TAC-92. Children's Theatre (3)
   Offered: Spring
   Lec 1 Hr; Lab 6 Hrs
This course will involve students in theatrical production for young audiences. Participating in the production of a children's theatre performance, students will explore elements of design, technical theatre, performance, and stage management, as well as basic dramatic forms for the K-12 level student target audiences.
[CSU]

WLD-52. Sheet Metal Fabrication (2)
   Offered: Spring
   Lec 1 Hr; Lab 3 Hrs
Introduction and basic training in sheet metal forming, fastening and pattern making skills. Students learn to develop patterns and fabricate a variety of sheet metal projects. Skills training in the safe and proper use of sheet metal related equipment.
[CSU]

WLD-53. Welding Fabrication (2)
   Prerequisite: WLD-150 or WLD-151 with a grade of "C" or better.
   Offered: Fall, Spring
   Lec 1 Hr; Lab 3 Hrs
Practical experience in metal fabrication, production welding and maintenance welding techniques. Study and practice in measurement, blue print reading, layout techniques, material selection, weight and cost estimation. Students are assigned various fabrication projects on industrial and agricultural equipment that require the use of the oxy-fuel, plasma, GMAW and GTAW processes.
[CSU]

WLD-54. Advanced Arc Welding (2)
   Prerequisite: WLD-150 or WLD-151 with a grade of "C" or better.
   Offered: Fall, Spring
   Lec 1 Hr; Lab 3 Hrs
Advanced study of theory and practice of SMAW, GTAW, GMAW, FCAW, and various cutting practices. A course designed to prepare students for qualification in welding methods used in the agriculture, construction, pipeline and pressure vessel welding industries. Emphasis on destructive and nondestructive testing.
[CSU]

WLD-55. Pipe Welding (2)
   Prerequisite: WLD-150 or WLD-151 with a grade of "C" or better.
   Offered: Spring
   Lec 1 Hr; Lab 3 Hrs
Advanced study in SMAW and GTAW with full emphasis on pipe welding techniques. Students practice welding in the 2G, 5G and 6G positions on pipe and tubing.
[CSU]

WLD-56. Hardfacing and Surfacing (2)
   Prerequisite: WLD-150 with a grade of "C" or better.
   Offered: Spring
   Lec 1 Hr; Lab 3 Hrs
Advanced study in arc welding methods with full emphasis on the practice of hardfacing and surfacing techniques used in the agricultural and construction industries. Student will practice applying surfacing with a variety of hardfacing electrodes using SMAW, OFW, FCAW and spray surfacing methods.
[CSU]

WLD-99. Occupational Cooperative Work Experience Education (1 - 8)
   Offered: Fall, Spring
Designed for students employed or volunteering in a field related to their college major or career goals to assist them in the development of skills and responsibilities related to their career choice. Structured objectives are developed and agreed upon by the student, college instructor, and employer. Students are eligible to earn 1 unit for 60 hours of volunteer work or for 75 hours of paid work. A maximum of four credit hours per semester may be earned up to a total of 16 semester credit hours in the Parallel Plan. A maximum of eight credit hours may be earned during one enrollment period up to a total of 16 semester credit hours for the Alternate Plan.

WLD-150. Basic Welding (2)
   Offered: Fall, Spring, Summer
   Lec 1 Hr; Lab 3 Hrs
Introductory level study and safe practice in shielded metal arc welding, gas metal arc welding and oxy-fuel cutting of steel materials. Introduction to metallurgy, metal identification, destructive and non-destructive weld testing, welding symbols and basic practices in metal repair and maintenance. A service course for other trades.
WLD-151. Gas & Tig Welding (2)

**Offered:** Fall, Spring, Summer

**Lec 1 Hr; Lab 3 Hrs**

Introductory level study and safe practice in oxy-acetylene and gas tungsten arc welding. Emphasis will be placed on the out of position welding of steel, aluminum and stainless steel joints and pipe fittings. Included will be study of ferrous and nonferrous metallurgy and common practices of metal repair and maintenance.

WLD-155. Ornamental Ironwork (2)

**Offered:** Spring

**Lec 1 Hr; Lab 3 Hrs**

Introductory level study to the practical application of traditional and modern metal working techniques. Focus is on the history, development and present day practices used in the fabrication of architectural ornamental ironwork. Emphasis is on applied safety and process fundamentals including mig welding, oxy-fuel and plasma cutting, metal forming and traditional hot forging practices. WLD-150 (formerly WLD-50) and or WLD-151 (formerly WLD-51).

WLD-156. Toolmaking (2)

**Advisory:** Completion of WLD-150 (formerly WLD-50) and or WLD-151 (formerly WLD-51)

**Offered:** Fall

**Lec 1 Hr; Lab 3 Hrs**

An introductory level metalworking course that focuses on the making of basic hand tools for the trades. Introduction to basic steel metallurgy, hot forging, heat treating and grinding operations performed on tooling. Emphasis is on safety in the use of metalworking equipment and understanding of process fundamentals. Not open to students who have successfully completed WLD-56.
South Bay Regional Public Safety Training Consortium

As a member of the South Bay Regional Public Safety Training Consortium, Hartnell College offers courses for students who are interested in Correctional officer, Law Enforcement, Reserve Police Officer, Dispatcher, Fire Technology, Probation Officer, or Juvenile Hall Counselor careers. The Consortium is funded by member colleges to provide vocational specific training which may require special facilities, special training conditions, or is presented outside of the regular schedule of college classes.

The application and registration process is completed at the South Bay Regional Public Safety Training Consortium Center campus. Although open to the public, the majority of these courses are intended to serve those who are already employed in these fields. If you have questions about these courses, or if you would like information about a career in any of these areas, please call (408) 270-6458 or visit the South Bay webpage at [www.theacademy.ca.gov](http://www.theacademy.ca.gov).

JFA and JFS courses do not follow the Hartnell College numbering pattern. All courses are degree applicable; courses followed by a [CSU] notation transfer to CSU.

**JAJ-1. PC 832 Laws of Arrest (1)**

**Prerequisite:** Requires each applicant not sponsored by a local or other law enforcement agency, or not a peace officer employed by a state or local agency, department, or district, submit written certification from the Department of Justice (Penal Code section 1311.5) that he/she has no criminal history background that would disqualify him/her from owning, possessing, or having a firearm under his/her control.

**Lec 8 Hrs; Lab 32 Hrs**

This 40-hour course covers professional orientation, laws of arrest, search, seizure, evidence, preliminary investigations, communications, and arrest techniques. May be offered as a component of the Correctional Officer Core course or as part of an 18-unit approved certificate for Reserve Police Officer. Necessary for students to meet a legally mandated training requirement as a condition of continued paid or volunteer employment.

[CSU]

**JAJ-2. Basic Police Academy, Re-Qualification (3)**

**Prerequisite:** Requires each applicant not sponsored by a local or other law enforcement agency, or not a peace officer employed by a state or local agency, department, or district, submit written certification from the Department of Justice (Penal Code section 1311.5) that he/she has no criminal history background that would disqualify him/her from owning, possessing, or having a firearm under his/her control. Proof of completion of POST basic course or modular level.

**Lec 4 Hrs; Lab 132 Hrs**

This 136-hour course is certified by POST guidelines for Regular Basic course requalification requirements. Required for individuals who have successfully completed the Regular Basic Course (e.g. Basic Course, Basic Academy Modular, or the State Investigators Basic course) and who have not been hired nor experienced a three-year break in service. Also required for applicants who are seeking appointment or reappointment and who meet the minimum criteria as determined by POST to enter the course (out-of-state applicants).

[CSU]

**JAJ-4. PC 832 Firearms (0.5)**

**Prerequisite:** Requires each applicant not sponsored by a local or other law enforcement agency, or not a peace officer employed by a state or local agency, department, or district, submit written certification from the Department of Justice (Penal Code section 1311.5) that he/she has no criminal history background that would disqualify him/her from owning, possessing, or having a firearm under his/her control. PC832 Laws of Arrest or equivalent

**Lec 8 Hrs; Lab 16 Hrs**

Covers the legal requirements for carrying and using a firearms. Participants are instructed in the safe handling of firearms and techniques of shooting. This course is certified by the Commission on Peace Officers Standards and Training (POST).

[CSU]

**JAJ-6. Basic Police Academy, Modular I (13)**

**Prerequisite:** Successful completion of POST Level I course entry requirements; POST entry reading and writing exam; Academy physical agility test; Medical Insurance; Valid California Drivers License; Medical exam clearance by a licensed physician; DOJ clearance per Penal Code section 13511.5; BAM III, BAM II

**Lec 70 Hrs; Lab 466 Hrs**

This course is certified by the Commission on Peace Officer Standards and Training (POST) and meets the content and hour requirements established by POST for Level I Reserve Peace Officers. This course combined with Level III and Level II certificates meets the regular basic academy requirements.
JAJ-7. Basic Police Academy, Modular II (8)

**Prerequisite:** Completion of POST Basic Police Academy Modular level III course. Completion of POST Level II course entry requirements. Medical insurance Valid California driver's license Medical exam by licensed physician DOJ clearance per Penal Code section 13511.5

**Lec** 70 Hrs; **Lab** 210 Hrs

This 280 hour course satisfies California Peace Officer Standards and Training (POST) minimum training mandates for Basic Academy Modular Level II. The course covers fundamental principles, procedures and techniques of law enforcement including criminal law, patrol procedures, cultural diversity, investigative procedures, report writing, community relations, defensive tactics and firearms.

JAJ-8. Basic Police Academy, Modular III (4)

**Lec** 29 Hrs; **Lab** 135 Hrs

This 164 hour course is certified by the Commission on Peace Officer Standards and Training (POST) and meets the content and hour requirements established by POST for Level III Reserve Peace Officers. This course combined with current PC 832 certificate, Level I and Level II certificates meet the regular basic academy requirements.

JAJ-9. School Security Guard Training (0.5)

**Pass/No Pass Only**

**Lec** 1 Hrs; **Lab** 31 Hrs

Designed to meet the specific training requirements for security personnel in K-12 school districts or California Community College districts, this course is mandated by state law SB 1626. The law applies to security personnel working on school property for more than 20 hours per week be pursuant to a contract with a private licensed security agency. School counselors, teachers, and administrative personnel may also benefit from the campus safety discussion.

[CSU]

JAJ-11. Special Weapons & Tactics (SWAT) (3 - 5)

**Prerequisite:** POST Basic Certificate and Penal Code Section 13511.5 requires that each applicant for admission to a course of training certified by the Commission (including the PC 832 course) that includes the carrying and use of firearms, and who is not sponsored by a local or other law enforcement agency, or is not a peace officer employed by a state or local agency, department, or district, shall be required to submit written certification from the Department of Justice that the applicant has no criminal history background which would disqualify him or her, from owning, or possessing, or having under his or her control a firearm.

**Lec** 20 Hr; **Lab** 180 Hrs

This course, which meets the training requirements of the California Commission on POST, is designed to prepare law enforcement officers for the demands of departmental special teams (e.g., SWAT, SRT, ERT, MERGE). Includes qualification courses of fire, tactical, and combat shooting.

[CSU]

JAJ-12. Canine Update (3)

**Pass/No Pass Only**

**Prerequisite:** POST Basic certificate of equivalent.

**Lec** 17 Hrs; **Lab** 109 Hrs

This course is designed to provide students with officer safety tactics, K-9 bite work, and the building searches in a field environment, utilizing scenarios. Provides updates on recent K-9 incidents and policies. Repeatable for credit: May be repeated periodically for new content, ongoing training or updating to maintain employment as a K9 officer.

JAJ-13. Firearms Update (0.5 - 1)

**Pass/No Pass Only**

**Prerequisite:** Basic Academy, POST Certified as a California Peace Officer

**Lec** 8 Hrs; **Lab** 32 Hrs

Provides POST required instruction to officers on tactical firearms and lethal force; consists of hands-on, practical skills firearms training for in-service officers. Emphasis is on safety, knowledge of weapons, and manipulative skills testing.

[CSU]

JAJ-14. Officer Safety/Field Tactics (0.5 - 1)

**Pass/No Pass Only**

**Lec** 8 Hrs; **Lab** 32 Hrs

Focuses on officer safety tactics and skills including basic field techniques of officer safety, firearms, and arrest and control techniques. Examines contemporary and safe, techniques, legal mandates and new laws relative to each topic.

[CSU]

JAJ-15. Radar Training (0.5)

**Pass/No Pass Only**

**Prerequisite:** POST Basic certificate or equivalent

**Lec** 10 Hrs; **Lab** 22 Hrs

Proper use of RADAR (Radio Detection and Ranging) and LIDAR (Light Detection and Ranging) speed-measuring device to improve speed enforcement. Covers RADAR operations, enforcement principles of stationary and moving RADAR/LIDAR, and case law.

[CSU]

JAJ-16. Gang Training (0.5)

**Pass/No Pass Only**

**Prerequisite:** POST Basic Certificate or equivalent.

**Advisory:** Completion of basic English Writing and Reading.

**Lab** 24 Hrs

This course is directed from a regional point of view to students in the identification and investigative techniques involved in gang activity and prosecution. The material presented is consistent with other information on gang activity throughout the state. The instructors are subject matter experts who meet with others to address gang problems in the region.
JAJ-17. Accident Investigation (1)
Pass/No Pass Only
Prerequisite: POST Basic Certificate or Equivalent, Valid California Driver's License
Lec 8 Hrs; Lab 32 Hrs
Designed to provide students with necessary investigative skills that will enable them to properly conduct thorough preliminary and follow-up investigations of vehicular collisions. The course is structured to augment training in vehicle accident investigation which students have already received, and to provide specialized, advanced training in more sophisticated concepts and techniques of vehicle collision investigation which are applicable to follow-up investigations.

JAJ-22. Law Enforcement Seminar/Conference (0.5 - 1)
Pass/No Pass Only
Lec 8 Hrs; Lab 32 Hrs
This 8-40 hour variable course is designed as a symposium in Law Enforcement. Topics are designed for the in-service education and training requiring annual training to maintain employment.

JAJ-24. Perishable Skills Program (0.5)
Prerequisite: POST basic Certificate and compliance with Penal code section 13511.5
This variable-unit 8-24 hour course is designed to meet POST requirements for the Perishable Skills Program. In-service peace officers receive training in courses such as Driver Training, Arrest and Control, Tactical Communication, and Firearms.

JAJ-25. Crime Prevention Through Environmental Design (0.5)
Pass/No Pass Only
Lec 8 Hrs; Lab 32 Hrs
This 24-40 hour course addresses the theory, history and basic concepts of crime prevention through environmental design. Topics include crime prevention design strategies for public areas and various residential developments and as the influence of law enforcement agencies on the architecture and design of various facilities to prevent crime.

JAJ-26. Child Victim Interviewing (0.5)
Pass/No Pass Only
Lec 4 Hrs; Lab 12 Hrs
Designed to provide techniques for interviewing child victims of sexual abuse. Focuses on the techniques of decreasing suggestibility and increasing narrative detail from the victim. Students participate in role play and exercises using actual case samples from child victim interviews and case examples from trials.

JAJ-27. Crisis Intervention Training Academy (1)
Pass/No Pass Only
Lec 23 Hrs; Lab 17 Hrs
The purpose of this curriculum is to facilitate law enforcement officers in the safe and secure assessment and transport to an appropriate designated mental health facility of an individual who is in a crisis as a result of a mental disorder and who meets the criteria established in Welfare & Institution Code #5150.
JAJ-34. Basic Motorcycle Instructor (2)
**Prerequisite:** Successful completion of the police academy, valid driver's license with a motorcycle endorsement, POST certification of completion of 80-hour Basic Motorcycle Course, one year of current enforcement riding experience.

**Lec 17 Hr; Lab 63 Hrs**
This 80-hour POST reimbursable Plan III course develops instructors for both basic and in-service motorcycle training. Prepares students to become Motorcycle Course Instructors who teach students to safely and effectively operate a police motorcycle while performing law enforcement duties. Focuses on teaching techniques including development of Motorcycle Instructor's Lesson Plan containing liabilities, responsibilities, safety procedures, equipment inspection and risk awareness. Strongly emphasizes the safe, competent operation of the police motorcycle while focusing on acceptable standards of rider capabilities and liabilities.

JAJ-35. Homocide Investigation (0.5 - 1)

**Lec 8 Hrs; Lab 32 Hrs**
Provides training in the highly specialized field of Homicide Investigation to law enforcement investigators. Topics include the legal aspects of death investigation, homicide crime scene procedures, autopsy, psychological profiling, criminal psychology, laboratory work, gunshots, asphyxia, drowning, burning, cutting, stabbing, and interviewing techniques.

[CSU]

JAJ-99. Basic Motorcycle (2)
**Pass/No Pass Only**

**Lec 15 Hrs; Lab 65 Hrs**
Provides basic skills for motorcycle traffic patrol duties. Cone patterns are set for BMW, Kawasaki and Harley-Davidson motorcycles.

[CSU]

JAJ-103. Field Training Officer (1)
**Pass/No Pass Only**

**Prerequisite:** Must complete POST Basic Course or equivalent.

**Lec 16 Hrs; Lab 24 Hrs**
This 40-hour course meets minimum California Commission on Peace Officer Standards and Training requirements for Field Training officers and follows the guidelines and standards under 832.3 of the Penal Code.

[CSU]

JAJ-107. Instructor Development (0.5 - 1)
**Pass/No Pass Only**

**Lec 8 Hrs; Lab 32 Hrs**
This POST-certified 24-40 hour variable-unit course is designed to provide instruction for POST Academy instructors in adult learning principles, including instructional planning skills and presentation and facilitation techniques.

[CSU]

JAJ-109. First Aid and CPR (0.5 - 1)

**Lec 8 Hrs; Lab 32 Hrs**
This 8-40 hour variable-unit course provides First Responder CPR (adult, child, infant), Automated External Defibrillator (AED), and basic first-aid measures for a number of medical emergencies and conditions that Public Safety Officers may encounter as a First Responder. Meets POST certification requirements. Can be adapted to a basic CPR and First Aid for civilians.

JAJ-110. Counselor Officer Training (0.5 - 4)
**Pass/No Pass Only**

**Lec 30 Hrs; Lab 135 Hrs**
Provides the training for the UCLA, Gang, Homicide, Counselors. Includes expectations, legal issues, child development, programs, youth development, safety and emergency procedures, active shooter and evacuations. The training ranges from active listening, and behavioral management to lecture and case scenarios. Training complies with POST, American Association Standards for Counselors and ADA.

JAJ-110. Counselor Officer Training (0.5)
**Pass/No Pass Only**

**Lec 8 Hrs; Lab 12 Hrs**
Provides the training for the UCLA, Gang, Homicide, Counselors. Includes expectations, legal issues, child development, programs, youth development, safety and emergency procedures and evacuations. The training ranges from active listening, and behavioral management to lecture and case scenarios. Training complies with POST, American Association Standards for Counselors and ADA.

JAJ-153. Traffic Collision Investigations Intermediate (2)
**Pass/No Pass Only**

**Prerequisite:** Basic POST Certificate or Equivalent

**Lec 24 Hrs; Lab 56 Hrs**
The proper techniques for scene assessment, vehicle assessment, physical evidence, photography, definitions and terminology, and field and practical exercises in traffic collision investigation.

JAJ-159. Traffic Collision Investigation Advanced (2)
**Pass/No Pass Only**

**Prerequisite:** Basic POST Certificate or Equivalent

**Advisory:** JAJ-153

**Lec 24 Hrs; Lab 56 Hrs**
Builds on concepts learned in the basic and intermediate courses. This course examines in detail the human environmental and vehicle factors of a traffic collision. Concepts taught include: a review of algebra and physics, interviewing techniques, roadway and environmental factors, advanced methods for processing collision scenes and creating scale diagrams, vehicle damage assessments, lamp analysis, occupant restraints, basic vehicle dynamics and occupants kinematics. Determination of speed based on projectile motion, and methods of conducting time-distance studies.
JAJ-164. Crime Scene Investigation (1)

**Pass/No Pass Option**

_Lec_ 10 Hrs; _Lab_ 30 Hrs

**Prerequisite:** POST Basic Certificate or Equivalent

Designed for students who desire and introduction to the basic tasks and responsibilities for an Evidence Technician. Students will be provided with the basic knowledge and skills needed to identify, process, collect and preserve various types of physical evidence.

JAJ-166. Crime Scene & Forensic Photography (0.5)

**Pass/No Pass Only**

_Prerequisite:_ POST Basic Certificate or Equivalent.

_Lec_ 8 Hrs; _Lab_ 16 Hrs

Provides the student with intensive knowledge and practical experience pertinent to crime scene and forensic photography of physical evidence, and latent prints found or developed on evidence. Equipment and procedures pertinent to crime scene and forensic photography and the detection and preservation of physical evidence will also be covered. Additional topics include: the proper selection of cameras, lenses, tripods, films, filters, specialized lighting techniques and high energy forensic lights.

JAJ-201. Chemical Agent-Non Lethal (0.5)

_Lec_ 7.8 Hrs; _Lab_ 0.2 Hrs

This 8-hour course of instruction includes types of non-lethal chemical agents, methods of dispersal and delivery, safety, first aid, tactics, use of the gas mask, and applicable penal code sections. Meets the requirements of PC 13514.  

[JCSU]

JAJ-202. Law Enforcement Field Training Program (1 - 12)

**Pass/No Pass Only**

_Prerequisite:_ POST Basic Certificate or Equivalent  
_Penal Code Section 13511.5_ requires that each applicant for admission to a basic course of training certified by the Commission (including the P.C. 832 course) that includes the carrying and use of firearms, and who is not sponsored by a local or other law enforcement agency, or is not a peace officer employed by a state or local agency, department, or district, shall be required to submit written certification from the Department of Justice that the applicant has no criminal history background which would disqualify him or her, from owning, possessing, or having under his or her control a firearm. Valid California Driver's License.

_Lec_ 240 Hrs; _Lab_ 720 Hrs

The Field Training Program is designed to provide a training continuum which integrates the acquired knowledge and skill from the Regular Basic Police Academy with the practical application of law enforcement services. This 80-960 hour variable course is certified by Peace Officers Standards and Training (POST).

JAJ-204. Annual Training for Corrections (0.5)

**Pass/No Pass Only**

_Lec_ 1 Hrs; _Lab_ 23 Hrs

This 24-hour course fulfills the California Corrections Standards Authority annual training requirements for eligible staff to remain current and to upgrade knowledge and skills. Content reflects state standards and agency education and training objectives for probation officers, adult institutions and juvenile institutions staff.

JAJ-205. Background Investigation (0.5)

**Pass/No Pass Only**

_Prerequisite:_ POST Certificate or Equivalent  
_Valid California Driver's License_

_Lec_ 8 Hrs; _Lab_ 28 Hrs

Designed to give students the skills necessary to become an accomplished Background Investigator, this course applies the fundamentals of background investigation, interviewing, the use of psychological screening, polygraphs, legal aspects of background investigation, and verbal/non-verbal communication. This course is certified by POST.  

[CSU]

JAJ-206. Citizen Police Academy (0.5)

**Pass/No Pass Only**

_Prerequisite:_ Law Enforcement or other initial career certification required.

_Lec_ 2 Hrs; _Lab_ 30 Hrs

Enhances the relationship of the Police Department with the community by educating the citizen in various aspects of police operations. Intended for citizens who want to gain first-hand knowledge of police duties and responsibilities. The citizen becomes more aware of police services, the methodologies and strategies behind police programs and tactics, and other aspects of law enforcement.

JAJ-207. Skills & Knowledge Modular Training (0.5 - 2)

**Pass/No Pass Only**

_Prerequisite:_ Law Enforcement or other initial career certification required.

_Lec_ 16 Hrs; _Lab_ 64 Hrs

This 8-80 hour variable-unit course provides modules focusing on different aspects of public safety training. Each module is 8 hours long and is either certified through Peace Officers Standards of Training (POST) or State Board of Corrections ? Correctional Standard Authority (CSA) or the Office of the State Fire Marshall. Students choose three (3) or more modules per semester to earn from 0.5 to 2 units. Each module may be repeated for credit every 2 years due to required updating of content as prescribed by changes in laws, regulations and procedures.

JAJ-210. Basic Public Safety Dispatcher (3)

_Lec_ 24 Hrs; _Lab_ 96 Hrs

This 120-hour course is designed to provide dispatchers with the necessary skills and knowledge to perform the job of a dispatcher. Includes computer systems familiarization, legal updates, and communication techniques.

JAJ-211. Public Safety Dispatch - Update (1 - 5)

_Prerequisite:_ Student must be employed as a Public Safety Dispatcher

_Lec_ 20 Hrs; _Lab_ 180 Hrs

This 40-200 variable course is designed to provide necessary and required continuing professional training to public safety dispatches as required by The Commission on Peace Officer Standards and Training (POST). Students will learn radio procedures, radio systems, telephone procedures, legal updates and emergency dispatching techniques.
JAJ-212. Emergency Medical Dispatch (0.5 - 1)
**Pass/No Pass Only**
*Lec 4 Hrs; Lab 36 Hrs*
Designed to provide public safety dispatchers with the general knowledge of how the emergency system operates and the services that are available. Includes medical dispatch orientation, basic telecommunications, allocation of EMS resources, medicolegal considerations, and introduction to the Pre-Arrival Instruction Program, treatment sequence cards, pre-arrival instruction cards, interactive scenarios, multi-casualty incidents/disasters, quality assurance program, and critical incident stress management.

JAJ-214. Basic Police Academy (22 - 27)
**Prerequisite:** POST approved pre-entry English skills and physical abilities assessment examinations provided by the Academy. Penal Code Section 13511.5 requires that each applicant for admission to a basic course of training certified by the Commission (including the P.C. 832 course) must have the carrying and use of firearms, and who is not sponsored by a local or other law enforcement agency, or is not a peace officer employed by a state or local agency, department, or district, shall be required to submit written certification from the Department of Justice that the applicant has no criminal history background which would disqualify him or her from owning, possessing, or having under his or her control a firearm.
*Medical clearance by a licensed physician and a valid driver’s license*
*Lec 110 Hrs; Lab 970 Hrs*
This 880-1080 variable hour course satisfies all minimum required training mandates governed by the Commission on Peace Officer Standards and Training (POST) for entry level Peace Officers. The course includes fundamental principles, procedures and techniques of law enforcement, including: Criminal Law, Patrol procedures, Cultural Diversity, Investigative procedures, Report Writing, Defensive Tactics, Firearms, Leadership, Ethics, Community Relations, Police Vehicles Operations, Traffic Enforcement, Accident Investigation and First Aid/CPR. This course is open to those students who meet and satisfy entry requirements including written examination, physical fitness examination, DOJ fingerprint clearance and medical clearance. This course requires significant time commitments and outside course work including uniform preparation, homework assignments and equipment maintenance.

JAJ-215. Police Supervisor (2)
**Pass/No Pass Only**
**Prerequisite:** POST certificate or Equivalent
**Advisory:** POST Approved Pre-entry English Skills, Assessment Exam given by Academy
*Lec 80 Hrs*
This 80 hour course is designed for new sergeants emphasizing the basic elements of supervision, teacher training, conference leadership, and related law enforcement subjects as outlined by the Commission on Peace Officer Standards and Training (POST).

JAJ-216. Basic Fire Dispatcher (2)
**Pass/No Pass Only**
*Lec 8 Hrs Lab 72 Hrs*
This 80-hour course is designed to familiarize public safety dispatchers with field operations and provide them with the necessary skills to effectively receive and dispatch emergency calls for service.

JAJ-220. Advanced Officer Training - Pending (1)
**Pass/No Pass Only**
**Prerequisite:** POST Basic Certificate or Equivalent Penal Code Section 13511.5 requires that each applicant for admission to a course of training certified by the Commission (including the P.C. 832 course) must have the carrying and use of firearms, and who is not sponsored by a local or other law enforcement agency, or is not a peace officer employed by a state or local agency, department, or district, shall be required to submit written certification from the Department of Justice that the applicant has no criminal history background which would disqualify him or her, from owning, possessing, or having under his or her control a firearm.
*Lec 4 Hrs; Lab 50 Hrs*
This course covers a series of updated training topics such as Active Shooter, Driver Awareness, First Aid, CPR, Arrest and Control Techniques, Firearms, Legal Updates, and Harassment Policies. This updated training meets the requirements of the California Commission of Peace Officer Standards and Training. This course accommodates all agencies individual training requirements. 54 hours - 1 unit

JAJ-221. Field Evidence Technician (2)
**Pass/No Pass Only**
*Lec 8 Hrs; Lab 72 Hrs*
Designed for recently assigned evidence technicians or those personnel who desire an introduction to the basic tasks and responsibilities of an Evidence Technician. Covers basic knowledge and skills needed to identify, process, collect and preserve various types of physical evidence.

JAJ-222. Advanced Officer Skills (1 - 3)
**Pass/No Pass Only**
**Prerequisite:** POST Basic Police Academy certification or equivalent
*Lec 30 Hrs; Lab 90 Hrs*
This course provides agency discretionary training and/or required mandated training according to the Commission on Peace Officer Standards and Training (POST) and Correction Standards Authority (CSA). 40-120 hours.

JAJ-223. Narcotics Enforcement 11550 (0.5 - 1)
**Pass/No Pass Only**
*Lec 8 Hrs; Lab 32 Hrs*
Designed for law enforcement officers desiring to upgrade, refine, or develop an expertise in field recognition or identification and apprehension of individuals under the influence of narcotics and dangerous drugs. Includes identification of narcotics, narcotics users, abuses of controlled substances, use and development of informants, development of probable cause, testifying in court, organization and execution of arrests, and officer survival during drug arrests.

[CSU]
JAJ-224. Communications Training Officer (1)
Pass/No Pass Only
Prerequisite: POST Dispatch Certificate or Equivalent
Lec 4 Hrs; Lab 36 Hrs
This 40-hour course is designed to provide the Communications Training Officer with the skills to effectively train new dispatchers. Includes the Role of the Trainer, Elements of Instruction, Legal Aspects and Liability, Evaluation and Documentation, Critical Incident Stress, Adult Learning Theory, and practical exercises.

JAJ-225. Bicycle Patrol (0.5)
Prerequisite: Students must currently be employed as a peace officer and must in good physical condition and free of injuries.
Lab 24 Hrs
This 24-hour course is designed to give students basic knowledge of the use of the bicycle in police patrol and improve their bicycle riding skills. Covers physical fitness, subject/suspect contact, off-road bicycle-handling skills, maintenance, and the history of the bicycle.

JAJ-226. Computer Crime Training (0.5 - 1)
Pass/No Pass Only
Lec 5 Hrs; Lab 32 Hrs
Covers how to seize and search computers and networks for evidence of crimes as well as legal issues, including search warrant requirements for trade secret theft, network intrusion crimes, theft of data, chip theft, and California State and federal laws.

JAJ-227. Lifestock Theft/Rural Crime (1)
Lec 8 Hrs; Lab 32 Hrs
This 40-hour course includes instruction on basic livestock theft investigation, breed and brand recognition, individual case studies, rural crime, criminal law, expert testimony, crop and commodity enforcement, livestock killings and slaughters, and fish and game and enforcement.

JAJ-230. DUI-Field Sobriety Testing (0.5 - 1)
Pass/No Pass Only
Lec 8 Hrs; Lab 32 Hrs
Provides peace officers with the knowledge, skills, and tools to effectively increase the deterrence of Driving Under the Influence (DUI) violations, resulting in a reduction of the number of collisions, deaths, and injuries caused by impaired drivers.

JAJ-232. Skill Training for Security Guards (0.5 - 1)
Pass/No Pass Only
Lec 4 Hrs; Lab 44 Hrs
This 8-48 variable unit course includes the following modules: Module I addresses Business and Professions Code section 7583.7, including legal aspects, techniques, liability, and requirements relating to the arrest. Module II addresses observation skills required to identify and report precursor activities to a terrorist event, react appropriately, report the occurrence of a terrorist event, and remain safe while helping control the scene after a terrorist event. Modules III through VI help students in basic skills and address security guard work. Module VII focuses on basic employer requirements relating to the performance of guard duties. These modules are accepted as the required 16 hours of elective training as mandated by the Business and Profession Code Section 7583.6 and the continuing education requirement of an additional 8 hours of annual training pursuant to Section 7585.6(f) (1).

JFS-1A. Fire Command 1A (1)
Lec 8 Hrs; Lab 32 Hrs
This 40-hour course provides fire personnel with basic information, requirements, and certification of Incident Command Systems. Examines the leading causes of fire spread and initial decision and action plans for working fires. Includes responsibilities of fire personnel, fire behavior, fire ground resources, and operations and scene management.
[CSU]

JFS-1B. Fire Command 1B Company Officers (1)
Prerequisite: JFS-1A with a grade of "C" or better.
Lec 8 Hrs; Lab 32 Hrs
This 40-hour course addresses the tactics, strategies, and scene management for multi-casualty incidents, hazardous materials incidents, and wildland fires. Skill improvement through handling initial operations at these types of incidents through simulation and class activities.
[CSU]

JFS-1C. Fire Command 1C (1)
Pass/No Pass Only
Lec 8 Hrs; Lab 32 Hrs
Designed around the responsibilities of the Company Officer at a wildland/urban interface incident. Introduces personnel to urban/interface and unfamiliar situations.
[CSU]

JFS-3. Fire Management 1 - Management/ Supervisor for Company Officers (1)
Lec 17 Hrs; Lab 23 Hrs
This 40-hour course prepares first-line supervisors to supervise subordinates. Introduces key management concepts and practices used, including decision making, time management, leadership styles, personnel evaluations, and counseling guidelines.
[CSU]

JFS-4A. Fire Management 2A - Organizational Development and Human Relations (1)
Lec 8 Hrs; Lab 32 Hrs
This 40-hour course designed for Chief Officers, Company Officers, Staff Officers, Training Officers and other Fire Service Managers provides information about transitioning from supervisor to manager. Offers sound management principles in preparation for more intensified training in specific disciplines. Includes internal and external influences, personality traits of fire fighters, managing human relations, group dynamics, and conflict resolution.
[CSU]

JFS-4B. Fire Management 2B - Fire Service Financial Management (1)
Prerequisite: JFS 4A with a grade of "C" or better
Lec 8 Hrs; Lab 32 Hrs
This 40-hour course is designed for Chief Officers, Company Officers, Staff Officers, and other Fire Service Managers to provide insight into the cyclical nature of budgeting and financial management. Management topics include essential elements of financial planning, budget preparation, budget justification, and budget controls.
[CSU]
COURSE LISTINGS

JFS-4E. Fire Management 2A - Organizational Development and Human Relations (1)

  Lec 8 Hrs; Lab 32 Hrs

This 40-hour course provides an overview of contemporary management issues and concepts. Key topics include governmental relations, changing settings/policy formation, program management, personnel and labor relations, and legal environment. Designed for Chief Officers, Company Officers, and Functional Managers.

[CSU]

JFS-5. Fire Investigation 1A - Fire Cause & Origin Determination (1)

  Lec 8 Hrs; Lab 32 Hrs

This 40-hour course provides an introduction and basic overview of fire scene investigation and investigative tools required to collect, document, and preserve evidence. Focuses on providing information about fire scene indicators and determining the fire's origin.

[CSU]

JFS-6A. Fire Apparatus Driver/Operator 1A (1)

  Pass/No Pass Only

  Lec 4 Hrs; Lab 36 Hrs

Designed to provide students with information on driver techniques for emergency vehicles and techniques of basic inspection and maintenance of emergency vehicles, including actual driving exercises under simulated emergency conditions.

[CSU]

JFS-6B. Fire Apparatus Driver/Operator 1B-Pump Operations (1)

  Lec 4 Hrs; Lab 36 Hrs

Provides students with information, theory, methods, and techniques for operating fire service pumps. Includes types of pumps, engine and pump gauges, maintenance, unsafe pumping conditions, pressure relief devices, cooling systems, water supplies, drafting, field hydraulics, and pumping operations.

[CSU]

JFS-7A. Fire Prevention 1A - Fire Inspection Practices (1)

  Pass/No Pass Only

  Lec 8 Hrs; Lab 32 Hrs

Required course for Level 1 Fire Prevention Officer 1 Certification. Includes organization and function of fire prevention, fire and life safety inspections, codes and ordinances relating to the use and storage of flammable, combustible, toxic, reactive and radioactive materials; engineering and enforcing a solution of a fire hazard; and fire extinguisher and fixed systems requirements.

[CSU]

JFS-7B. Fire Prevention 1B - Code Enforcement (1)

  Pass/No Pass Only

  Lec 8 Hrs; Lab 32 Hrs

Provides fire prevention professionals with the base level of knowledge necessary to inspect fire protection systems and special hazards.

[CSU]

JFS-8. Fire Fighter I Academy (14)

  Prerequisite: Physical Agility Exam

  Lec 125 Hrs; Lab 375 Hrs

This course provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently.

JFS-9A. Fire Instructor 1A (1)

  Lec 8 Hrs; Lab 32 Hrs

This 40-hour course is the first of a two-course series. Includes occupational analysis, course outline, concepts of learning, levels of instruction, behavioral objectives, lesson plan development, psychology of learning, and instructor evaluation. Designed for company officers and personnel preparing for a Training Officer position.

[CSU]

JFS-10. Rescue Systems I - Fundamentals of Heavy Rescue (1)

  Prerequisite: Fire Fighter Certification

  Lec 8 Hrs; Lab 32 Hrs

This 40-hour course is designed for all emergency personnel. Includes team organization, rescue and environmental considerations, use of ropes, knots, rigging and pulley systems, descending, repelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situation, and day- and night-simulated rescue exercises.

JFS-14. Fire CDF Academy (2 - 4)

  Lec 8 Hrs; Lab 72 Hrs

This 80-160 hour course provides a basic firefighter course oriented toward the equipment utilized on CDF engines. Fundamentals of wildland fire control pumping skills, incident command and techniques of controlling other emergency incidents are covered with a strong safety perspective. Structured with a maximum emphasis on demonstration, student application, and performance examinations.

[CSU]

JFS-15. CDF Fire Academy Seasonal Refresher (0.5 - 2)

  Prerequisite: JFS-14 with a grade of "C" or better.

  Lec 8 Hrs; Lab 72 Hrs

Refresher course for the Basic CDF Firefighter Academy. Returning fire fighters must pass the returning firefighter written examination before working on an emergency incident. Intended to give the Firefighter 1 a basic knowledge which is needed prior to emergency response. Students are required to meet the minimum standard as noted in the behavioral objective for each subject/topic. Candidates for qualification under this course must meet the basic requirements for employment as a CDF Firefighter 1.

[CSU]
### JFS-18. Helitack Academy (1)

**Lec 8 Hrs; Lab 32 Hrs**

This 40-hour course is designed for the pilots/students of the California Department of Forestry (CDF) Air Program. Students will demonstrate Helitack specific tactics and competently perform all operational functions including crew, bucket and tank deployment, medical evacuation and the use of hand signals. [CSU]

### JFS-30. Paramedic Core (11 - 14)

**Pass/No Pass Only**

**Lec 56 Hrs; Lab 504 Hrs**

Designed to guide students to successful completion of the National Registry EMT-Paramedic exam and meets the training requirements mandated by the State of California, California Code of Regulations Title 22. The didactic instruction represents the delivery of primarily cognitive material. This is the first part of a three-part program. Students must successfully complete the didactic portion of training prior to progressing to Clinical training (440-560hrs). [CSU]

### JFS-40. California ROSS Dispatcher (0.5 - 1)

**Pass/No Pass Only**

**Advisory: Students must be qualified as (Fire) Support Dispatchers.**

**Lec 4 Hrs; Lab 36 Hrs**

This 24-40 hour-variable interactive course is designed to instruct Support Dispatchers students on the Dispatch portion of the Resource Ordering and Status System (ROSS). Divided into two sections, the main portion of this class is intended for all students. The second portion of this course contains advanced topics that focus on pre-planning and non-emergency response actions.

### JFS-41. Incident Command for High Rise Firefighting Operations (0.5)

**Lec 4 Hrs; Lab 12 Hrs**

Designed to assist emergency response officers in organizing high-rise incidents by organizing resources, developing strategies, and managing tactical operations and interagency coordination to protect life and minimize damage at high-rise incidents. [CSU]

### JFS-150. Emergency Medical Technician (3 - 5)

**Lec 20 Hrs; Lab 180 Hrs**

This 125-200 hour course is designed to prepare personnel to render pre-hospital basic life support services, including cardiopulmonary resuscitation, with emphasis on field application, practices, and techniques vital to the interaction of EMT-1 personnel with all levels of emergency medical personnel. This course is a variable course so we may accommodate multiple agency requirements for course hours. May be repeated three times for credit. [CSU]

### JFS-151. Emergency Medical Technician-Refresher (0.5 - 1)

**Pass/No Pass Only**

**Prerequisite: JFS-150 with a grade of "C" or better.**

**Lec 8 Hrs; Lab 32 Hrs**

This 24-40 hour EMT-Basic Refresher curriculum is competency based. Divided into six modules that follow the National Standard Curricula. EMTs who successfully complete this course must demonstrate competency over the knowledge and skills outlined in this refresher education program. [CSU]

### JFS-161. I-300 Intermediate Incident Command System (0.5)

**Pass/No Pass Only**

**Lab 27 Hrs**

A 27-hour class in the Incident Command System designed for Fire Officers who have a working knowledge of ICS. Consists of five modules developed by the National Wildfire Coordinating Group to meet the needs of command officers managing complex emergency incidents. Expands upon Basic ICS, but does not repeat any information. Provides in dept description and details of ICS, covers management of resources, describes the duties of all positions including the Air Operations organization, and provides examples of how the essential principles are used in incident event planning. This class may be repeated 3 times for credit. This is a pass/ no pass course.

### JFS-162. I-400 Advanced ICS (0.5)

**Pass/No Pass Only**

**Prerequisite: I-300 Intermediate ICS or an equivalent working knowledge of ICS. Chief Officer rank or Captains who are qualified by their agency to serve as Acting Battalion Chief.**

**Lec 1 Hrs; Lab 23 Hrs**

This 24-hour Incident Command System course is designed for Chief Officers. Consists of four modules developed by the National Wildfire Coordinating Group to meet the needs of command officers managing complex emergency incidents. Expansion of the material covered in the I-300 course. Emphasizes large-scale organization development; roles and relationships of primary staff, and the planning of operational logistical and fiscal considerations related to large and complex incident and event management. Describes the application of Area Command and the importance of interagency coordination on complex incidents and events. [CSU]

### JFS-201. Auto Extrication (0.5)

**Pass/No Pass Only**

**Lec 4 Hrs; Lab 12 Hrs**

Familiarization and knowledge of automobile construction technology and the equipment used at auto accidents to free trapped patients are essential factors in the safe performance of basic firefighter duties. It is the responsibility of the firefighter to operate tools and equipment in the most efficient and safe manner possible on the emergency scene.

### JFS-202. Hazardous Materials 1A Basic Chemistry of Hazardous Materials (1)

**Lec 8 Hrs; Lab 32 Hrs**

Designed to provide students with a basic foundation in chemistry and physics as they relate to hazardous materials incidents. Topics include an overview of chemical and physical properties, chemical structures and formulas, covalent and ionic bonding, different types of chemical compounds, DOT hazard classes, and the combustion process as it relates to hazardous materials.
JFS-203. Hazardous Materials 1B-Applied Chemistry Field ID of Chemicals (1)
   **Prerequisite:** JFS-202 with a grade of "C" or better
   **Lec** 8 Hrs; **Lab** 32 Hrs

Designed for hazardous materials emergency responders. Emphasizes application of topics learned in Hazardous Materials 1A. Includes the use of field monitoring and detection devices, sample collection of equipment, and field identification procedures for verifying, identifying, and classifying unknown chemicals.

JFS-204. Hazardous Materials 1C - Incident Consideration (1)
   **Prerequisite:** JFS-203 with a grade of "C" or better.
   **Lec** 8 Hrs; **Lab** 32 Hrs

Designed for hazardous materials emergency responders. Provides an introduction to the Haz Mat Incident Command System, concepts associated with haz mat response activities, and an in-depth study of incident-specific considerations influencing haz mat emergencies. Introduction to site planning, contingency planning, protective action options, and meteorological considerations.

JFS-205. Hazardous Materials 1D - Tactical Field Operation (1)
   **Prerequisite:** JFS-204 with a grade of "C" or better.
   **Lec** 8 Hrs; **Lab** 32 Hrs

Designed for hazardous materials emergency responders. Provides "hands-on" training in haz mat confinement and control operations, including diking dams, absorbent materials, methods and procedures of plugging, patching, sampling, and over packing. Use of chemical protective equipment and decontamination methods and procedures. Information on other tactical considerations, such as haz mat triage, sabotage, preservation of evidence, and EMS considerations is also provided.

JFS-206. Hazardous Materials 1F- Special Mitigation Techniques (1)
   **Prerequisite:** JFS-205 with a grade of "C" or better.
   **Lec** 8 Hrs; **Lab** 32 Hrs

Intensive "hands-on" introduction to specialized mitigation techniques employed by the Hazardous Materials Specialist. Instruction includes plugging, patching, and repairing railroad cars, intermodel tanks, and highway cargo tank cars, advanced chemical field identification testing procedures, and fixed facility repair considerations.

JFS-207. Hazardous Materials 1G - Advanced Field Operations (1)
   **Prerequisite:** JFS-206 with a grade of "C" or better.
   **Lec** 8 Hrs; **Lab** 32 Hrs

Culmination of Modules 1A-1F in an environment of "hands-on" full-scale exercises. Includes evaluation of performance as a member of a haz mat team in a series of simulated haz mat incidents.

JFS-208. Fire Officer Supervisor (2)
   **Pass/No Pass Only**
   **Prerequisite:** Employment with a Fire Department as a full time first line officer.
   **Lec** 8 Hrs; **Lab** 72 Hrs

This is an 80-hour management program designed to teach supervision and management skills to current first-line officers in the fire service. Candidates are chosen from amongst eligible supervisors by department administrators.

JFS-211. Haz Mat-Awareness/Operational (0.5)
   **Pass/No Pass Only**
   **Lec** 1 Hrs; **Lab** 23 Hrs

Designed for fire department respondents to releases or potential releases of hazardous materials as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. Provides defensive tactics to contain the release from a safe distance, keep it from spreading, and prevent exposures without trying to stop the release. Meets and exceeds the requirements of CFR 29 1910.120 and CCR Title 8.

JFS-212. Hazardous Materials-Incident Commander Training (0.5)
   **Lec** 1 Hrs; **Lab** 23 Hrs

Designed to provide the Incident Commander with the skills and competency necessary to mitigate an emergency incident, initiate action, and ensure the restoration of normal services with a comprehensive resource-management approach.

JFS-214. Wildland Fire Chain Saws (0.5)
   **Prerequisite:** Firefighter I Academy certificate or equivalent.
   **Lec** 8 Hrs; **Lab** 16 Hrs

This course provides introductory level training for firefighters on the use of chainsaws in wild land fire management, tactical fireline application.

JFS-216. Fire Continued Professional Training (3)
   **Pass/No Pass Only**
   **Prerequisite:** Fire Fighter I Academy or equivalent
   **Lec** 18 Hrs; **Lab** 102 Hrs

This course is designed to update, improve, and assess the professional skills required by municipal and wildland firefighters. Topics covered include structure firefighting, emergency medical skills, first responder operations, firefighter rescue and survival techniques, and required updates on sexual harassment prevention and OSHA mandates. All hours are TBA and focus on achieving the stated student learning outcomes to meet the mandated training requirements put forth by Cal OSHA and the California State Fire Marshal's Office, State Board of Fire Services.

JFS-218. Paramedic-Internship (12 - 18)
   **Pass/No Pass Only**
   **Lec** 80 Hrs; **Lab** 640 Hrs

Assignment of a field internship following successful completion of a clinical internship. The intern returns to a Paramedic mobile intensive care unit (ambulance) where he/she will perform on-the-job-duties, under supervision, for a minimum of 480 hours and a maximum of 720 hours. The field internship portion of training must be completed within six months of the student's first shift date in his/her internship.

JFS-219. Paramedic-Clinical Internship (4 - 7)
   **Pass/No Pass Only**
   **Lec** 28 Hrs; **Lab** 252 Hrs

Upon completion of the didactic phase (part one) of paramedic training, the paramedic intern is required to complete a clinical rotation. Clinical training (part two) will be conducted at local contracted hospitals for a minimum of 160 hours to maximum of 280 hours. Students will be assigned a specific hospital. Clinical internship must be completed within three months of the student's first clinical rotation. Field internship (part three) may not begin until the clinical internship is completed and the student completes a clinical closeout meeting.
JFS-272. Wildland Fire Origin and Cause Determination FI-210 (0.5)

**Lec 1 Hrs; Lab 31 Hrs**

This 32-hour course is designed to meet the requirements of the National Wildfire Coordinating Group (NWCG) for Wildland Fire Investigator certification, as outlined in the Wildland and Prescribed Fire Qualifications System Guide (PMS 310-1), and the Position Task Book. This course provides the necessary knowledge and basic skills required for the position. The concepts taught in this course meet the minimum national performance standards for a Wildland Fire Investigator. The course consists of eight formal classroom lecture/discussion units, three practical exercises, one practical examination, and a final written examination. Students will have the opportunity to practice new skills in the exercise portions of the class.

JFS-289. Low-Angle Rope Rescue (0.5 - 1)

**Pass/No Pass Only**

**Lec 8 Hrs; Lab 16 Hrs**

This 16-24 hour variable course is designed to teach fire personnel techniques and methods for using rope, webbing, hardware friction devices, and litters in low-angle rescue situations. Covers rope and related equipment, anchor systems, safety lines, stretcher lashing and rigging, mechanical advantage systems, and single and two-line rescue systems.

JFS-290. Intermediate Wildland Fire Behavior Determination FI-210 (1)

**Pass/No Pass Only**

**Prerequisite: Required Training: Introduction to Wildland Fire Behavior, S-190. Prerequisite Experience: Satisfactory performance at the wildland fire Firefighter Type 2 level.**

**Lec 18 Hrs; Lab 24 Hrs**

This variable course is intended to meet S-290 requirements for wildland fire management. The course addresses wildland fire behavior, safe and effective tactics, and scene management. Activities include wildfires, fire use and prescribed fire.
Administration and Faculty

DR. WILLARD LEWALLEN, SUPERINTENDENT/PRESIDENT

Vice President of Academic Affairs ................................................................. Dr. Lori Kildal
Dean of Academic Affairs, Advanced Technology ........................................ Dr. Zahi Kanaan-Atallah
Director of Agricultural Business & Technology Institute ........................ Dr. Susan Pheasant
Dean of Academic Affairs, South County Education Services ................... Renata Funke
Dean of Academic Affairs, Instructional Programs and Support ............... Dr. Céline Pinet
Director of The Western Stage ...................................................................... Jon Selover
Education and Artistic Program Administrator ........................................ Melissa Chin-Parker
Director of Early Childhood Education/Child Development Center .......... Susan Ratliff
Deputy Sector Navigator, Digital Arts ........................................................... Olivia Davalos
Dean of Academic Affairs, Learning Support and Resources .................... Kathy Mendelsohn
Director of Student Academic Support ....................................................... Antonio Alarcon
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Director of Student Affairs, Special Programs ......................................... Bronwyn Moreno

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Manager of Food Services ......................................................................... Jill Sweeney

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**June 2016**
- 20 - Summer Semester Begins

**July 2016**
- 4 - Independence Day
- 29 - Summer Semester Ends

**August 2016**
- 15 - Flex Day
- 16 - Fall Semester Begins

**September 2016**
- 5 - Labor Day

**November 2016**
- 11-12 - Veterans Day
- 24-26 - Thanksgiving Holiday

**December 2016**
- 10 - Last Day of Instruction
- 17 - Fall Semester Ends
- 26 - Observe Christmas Day

**January 2017**
- 2 - Observe New Year’s Day
- 16 - Martin Luther King, Jr. Day

**February 2017**
- 17 - Observe Lincoln’s Day
- 20 - Washington’s Day

**March 2017**
- 31 - Cesar Chavez Day

**April 2017**
- 10-15 - Spring Break

**May 2017**
- 20 - Last Day of Instruction
- 26 - Commencement
- 29 - Observe Memorial Day

**June 2017**
- 4 - Independence Day
- 28 - Summer Semester Ends

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5 FLEX DAYS - 3 DISTRICT, 2 PERSONAL
101 FALL INSTRUCTIONAL DAYS (M - SAT CLASSES)
101 SPRING INSTRUCTIONAL DAYS (M - SAT CLASSES)
MINIMUM: 175 TOTAL CONTRACTUAL DAYS
Title 5: Sections 55720 - 55732; 58120; 58142

BOARD ADOPTED: January 13, 2015
K-12 Programs
- NASA MAA
- Citizen's Jury STEMDAYS
- CyberPatriot
- Astronomy
- Engineering
- Environmental Science
- Chemistry
- Math
- Physics

K-12 Districts:
- South Monterey County
  - Joint (King City & Greenfield) HS
  - Soledad Unified
  - Gonzales Unified
- Alisal Union
- Salinas City Elementary
- Salinas Union HS
- North Monterey County Unified

STEM Internship Program
Science & STEM Internship Program
Project Management
Soft Skills
Industry Partnerships

Transfer Support
Articulation Agreements
CSUMB
Fresno State
UC Santa Cruz
UC Davis
All Other UCs

Private and Out-of-State Universities

Academic Support and Advising
- Math Engineering Science Achievement (MESA)
- STEM Counseling
- Tutoring
- Supplemental Instruction
- STEM Learning Community
- Peer-Led Team Learning
- Student Success and Support Program

Exposure and Engagement
- University and Industry Fieldtrips
- STEM Conferences and Events
- Fall/Winter Days
- Cisco Mentor Program
- Software Development
- STEM Clubs: Medicine, Engineering, Physics, Math, Nanotechnology and Research

MESA

Fraunhofer Center
UC Santa Cruz
UC Davis
All Other UCs

All STEM majors

Allstate
Alvarez Technology Group
Apple
California Public Utilities Commission
Chevron
Community Hospital of Monterey Peninsula
CIMAT
Cisco
County of Monterey
CSU Monterey Bay
Disney
Driscoll's
Enza Zaden
Firetide
HeavyConnect
Language Line
Lowes, Home & Hardware
Naval Postgraduate School
Opterra Energy
PredPol
Salesforce
Salinas Valley Memorial
Santa Cruz
Seed Central
Smart Wash Solutions
Twitter
Uber
UC Berkeley
UC Santa Cruz
UC Department of Agriculture
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