HARTNELL COLLEGE

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

2013 – 2014 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) an institutional body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. In addition, certain programs at Hartnell College hold special accreditation with the California Board of Registered Nursing, the California Board of Vocational Nurse and Psychiatric Technician Examiners, and the National Academy of Early Childhood Programs. It has the approval of the State Department of Education to train veterans under Public Law 874 and Public Law 550 and also of the U.S. Immigration and Naturalization Service to educate foreign students.
HARTNELL COMMUNITY COLLEGE DISTRICT

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INTERNAL PAGE:

ACCURACY STATEMENT
The Hartnell Community College District has made every reasonable effort to ensure that information in this catalog is accurate. Courses and programs that are offered, along with other matter contained herein, are subject to change without notice by Hartnell College administration for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District and the College. The District and the College further reserve the right to add to, amend, or repeal any of their rules, regulations, policies, and procedures, consistent with application laws.

HARTNELL COLLEGE EMERGENCY COMMUNICATIONS

Campus Security: (831) 755-6888
Maintenance: (831) 755-6950
Facility Emergency Hotline: (831) 755-6700, x5700
Office of Student Affairs: (831) 755-6822
Office of Academic Affairs: (831) 770-7090
Advanced Technology Office: (831) 755-6960
Website Pop-Up Emergency Notice: www.hartnell.edu/emergency

Professional photos including cover photos by Randy Tunnell
Welcome to Hartnell College

MISSION STATEMENT

Hartnell College provides the leadership and resources to ensure that all students shall have equal access to a quality education and the opportunity to pursue and achieve their goals. We are responsive to the learning needs of our community and dedicated to a diverse educational and cultural campus environment that prepares our students for productive participation in a changing world.

VISION STATEMENTS

- Hartnell College shall provide its diverse communities and student population with equal opportunities for educational access and success.
- Hartnell College shall implement programs and services and recognize its culturally diverse community, and provide fair and ethical treatment of its entire population.
- Hartnell College shall actively recruit, support, and retain the best personnel.
- Hartnell College shall seek and dedicate resources to be a technologically advanced institution.
- Hartnell College shall support a learning environment that rewards creativity, innovation, and risk-taking.
- Hartnell College shall anticipate and respond to change.
- Hartnell College shall be a valuable resource and a facilitator of changes for its communities.
- Hartnell College shall enhance its local and global community partnerships and outreach activities.
- Hartnell College shall excel in the recruitment, retention, and placement of students.

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 resource 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.
For information about new classes that may become available, go to http://www.hartnell.edu/academics/schedule/

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.

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 page 227.

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 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 www.hartnell.edu/safety/parking_regulations

For questions or assistance contact Campus Security at (831) 755-6888. Permits may be obtained from the Cashier’s Office at any time during the semester.

Cashier Hours
Monday – Thursday: 8:30 am to 5:45 pm
Friday – 9:00 am to 1:00 pm

Cost of Parking Permits:
Fall/Spring Semester: $40 (each semester)
Summer Session: $30

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: 20-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 2013-14 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. 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.hartnell.bkstr.com

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 the Vice President of Student Affairs located in Building B, Room 123 (831) 755-6820, 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. On weekdays from 8 am to 5 pm, contact security by calling (831) 755-6888. On weekends, after 5 p.m. weekdays, or if there is no answer at the office, Campus Security may be reached by calling (831) 757-4302.

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.

AlertU
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 (AlertU) for your mobile phone. In the event of an emergency, Hartnell College students, staff, faculty and others will be alerted in real-time important security information.

Sign up is simple, just enter your mobile # online at http://www.hartnell.edu/safety/.
Library & Learning Resource Center

Hours of operation are:

Fall and Spring semester
- 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 summer session and/or winter intersession will 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 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 printers, photocopiers, collaborative group study rooms, a Faculty Staff Resource Center, a Community Room, a Distance Learning Center, an Information Competency Center, and a silent study room. Library technology staff provide 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 drop-in workshops that teach students important research skills.

The library’s collections support the college’s curriculum and contain more than 60,000 books, 25,000 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 30 electronic databases that include full-text periodicals, journals, newspapers, 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.

Audio Visual Services provides and maintains media equipment and presentation technologies in support of classroom teaching. While the college is moving towards building smart classrooms, AV equipment continues to be delivered to classes at faculty’s advance request. Computers with presentation equipment, plasma screens, laptop computers, and digital cameras may be checked out to faculty depending on availability.

Special Collections features unique book collections and college archives. The most notable collection is the ornithology and natural history library of O.P. Stillman. Access to Special Collections is by appointment.

For more information about the library and library’s open hours, visit http://www.hartnell.edu/library/ or call Circulation Services, (831) 755-6872.

OFF-CAMPUS INSTRUCTION

Each semester Hartnell conducts off-campus classes at the Alisal Campus and in King City, Soledad, Gonzales, and various locations throughout the District.

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

Distance Education

Hartnell College offers online classes and Polycom’s video-conferencing equipment for real-time interactive video and audio distant education courses. 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). Polycom delivery will require the student to attend class at a site that has a video-conferencing system installed and operational for the class.

All distance education courses are academically rigorous, require the direction of and interaction with qualified faculty, and are equivalent to traditionally taught courses.

OTHER CAMPUS PROGRAMS

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.

Foster & Kinship Care Education

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 like 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 “system”, we understand that there is much you want to know and there is much you 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.

The California Community Colleges have established the Foster Youth Success Initiative (FYSI) to assist former foster youth in accessing and successfully completing college. FYSI Liaisons are located in the Student Support Services Department. 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.
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 was 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.
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.

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.

SEXUAL HARASSMENT POLICY

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.

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

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 on the Hartnell College website: www.hartnell.edu in the schedule of classes and from the Admissions & Records Office at Main Campus, Alisal Campus, and the King City Education Center. Applications can be mailed, faxed, or delivered in-person to Admissions & Records. New and returning students should submit applications early in the registration cycle to have the best opportunity to get needed courses. Students who have not attended Hartnell in the last year 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. California residents who possess a high school diploma or equivalent, such as a Certificate of Proficiency by the State Board of Education shall be admitted upon application.
2. Applicants over the age of 18 who are capable of profiting from instruction offered shall be admitted.
3. Persons who are apprentices as defined in Labor Code Section 3077.
4. Applicants who meets the special admission requirements and could benefit from instruction offered should be admitted.

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 residence 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 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 motor vehicle license plates.
7. possessing California driver’s license or California ID.
8. maintaining a permanent military address or home of record in California while in the armed services.
9. establishing and maintaining active California bank accounts.
10. being the petitioner for a divorce in California.
11. documentation of employment (check stub, letter from employer).

Military personnel on active duty in California, their spouses and dependent children qualify as immediate residents. (Submit military documentation with application.) Military dependents are allowed to attend Hartnell without paying non-resident tuition for one year after being assigned to California. After the one-year period, military dependents must provide documentation that indicates their intent to maintain California as their permanent home.

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

Non-resident students do not automatically become residents by being in California for one year. A student seeking reclassification from non-resident to resident status must complete and file a change of residency request form in order to change their status. Residency documents along with the change of residency request form must be submitted to Admissions & Records Office prior to registering for the next semester. Out-of-state residency will not be changed automatically.
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 to non-resident tuition exists when documentation is presented for any of the following:

- Attended a California high school (or high school equivalent) for a minimum of three years and earned a California High School diploma or equivalent.
- Full-time credentialed employee of a California public school enrolling in college for purposes of fulfilling credential-related requirements.
- Seasonal agricultural worker for at least a total of two months of each of the past two years (or child of a seasonal agricultural worker).

INTERNATIONAL STUDENTS

F-1 Visa Status
It is the policy of Hartnell College to provide international student advisement in the process of 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.

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.

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

Hartnell College international students must attend this institution and successfully complete 12.0 units with a “C” average or better before being released and transferred to another U.S. collegiate institution.

Hartnell international students are responsible for any pending financial obligations with the Cashier’s Office prior to submitting the transfer request form to Admissions personnel.

English Assessment Test
All international students will be required to take a diagnostic test of English proficiency upon their arrival at Hartnell College. Based on the results of this test, students will be counseled and may be required to enroll in as many as 9.0 units of English consisting of grammar, composition, conversation, and/or vocabulary/spelling.

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 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.

Guest Students
Hartnell College international students who are accepted by another collegiate institution must enroll in a minimum of 12.0 units concurrently. A minimum of 9.0 units must be taken at Hartnell College.

Distance Learning
International students may take online courses; however, a minimum of 9.0 units must be taken at Hartnell College campus in a regular classroom setting.

Employment
After one semester of successful study, international students may be permitted to work part-time on campus if there is urgent financial need. Off-campus employment is subject to the rules of the Immigration and Naturalization Service.

Student Responsibility
International students must be familiar with the Immigration and Naturalization Service regulations as well as Hartnell College’s regulations on student conduct and enrollment and comply with those regulations. For more information, call (831) 755-6829, email us at intstud@hartnell.edu to schedule an appointment, or visit our website at www.hartnell.edu/students/international
CONCURRENT ENROLLMENT BP 5010
Admission of K-12 Students (Concurrent Enrollment)

K-12 students must complete an assessment to establish the ability to benefit from college instruction. Within the first two weeks of a regular semester and the first three days of a summer term or intersession, the faculty member of record will retain the right to determine whether the student’s progress, participation and maturity are sufficient to continue or be dropped from the class.

A parent or guardian must complete a College Concurrent Enrollment Form requiring the signatures of the parent, school principal, Hartnell College Counselor, and District administrator(s).

- Any student whose age or class level is equal to grades 9-12 is eligible to attend as a special part-time student or full-time student for advanced scholastic or vocational courses.

- 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.)

Denial of Requests for Admission

- If the Board denies a request for special full time or part time enrollment by a pupil who is identified as highly gifted, the board will record its findings and the reason for denying the request in writing within 60 days.

- The written recommendation and denial shall be issued at the next regularly scheduled board meeting that occurs at least 30 days after the pupil submits the request to the district.

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 meet placement test (see Student Affairs) 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

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

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

2. Those whose age or class level is equal to grades 9-12 and is 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 the Vice President of Student Affairs
   E. Written approval of Hartnell College Superintendent/President

Special Summer Session Students

1. 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 Hartnell College counselor

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.

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.
## CREDIT FOR EXTERNAL EXAMINATIONS

**Advanced Placement (AP) Tests**

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 requirements. Students should be aware that AP test credit is evaluated by corresponding it to an equivalent Hartnell College course, e.g., History 17A or as elective credits.

**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.

**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.

**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 & Records Office to receive credit.
- A student who receives external examination credit and then takes the equivalent Hartnell College course will have the unit credit for the duplication deducted prior to graduation.
- 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. Please check the transfer institution’s catalog for details.

<table>
<thead>
<tr>
<th>Subject Exam</th>
<th>Minimum Score</th>
<th>Hartnell College AA degree Credit Award</th>
<th>CSU</th>
<th>IGETC for UC and CSU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hartnell Equivalent</td>
<td>Hartnell Units Awarded</td>
<td>Associate Area</td>
</tr>
<tr>
<td><strong>College Board Advanced Placement (AP) Tests</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP Art - History of Art</td>
<td>3</td>
<td>ART 1A</td>
<td>3.0 Humanities</td>
<td>C1 or C2</td>
</tr>
<tr>
<td>AP Art - Studio- Art 2D</td>
<td>3</td>
<td>None - Elective only</td>
<td>3.0 Humanities</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Art - Studio- Art 3D</td>
<td>3</td>
<td>None - Elective only</td>
<td>3.0 Humanities</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Art - Studio Art- Drawing</td>
<td>3</td>
<td>None - Elective only</td>
<td>3.0 Humanities</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Biology</td>
<td>3</td>
<td>BIO 10 + 2 Elective</td>
<td>6.0 Nat. Sci.</td>
<td>B2 &amp; B3</td>
</tr>
<tr>
<td>AP Chemistry</td>
<td>3</td>
<td>CHM 1A + 1 Elective</td>
<td>6.0 Nat. Sci.</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP Computer Science A⁴</td>
<td>3</td>
<td>CSS 2A</td>
<td>4.0 Lang. &amp; Rat.</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Computer Science AB⁴</td>
<td>3</td>
<td>CSS 2A + 2 Elective</td>
<td>6.0 Lang. &amp; Rat.</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Economics - Microeconomics</td>
<td>3</td>
<td>ECO 5</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D2</td>
</tr>
<tr>
<td>AP Economics - Macroeconomics</td>
<td>3</td>
<td>ECO 1</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D2</td>
</tr>
<tr>
<td>AP English - Lang, &amp; Composition</td>
<td>3</td>
<td>ENG 1A + 3 Elective</td>
<td>6.0 Lang. &amp; Rat.</td>
<td>A2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ENG 1A &amp; ENG 1B</td>
<td>6.0 Lang. &amp; Rat. and Humanities</td>
<td>A2 &amp; C2</td>
</tr>
<tr>
<td>AP Environmental Science</td>
<td>3</td>
<td>BIO 48 + BIO 4B</td>
<td>4.0 Nat. Sci.</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP French - French Language</td>
<td>3</td>
<td>FRN 1 + 1 Elective</td>
<td>6.0 Humanities</td>
<td>C2</td>
</tr>
<tr>
<td>AP French - French Literature</td>
<td>3</td>
<td>None-6 Electives only</td>
<td>6.0 Humanities</td>
<td>n/a</td>
</tr>
<tr>
<td>AP German language</td>
<td>3</td>
<td>None- Elective only</td>
<td>6.0 Humanities</td>
<td>C2</td>
</tr>
<tr>
<td>AP Gov. &amp; Politics: Comparative</td>
<td>3</td>
<td>POL 2</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D8</td>
</tr>
<tr>
<td>AP History - European History</td>
<td>3</td>
<td>HIS 4A + 3 Electives</td>
<td>6.0 Soc. &amp; Beh.</td>
<td>C2 or D6</td>
</tr>
<tr>
<td>AP History - United States History</td>
<td>3</td>
<td>HIS 17A + 3 Electives</td>
<td>6.0 Soc. &amp; Beh.</td>
<td>(C2 or D6) + US 1</td>
</tr>
<tr>
<td>AP History - World History</td>
<td>3</td>
<td>HIS 5A + 3 Electives</td>
<td>6.0 Soc. &amp; Beh.</td>
<td>C2 or D6</td>
</tr>
<tr>
<td>AP Human Geography</td>
<td>3</td>
<td>None- Elective Only</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D5</td>
</tr>
<tr>
<td>AP Italian Language and Culture</td>
<td>3</td>
<td>None- Elective Only</td>
<td>6.0 Humanities</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Japanese Language and Culture</td>
<td>3</td>
<td>JPN 10 + 1 Elective</td>
<td>6.0 Humanities</td>
<td>C2</td>
</tr>
<tr>
<td>AP Latin - Latin Literature</td>
<td>3</td>
<td>None - Elective only</td>
<td>6.0 Humanities</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Latin - Vergil</td>
<td>3</td>
<td>None -Elective only</td>
<td>3.0 Humanities</td>
<td>C2</td>
</tr>
<tr>
<td>AP Math Statistics</td>
<td>3</td>
<td>MAT 13</td>
<td>5.0 Lang. &amp; Rat.</td>
<td>B4</td>
</tr>
<tr>
<td>AP Math (Calculus AB)</td>
<td>3</td>
<td>MAT 3A</td>
<td>4.0 Lang. &amp; Rat.</td>
<td>B4</td>
</tr>
<tr>
<td>AP Math (Calculus BC)</td>
<td>3</td>
<td>MAT 3A</td>
<td>4.0 Lang. &amp; Rat.</td>
<td>B4</td>
</tr>
<tr>
<td>AP Math (Calculus BC/AB) Subscore</td>
<td>3</td>
<td></td>
<td></td>
<td>B4</td>
</tr>
<tr>
<td>AP Music - Theory</td>
<td>3</td>
<td>MUS 50A + 3 Electives</td>
<td>6.0 Humanities</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Physics B¹</td>
<td>3</td>
<td>PHY 2A + 2 Electives</td>
<td>6.0 Nat. Sci.</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP Physics C¹ (Mechanics)</td>
<td>3</td>
<td>PHY 4A</td>
<td>4.0 Nat. Sci.</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP Physics C¹ (Electricity &amp; Magnetism)</td>
<td>3</td>
<td>None-Elective Only</td>
<td>4.0 Nat. Sci.</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>3</td>
<td>PSY 2</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D9</td>
</tr>
<tr>
<td>AP Spanish - Spanish Language</td>
<td>3</td>
<td>SPA 1. 1S or 1X + 1 Elective</td>
<td>6.0 Lang. &amp; Rat. or Humanities</td>
<td>C2</td>
</tr>
<tr>
<td>AP Spanish - Spanish Literature</td>
<td>3</td>
<td>None-Elective Only</td>
<td>6.0 Humanities</td>
<td>C2</td>
</tr>
</tbody>
</table>
## ADMISSIONS

### International Baccalaureate (IB)

<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 Area²</th>
<th>CSU Units Awarded¹</th>
<th>IGETC Area²</th>
<th>IGETC Units Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>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>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>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></td>
<td></td>
</tr>
<tr>
<td>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></td>
<td></td>
</tr>
<tr>
<td>History (any region) HL</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>3 or 4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Language A1 (any language) HL (If in English IGETC only gives Area 3 not LOTE)</td>
<td>4-AA or CU; 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>Language A2 (any language) HL (If in English IGETC only gives Area 3 not LOTE)</td>
<td>4-AA or CU; 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>Language B (any language) HL</td>
<td>4-AA or CU; 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>
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<tr>
<td>Mathematics HL</td>
<td>5</td>
<td>3.0 GE</td>
<td>Nat. Sci.</td>
<td>B4</td>
<td>3.0 GE + 3 Electives</td>
<td>2</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>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>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>Theatre HL</td>
<td>4-AA or CU; 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)

<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 Area²</th>
<th>CSU Units Awarded¹</th>
<th>IGETC Area²</th>
<th>IGETC Units Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>D8</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>3.0 GE</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Analyzing and Interpreting Lit.</td>
<td>50</td>
<td>3.0 GE</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>3.0 GE</td>
<td>Nat. Sci.</td>
<td>B2</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>3.0 GE</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
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<tr>
<td>Chemistry</td>
<td>50</td>
<td>3.0 GE</td>
<td>Nat. Sci.</td>
<td>B1</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>3.0 GE</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>College Algebra-Trigonometry</td>
<td>50</td>
<td>3.0 GE</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>50</td>
<td>3.0 GE</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>50</td>
<td>3.0 Electives</td>
<td>Lang. &amp; Rat.</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>French I/A Level I</td>
<td>50</td>
<td>5.0 GE</td>
<td>Humanities</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>French I/A Level II</td>
<td>50</td>
<td>5.0 GE</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE + 12 Electives</td>
<td>m/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>German I/A Level I</td>
<td>50</td>
<td>5.0 GE</td>
<td>Humanities</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>German I/A Level II</td>
<td>60</td>
<td>5.0 GE</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE + 12 Electives</td>
<td>m/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History, United States I</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>D6 + US 1</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
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<tr>
<td>History, United States II</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>D6 + US 1</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
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<tr>
<td>Human Growth and Develop.</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>E</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>3.0 GE</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Info Systems and Computer Applications</td>
<td>50</td>
<td>3.0 Electives</td>
<td>Lang. &amp; Rat.</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Intro Business Law</td>
<td>50</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Intro Psychology</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>D9</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Intro Sociology</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>D0</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>50</td>
<td>3.0 GE</td>
<td>Nat. Sci.</td>
<td>B1 or B2</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>50</td>
<td>3.0 GE</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>50</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soci. &amp; Beh.</td>
<td>D2</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Principles of Management</td>
<td>50</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>50</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soci. &amp; Beh.</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Spanish I/A Level I</td>
<td>50</td>
<td>5.0 GE</td>
<td>Humanities</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Spanish I/A Level II</td>
<td>60</td>
<td>5.0 GE</td>
<td>Humanities</td>
<td>C2</td>
<td>3.0 GE + 12 Electives</td>
<td>m/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>3.0 GE</td>
<td>Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>C2 or D6</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>3.0 GE</td>
<td>Soc. &amp; Beh.</td>
<td>D6</td>
<td>3.0 GE</td>
<td>m/a</td>
<td>n/a</td>
<td></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 CLEP test in the same language (other than English), 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 the Admissions & Records Office, college credit will be credited to the student's record. For more information, please see a counselor.

Hartnell College Catalog/2013-14
TRANSFER TRANSCRIPTS
Hartnell College students pursuing an Associate Degree, Certificate, Veteran’s Benefits, or to meet a prerequisite may request evaluation of previously awarded university credit after the completion of 6.0 units at Hartnell. It is the student’s responsibility to 1) request official transcripts be mailed directly to the Admissions & Records Office and (2) submit a Transfer Credit Evaluation Petition. The previous college or university institution must have been accredited at the time of attendance. 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/academic/foreign Transcript_evaluation.html.

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 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, have transcripts forwarded, have transfer credit evaluated, have unofficial transcripts 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.

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 completion of 6 units at Hartnell, 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 after the completion of 6.0 units at Hartnell. 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, and (3) submit a Transfer Credit Evaluation Petition. The following web sites may be used to request transcripts from the military branches:
- The Army/ (AARTS): http://aarts.army.mil

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

For credit to be awarded, the student must be enrolled at Hartnell, have completed a minimum of 6.0 units, and must submit a Transfer Credit Evaluation Petition to the Admissions & Records Office.

REGISTRATION
All students MUST have a registration appointment to register. Continuing students are given the first opportunity to register each semester, and their registration appointment is based on units completed through the previous semester. Students may be notified by student email approximately 2–3 weeks prior to registration starting.

Continuing students may register using PAWS online registration www.hartnell.edu. Students who miss a registration appointment time may register any day after until the Thursday before the semester begins, or for short-courses, up until the day the course begins.

New & Returning students are issued a registration appointment date at the time of submission of their Application for Admission. New & Returning students are given appointment dates after continuing students have had an opportunity to register. New & Returning students may register using PAWS online registration www.hartnell.edu. Students who miss a registration appointment time may register any day after until the Thursday before the semester begins, or for short-courses, up until the day the course begins.

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.

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
Steps to Enroll at Hartnell College

STEP 1: APPLY

a) Complete and submit an Application for Admission. Apply on-line at www.hartnell.edu or download the PDF Application and submit to the Admissions and Records Office by mail, fax, or in person.
   “If applicable, complete the California Nonresident Tuition Exemption Request.

b) Apply NOW also for Financial Aid, if applicable. Apply on line at www.fafsa.ed.gov or complete the BOGW application in the schedule of classes and mail it in to the Financial Aid Office. Call Financial Aid at (831) 755-6806.

STEP 2: ASSESSMENT AND ORIENTATION

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) There are 2 ways to complete the orientation requirement. Complete the on-line Orientation at www.hartnell.edu/orientation/ or attend an orientation session with an academic counselor. Please contact the Counseling Department at (831) 755-6820 to schedule an appointment. This is highly recommended for students enrolling in 6.0 or more units.

STEP 3: DEVELOP AN EDUCATIONAL PLAN WITH A COUNSELOR

All students should schedule an appointment to meet with a counselor to discuss academic goals and develop an Educational Plan. Call (831) 755-6820 to schedule an appointment.

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

STEP 4: REGISTER

Register using the WEB at www.hartnell.edu. Classes fill quickly so register as early as possible.

Concurrent Enrollment Students in grades less than 9th grade must use In-Person Registration. Please consult the schedule for dates and times.

STEP 5: PAY FEES

Pay all registration fees online by the due dates to avoid being dropped for non-payment.

Please see the payment deadline dates in the current Schedule of Classes.

STEP 6: HARTNELL COLLEGE CATCARD

Visit the Associated Students of Hartnell College Office to obtain or update your CatCard. Present your receipt of payment to the ASHC Office located in Building C, Room 104.

STEP 7: STAY ON TRACK

Follow up with your counselor and/or check your eligibility for Special Student Affairs Programs. Call (831) 755-6820 early in the semester to check on your current progress.

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 will offer automated waitlists beginning Fall 2013. All registration rules still apply when using waitlists. Students will be able to place themselves on a waitlist for closed classes. 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. Students will be notified of registration and fees. 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 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 a fee for enrolling in credit courses as required and set by law.
K-12 Concurrent Enrollment students will have all enrollment fees waived commencing Fall 2013.
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 2013-2014 academic year has been set at $314 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 $283 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 courses. A master list of approved course materials fees is maintained in the appropriate discipline’s administrative office.

Student Services/Activities Fee
The Student Services/Activities Fee & ID Card is a student fee and costs $10.00 (per semester for all students and is charged at all locations. This fee will fund activities and services for students for the entire Hartnell College student body. Part of this fee supports the ASHC Senate (student senate), student clubs, and governance activities. Other services/benefits for card holders are: ASHC scholarships, book lenders, health and educational workshops, recognition awards, cultural workshops and events, merchant discounts such as Monterey-Salinas Transit Fee Fare Zone, free access to Hartnell home sporting events, free access to Hartnell’s Western Stage Regular Season performances, Monterey Bay Aquarium, etc.

Photo identification is required when you use any of the services at Hartnell College. Student identification is required to check out books at Hartnell’s Library and for services from the Admissions & Records Office and Financial Aid Offices.

The Student Services/Activities Fee should accompany your registration payment. The 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 Activity/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 Student Activities Office 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.

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).

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.

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.

Example:
Course is 12.0 Units
Scheduled: is completed by the end of
4-week session 2nd day of session
6-week session 3rd day of session
8-week session 4th day of session

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

UNITS OR GPA REQUIREMENTS
(FOR GOVERNMENTAL SUBSISTENCE)
In order to qualify for full governmental subsistence, students must carry a minimum program of new work as indicated below:
1. Veterans under U.S. Code, Title 38, chapters 30, 31, 32, 33 and 35 (as required by Veterans’ Administration) – 12.0 Units
2. Veterans’ dependents under U.S. Code, Title 38, Chapters 33-35 – 12.0 Units
3. Veterans under the Cal-Vet Bill – 12.0 Units
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
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 met the prerequisite at another college, or completed a placement assessment at another college, they should see a Hartnell College counselor prior to registration to complete a Prerequisite Clearance Form following the procedures below:

1. Student makes an appointment to meet with a counselor for advisement and to begin the process of submitting a Prerequisite Clearance Form.
2. Together, the counselor and student review transcripts/assessment test information, and/or multiple measures. The counselor determines course equivalency, which is indicated on the form.
3. Student and counselor both sign the Prerequisite Clearance Form.
4. Unofficial transcripts, official transcripts or assessment scores are attached to the Prerequisite Clearance form.

- A. If the prerequisite clearance form is documenting other college coursework, the completed form is submitted to the Admissions & Records Office for clearance.
- B. If the prerequisite clearance form is documenting other college assessment placement scores, the completed form is submitted to the Assessment Office for clearance.
- C. If the prerequisite clearance form is for Counseling 21 Orientation Clearance, the form is submitted to the Admissions & Records Office for clearance.

All Prerequisite Clearance Forms require two-working days to process. Students will be able to register by PAWS Web Registration within two-working days of submission.

Please note that Official College/University or 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. The student has documented knowledge and abilities equivalent to those specified in the prerequisite course.
- 2. The College has not made the prerequisite course reasonably available.
- 3. The prerequisite is discriminatory or is being applied in a discriminatory fashion.

PROCEDURES FOR PREREQUISITE CHALLENGE
A student may challenge a prerequisite for the following reasons:
- The student has documented knowledge and abilities equivalent to those specified in the prerequisite course.
- The College has not made the prerequisite course reasonably available.
- The prerequisite is discriminatory or is being applied in a discriminatory fashion.

Student Instructions

Step 1 Pick up 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

Student Affairs has performed an integral function at Hartnell College for over 50 years. 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 the individual and the community.

As a team of well-trained, dedicated professionals, we share a common objective 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 should meet with a counselor before their first semester is completed to formulate a Student Educational Plan (SEP).

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

Matriculation

Matriculation is a process designed to promote student success. It ensures fair and consistent assessment, course placement, and access to campus resources. Matriculation provides the opportunity for students to pursue their educational objectives.

The primary purpose of matriculation is to enhance student success. The matriculation agreement acknowledges responsibility of both the college and the student to attain this objective. All students will participate in some form of matriculation. For the college, the matriculation 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
- Assessment of basic educational skills
- Orientation to the college’s programs, services and policies
- Advisement/counseling
- Appropriate academic and vocational 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/students/staar/.

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.

Disability Services

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 (5) years.

EXEMPTION from Assessment Services

Hartnell College students may be exempt from participation in STAAR* Placement Assessment if they:

• students who have earned an AA/AS degree or more advanced degree;
• 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;
• students who 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;
• students who are enrolling in courses in which English and math are not a prerequisite (IT IS HIGHLY RECOMMENDED THAT ALL STUDENTS TAKE THE PLACEMENT ASSESSMENT);
• 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).
• 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 uses 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:

• students who have earned an AA/AS degree or more advanced degree;
• 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;
• students who 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;
• students who are enrolling in courses in which English and math are not a prerequisite (IT IS HIGHLY RECOMMENDED THAT ALL STUDENTS TAKE THE PLACEMENT ASSESSMENT);
• students who can provide 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;
• students who are enrolling in courses in which English and math are not a prerequisite (IT IS HIGHLY RECOMMENDED THAT ALL STUDENTS TAKE THE PLACEMENT ASSESSMENT);
• 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, with disabilities may arrange for modified placement assessment by calling the Department of Supportive Programs 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:

1. at least fourteen days have passed since the first test (to allow for extra preparation and study), and
2. 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 to Hartnell are highly recommended to attend an orientation preferably before or during their first semester, unless determined to be exempt. (See Exemptions to Orientation).

Hartnell College counselors facilitate the orientation. Topics include students’ rights and responsibilities, attendance policies, in-depth student services guidance, information on vocational certificates and degrees and transfer to four-year institutions. The counselor will also advise students on course selections and write an individual first semester educational plan.

Orientations are available throughout the year. Please contact the Counseling Office at (831) 755-6820 to schedule an Orientation.

Academic Planning

All first-time Hartnell College students should 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.

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 Matriculation 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 Center/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.

Hartnell’s Transfer Center

The Transfer Center provides information and offers workshops on choosing a college, transfer admission requirements, completing application essay, and financial aid. Transfer 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 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 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 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.

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 qualify for transfer to the college of their choice by maintaining 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 an institution as a junior. Check with a Hartnell Counselors 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 Center and Counseling Department sponsors Transfer Day/College Night each Fall. Call (831) 759-5007 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 a 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 (FAFSA) 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 (FAFSA) 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, work-study, and/or loans.

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, GED, or pass a Federal recognized “Ability to Benefit Test” administered by the institution.

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 2013-2014 year awards will range from $1113-$5645.

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.

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.

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.californiaact.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.

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 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 appear 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,” “M,” “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.

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 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.

For the full SAP Policy and Appeal process for 2013-2014, please visit the Financial Aid website at www.hartnell.edu/financial_aid;
Scholarships

Scholarships are available for new, continuing, and transfer students who show academic interest, need, financial achievement, a desire to succeed, and community or campus involvement. 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/financial_aid/scholarships

How to Apply for Scholarships

1. Complete a Hartnell College Scholarship Application.
2. Write a one-page personal statement that includes the applicant’s personal and academic goals and financial need, including any 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 or counselor.
4. Submit a transcript. Applicant’s Hartnell transcripts will be obtained by the Financial Aid & Scholarship Office.

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, banners, campus bulletin boards, and the Hartnell College website. No applications will be accepted after the posted deadline.

Applications will be reviewed by a committee in 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/financial_aid/scholarships

Extended Opportunity Programs and Services (EOPS)

The Extended Opportunity Program and Services (EOPS) is designed to recruit, retain, graduate, and/or transfer educationally disadvantaged, low income, and underrepresented students who have chosen to continue their education. Students receive assistance with their admission, registration, financial aid, book purchases, curriculum planning, academic and personal counseling, and other support services from counselors, administrative staff, and a team of well-trained peer advisors.

A candidate for EOPS is defined as an individual who has the potential to perform satisfactorily at the college level but who has not been able to realize that potential because of economic, social, or educational reasons. The following criteria are used to determine for eligibility in the EOPS program:

1. Successfully filed a financial aid application (FAFSA – Free Application for Federal Student Aid)
2. Enrolled in at least 12 units
3. Verification of family or individual yearly income based on BOGW B income criteria
4. Determined as educationally disadvantaged by the EOPS Program
5. Under 70 units

Students interested in being considered for EOPS should visit the EOPS website, office or call (831) 755-6860.

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, books, 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.

CalWORKs:

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;
- Placement with Hartnell College Child Development Centers (based on space availability);
- 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;
- Local and state labor market information for informed decision making;
- Access to the Job Bank;
- Subsidized training through the CalWORKs 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

The Career Center 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 class or workshop by scheduling an appointment with a career advisor.

Assessments that measure an individual’s interest, aptitudes, personality traits, and work values are available. Assessments must be scheduled through a counselor.

Staff are available to assist students with a variety of career related services and activities. The Eureka California Career Information System, available through the Career Center, provides up-to-date computerized labor market and educational information.

For more information, call the Career Center at (831) 755-6007.
High School Equivalency Program (HEP)

HEP is a program designed to assist migrant and seasonal field workers and their immediate family members to obtain a GED 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. The program is funded by the US Department of Education, Secondary Education-Office of Migrant Education.

The services include:
- GED 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
Phone: (831) 770-7070
Email: HEP@hartnell.edu

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 eligible dependents in planning educational programs and maintaining compliance with Veterans Administration regulations.

Certification to the Veterans Administration for educational benefits and admissions enrollment in the College are separate functions. It is important that VA beneficiaries notify both the Admissions & Records Office and the Financial Aid Office 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.) (831) 755-6909

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 instlstud@hartnell.edu. More information about the International Student Program is online at www.hartnell.edu/students/international.

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 a completed 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.

Further questions can be addressed to the Financial Aid office which is located in Building B, Room 110, or call (831) 755-6806.

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

Additionally, DSPS offers instruction or courses designed to address the needs of students with disabilities:

- Learning Skills Courses
- Adaptive PE
- American Sign Language Instruction

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/dspss.

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

For Adaptive PE, contact Melissa Stave in Building G, Room 144 or (831) 755-6876 or email at mstave@hartnell.edu.
STUDENT AFFAIRS

TRIO/Student Support Services Program

The TRIO Student Support Services Program is federally funded student retention program for first generation and/or low-income students.

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 first-year student orientation, counseling, tutoring, transfer assistance, financial aid and scholarship assistance; academic and personal advising, peer mentoring, cultural enrichment activities, and field trips to universities.

To meet TRIO Eligibility Guidelines, TRIO students must:
- below-income and/or first-generation college students (disabled students can qualify if they are low income);
- be a US citizen or legal resident;
- interested in transferring to a four-year institution;
- have an academic need and a GPA of 2.0 or higher; and
- be educationally disadvantaged according to the federal guidelines.

For more information and/or an appointment, call, email, or stop by the TRIO Student Study Center located in Building A, Room 147, (831) 759-6013.

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

For more information, visit us online at: http://www.hartnell.edu/ssspp/

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

Associated Students of Hartnell College

The Associated Students of Hartnell College (ASHC) is the college’s officially recognized student government. Membership of the Associated Students is open to all students who are currently enrolled at Hartnell College.

The goal of the ASHC is to promote efforts into facilitating communication and leadership among students, faculty, the administration and the community. The ASHC manages the affairs of student life and encourages student participation in social and cultural events. It provides support to student organizations and student representation on campus-wide shared governance committees.

The ASHC office is located in Building C, Room 101. For more information, call (831) 755-6825.

Student Clubs

Funded by the ASHC, student organizations and clubs provide an opportunity for students to share common interests and new experiences beyond the classroom.

Our clubs which are recognized by the college, campus organizations including honor societies, service and religious organizations, ethnic/multicultural groups, and departmental and special interest groups. These groups offer opportunities for social life and contribute to the development of student leadership.

For information about an existing club or about starting a new club, please stop by the Student Life Office located in the College Center, Building C, Room 101 or call (831) 755-6825.

MESA (Mathematics, Engineering, Science Achievement)

The MESA Program at Hartnell provides a wide range of academic support programs and activities for students who intend to major in science, technology, engineering, or math (STEM) and who intend to transfer to a four-year institution to pursue course work in a STEM area.

WHAT DOES MESA OFFER?
- MESA Student Center in MER30 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;
- Workshops on scholarships, internships and financial aid;
- Field trips to universities, science museums, industries, and research centers; and
- Book check-out program.

If you are interested in joining the program and would like to pick up an application, drop by MER30, and learn more about the program.

ACADEMIC REQUIREMENTS

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 three-year education plan.

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

Education Criteria:
1. First-generation college student
2. Attended federally designated high school
3. Under 24 years old and living independently
4. 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
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>GRADE 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>

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:

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.

Grade Point Average
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, a “C” in a class worth three 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:

\[
\begin{align*}
4 \text{ units of B} & \times 3 \text{ points} = 12 \text{ grade points} \\
3 \text{ units of A} & \times 4 \text{ points} = 12 \text{ grade points} \\
2 \text{ units of C} & \times 2 \text{ points} = 4 \text{ grade points} \\
3 \text{ units of F} & \times 0 \text{ points} = 0 \text{ grade points} \\
1 \text{ unit of B} & \times 3 \text{ points} = 3 \text{ grade points}
\end{align*}
\]

13 total units attempted = 31 total grade points

31 Grade Points = 2.38 Average
13 Total Units Attempted = (or a 2.38 GPA)

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.
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" 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 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 "P." 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.

Grade Reports
Hartnell College does not issue final grade reports each semester. Semester grades are generally available three weeks from the last date 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:
1. Access PAWS for students at www.hartnell.edu. Students may print their own grade reports.
2. Stop by the Admissions & Records Office with a picture ID to obtain a printed copy of semester grades.

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 $4 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/admissions/transcripts.html 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 $10 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.
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.
   a. If there are any questions about the grade change form, the Dean of Enrollment Services or designee will contact the faculty member immediately.
6. The pink copy of the grade change form will be mailed to the student
7. The yellow copy of the grade change form will be put into the student's academic record.

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.

Hartnell College Catalog/2013-14
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.

Course Repeat Policy Update

The Hartnell College Course repetition policy has now changed significantly. This could have an impact on many students and it is important that you understand this change as you select your courses. Students may no longer enroll in the same course more than three times at Hartnell College. Please note that “current enrollments” in all courses will now be calculated towards this enrollment maximum. As an example, if you previously earned a “W” in Math 123, are currently enrolled in Math 123 this Spring and are now attempting to take Math 123 one more time in Summer 2013, this would be considered your third enrollment and subject to approval from Counseling.

1st enrollment in a course

If you withdraw (receive a “W”) or don’t pass the course, this is called your first “attempt” at the course.

This is your first of three attempts/enrollments. Before you decide to drop, remember that you only have two possible additional opportunities to complete this course.

2nd enrollment in the course

This is called your “first repetition” of the same course. The system will allow you to enroll on your own.

Be sure you are prepared to complete the course successfully this time. This will be your last opportunity to enroll in the course without prior authorization from Counseling!

3rd enrollment in the same course

This is called your “second repetition” of the same course. You cannot enroll in the course this time without first meeting with a counselor to submit a Course Repetition Form.

Before being allowed to enroll in the course a third time, you may be advised by the Counselor to re-take the placement assessment to determine if you have appropriate skills to be successful in the course.

The course repetition policy/procedures are still under review by the CA Community College Chancellor’s Office. Please consult the current class schedule for the most up-to-date information.

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 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.
- 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. A non-refundable audit fee of $15.00 per unit will be payable at the time of enrollment as an auditor. 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.

Auditing Procedures

1. A prospective auditor will bring the “Petition to Audit” form to the instructor at the conclusion of the add/drop period.
2. If the instructor approves, s/he signs the form.
3. The auditor then secures the signature of an appropriate area dean.
4. The auditor returns the completed petition to Admission and Records.
5. The auditor will be required to pay a non-refundable audit fee of $15.00 per unit, payable immediately after registering at the Cashier’s Office, and will be charged for all instructional materials.
6. The auditor will give the yellow copy of the petition to Audit form to the instructor to indicate that the auditor has paid the audit fee.

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.
   - 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.
10. After completion of the examination, the instructor will submit the student’s final grade on PAWS and complete the Examination Certification portion of the petition and return it to the Vice President of Academic Affairs with the original exam for their signature.
11. The Vice President of Academic Affairs will then forward the signed petition back to Admissions and Records for their records.

 ATTENDANCE POLICY

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.

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. 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 progress in that class; therefore, an “excused” absence is no less serious than “unexcused.” Participation in curricular and extra-curricular college activities is acknowledged to be an integral part of a student’s total educational experience. Prior approval from the instructor is necessary for this participation not to be considered an absence.
3. 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,” “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, 55007.
ACADEMIC POLICIES

Multiple and Overlapping Enrollments BP 4226 CON’T

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 the Conflicting Course Petition and state on the Petition exactly when the overlapping time will be scheduled.
- The Dean of Enrollment Services 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.

PROBATION AND DISMISAL

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 “P.”

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 pattern. 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 Vice President of Student Affairs.

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 Vice President of Student Affairs for specific consideration. 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 unit 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 waiver.
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 approved.
5. If the waiver is denied, the counselor shall refer the student to appropriate adult education programs or community services.

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 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.

Solomon Amendment

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

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 be granted and assured all rights and procedures inherent in the above, and Hartnell College shall make a comprehensive effort to ensure that all students are informed of and, as applicable, assisted with these procedures.

The general procedures for a student with a grievance to follow are fully described in the Student Rights & Responsibilities Handbook. Copies of the Student Rights & Responsibilities Handbook are available in the Office of Student Affairs and on Hartnell’s website.

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 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 in a timely manner.

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 footgear.

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

Policy on Cheating

Dis respect 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 Student Affairs and provide them with the related documentation for record of the violation. The Vice President of Student 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, the student should contact the Vice President of Student Affairs within five working days of notification of the disciplinary action.

Hartnell College Catalog/2013-14
ACADEMIC POLICIES

CODE OF STUDENT CONDUCT

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 Chapter 2 (commencing with Section 11053) of Division 10 of the California Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind on District property or at events sponsored by the District; 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. Failure to pay just debts such as fines or loans, and failure to return borrowed property.

8. Gambling in any form.

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

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

11. 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.

12. Hazing or any acts of discrimination that injures, degrades, or disgrace another person or group.

13. 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.

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

15. Interference with the normal operations of the College (e.g., teaching, research, administration, disciplinary procedures, pedestrian, or vehicular traffic, or other College activities, including its public service functions or other authorized activities on College premises).

16. Failure to comply with lawful directions of College officials, faculty, staff, or campus safety officers who are acting within the scope of their duties.

17. Violation of District policies or College regulations concerning the registration of student organizations, the use of District facilities, or the time, place, and manner of public expression.

18. Using or consulting sources or materials, including electronic devices, during an examination unless expressly authorized by the instructor or as a permitted accommodation.

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

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

21. Unauthorized entry upon or use of College facilities.

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

23. Engaging in expression which is obscene; libelous, or slanderous; or which so incites students as to create a clear and present danger of the commission of unlawful acts on College premises, or the violation of lawful District administrative procedures, or the substantial disruption of the orderly operation of the District.

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

25. Transmission, copying, or use of any material in violation of any United States or state regulation is prohibited. This includes, but is not limited to, copyrighted material, threatening or obscene material, or material protected by trade secrets. Downloading, viewing, storing or printing files or messages that are profane, obscene, or that use language that is offensive or degrading to others is not allowed.

26. 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 typed class notes, except as permitted by any District policy or administrative procedure.

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

ANIMAL CONTROL

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

2. Students not observing this regulation will be in violation of the Student Code of Conduct and may have sanctions enforced as a result.
HARTNELL COLLEGE STUDENT RIGHT-TO-KNOW INFORMATION

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. The information presented here shows the academic outcomes for three years for all first-time, full-time students who were first enrolled at Hartnell College in fall 2001 with educational goals of earning a degree, earning a certificate, or transferring to a four-year institution. Please note that this cohort represents only 1% of all students enrolled at Hartnell College during the fall 2001 semester. Under SRTK criteria, program completion is defined as earning a degree, a certificate or completing 56 transferable units with a grade point average of 2.0 or higher within the three years (fall 2001 through spring 2004). It excludes all part-time students and those students who have one of the following educational goals: improving basic skills, upgrading job skills, maintaining licenses, or personal enrichment.

The table below provides the completion and transfer rates for Hartnell College and the averages of all California community colleges for comparison.

The table shows that Hartnell College’s official SRTK completion rate for the 2002 cohort is 49%. The statewide average for completion is 36%. The official SRTK transfer rate for Hartnell is 24% and the state average is 29.6%. However, this figure substantially under represents the success of Hartnell College in preparing its students for transfer to four-year institutions. The SRTK methodology only allows each student to be counted once, even though a student can complete both a degree and transfer to a four-year institution. Students who complete both a degree and also transfer are counted only in the completion category but are not counted in the transfer category.

The SRTK process tracks other student outcomes besides completion and transfer. At the end of the three year tracking period, each student is placed in one of five categories: completion, transfer, still enrolled, left in good standing, or left in poor academic standing. In addition to the completing and transferring, which account for 54% of the students in the SRTK cohort, another 8% left the college in good standing and 29% were still enrolled. Ten percent of the students left the college under other circumstances. This means that 84% of the students in this cohort have achieved some degree of academic success while at Hartnell College.

<table>
<thead>
<tr>
<th>Group</th>
<th>SRTK Completion Rate (including Transfers)</th>
<th>SRTK Transfer Rate (Excluding Completers)</th>
<th>Combined Completion and Transfer Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hartnell College</td>
<td>49%</td>
<td>24%</td>
<td>43%</td>
</tr>
<tr>
<td>California Community College Average</td>
<td>36%</td>
<td>21%</td>
<td>46%</td>
</tr>
</tbody>
</table>

1. The cohort follows first-time students for three years who first enrolled in fall 2001 and continued through spring 2004.
2. SRTK Completions is defined as earning a degree, certificate or completing 56 transferable units with a grade-point average of 2.0 or higher within three years.
3. SRTK Transfer Rate refers to any student who transferred to another two-year or four-year institution without completing a degree, certificate, or becoming transfer prepared within three years.
4. Combined Transfer Rate represents the percent of students in the SRTK cohort who either completed a degree, certificate, became transfer prepared, or transferred to a UC or CSU within three years.

This Student-Right-To-Know Program Completion information is also available in the Hartnell College Schedule of Classes and in the College Catalog.
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.

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 which 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 via Internet 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 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 and to confirm how each course will be accepted at a particular four-year institution.
INSTRUCTIONAL PROGRAMS

TUTORIAL CENTER
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, applications, and/or Drop-in Tutoring, Supplemental Instruction, and Workshop schedules, visit our web site at http://www.hartnell.edu/academics/lsc/tutorial_center.html.

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 advanced 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 – 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 student/athlete must pass 24 units prior to the next season of the sport 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.
## Associate Degree (AA or AS) Programs

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.

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### HARTNELL COLLEGE DEGREES AND CERTIFICATES

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<tr>
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<th>Associate Degree</th>
<th>Certificate</th>
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Hartnell College Catalog/2013-14
ASSOCIATE DEGREE REQUIREMENTS

GENERAL INFORMATION - 2013-2014 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 noted 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 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 MAT123, 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 42 of this catalog for additional information.
# ASSOCIATE DEGREE GENERAL EDUCATION COURSE LIST 2013-2014

## NATURAL SCIENCES (3 Units)

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<td>ABT92</td>
<td>Plant Science</td>
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<td>ANT1</td>
<td>Physical Anthropology</td>
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<td>AST1</td>
<td>Introduction to Astronomy</td>
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<td>Fundamental Biological Concepts</td>
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<td>General Zoology</td>
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<td>General Botany</td>
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<td>Introductory Human Anatomy and Physiology</td>
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## SOCIAL AND BEHAVIORAL SCIENCES (3 Units)

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<td>ANT15</td>
<td>North American Indians</td>
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## SOCIAL AND BEHAVIORAL SCIENCES (continued)

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HUMANITIES
(3 Units)

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<td>Hartnell Chorale-Classic/Romantic Emphasis</td>
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<td>Hartnell Chorale-20th Century Emphasis</td>
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<td>MUS23.5</td>
<td>Hartnell Chorale-21st Century Emphasis</td>
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<td>THA190</td>
<td>Proscenium Stage Lighting, Sound and Rigging Techniques</td>
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<td>THA192</td>
<td>Thrust &amp; Three-Quarter Stage, Light, Sound and Rigging Techniques</td>
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ASSOCIATE DEGREE REQUIREMENTS

ETRNIC GROUPS IN THE UNITED STATES
(3 Units)

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<td>COM35</td>
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<td>SPA35</td>
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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)

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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 course(s) 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 Plane Geometry
   - MAT122 Plane Geometry
   - MAT123 Intermediate Algebra
   - MAT123L4 Intermediate Algebra Lab 4

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
   - BUS5 Introduction to Organizational Communication

   COM1 Introduction to Public Speaking
   - COM3 Introduction to Communication
   - COM5 Introduction to Organizational Communication
   - COM8 Interpersonal Communication
   - COM20 Argumentation and Debate
   - COM35 Intercultural Communication

   CSS1 Intro to Comp Science and Programming Fundamentals
   - CSS2A Object Oriented Programming
   - CSS2B Data Structures and Algorithms
   - CSS4 Introduction to Scientific Programming
   - CSS31 Database Management
   - CSS 43 Computer Systems and Information Literacy
   - CSS122 Computer Security Principles
   - CSS123 Network Security Principles

   COU1 Student Success Seminar
   - COU28 Student Skills for Success: Career Development
   - COU29 Student Skills for Success: Learning Strategies
   - COU27 Life Planning
   - COU35 Intercultural Communication

   ENG1B College Literature and Composition
   - ENG1B College Literature and Composition/Multicultural Perspective

   ENG2 Critical Thinking and Writing
   - ENG10 Introduction to Linguistics

   FRN1 Elementary French 1
   - FRN2 Elementary French 2
   - FRN3 Intermediate French

   JPN10 Japanese Language & Culture I
   - JPN11 Japanese Language & Culture II

   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 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:

Communication Skills
Students will demonstrate reading comprehension and expository writing skills at a college level.

Information Skills
Students will define information needs, access information efficiently and effectively, evaluate information critically, and use information ethically.

Critical Thinking/Problem solving
Students will use quantitative and logical reasoning to analyze information, evaluate ideas, and solve problems.

Global Awareness
Students will demonstrate knowledge of global interdependence; others’ values, cultures and beliefs; and the ability to describe one’s own cultural heritage.

Aesthetic Appreciation
Students will critically reflect upon works of visual and performing arts in a diverse cultural context.

Personal Growth and Responsibility
(a) Students will select lifestyle choices that promote physical and mental well-being.
(b) Students will demonstrate the importance of being an informed, ethical, and active citizen in their community and the world.
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:

Step 1. Selecting a career goal
Step 2. Selecting an appropriate major to meet your career goal
Step 3. Selecting an appropriate college/university
Step 4. Planning and completing an appropriate transfer program
Step 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 which they wish to transfer, they should consult the respective catalog 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 are baccalaureate level. 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 nearly every 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 stands 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. 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.36. Additional degrees 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://www.hartnell.edu/academics/catalogs/. 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.
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](http://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:
  a. Two transferable college courses (3 semester units
     or 4-5 quarter units each) in English composition;
     and
  b. One transferable college course (3 semester units
     or 4-5 quarter units) in Mathematical Concepts and
     Quantitative Reasoning; and
  c. 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](http://www.universityofcalifornia.edu/apply).
CSU GENERAL EDUCATION

CALIFORNIA STATE UNIVERSITY SYSTEM – GENERAL EDUCATION

The California State University provides California Community College transfer students a general education pattern CSU-GBE for transfer to fulfill all lower division general education requirements. The CSU-GBE is accepted at all California State University campuses. The CSU-GBE 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.

General Education-Breadth Requirements for California State University 2013-14

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.

<table>
<thead>
<tr>
<th>Area A: Communication &amp; Critical Thinking</th>
<th>Area B: Physical Universe and Its Life Forms</th>
<th>Area B: Physical Universe (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(9 Units Required)</td>
<td>(9 Units Required)</td>
<td></td>
</tr>
<tr>
<td>Choose one course from each sub-group</td>
<td>Choose one course from each sub-group</td>
<td></td>
</tr>
<tr>
<td>A1 ORAL COMMUNICATION</td>
<td>B1 PHYSICAL UNIVERSE</td>
<td>PHY2A College Physics I</td>
</tr>
<tr>
<td>(3 units required)</td>
<td>(3 units required)</td>
<td>PHY2B College Physics II</td>
</tr>
<tr>
<td>COM1 Introduction to Public Speaking</td>
<td>B1 PHYSICAL UNIVERSE</td>
<td>PHY4A General Physics/Mechanics</td>
</tr>
<tr>
<td>COM3 Intro. to Communications</td>
<td></td>
<td>PHY4B General Physics/Electricity &amp; Magnetism</td>
</tr>
<tr>
<td>COM5/ BUS5 Intro. to Organizational</td>
<td></td>
<td>PHY4C General Physics/Waves, Heat, Light and Modern Physics</td>
</tr>
<tr>
<td>COMM20 Argumentation and Debate</td>
<td></td>
<td>PHY10 Introduction to Physics</td>
</tr>
<tr>
<td>A2 WRITTEN COMMUNICATION</td>
<td>ABT90 Soil Science</td>
<td></td>
</tr>
<tr>
<td>(3 units required)</td>
<td>AST1 Introduction to Astronomy</td>
<td></td>
</tr>
<tr>
<td>ENG1A College Composition and Reading</td>
<td>CHM1A General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>ENG1B College Literature and Composition</td>
<td>CHM1B General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>A3 CRITICAL THINKING</td>
<td>CHM12A Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>(3 units required)</td>
<td>CHM12B Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>ENS2 Critical Thinking and Writing</td>
<td>CHM22 The Science of Chemistry</td>
<td></td>
</tr>
<tr>
<td>COMM20 Argumentation and Debate</td>
<td>CHM23 Organic and Biological</td>
<td></td>
</tr>
<tr>
<td>PHL15 Critical Thinking and Logic</td>
<td>Chemistry for Health Sciences</td>
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</tr>
<tr>
<td></td>
<td>CHM60 Principles of Chemistry</td>
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<tr>
<td></td>
<td>GEG1 Introduction to Geography: Physical Elements</td>
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<tr>
<td></td>
<td>GEL1 Dynamic Earth</td>
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<tr>
<td></td>
<td>GEL2 Introduction to Geology</td>
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</tr>
<tr>
<td></td>
<td>GEL6 History of the Earth</td>
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<tr>
<td></td>
<td>GEL25 Environmental Geology</td>
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</tr>
<tr>
<td></td>
<td>GEL36 California Geology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MET1 Meteorology-Weather and Climate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OCN1 Oceanography</td>
<td></td>
</tr>
</tbody>
</table>

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.
### Area B: Physical Universe (continued)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>B3 LABORATORY ACTIVITY</td>
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</tr>
<tr>
<td>ABT90</td>
<td>Soil Science</td>
</tr>
<tr>
<td>ABT92</td>
<td>Plant Science</td>
</tr>
<tr>
<td>AST1L</td>
<td>Astronomy Laboratory</td>
</tr>
<tr>
<td>BIO1</td>
<td>Fund. Biological Concepts</td>
</tr>
<tr>
<td>BIO2</td>
<td>General Zoology</td>
</tr>
<tr>
<td>BIO3</td>
<td>General Botany</td>
</tr>
<tr>
<td>BIO5</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>BIO6L</td>
<td>Physiology Laboratory</td>
</tr>
<tr>
<td>BIO7</td>
<td>General Microbiology</td>
</tr>
<tr>
<td>BIO10</td>
<td>General Biology</td>
</tr>
<tr>
<td>BIO11</td>
<td>Introductory Human Anatomy</td>
</tr>
<tr>
<td>BIO20</td>
<td>Field Biology/Natural Science</td>
</tr>
<tr>
<td>BIO27</td>
<td>Principles of Microbiology</td>
</tr>
<tr>
<td>BIO30</td>
<td>Marine Biology</td>
</tr>
<tr>
<td>BIO47</td>
<td>Ecology</td>
</tr>
<tr>
<td>BIO48L</td>
<td>Environmental Science Lab</td>
</tr>
<tr>
<td>CHM1A</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHM1B</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHM12A</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHM12B</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHM22</td>
<td>The Science of Chemistry</td>
</tr>
<tr>
<td>CHM23</td>
<td>Organic and Biological Chemistry for Health Sciences</td>
</tr>
<tr>
<td>CHM60</td>
<td>Principles of Chemistry</td>
</tr>
<tr>
<td>GEL1</td>
<td>Dynamic Earth</td>
</tr>
<tr>
<td>GEL6</td>
<td>History of the Earth</td>
</tr>
<tr>
<td>PHY2A</td>
<td>College Physics I</td>
</tr>
<tr>
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<tr>
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</tr>
<tr>
<td>PHY4C</td>
<td>General Physics/ Waves, Heat, Light, and Modern Physics</td>
</tr>
<tr>
<td>PHY10</td>
<td>Introduction to Physics</td>
</tr>
</tbody>
</table>

### Area C: Arts, Literature, Philosophy & Foreign Language (9 Units Required)

Choose at least one course in the arts and one in humanities.

#### C1 ARTS (ART, DANCE, THEATRE, MUSIC PHOTOGRAPHY)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART1A</td>
<td>Art History Survey I</td>
</tr>
<tr>
<td>ART1B</td>
<td>Art History Survey II</td>
</tr>
<tr>
<td>ART1W</td>
<td>Women in Art</td>
</tr>
<tr>
<td>ART10</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td>ENG50</td>
<td>Film Appreciation To 1960</td>
</tr>
<tr>
<td>ENG51</td>
<td>Film Appreciation 1960-Present</td>
</tr>
<tr>
<td>MUS1A</td>
<td>Music Appreciation-Historical Perspective</td>
</tr>
<tr>
<td>MUS1B</td>
<td>Music Appreciation-Genre</td>
</tr>
<tr>
<td>MUS2</td>
<td>Music Fundamentals</td>
</tr>
<tr>
<td>MUS5</td>
<td>Ethnic Musics in the U.S.</td>
</tr>
<tr>
<td>MUS6</td>
<td>Hawaiian Music</td>
</tr>
<tr>
<td>MUS7</td>
<td>Jazz Appreciation</td>
</tr>
<tr>
<td>MUS55A</td>
<td>Harmony I</td>
</tr>
<tr>
<td>MUS55B</td>
<td>Harmony II</td>
</tr>
<tr>
<td>MUS552A</td>
<td>Harmony III</td>
</tr>
<tr>
<td>MUS552B</td>
<td>Harmony IV</td>
</tr>
<tr>
<td>PHO1</td>
<td>Introduction to Photography</td>
</tr>
<tr>
<td>THA1</td>
<td>Introduction to Theatre</td>
</tr>
<tr>
<td>THA3</td>
<td>History of Theatre</td>
</tr>
</tbody>
</table>

#### C2 HUMANITIES (LITERATURE, PHILOSOPHY, FOREIGN LANGUAGE)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL2</td>
<td>American Sign Language II</td>
</tr>
<tr>
<td>ASL3</td>
<td>American Sign Language III</td>
</tr>
<tr>
<td>ENG1B</td>
<td>College Literature &amp; Comp.</td>
</tr>
<tr>
<td>ENG10</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>ENG17</td>
<td>The Contemporary Shakespeare</td>
</tr>
<tr>
<td>ENG22</td>
<td>Studies in Poetry</td>
</tr>
<tr>
<td>ENG24</td>
<td>The Short Story</td>
</tr>
<tr>
<td>ENG26</td>
<td>Chicano Literature</td>
</tr>
<tr>
<td>ENG31</td>
<td>Beginning Creative Writing</td>
</tr>
<tr>
<td>ENG32</td>
<td>Intermediate Creative Writing</td>
</tr>
<tr>
<td>ENG33</td>
<td>Advanced Creative Writing</td>
</tr>
<tr>
<td>ENG41</td>
<td>Art of Steinbeck</td>
</tr>
<tr>
<td>ENG44A</td>
<td>World Literature I</td>
</tr>
<tr>
<td>ENG44B</td>
<td>World Literature II</td>
</tr>
<tr>
<td>ENG46A</td>
<td>Survey of British Literature I</td>
</tr>
<tr>
<td>ENG47A</td>
<td>Survey of American Literature I</td>
</tr>
<tr>
<td>ETH12</td>
<td>Chicano Cinema</td>
</tr>
<tr>
<td>ETH25</td>
<td>American Indian Literature</td>
</tr>
<tr>
<td>FRN1</td>
<td>Elementary French 1</td>
</tr>
<tr>
<td>FRN2</td>
<td>Elementary French 2</td>
</tr>
<tr>
<td>FRN3</td>
<td>Intermediate French</td>
</tr>
</tbody>
</table>

### Area D: Arts, Literature, Philosophy & Foreign Language

Choose at least one course in the arts and one in humanities.

#### C3 ARTS (ART, DANCE, THEATRE, MUSIC PHOTOGRAPHY)

<table>
<thead>
<tr>
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<td>ART1A</td>
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<td>History of Theatre</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 21 or History 40 or History 17A or History 17B) to satisfy the U.S. History requirement (US1);
2. AND one course
3. (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 D. Hartnell will certify both of these courses toward satisfying the Area D requirement.
## Area D: Social, Political & Economic Institutions
(9 Units Required)

No more than two courses may be counted from any single classification.

### D1 ANTHROPOLOGY AND ARCHEOLOGY

- ANT1 Intro. to Anthropology: Physical
- ANT2 Intro. to Anthropology: Cultural
- ANT3 Introduction to Archeology
- ANT10 California Indians
- ANT15 North American Indians
- ANT20 Cultures of Mexico

### D2 ECONOMICS

- BUS32 Introduction to Business
- ECO1 Principles of Economics-Macro
- ECO5 Principles of Economics-Micro

### D3 ETHNIC STUDIES

- EDU1 Multicultural Perspectives of Education
- ETH1 Introduction to Ethnic Studies
- ETH2 Chicano Leadership
- ETH3 Chicanos in American Society
- ETH4 Chicano Culture
- ETH5 Chicano Politics and the American Political System
- ETH6 La Chicana
- ETH25 American Indian Literature
- HIS4A Race and Ethnicity in American Hist A
- HIS4B Race and Ethnicity in American Hist B
- POL5 Chicano Politics and the American Political System
- PSY36 Psychology of “La Mujer”

### D4 GENDER STUDIES

- ETH6 La Chicana
- HED7 Women’s Health
- PSY36 Psychology of “La Mujer”
- PSY42 Psychology of Women

### D5 GEOGRAPHY

- GEG1 Introduction to Geography: Physical Elements
- GEG2 Introduction to Geography: Cultural Elements
- GEG10 Geography and World Affairs: A Regional Approach
- HIS4A Western Civilization A

### D6 HISTORY

- HIS4A Western Civilization A
- HIS4B Western Civilization B
- HIS5A World History A
- HIS5B World History B
- HIS6 History of Mexico
- HIS10 History of California
- HIS17A United States A
- HIS17B United States B
- HIS21 Social and Political Histories of the United States
- HIS46A Race and Ethnicity in American Hist A
- HIS46B Race and Ethnicity in American Hist B
- HIS47 Religions of the World
- HIS48 African American History and Culture
- HIS49A Chicano History A
- HIS49B Chicano History B
- HIS51 Women in History

### D7 INTERDISCIPLINARY SOCIAL OR BEHAVIORAL SCIENCE

- COM8 Interpersonal Communication
- COM35 Intercultural Communication
- COU35 Intercultural Communication
- ECE2 Home, School & Community Relations
- EDU1 Multicultural Perspectives of Education
- PETH5 Sport in Society
- PSY36 Psychology of “La Mujer”
- PSY42 Psychology of Women

### D8 POLITICAL SCIENCE, GOVERNMENT, AND LEGAL INSTITUTIONS

- ADJ3 Concepts of Criminal Law
- ETH5 Chicano Politics and the American Political System
- HIS21 Social and Political Histories of the United States
- POL1 American Political Institutions
- POL2 Contemporary Governments Abroad
- POL3 International Relations
- POL5 Chicano Politics and the American Political System
- POL6 Introduction to Contemporary Political Thought

### D9 PSYCHOLOGY

- PSY2 General Psychology
- PSY6 Social Psychology
- PSY8 Research Methods in Psychology
- PSY12 Theories of Personality
- PSY14 Child Psychology
- PSY15 Human Sexuality
- PSY22 Abnormal Psychology
- PSY25 Developmental Psychology-Lifespan
- PSY33 Personal and Social Adjustment
- PSY41 Psychology of Human Relations

### Area E: Lifelong Understanding and Self Development
(3 Units Required)

### E1 INTEGRATED ORGANISM

- BIO42 Human Biology
- COU1 Student Success Seminar
- COU23 Student Skills for Success: Career Development
- COU27 Life Planning
- FCS14 Child Development
- FCS23 Nutrition
- GEL25 Environmental Geology
- HED2 Health Education
- HED6 Multicultural Health Beliefs
- HED7 Women’s Health
- PETH1 Introduction to Kinesiology
- PETH4 Mental Skills for Sports Performance
- PSY14 Child Psychology
- PSY15 Human Sexuality
- PSY25 Developmental Psychology-Lifespan
- PSY33 Personal and Social Adjustment
- PSY36 Psychology of “La Mujer”
- PSY41 Psychology of Human Relations
- PSY42 Psychology of Women
- SOC5 Introduction to Social Problems
- SOC 41 Marriage and the Family
INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (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.

Intersegmental General Education Transfer Curriculum (IGETC) for the University of California or California State University 2013-14

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 2 Critical Thinking & Writing

Group C: Oral Communication (3 units required) (CSU Only)
COM 1 Introduction to Public Speaking
COM 3 Intro. to Communication
COM 20 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

Choose 3 courses (9.0 semester units or 12-15 quarter units), with at least one course from the Arts and one course from the Humanities.

Art Courses

ART 1A Art History Survey I
ART 1B Art History Survey II
ART 1W Women in Art
ART 10 Art Appreciation
ENG 51 Film Appreciation 1960 to the Present
MUS 1A Music Appreciation-Historical Perspective
MUS 1B Music Appreciation-Genre Perspective
MUS 2 Music Fundamentals
MUS 3 Music Fundamentals
MUS 4 Music Fundamentals
MUS 5 Ethnic Musics in the United States
MUS 6 Hawaiian Music
MUS 50A Harmony I
MUS 50B Harmony II
MUS 52A Harmony III
MUS 52B Harmony IV
PHO 1 Intro. to Photography
THA 1 Intro. to Theatre
THA 3 History of Theatre

Humanities Courses

ENG 1B College Literature and Composition
ENG 10 Introduction to Linguistics
ENG 17 The Contemporary
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 Film Appreciation to 1950
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 48 African-American History and Culture
HIS 49A Chicano History A
HIS 49B Chicano History B
HIS 51 Women in History
JPN 11 Japanese Language and Culture II
MUS 7 Jazz Appreciation
PHL 2 Introduction to Philosophy
PHL 6 Introduction to Philosophy: Greek to Medieval Period
PHL 8 Introduction to Philosophy: Renaissance to 20th Century
PIL 10 Ethics
***SPA 3 Intermediate Spanish
***SPA 3S Intermediate Spanish
***SPA 4 Intermediate Spanish
***SPA 4S Intermediate Spanish
SPA 35 Literatura chicana

***SPA 3 and SPA 3S combined, maximum credit one course; and, SPA 4 and SPA 4S combined, maximum credit one course.
## IGETC General Education

### Area 4 - Social & Behavioral Sciences
Courses from at least two disciplines (minimum 3 courses/9 semester units required).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 1</td>
<td>Intro to Admin Justice</td>
</tr>
<tr>
<td>ADJ 3</td>
<td>Concepts of Criminal Law</td>
</tr>
<tr>
<td>ADJ 51</td>
<td>Criminology</td>
</tr>
<tr>
<td>ANT 2</td>
<td>Intro. to Anthropology: Cultural</td>
</tr>
<tr>
<td>ANT 3</td>
<td>Intro. to Archaeology</td>
</tr>
<tr>
<td>ANT 10</td>
<td>California Indians</td>
</tr>
<tr>
<td>ANT 15</td>
<td>North American Indians</td>
</tr>
<tr>
<td>ANT 20</td>
<td>Cultures of Mexico</td>
</tr>
<tr>
<td>COM 8</td>
<td>Interpersonal Communications</td>
</tr>
<tr>
<td>COM 35</td>
<td>Intercultural Communications</td>
</tr>
<tr>
<td>COU 35</td>
<td>Intercultural Communications</td>
</tr>
<tr>
<td>ECE 2</td>
<td>Home, School &amp; Community Relations</td>
</tr>
<tr>
<td>ECO 1</td>
<td>Principles of Economics - Macro</td>
</tr>
<tr>
<td>ECO 5</td>
<td>Principles of Economics - Micro</td>
</tr>
<tr>
<td>ETH 1</td>
<td>Intro. to Ethnic Studies</td>
</tr>
<tr>
<td>ETH 2</td>
<td>Chicano Leadership</td>
</tr>
<tr>
<td>ETH 3</td>
<td>Chicanos in American Society</td>
</tr>
<tr>
<td>ETH 4</td>
<td>Chicano Culture</td>
</tr>
<tr>
<td>ETH 5</td>
<td>Chicano Politics and the American Political System</td>
</tr>
<tr>
<td>ETH 6</td>
<td>La Chichana</td>
</tr>
<tr>
<td>FCS 14</td>
<td>Child Development</td>
</tr>
<tr>
<td>GEG 2</td>
<td>Intro. to Geography: Cultural Elements</td>
</tr>
<tr>
<td>GEG 10</td>
<td>Geography of World Affairs: Regional Approach</td>
</tr>
<tr>
<td>HED 7</td>
<td>Women’s Health</td>
</tr>
<tr>
<td>HIS 5A</td>
<td>World History A</td>
</tr>
<tr>
<td>HIS 5B</td>
<td>World History B</td>
</tr>
<tr>
<td>HIS 6</td>
<td>History of Mexico</td>
</tr>
<tr>
<td>HIS 21</td>
<td>Social and Political Histories of the United States</td>
</tr>
<tr>
<td>HIS 40</td>
<td>History of Women in the U.S.</td>
</tr>
<tr>
<td>HIS 46A</td>
<td>Race and Ethnicity in American History A</td>
</tr>
<tr>
<td>HIS 46B</td>
<td>Race and Ethnicity in American History B</td>
</tr>
<tr>
<td>POL 1</td>
<td>American Political Institutions</td>
</tr>
<tr>
<td>POL 2</td>
<td>Contemporary Governments Abroad</td>
</tr>
<tr>
<td>POL 3</td>
<td>Introduction to International Relations</td>
</tr>
<tr>
<td>POL 5</td>
<td>Chicano Politics and the American Political System</td>
</tr>
<tr>
<td>POL 6</td>
<td>Introduction to Contemporary Political Thought</td>
</tr>
<tr>
<td>PSY 2</td>
<td>General Psychology</td>
</tr>
<tr>
<td>PSY 6</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSY 12</td>
<td>Theories of Personality</td>
</tr>
<tr>
<td>PSY 14</td>
<td>Child Psychology</td>
</tr>
<tr>
<td>PSY 15</td>
<td>Human Sexuality</td>
</tr>
<tr>
<td>PSY 22</td>
<td>Abnormal Psychology</td>
</tr>
<tr>
<td>PSY 25</td>
<td>Developmental Psychology-Lifespan</td>
</tr>
<tr>
<td>PSY 36</td>
<td>Psychology of “La Mujer”</td>
</tr>
<tr>
<td>PSY 42</td>
<td>Psychology of Women</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>SOC 5</td>
<td>Intro. to Social Problems</td>
</tr>
<tr>
<td>SOC 41</td>
<td>Marriage and the Family</td>
</tr>
<tr>
<td>SOC 42</td>
<td>The Sociology of Minority Relations</td>
</tr>
</tbody>
</table>

### Area 5 - Physical & Biological Sciences
(At least 2 courses, one of which is in Physical Science and one in Biological Science, at least one of which incorporates a laboratory, 7-9 semester units required.)

#### Physical Science Courses
All courses with a lab component are bold face type.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 90</td>
<td>Soil Science</td>
</tr>
<tr>
<td>ANT 1</td>
<td>Introduction to Anthropology: Physical</td>
</tr>
<tr>
<td>AST 1</td>
<td>Introduction to Astronomy</td>
</tr>
<tr>
<td>AST 1L</td>
<td>Astronomy Laboratory</td>
</tr>
<tr>
<td>CHM 1A</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHM 1B</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td><strong>CHM 12A</strong></td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td><strong>CHM 12B</strong></td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td><strong>CHM 22</strong></td>
<td>The Science of Chemistry</td>
</tr>
<tr>
<td>GEG 1</td>
<td>Intro. to Geography: Physical Elements</td>
</tr>
<tr>
<td>GEL 1</td>
<td>Dynamic Earth</td>
</tr>
<tr>
<td><strong>GEL 2</strong></td>
<td>Introduction to Geology</td>
</tr>
<tr>
<td>GEL 6</td>
<td>History of the Earth</td>
</tr>
<tr>
<td>GEL 25</td>
<td>Environmental Geology</td>
</tr>
<tr>
<td>GEL 36</td>
<td>California Geology</td>
</tr>
<tr>
<td>MET 1</td>
<td>Meteorology - Weather and Climate</td>
</tr>
<tr>
<td>OCN 1</td>
<td>Oceanography</td>
</tr>
<tr>
<td><strong>PHY 2A</strong></td>
<td>College Physics I</td>
</tr>
<tr>
<td><strong>PHY 2B</strong></td>
<td>College Physics II</td>
</tr>
<tr>
<td><strong>PHY 4A</strong></td>
<td>General Physics/Electricity and Magnetism</td>
</tr>
<tr>
<td><strong>PHY 4B</strong></td>
<td>General Physics/Waves, Heat, Light and Modern Physics</td>
</tr>
<tr>
<td><strong>PHY 10</strong></td>
<td>Introduction to Physics</td>
</tr>
</tbody>
</table>

### Biological Sciences Courses
All courses with a lab component are bold face type.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 92</td>
<td>Plant Science</td>
</tr>
<tr>
<td>BIO 1</td>
<td>Fundamental Biological Concepts</td>
</tr>
<tr>
<td><strong>BIO 2</strong></td>
<td>General Zoology</td>
</tr>
<tr>
<td><strong>BIO 3</strong></td>
<td>General Botany</td>
</tr>
<tr>
<td>BIO 5</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>BIO 6</td>
<td>Introductory Physiology</td>
</tr>
<tr>
<td>BIO 6L</td>
<td>Physiology Laboratory</td>
</tr>
<tr>
<td>BIO 7</td>
<td>General Microbiology</td>
</tr>
<tr>
<td><strong>BIO 10</strong></td>
<td>General Biology</td>
</tr>
<tr>
<td>BIO 11</td>
<td>Introductory Human Anatomy and Physiology</td>
</tr>
<tr>
<td>BIO 12</td>
<td>Anatomy and Physiology</td>
</tr>
<tr>
<td>BIO 18</td>
<td>Physiology of Human Health and Disease</td>
</tr>
<tr>
<td>BIO 20</td>
<td>Field Biology/Natural Science</td>
</tr>
<tr>
<td>BIO 27</td>
<td>Principles of Microbiology</td>
</tr>
<tr>
<td>BIO 30</td>
<td>Marine Biology</td>
</tr>
<tr>
<td>BIO 42</td>
<td>Human Biology</td>
</tr>
<tr>
<td>BIO 47</td>
<td>Ecology</td>
</tr>
<tr>
<td>BIO 48</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>BIO 48L</td>
<td>Environmental Science Lab</td>
</tr>
<tr>
<td>PSY 10</td>
<td>Introduction to Biological Psychology</td>
</tr>
</tbody>
</table>

### 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL1</td>
<td>American Sign Language I</td>
</tr>
<tr>
<td>ASL2</td>
<td>American Sign Language II</td>
</tr>
<tr>
<td>ASL3</td>
<td>American Sign Language III</td>
</tr>
<tr>
<td>FRN 1</td>
<td>Elementary French</td>
</tr>
<tr>
<td>FRN 2</td>
<td>Elementary French</td>
</tr>
<tr>
<td>FRN 3</td>
<td>Intermediate French</td>
</tr>
<tr>
<td>JPN 10</td>
<td>Japanese Language and Culture I</td>
</tr>
<tr>
<td>JPN 11</td>
<td>Japanese Language and Culture II</td>
</tr>
<tr>
<td>SPA 1</td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>SPA 1B</td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>SPA 1S</td>
<td>Elementary Spanish Speakers</td>
</tr>
<tr>
<td>SPA 1X</td>
<td>Spanish for Chicano Students</td>
</tr>
<tr>
<td>SPA 2</td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>SPA 2B</td>
<td>Elementary Spanish Speakers</td>
</tr>
<tr>
<td>SPA 2X</td>
<td>Elementary Spanish for Chicano Students</td>
</tr>
<tr>
<td>SPA 3</td>
<td>Intermediate Spanish</td>
</tr>
<tr>
<td>SPA 3S</td>
<td>Intermediate Spanish Speakers</td>
</tr>
<tr>
<td>SPA 4</td>
<td>Intermediate Spanish</td>
</tr>
<tr>
<td>SPA 4S</td>
<td>Intermediate Spanish</td>
</tr>
</tbody>
</table>

### CSU Requirement Only

CSU graduation requirement in US History Constitution and American Ideals may be completed prior to transfer by completing: ETH 5 or POL 1 or POL 5; and HIS 17A or HIS 17B or HIS 21 or HIS 40. Students planning on transfer to a CSU are advised to complete two of these courses for Area 3 and/or Area 4.

### 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.

### CSU Requirement Only

Course graduation requirement in US History Constitution and American Ideals may be completed prior to transfer by completing: ETH 5 or POL 1 or POL 5; and HIS 17A or HIS 17B or HIS 21 or HIS 40. Students planning on transfer to a CSU are advised to complete two of these courses for Area 3 and/or Area 4.

### CSU Requirement Only

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.
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>Correccional 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>
<tr>
<td>Criminal Justice</td>
<td>Complete restricted degree electives (choose three courses) from ADJ-8, ADJ-10, ADJ-30, ADJ-33, ADJ-45, ADJ-51, ADJ-102</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, E-218  
Lindsey Bertomen at (831) 755-6742, bertomen@hartnell.edu, 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-49</td>
<td>Special Projects</td>
<td>1.0-3.0</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 Armed and Firearms</td>
<td>3.5</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9.0)
# Administration of Justice—Associate of Science Degree

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Natural Sciences</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Social &amp; Behavioral Sciences</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Humanities</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Ethnic Groups in the United States</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Language and Rationality</strong> (9 Units)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. <strong>Written Composition</strong></td>
<td>ENG-1A College Composition and Reading</td>
</tr>
<tr>
<td></td>
<td>B. <strong>Communication and Analytical Thinking</strong></td>
<td>MAT-123* Intermediate Algebra</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General Education</strong> (21.0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Administration of Justice Required Major Courses and Restricted Major Electives</strong> (30.0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>ELECTIVES (Courses Numbered 1–199)</strong> required when GE units plus Degree units total are fewer than 60.0 (9.0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL UNITS</strong> (60.0)</td>
<td></td>
</tr>
</tbody>
</table>

*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>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Major Courses</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Required Major Course</td>
<td>ADJ-1 Introduction to Administration of Justice</td>
</tr>
<tr>
<td></td>
<td>Required Major Course</td>
<td>ADJ-2 Community Relations and the Justice System</td>
</tr>
<tr>
<td></td>
<td>Required Major Course</td>
<td>ADJ-3 Concepts of Criminal Law</td>
</tr>
<tr>
<td></td>
<td>Required Major Course</td>
<td>ADJ-4 Criminal Evidence</td>
</tr>
<tr>
<td></td>
<td>Required Major Course</td>
<td>ADJ-5 Criminal Court Process</td>
</tr>
<tr>
<td></td>
<td>Required Major Course</td>
<td>ADJ-11 Law Enforcement Report Writing</td>
</tr>
<tr>
<td></td>
<td>Required Major Course</td>
<td>ADJ-21A Narcotics and Dangerous Drugs</td>
</tr>
<tr>
<td></td>
<td><strong>SUBTOTAL UNITS (21.0)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Other Required Courses</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Required Course</td>
<td>ENG-1A College Composition and Reading</td>
</tr>
<tr>
<td></td>
<td>Required Course</td>
<td>MAT-121* Elementary Algebra</td>
</tr>
</tbody>
</table>

*Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.
Agriculture—Business Emphasis—Associate of Science Degree

Agriculture—Production Emphasis—Associate of Science Degree

Program Description

The Agriculture program offers an Associate of Science degree and a Certificate of Achievement in Agriculture with an emphasis in either Agriculture Business or Agriculture Production. 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 contacts in the local produce industry.

Many local employees started their career paths in the agriculture program at Hartnell College. The hands-on, practical approach helps students to find opportunities in a wide range of industry positions: product managers, quality control supervisors, produce sales, supplies and services sales, labor contractors, pest control advisors, and many others. Come find your future in the dynamic industry of agriculture.

For More Information, Contact:

Center for Advanced Technology, (831) 755-6980, Alisal Campus, AC-A102
Steven Triano, (831) 755-6961, striano@hartnell.edu, Alisal Campus, AC-C101

Program Outcomes

Upon successful completion of 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.

<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-57</td>
<td>Agriculture Computer Applications</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-96</td>
<td>Soil Science</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ABT-92</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>3.0</td>
</tr>
</tbody>
</table>

Subtotal Units (17.0)

Choose a Single Area of Emphasis: Complete a minimum of 14.0 units in one of the following areas of emphasis:

<table>
<thead>
<tr>
<th>Restricted Major Electives (Agriculture Business Emphasis)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-49</td>
<td>Introduction to Agriculture Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-51</td>
<td>Agribusiness Management Project</td>
<td>2.0</td>
</tr>
<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</td>
<td>Agribusiness Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-54</td>
<td>Agriculture Marketing</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 (14.0)

Choose a Single Area of Emphasis: Complete a minimum of 14.0 units in one of the following areas of emphasis:

<table>
<thead>
<tr>
<th>Restricted Major Electives (Agriculture Production Emphasis)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-47</td>
<td>Pesticide Applicator Certification Training</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-93</td>
<td>Product Processing &amp; Cooling</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-94</td>
<td>Agriculture Enterprise Project</td>
<td>2.0</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>
<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>AIT-87</td>
<td>Applied GPS Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>AIT-70</td>
<td>Introduction to Mechanized Agriculture</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Subtotal Units (14.0)

General Education Courses

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-90</td>
<td>Soil 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>

General Education Units: 21.0

Agriculture Required Major Courses and Restricted Major Electives: 31.0

Electives (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0: 8.0

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.

### 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-57</td>
<td>Agriculture Computer Applications</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</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (17.0)**

### RESTRICTED MAJOR ELECTIVES (AGRICULTURE BUSINESS EMPHASIS)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-49</td>
<td>Introduction to Agriculture Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-51</td>
<td>Agribusiness Management Project</td>
<td>2.0</td>
</tr>
<tr>
<td>ABT-52</td>
<td>Sales &amp; Service in Agribusiness</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-53</td>
<td>Agribusiness Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-94</td>
<td>Agriculture Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-160</td>
<td>Introduction to Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS-18</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS-1A</td>
<td>Legal Environment of Business</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (14.0)**

### RESTRICTED MAJOR ELECTIVES (AGRICULTURE PRODUCTION EMPHASIS)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT-67</td>
<td>Applied GPS Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>AIT-70</td>
<td>Introduction to Mechanized Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-41</td>
<td>Pesticide Applicator Certification Training</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-93</td>
<td>Product Processing &amp; Cooling</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-94</td>
<td>Agriculture Enterprise Project</td>
<td>2.0</td>
</tr>
<tr>
<td>AIT-96</td>
<td>Vegetable Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-97</td>
<td>Vineyard Production &amp; Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-98</td>
<td>Fertilizers &amp; Plant Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-160</td>
<td>Introduction to Agriculture</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (14.0)**

### 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>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

**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.**
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, 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.

<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-70</td>
<td>Introduction to Agriculture Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AIT-71</td>
<td>Agricultural and Industrial Equipment Operation</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AIT-169</td>
<td>Hazmat and Industrial Safety</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AIT-172</td>
<td>Agricultural Equipment Fabrication</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>AIT-180</td>
<td>Industrial Workplace Skills</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-150</td>
<td>Basic 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>Required Course</td>
<td>ESL-101*</td>
<td>or</td>
<td></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 (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, 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-177</td>
<td>Commercial Refrigeration</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* 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 (19.0)

* 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.

<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 and Regulations</td>
<td>3.0</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></td>
<td>or ESL-101*</td>
<td>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.
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 after-care 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-41</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-6</td>
<td>Prevention, Education and Release 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>

<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>PSY-33 or</td>
<td>Personal and Social Adjustment or Psychology of Human Relations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<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 AOD-10</td>
<td>PSY-10</td>
<td>Introduction to Biological Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective PSY-22</td>
<td>PSY-22</td>
<td>Abnormal Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective PSY-33</td>
<td>PSY-33</td>
<td>Personal and Social Adjustment</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective PSY-41</td>
<td>PSY-41</td>
<td>Psychology of Human Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective PSY-42</td>
<td>PSY-42</td>
<td>Psychology of Women</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective SOC-5</td>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective SDC-41</td>
<td>SDC-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>PSY-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-41</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>(9 Units)</td>
<td>Language and Rationality</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>3.0</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>Alcohol and Drug Abuse Counseling Required Major Courses and Restricted Major Electives</td>
<td>44.0</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>65.0</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 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.
ALCOHOL AND DRUG ABUSE COUNSELING—CERTIFICATE OF ACHIEVEMENT

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>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 &amp; Physiology of Alcohol and Other Drugs</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-3</td>
<td>Introduction to Treatment Planning and Case Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-4</td>
<td>Counseling Diverse Populations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-5</td>
<td>Legal and Ethical Considerations and Professional Growth</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-6</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 &amp; Group Counseling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AOD-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>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>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>REQUIRED BASIC COMPETENCY</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 and Accreditation at (831) 770-7090, E-101

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-3</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>

RESTRIC TED MAJOR ELECTIVES (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>ART-6A</td>
<td>Watercolors and Gouache</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-15B</td>
<td>Ceramics B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-33</td>
<td>Weaving</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-41A</td>
<td>Jewelry I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-50</td>
<td>Gallery Management</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-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Written Composition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. Communication and Analytical Thinking</strong></td>
<td>MAT-123*</td>
<td>5.0</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Education</strong></td>
<td></td>
<td>21.0</td>
</tr>
<tr>
<td><strong>Art Required Major Courses and Restricted Major Electives</strong></td>
<td></td>
<td>24.0</td>
</tr>
</tbody>
</table>

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL UNITS</strong></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.
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 counsel to identify required courses at their target university. 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.

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>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST-1P</td>
<td>Introduction to Astronomy</td>
<td>3.0</td>
</tr>
<tr>
<td>AST-1L1</td>
<td>Astronomy Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY-4B</td>
<td>General Physics/Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light and Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT-3A2</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>
<td>4.0</td>
</tr>
<tr>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (34.0)

<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 1</td>
<td>5.0</td>
</tr>
<tr>
<td>CSS-6</td>
<td>Introduction to Scientific Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>AST-45</td>
<td>Special Projects</td>
<td>1.0-3.0</td>
</tr>
<tr>
<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)

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>

GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)

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)

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>

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.
AUTOMOTIVE TECHNOLOGY—AUTOMOTIVE SHOP MANAGEMENT—ASSOCIATE OF SCIENCE DEGREE

THIS PROGRAM IS CURRENTLY UNDER REVIEW, AND COURSE OFFERINGS WILL BE LIMITED FOR THE 2013-2014 ACADEMIC YEAR.

NEW STUDENTS WILL NOT BE ADMITTED INTO THE AUTOMOTIVE TECHNOLOGY—AUTOMOTIVE SHOP MANAGEMENT PROGRAM FOR THE 2013-14 ACADEMIC YEAR.

PROGRAM DESCRIPTION

This certificate or degree prepares students for positions in management of automotive technology service and repair facilities. Management positions include shop supervisors and managers, insurance estimators, parts manager, and factory products representatives. Classes are designed to provide a broad exposure to industry standards and practices.

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.

As a result of ongoing changes in technology, the need to expand competencies, and changing certification or 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: Valentin Rodriguez at (831) 770-7078, vrodriguez@hartnell.edu, Alisal Campus AC-A101

PROGRAM OUTCOMES:

Upon successful completion of Automotive Technology program, a student should be able to:

• demonstrate skills and knowledge to inspect and repair all major systems found in current automobiles.
• complete accurate work orders of automobile repairs related to service history, analysis of problems and description of correct repairs.
• research applicable vehicle and service information using automobile manuals, pertinent websites, and diagnostic equipment to identify, analyze, and to correct problems of all major automobile 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>AUT-50</td>
<td>Introduction to Automotive Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-51</td>
<td>Auto Engine Performance and Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-71</td>
<td>Automotive Brakes and Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-72</td>
<td>Fuel Systems and Emission Control</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-73</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-83</td>
<td>Automotive Wheel Alignment and Suspension</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-179</td>
<td>Automotive Business and Shop Management</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-110</td>
<td>Automotive Climate Control</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-32</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (39.0)

<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>3.6</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

Automotive Technology—Automotive Shop Management Required Major Courses 39.0

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 or a score of 70% or greater on the mathematics competency exam.
AUTOMOTIVE TECHNOLOGY—AUTOMOTIVE SHOP MANAGEMENT—CERTIFICATE OF ACHIEVEMENT

THIS PROGRAM IS CURRENTLY UNDER REVIEW, AND COURSE OFFERINGS WILL BE LIMITED FOR THE 2013-2014 ACADEMIC YEAR.

NEW STUDENTS WILL NOT BE ADMITTED INTO THE AUTOMOTIVE TECHNOLOGY—AUTOMOTIVE SHOP MANAGEMENT PROGRAM FOR THE 2013-14 ACADEMIC YEAR.

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>AUT-50</td>
<td>Introduction to Automotive Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-51</td>
<td>Auto Engine Performance and Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-71</td>
<td>Auto Brakes Systems and Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-72</td>
<td>Fuel Systems and Emissions Control</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-73</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-83</td>
<td>Automotive Wheel Alignment and Suspension</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-179</td>
<td>Automotive Business and Shop Management</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major 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 Major Course</td>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

SUBTOTAL 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.

AUTOMOTIVE TECHNOLOGY—ADVANCED AUTOMOTIVE TECHNICIAN—CERTIFICATE OF ACHIEVEMENT

THIS PROGRAM IS CURRENTLY UNDER REVIEW, AND COURSE OFFERINGS WILL BE LIMITED FOR THE 2013-2014 ACADEMIC YEAR.

NEW STUDENTS WILL NOT BE ADMITTED INTO THE AUTOMOTIVE TECHNOLOGY—ADVANCED AUTOMOTIVE TECHNICIAN PROGRAM FOR THE 2013-14 ACADEMIC YEAR.

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>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>AUT-50</td>
<td>Introduction to Automotive Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-51</td>
<td>Auto Engine Performance and Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-72</td>
<td>Fuel Systems and Emissions Control</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-73</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-83</td>
<td>Automotive Wheel Alignment and Suspension</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-120</td>
<td>Introduction to Alternate Fuel and Electric Hybrid Vehicles</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-121</td>
<td>Hybrid, Electric &amp; Fuel-Cell Vehicles</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ELE-52</td>
<td>Electronic Fundamentals</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ELE-151</td>
<td>DC Circuit Analysis</td>
<td>2.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-271+</td>
<td>California BAR Clean Air Car Course</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major 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 Major Course</td>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (36.5)

*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.

+ AUT 271 content is a state requirement for BAR certification.
AUTOMOTIVE TECHNOLOGY—GENERAL AUTOMOTIVE MECHANICS—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

This certificate or degree program prepares students for entry-level employment as automotive service and repair technicians. Basic automotive maintenance and service operations are stressed to allow students to be immediately productive on the job. This program prepares students for employment in automotive servicing and repair, engine testing, automotive field services, and automotive parts. A long-sleeve work shirt, safety glasses, pants, and work boots are required dress in all AUT classes for safety reasons.

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.

FOR MORE INFORMATION, CONTACT: Valentin Rodriguez at (831) 770-7078, vrodriguez@hartnell.edu, Alisal Campus, AC-A101

PROGRAM OUTCOMES:

Upon successful completion of Automotive Technology program, a student should be able to:

- demonstrate skills and knowledge to inspect and repair all major systems found in current automobiles.
- complete accurate work orders of automobile repairs related to service history, analysis of problems and description of correct repairs.
- research applicable vehicle and service information using automobile manuals, pertinent websites, and diagnostic equipment to identify, analyze, and to correct problems of all major automobile 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>AUT-50</td>
<td>Introduction to Automotive Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-51</td>
<td>Auto Engine Performance and Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-71</td>
<td>Automotive Brakes and Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-73</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-81</td>
<td>Automotive Drive Train</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-82</td>
<td>Automatic Transmission and Transaxles</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-83</td>
<td>Automotive Wheel Alignment and Suspension</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-86</td>
<td>Automotive Electronics and Engine Performance</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-103</td>
<td>Automotive Engines</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-110</td>
<td>Automotive Climate Control</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (40.0)

<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 (8 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

Automotive Technology—General Automotive Mechanics Required Major Courses 40.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0

TOTAL UNITS 61.0

*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.
**AUTOMOTIVE TECHNOLOGY—GENERAL AUTOMOTIVE MECHANICS—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>AUT-50</td>
<td>Introduction to Automotive Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-51</td>
<td>Auto Engine Performance and Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-71</td>
<td>Automotive Brakes and Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-73</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-81</td>
<td>Automotive Drive Train</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-82</td>
<td>Automatic Transmission and Transaxles</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-83</td>
<td>Automotive Wheel Alignment and Suspension</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-86</td>
<td>Automotive Electronics and Engine Performance</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-103</td>
<td>Automotive Engines</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-110</td>
<td>Automotive Climate Control</td>
<td>4.0</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></td>
<td>ESL-101*</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td></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 (40.0)**

*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.
Automotive Technology—Heavy Duty Diesel Technology—Associate of Science Degree

New Students Will Not Be Admitted into the Automotive Technology—Heavy Duty Diesel Technology Program or Courses for the 2013-2014 Academic Year.

Program Description

The Automotive Technology, and Heavy Duty Diesel Technology—Transportation program is designed to provide students with the skills and knowledge necessary to succeed as technicians in the automotive service and heavy duty diesel transportation industries. The curriculum provides hands-on learning experience, which provides students with the opportunity to apply the basic theories of automotive and diesel transportation technology. Diagnosis and repair procedures performed on automotive and diesel equipment enables students to develop the skill levels required for placement in the automotive or heavy duty diesel technology industry (for example, servicing and maintaining diesel powered highway trucks, off-road heavy equipment, and stationary engines.) A long-sleeve work shirt, safety glasses, pants, and work boots are required dress in all AUT classes for safety reasons.

This certificate option is for students who want technical knowledge and experience in the diesel technology field. The course work emphasizes diesel service management, as well as the theory and skills of refrigeration, electronic and mechanical fuel injection, chassis maintenance, vehicle inspection, tune-up, engine overhaul, transmission repair, brake service, and handling hazardous waste. The curriculum provides exposure to all facets of the industry with specific emphasis on problem solving and transferability of skills. A long-sleeve work shirt, pants, and work boots are required dress in all AUT for safety reasons.

As a result of ongoing changes in technology, the need to expand competencies, and changing certification or 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: Valentin Rodriguez at (831) 770-7078, vrodriguez@hartnell.edu, Alisal Campus, AC-A101

Program Outcomes:

Upon successful completion of Heavy Duty Diesel Technology program, a student should be able to:

- demonstrate skills and knowledge to inspect and repair all major systems found in current heavy duty diesel equipment.
- complete accurate work orders of heavy duty diesel equipment repairs related to service history, analysis of problems and description of correct repairs.
- research applicable vehicle and service information using heavy duty equipment manuals, pertinent websites, and diagnostic equipment to identify, analyze, and to 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>✓ 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>AUT-150</td>
<td>Introduction to Heavy Duty Diesel Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-151</td>
<td>Heavy Duty Diesel Preventive Maintenance</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-152</td>
<td>Heavy Duty Diesel Electrical and Basic Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-153</td>
<td>Heavy Duty Diesel Brakes, Steering and Suspension</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-154</td>
<td>Heavy Duty Diesel Engine Performance and Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-155</td>
<td>Heavy Duty Diesel Climate Control</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-156</td>
<td>Heavy Duty Diesel Engine Rebuild</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-157</td>
<td>Heavy Duty Diesel Electronic Systems and Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-158</td>
<td>Heavy Duty Diesel Power Drive Train</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-159</td>
<td>Heavy Duty Diesel Automatic Transmissions</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AUT-156</td>
<td>Hydraulics &amp; Pneumatics</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</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 Rationale</td>
<td></td>
<td>(9 Units)</td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENGL-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></td>
<td>(Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
</tbody>
</table>

General Education: 21.0
Automotive Technology—Heavy Duty Diesel Required Major Courses: 38.0
Electives (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0: 15

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.
AUTOMOTIVE TECHNOLOGY—HEAVY DUTY DIESEL TECHNOLOGY—CERTIFICATE OF ACHIEVEMENT

NEW STUDENTS WILL NOT BE ADMITTED INTO THE AUTOMOTIVE TECHNOLOGY—HEAVY DUTY DIESEL TECHNOLOGY OR COURSES FOR THE 2013-2014 ACADEMIC YEAR.

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>
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<th>Units</th>
</tr>
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<tbody>
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<td>4.0</td>
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<td>AUT-151</td>
<td>Heavy Duty Diesel Preventive Maintenance</td>
<td>3.0</td>
</tr>
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<td>Heavy Duty Diesel Electronic Systems and Controls</td>
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</tbody>
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<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)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (35.0)

*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.
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, sedens@hartnell.edu, N-14
Rebecca Fields at (831) 755-6921, rfields@hartnell.edu, N-14
Jeffrey Hughey at (831) 770-7054, jhughey@hartnell.edu, N-26C
Ann Wright at (831) 770-6112, awright@hartnell.edu, N-14

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.

<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-1</td>
<td>Fundamental Biological Concepts</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BIO-2</td>
<td>General Zoology</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BIO-3</td>
<td>General Botany</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-1A‡</td>
<td>General Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-1B‡</td>
<td>General Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3‡</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-25‡</td>
<td>Pre-Calculus</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-2A/2B or CHM-1A‡</td>
<td>General Chemistry</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>or PHY-4A/4B/4C</td>
<td>College Physics or General Physics</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td>SUBTOTAL UNITS (42.0-46.0)</td>
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</table>

<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>BIO-T</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BIO-45</td>
<td>Special Projects</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>CHM-12A‡</td>
<td>Organic Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>CHM-12B‡</td>
<td>Organic Chemistry II</td>
<td>5.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-2‡</td>
<td>Calculus for Managerial, Life, &amp; Social Sciences</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-3A‡</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-3B‡</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-3C‡</td>
<td>Analytic Geometry and Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>✓ GENERAL EDUCATION COURSES</td>
<td>Course No.</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>CHM-1A‡</td>
<td>General Chemistry</td>
<td>5.0</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></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 (8 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-12‡</td>
<td>Elementary Statistics</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>MAT-25‡</td>
<td>Pre-Calculus</td>
<td>(4.0)</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></td>
</tr>
<tr>
<td>✓ GENERAL EDUCATION COURSES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology Required Major Courses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ TOTAL UNITS</td>
<td></td>
<td></td>
<td></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.asist.org. Please consult with a Hartnell College counselor to review transfer requirements.
BUSINESS ADMINISTRATION—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION
The Business 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 Administration program prepares students with the lower-division coursework required at most universities for advancement to upper-division coursework for a Bachelor's Degree with a major in Business Administration.

FOR MORE INFORMATION, CONTACT: Robert Maffei at (831) 755-6744, rmaffei@hartnell.edu, D-365
Carol Hobson at (831) 755-6652, chobson@hartnell.edu, E-216

PROGRAM OUTCOMES
Upon successful completion of the Business Administration program, a student should be able to:

- define information needs, identify the scope and level of information needed, and access and communicate information effectively and efficiently using appropriate electronic tools in a business environment to make sound decisions.
- interpret, analyze, and use quantitative and logical reasoning to evaluate and solve business problems.

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>BUS-1A</td>
<td>Accounting Principles—Managerial</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-1B</td>
<td>Accounting Principles—Financial/Management</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-18</td>
<td>Legal Environment of Business</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-32</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECO-11†</td>
<td>Principles of Economics—Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECO-5†</td>
<td>Principles of Economics—Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-13f</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS/COM-5f</td>
<td>Introduction to Organizational Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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>MAT-16</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-2</td>
<td>Calculus for Managerial, Life, and Social Sciences</td>
<td>4.0</td>
</tr>
<tr>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-17A or HIS-17B</td>
<td>United States History A or B</td>
<td>3.0</td>
</tr>
<tr>
<td>POL-1</td>
<td>American Political Institutions</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG-2</td>
<td>Critical Thinking and Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
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<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-13f</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>BUS/COM-5f</td>
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<tr>
<td>ECO-1†</td>
<td>Principles of Economics—Macro</td>
<td>(3.0)</td>
</tr>
<tr>
<td>HIS-17A or HIS-17B</td>
<td>United States History A or B</td>
<td>(3.0)</td>
</tr>
<tr>
<td>POL-1</td>
<td>American Political Institutions</td>
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</tr>
<tr>
<td>ENG-2</td>
<td>Critical Thinking and Writing</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

General Education

Business Administration Required Major and Restricted 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

‡ 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.
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, 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.

**RECOMMENDED MAJOR ELECTIVES** (Select from the following; none required)

**GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Course Title</th>
<th>Course Title</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-5/COM-5</td>
<td>Introduction to Organizational Communication</td>
<td>BUS-9</td>
<td>Human Relations in Business</td>
<td>BUS-194</td>
</tr>
<tr>
<td>BUS-50</td>
<td>Introduction to PC Applications</td>
<td>BUS-150.15</td>
<td>Word Processing</td>
<td>BUS-32</td>
</tr>
<tr>
<td>BUS-111</td>
<td>Intermediate Office Skills</td>
<td>BUS-172</td>
<td>Machine Calculations on the Microcomputer</td>
<td>BUS-151</td>
</tr>
<tr>
<td>BUS-128</td>
<td>Professionalism in the Workplace</td>
<td>BUS-173</td>
<td>Filing Procedures and Records Management</td>
<td>Business Mathematics</td>
</tr>
<tr>
<td>BUS-129</td>
<td>Practical Customer Service Skills</td>
<td>BUS-176</td>
<td>Business Communications</td>
<td>BUS-190</td>
</tr>
<tr>
<td>BUS-131</td>
<td>Business English</td>
<td>BUS-177</td>
<td>Proofreading and Editing Skills</td>
<td>Career Management</td>
</tr>
<tr>
<td>BUS-140A &amp; B</td>
<td>Keyboarding Speed and Accuracy</td>
<td>BUS-180</td>
<td>Business Office Technology—Information Processing Required Major Courses</td>
<td>BUS-150.15</td>
</tr>
<tr>
<td>BUS-150</td>
<td>Business Mathematics</td>
<td>BUS-189</td>
<td>Human Relations in Business</td>
<td>BUS-194</td>
</tr>
<tr>
<td>COM-1</td>
<td>Introduction to Business</td>
<td>BUS-190</td>
<td>Career Management</td>
<td>BUS-194</td>
</tr>
<tr>
<td>BUS-5/COM-5</td>
<td>Introduction to Organizational Communication</td>
<td>BUS-194</td>
<td>Human Relations in Business</td>
<td>BUS-194</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>BUS-196</td>
<td>Technical Writing</td>
<td>BUS-199</td>
</tr>
<tr>
<td>BUS-125</td>
<td>Intermediate Algebra</td>
<td>BUS-5/COM-5</td>
<td>Introduction to Organizational Communication</td>
<td>BUS-199</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (36.0)

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Office Technology—Information Processing Required Major Courses</td>
<td>36.0</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>
</tr>
<tr>
<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.

1 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.
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></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUS-110A and</td>
<td>Beginning Keyboarding and Document Processing</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>BUS-110B</td>
<td></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></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESL-101*</td>
<td>or Academic Writing &amp; Reading II</td>
<td></td>
</tr>
<tr>
<td>Required Course</td>
<td>BUS-151**</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*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></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESL-101*</td>
<td>or Academic Writing &amp; Reading II</td>
<td></td>
</tr>
<tr>
<td>Required Course</td>
<td>BUS-151**</td>
<td>Business Mathematics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*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

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-13F</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-25F</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 &amp; Properties of Matter</td>
<td>General Physics/Electricity and Magnatism</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-15</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-11</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>

<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>CHM-1A</td>
<td>General Chemistry I</td>
<td>(5.0)</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></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-13F</td>
<td>Elementary Statistics</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>MAT-25F</td>
<td>Pre-Calculus</td>
<td>(4.0)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

GENERAL EDUCATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3.0</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>Natural Science</td>
<td>5.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Humanities</td>
<td>3.0</td>
</tr>
<tr>
<td>Ethnic Groups in the United States</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Language and Rationality</td>
<td>9.0</td>
</tr>
<tr>
<td>Liberal Education</td>
<td>12.0</td>
</tr>
</tbody>
</table>

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, brocha@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.

<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-49A</td>
<td>Chicano History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-49B</td>
<td>Chicano History B</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ETH-3*</td>
<td>Chicano in American Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ETH-4</td>
<td>Chicano Culture</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**COMPLETE 3.0 UNITS IN EACH OF THE FOLLOWING AREAS OF EMPHASIS:**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES—CULTURE (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>ETH-POL-5</td>
<td>Chicano Politics and the American Political System</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-6</td>
<td>La Chicana</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**COMPLETE 3.0 UNITS IN EACH OF THE FOLLOWING AREAS OF EMPHASIS:**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES—LITERATURE (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-1B</td>
<td>College Reading and Composition: Chicano Perspective</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>ETH-12</td>
<td>Chicano Cinema</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>SPA-35</td>
<td>Literatura chicana</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**RECOMMENDED ELECTIVES (Select from list; none required) | Course No. | Course Title | Units |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>SPA-2, 2S, or 2X</td>
<td>Elementary Spanish or higher</td>
<td>5.0</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>

**GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ETH-3*</td>
</tr>
<tr>
<td></td>
<td>Language and Rationality (9 Units)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Written Composition</td>
<td>ENG-1A</td>
</tr>
<tr>
<td></td>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123*</td>
</tr>
<tr>
<td></td>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
</tbody>
</table>

**CHICANO 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 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 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

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.

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.

In order to earn this degree, students must complete:

- Minimum of 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major as detailed in the degree section of the catalog. All courses in the major must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis (Title 5 § 55063).
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Minimum of 60 CSU-transferable semester units.
- Certification of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 85 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 102 of the Hartnell College Catalog for more information).
- No additional local Associate degree requirements are applied.

**REQUIREMENT FOR AIDS TO THE UNIVERSITY OF CALIFORNIA AND CALIFORNIA STATE UNIVERSITY SYSTEMS**

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

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.

**FIGURE 1- Communication Studies Degree Program:**

- **REQUIRED MAJOR COURSES**
  - Course No. | Course Title | Units
  - COM-1 | Introduction to Public Speaking | 3.0
  - COM-3 | Introduction to Communication | 3.0
  - COM-8 | Interpersonal Communication | 3.0
  - COM/COU-35 | Intercultural Communication | 3.0
  - **SUBTOTAL UNITS (12.0)**

- **RESTRICTED MAJOR ELECTIVES** (Select a minimum of 9.0 units from the following):
  - Course No. | Course Title | Units
  - BUS-175 | Business Communications | 3.0
  - BUS-194 | Human Relations in Business | 3.0
  - COMBUS-5 | Introduction to Organizational Communication | 3.0
  - SOC-5 | Introduction to Social Problems | 3.0
  - SOC-41 | Marriage and Family Relations | 3.0
  - PSY-41 | Psychology of Human Relations | 3.0
  - ANT-2 | Introduction to Anthropology: Cultural | 3.0
  - **SUBTOTAL UNITS (9.0)**

- **GENERAL EDUCATION COURSES**
  - Course No. | Course Title | Units
  - ENG-1A | College Reading and Composition | 3.0
  - MAT-123* | Intermediate Algebra | 5.0
  - **General Education 21.0**
  - **Communication Studies Required Major Courses and Restricted Major Electives 21.0**
  - **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.

Hartnell College Catalog/2013-14
COMPUTER SCIENCE AND INFORMATION SYSTEMS—COMPUTER SCIENCE OPTION—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION
The Computer Science and Information Systems program prepares students planning to transfer to a 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.

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: Pam Wiese at (831) 755-6918, pwiese@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>✓ 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-31</td>
<td>Database Management</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-41</td>
<td>Operating Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-121A</td>
<td>Networking Fundamentals</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (28.0)

<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>CSS-90A</td>
<td>2-D Game Development</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-90B</td>
<td>3-D Game Development</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-179A</td>
<td>Networking Administration and Storage Management</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (8.0)

<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-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</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-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total General Education Requirements: 21.0

Computer Science Option Required Major Courses and Restricted Electives: 36.0

ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0: 3.0

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.
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>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-31</td>
<td>Database Management</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-41</td>
<td>Operating Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-121A</td>
<td>Networking Fundamentals</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Subtotal units (28.0)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS-60A</td>
<td>2-D Game Development</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-60B</td>
<td>3-D Game Development</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-122</td>
<td>Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-170A</td>
<td>Networking Administration and Storage Management</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 (8.0)

<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>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(6.0)</td>
</tr>
</tbody>
</table>

Total units (36.0)

*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.

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.

<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-25</td>
<td>Multimedia Integration</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-27</td>
<td>Digital Project 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-33</td>
<td>Database Management</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</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>RESTRICTED MAJOR ELECTIVES (Select a minimum of 12.0 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>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>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></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States</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>MATH-123</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education 21.0

Digital and Web Design Option Required Major Course and Restricted Electives 42.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 42.0

TOTAL UNITS 63.0

*Completion of MATH-123 or completion of any math in which MATH-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 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>Digital Project 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-43</td>
<td>Computer Systems and Information Literacy</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>

**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-60A</td>
<td>2-D Game Development</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-60B</td>
<td>3-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 (30.0)**

<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>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**Required Course**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<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: Joe Welch at (831) 755−6747, jwelch@hartnell.edu, Alvarez Campus, AC-C201

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>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-1A</td>
<td>Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-41</td>
<td>Operating Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-121A</td>
<td>Networking Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-121B</td>
<td>Routing Protocols and LAN Switching</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-121C</td>
<td>Accessing the Wide Area Network (WAN)</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-169</td>
<td>Computer Maintenance and Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-170A</td>
<td>Networking Administration and Storage Management</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (41.0)

<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></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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General Education 21.0

Network and Security Option Required Major Courses 41.0

ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0

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>Required Major Course</td>
<td>CSS-41</td>
<td>Operating Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</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>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-T21A</td>
<td>Networking Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-T21B</td>
<td>Routing Protocols and LAN Switching</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-T21C</td>
<td>Accessing the Wide Area Network (WAN)</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-T22</td>
<td>Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-T23</td>
<td>Network Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-T70A</td>
<td>Networking Administration and Storage Management</td>
<td>4.0</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* 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>

*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 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:

<table>
<thead>
<tr>
<th>Green Building</th>
<th>Complete electives CONS 126, CONS 128, CONS 130, CONS 132, CONS 134, CONS 136, CONS 150, CONS 151, CONS 154</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Design</td>
<td>Complete electives CONS 128, CONS 128, CONS 150, CONS 151, DRA 52, DRA 70, DRA 71, CSS 86</td>
</tr>
<tr>
<td>Construction Management</td>
<td>Complete electives CONS 140, CONS 144, CONS 148, CONS 149; CONS 150, CONS 151, CONS 152, CONS 154</td>
</tr>
</tbody>
</table>

FOR MORE INFORMATION, CONTACT: John Anderson, (831) 755–6962, janderson@hartnell.edu, Alisal Campus, AC-A109 Center for Advanced Technology, (831) 755-6960, 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>
</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-130</td>
<td>Heavy Equipment and Highway Construction</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>Contract and Labor for Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-146</td>
<td>Building Regulations and Permit Processes</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 II</td>
<td>6.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CONS-152</td>
<td>Construction Field Practice III</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>2.5</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>CSS-43</td>
<td>Computer Systems and Information Literacy</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>CSS-66</td>
<td>Introduction to Geographic Information Systems</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>Introduction to Architectural Drawing and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>DRA-71</td>
<td>Advanced Architectural Drawing and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>EGN-3</td>
<td>Renewable Energy and Energy Efficiency</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>WLD-52</td>
<td>Sheet Metal Fabriciation</td>
<td>2.5</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>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>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUBTOTAL UNITS (12.0)</th>
<th>Units</th>
</tr>
</thead>
</table>

- Eligibility for ENG-1A fulfills 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 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.

<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-123*</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

* 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 CONSTRUCTION—GREEN BUILDING—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.

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.

### PROGRAM OUTCOMES:

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.

### REQUIRED MAJOR COURSES

<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-126</td>
<td>Green Building Remodel and Retrofit</td>
<td>3.0</td>
</tr>
</tbody>
</table>

** SUBTOTAL UNITS (12.0) **

### RESTRICTED MAJOR ELECTIVES

(Select a minimum of 6.0 units from the following):

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS-128</td>
<td>Sustainable Building Design</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-129</td>
<td>Managing Offsite Impacts of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-130</td>
<td>Heavy Equipment and Highway Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-132</td>
<td>Masonry and Concrete</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-134</td>
<td>Plumbing and HVAC</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-136</td>
<td>Electrical</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-150</td>
<td>Construction Field Practice I</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-151</td>
<td>Construction Field Practice II</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

** SUBTOTAL UNITS (6.0) **

### 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>Intermediate Composition and Reading</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 (18.0) **

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CONSTRUCTION—SUSTAINABLE CONSTRUCTION—SUSTAINABLE DESIGN—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.

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.

### REQUIRED MAJOR COURSES

<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-121</td>
<td>Principles of Sustainable Design</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-123</td>
<td>Sustainable Design Studio</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-128</td>
<td>Sustainable Building Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

** SUBTOTAL UNITS (18.0) **

### RESTRICTED MAJOR ELECTIVES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS-126</td>
<td>Green Building Remodel and Retrofit</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-129</td>
<td>Managing Offsite Impacts of 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-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
<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-70</td>
<td>Introduction to Architectural Drawing and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>DRA-71</td>
<td>Advanced Architectural Drawing and Design</td>
<td>3.0</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>ESL-101*</td>
<td>Intermediate Composition and Reading</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 (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 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>
</tr>
</tbody>
</table>

<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-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>CSS-43</td>
<td>Computer 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 and Related Technologies</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 Course</td>
<td>EGN-3</td>
<td>Renewable Energy and Energy Efficiency</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>EGN-12</td>
<td>Engineering Design with Solid Works</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<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></td>
<td></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></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 Composition and Reading</td>
<td>3.0</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>
</tbody>
</table>

| Electives (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 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 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.

Hartnell College Catalog/2013-14
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 Breath will be indicated on the student’s transcript.

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, 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, digital art, 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 rotoscoping.

The Digital Arts 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:

| Graphic Design | Complete restricted degree electives (choose three courses) from ART-6A, ART-12A, ART-70, and PHO-1 |
| Digital Photography/Video | Complete restricted degree electives (choose three courses) from PHO-1, PHO-2, ART-12A, and ART-70 |
| Digital Animation / Illustration | Complete restricted degree electives (choose three courses) from ART-3, ART-6A, ART-73, and ART-75 |

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.

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.

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:

- develop the ability to creatively image and technically produce digital artwork or projects.
- demonstrate the ability to communicate visually for printed imagery and interactive media.
- demonstrate the ability to critically formulate visual digital design principles.
- create models in the 3D, X, Y, Z interfaces.
- develop sequential forms of animation in the 2D and 3D environment.
- research, design, analyze, and critically formulate storyboards for animation.

RESTRICTED MAJOR ELECTIVES (Select 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>ART-1</td>
<td>Digital Three Dimensional Design and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-76</td>
<td>3D Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-77</td>
<td>Introduction to Digital Video and Video Editing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-80</td>
<td>Introduction to Digital Photography and Photographic Imaging</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (18.0)

RESTRICTED MAJOR ELECTIVES (Select 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>ART-3</td>
<td>Drawing and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-70</td>
<td>Introduction to Graphic Design / Computer Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-6A</td>
<td>Watercolors and Gouache</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-73</td>
<td>Introduction to 2D Digital Illustration for Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-75</td>
<td>3D Modeling for Digital Animation</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>

SUBTOTAL UNITS (18.0)

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>

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.

Hartnell College Catalog/2013-14
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>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-71</td>
<td>Introduction to 2D Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-72</td>
<td>Introduction to Digital Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-74</td>
<td>Digital Three Dimensional Design and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-76</td>
<td>3D Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-77</td>
<td>Introduction to Digital Video and Video Editing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-80</td>
<td>Introduction to Digital Photography and Photographic Imaging</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-52</td>
<td>Portfolio Development</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>ART-70</td>
<td>Graphic Design/Computer Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-73</td>
<td>Introduction to Digital Illustration for Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-75</td>
<td>3D Modeling for Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**RESTRICTED MAJOR ELECTIVES (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-101*</td>
<td>Intermediate Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>ESL-101*</td>
<td>English for Academic Purposes II</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT-121**</td>
<td>Beginning Algebra</td>
<td>5.0</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></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*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 ENGINEERING 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 transfer to Engineering Technology or Industrial Technology programs at the baccalaureate level.

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).
- analyze and interpret data.
- 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 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 3D Modeling</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</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>Required Major Course</td>
<td>EGN-2</td>
<td>Engineering Graphics/CAD</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<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>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</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>CONS-142</td>
<td>Construction Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-66</td>
<td>Introduction to Geographic Information Systems (GIS)</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>EGN-12</td>
<td>Engineering Design 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>
</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 and Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ART-70 or RHD-1</td>
<td>Introduction to Graphic Design and Computer Graphics or Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>LIB-5</td>
<td>Information Competency in the Sciences and Applied Technology</td>
<td>1.0</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>6.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ Transfer 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>General Education</td>
<td>21.0</td>
</tr>
<tr>
<td>Drafting and Design Engineering Technology Required Major Courses and Restricted Major Electives</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>6.0</td>
</tr>
<tr>
<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.

† 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 ENGINEERING 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>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-62</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-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>
</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>CONS-104</td>
<td>Print Reading and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-72</td>
<td>Architectural Design and Visual Communication III</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 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 (18.0)

*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-62</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>
</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>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>EGN-12</td>
<td>Engineering Design 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>
</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 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 (18.0)

*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:  
Jeanne Hori-Garcia at (831) 759-6065, jhorigarcia@hartnell.edu, J-222  
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 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.

In order to earn this degree, students must complete:

- Minimum of 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an “AA-T” or “AS-T” major as detailed in the degree section of the catalog. All courses in the major must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis (title 5 § 55063).
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 85 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 102 of the Hartnell College Catalog for more information).
- No additional local Associate degree requirements are applied.

<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-3</td>
<td>Observation and Assessment</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-4</td>
<td>Preschool Theory &amp; Practicum</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-10</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-12A</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 (25.0)

<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</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>28.0</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>
</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.
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.

Child Development Permit issued by the Commission on Teacher Credentialing (CTC)—Educational and Experience Day Requirements

<table>
<thead>
<tr>
<th>Level</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher assistant</td>
<td>Requires any 6 ECE units</td>
</tr>
<tr>
<td>Associate Teacher</td>
<td>Requires 12 core ECE units (ECE 1, ECE 2, ECE 4, and FCS 14); Experience Days-ECE 12A</td>
</tr>
<tr>
<td>Teacher</td>
<td>Requires 24 ECE units including 12 core ECE units plus 16 General Education units (a minimum of one course in each of these 4 areas: Math and/or Science, English, Social Sciences and Humanities); Experience Days—ECE 12A and ECE 12B</td>
</tr>
<tr>
<td>Master Teacher</td>
<td>Requires all that is required for Teacher level plus ECE 71 and six ECE units from the following specializations:</td>
</tr>
<tr>
<td>Infant/Toddler</td>
<td>Select 6 units from ECE 20, ECE 21, ECE 22, ECE 23, or ECE 24</td>
</tr>
<tr>
<td>Special Needs</td>
<td>Select 6 units from ECE 24, ECE 26, or ECE 27</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Select 6 units from ECE 11, ECE 54, ECE 16, or ECE 17</td>
</tr>
<tr>
<td>Experience Days</td>
<td>ECE 12A and ECE 12B</td>
</tr>
<tr>
<td>Site Supervisor</td>
<td>Requires an AS with 24 ECE units, ECE 70 A, ECE 70B and ECE 71, Experience Days: ECE 12A and ECE 12B</td>
</tr>
<tr>
<td>Program Director</td>
<td>Requires a BA with 24 ECE units, ECE 70A, ECE 70B, and ECE 71</td>
</tr>
</tbody>
</table>

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- 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>CHECKED 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-14i</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>RECOMMENDED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-11</td>
<td>Cognitive Activities and Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-12B</td>
<td>Advanced Theory &amp; Practice in ECE</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-20</td>
<td>Infant and Toddler Development</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-22</td>
<td>Infant/Toddler: Family Relations of Diverse Backgrounds</td>
<td>1.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-23</td>
<td>Infant/Toddler Education: Cognitive and Language Learning</td>
<td>2.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-24</td>
<td>Infant/Toddler: Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-26</td>
<td>Children with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-27</td>
<td>Principles &amp; Practices in Guiding Children’s Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-54</td>
<td>Language and Early Literacy Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-70A</td>
<td>Supervision and Administration in ECE</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-70B</td>
<td>Advanced Administration of Child Development Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ECE-71</td>
<td>Supervision of Adults in an ECE Setting</td>
<td>2.0</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>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>FCS-14*</td>
<td>Child Development</td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States</td>
<td>ECE-53*</td>
<td>Teaching in a Diverse Society</td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</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.

EARLY CHILDHOOD EDUCATION—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>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; Practice</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>

**TOTAL UNITS (26.0)

<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>Required Course</td>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**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.
## 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-11*</td>
<td>Dynamic Earth</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</td>
<td>College Physics I and II</td>
<td>8.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHY-4A/4B/4C</td>
<td>General Physics/ 4A or 1A</td>
<td>12.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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>GEL-36</td>
<td>California Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEL-45</td>
<td>Special Projects</td>
<td>1.0-3.0</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>
<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>GEL-11*</td>
<td>Dynamic Earth</td>
<td>(4.0)</td>
</tr>
</tbody>
</table>

### SOCIAL & BEHAVIORAL SCIENCES (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>

### HUMANITIES (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>

### ETHNIC GROUPS IN THE UNITED STATES (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>

### LANGUAGE AND RATIONALITY (9 Units)

### WRITTEN COMPOSITION

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>

### COMMUNICATION AND ANALYTICAL THINKING

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>

### ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0

### TOTAL UNITS

---

*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.
ELEMENARY 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) 755-6820, Building B

PROGRAM OUTCOMES
Upon successful completion of the Elementary Teacher Education program, the student should be able to:

- clarify and articulate career goals of becoming a teacher
- demonstrate a 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 (i.e., the last 60 semester or 90 quarter units of coursework) to a CSU campus, to a program that is deemed similar to their own 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.

In order to earn this degree, students must complete:

- 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an “AA-T” or “AS-T” major as detailed in the degree section of the catalog. All courses in the major must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis (title 5 § 55063).
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 85 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 102 of the Hartnell College Catalog for more information).
- No additional local Associate degree requirements are applied.

Students can double-count required degree courses and courses for General Education.

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED MAJOR COURSES</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>GEG-10</td>
<td>Geography and World Affairs: A Regional Approach</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-22</td>
<td>The Science of Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<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>
</tr>
</tbody>
</table>

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 or MUS-1B</td>
<td>Music Appreciation- Historical Perspective or Music Appreciation- Genre 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 (34-37.50 units) certification requirements</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>
<td>52.0</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.
### ENGINEERING —ASSOCIATE OF SCIENCE DEGREE

#### PROGRAM DESCRIPTION
The Engineering program at Hartnell College covers the first two years of the traditional professional engineering program leading to a Bachelor’s Degree. It is nearly the same for all fields of engineering with specialization coming later in upper division coursework. The required core curriculum follows the Engineering Articulation Agreement developed by the Engineering Liaison Council (ELC) between community colleges and four-year public and private colleges and universities. This articulated agreement, commonly referred to as the Summit Agreement, states that students should be considered for admission upon completion of the engineering core curriculum and not necessarily the completion of all general education.

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.

**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.

#### 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.

#### REQUIRED MAJOR 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>EGN-2</td>
<td>Engineering Graphics/CAD</td>
<td>4.5</td>
</tr>
<tr>
<td>EGN-6</td>
<td>Introduction to Circuits Analysis</td>
<td>4.5</td>
</tr>
<tr>
<td>EGN-8</td>
<td>Engineering Statics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY-4B</td>
<td>General Physics/Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light &amp; Modern Physics</td>
<td>4.0</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>
<td>4.0</td>
</tr>
<tr>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</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>EGN-1</td>
<td>Introduction to Engineering and Related Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>EGN-3</td>
<td>Renewable Energy and Energy Efficiency</td>
<td>3.0</td>
</tr>
<tr>
<td>EGN-4</td>
<td>Materials Science</td>
<td>3.0</td>
</tr>
<tr>
<td>EGN-45</td>
<td>Special Projects</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM-1B</td>
<td>General Chemistry II</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (47.0)****

#### 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>HIS-17A or HIS-17B</td>
<td>United States History A or United States History B</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-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>
</tbody>
</table>

**GENERAL EDUCATION (21.0)****

**ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0

**TOTAL UNITS (71.0)**

---

† These courses also satisfy General Education Requirements.

For more information, contact:
- Melissa Horstein at (831) 755-6889, mhornestein@hartnell.edu, N-21
- Parviz Entekhabi at (831) 755-6866, pentekhabi@hartnell.edu, Alisal Campus, AC-A104
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, mendoza@hartnell.edu, D-364
Janet Pessagno at (831) 770-6133, jpeessagno@hartnell.edu, D-353
Dan Peterson at (831) 755-6953, dpeterson@hartnell.edu, D-368

PROGRAM OUTCOMES
Upon successful completion of the English program, 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 to any campus 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.

In order to earn this degree, students must complete:
- 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an “AA-T” or “AS-T” major as detailed in the degree section of the catalog. All courses in the major must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis (title 5 § 55063).
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 85 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 102 of the Hartnell College Catalog for more information).
- No additional local Associate degree requirements are applied.

<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>
<tr>
<td><strong>SUBTOTAL UNITS (6.0)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 0.6 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>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-45A</td>
<td>Survey of British Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-45B</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</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>
<tr>
<td><strong>SUBTOTAL UNITS (0.6)</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>ENG-10</td>
<td>Introduction to Linguistics</td>
<td>3.0</td>
</tr>
<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>Film Appreciation to 1960</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-51</td>
<td>Film Appreciation 1960 to Present</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>SUBTOTAL UNITS (3.0)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>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>
<tr>
<td>English 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>3.0-6.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></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.
ENGLISH—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The English program 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
- Janet Pessagno at (831) 770-6133, npessagno@hartnell.edu, D-353
- Dan Peterson at (831) 755-6953, dpeterson@hartnell.edu, D-368

PROGRAM OUTCOMES

Upon successful completion of the English program, 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.

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>ENG-18</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>
<tr>
<td>Required Major Course</td>
<td>ENG-10</td>
<td>Introduction to Linguistics</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>SUBTOTAL UNITS (9.0)</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>ENG-22</td>
<td>Studies in Poetry</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-24</td>
<td>The Short Story</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>SUBTOTAL UNITS (3.0)</strong></td>
<td></td>
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<td></td>
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</tbody>
</table>

<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>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><strong>SUBTOTAL UNITS (6.0)</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>ENG-17</td>
<td>The Contemporary Shakespeare</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>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-32</td>
<td>Intermediate Creative Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-33</td>
<td>Advanced Creative Writing</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><strong>SUBTOTAL UNITS (3.0)</strong></td>
<td></td>
<td></td>
<td></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</td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States</td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationale (5 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>
</tbody>
</table>

| General Education | 21.0 |
| English Required Major Courses and Restricted Major Electives | 21.0 |
| **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 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.
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 art/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 cannot double count General Education courses.

<table>
<thead>
<tr>
<th>Area of Emphasis: Natural Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students cannot double count General Education courses with area of emphasis.</td>
</tr>
<tr>
<td><strong>REQUIRED DEGREE COURSES</strong></td>
</tr>
<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, 7, 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, 36</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</td>
</tr>
</tbody>
</table>

Natural Science Emphasis Units 18.0

<table>
<thead>
<tr>
<th>Area of Emphasis: Social and Behavioral Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Students will develop an awareness of the method of inquiry used by the social and behavioral sciences.</td>
</tr>
<tr>
<td>For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students cannot double count General Education courses with area of emphasis.</td>
</tr>
<tr>
<td><strong>REQUIRED DEGREE COURSES</strong></td>
</tr>
<tr>
<td>Administrative Justice: ADJ 1, 51</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 35</td>
</tr>
<tr>
<td>Counseling: COU 35</td>
</tr>
<tr>
<td>Economics: ECO 1, 5</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, 2, 10</td>
</tr>
<tr>
<td>Health Education: HED 2</td>
</tr>
<tr>
<td>History: HIS 4A, 4B, 5A, 5B, 6, 10, 17A, 17B, 21, 40, 46A, 46B, 47, 48, 49A, 49B, 51</td>
</tr>
<tr>
<td>Philosophy: PHL 2, 6, 8, 10, 15</td>
</tr>
<tr>
<td>Political Science: POL 1, 2, 3, 5, 6</td>
</tr>
<tr>
<td>Psychology: PSY 2A, 6, 8, 10, 12, 14, 15, 22, 25, 33, 36, 41, 42</td>
</tr>
<tr>
<td>Sociology: SOC 1, 3, 41, 42</td>
</tr>
</tbody>
</table>

Social and Behavioral Science Emphasis Units 18.0
CON’T OF GENERAL STUDIES WITH AN AREA OF EMPHASIS—ASSOCIATE OF ARTS DEGREE

### 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 cannot 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 (formerly COU 80, 81, 83)</td>
</tr>
<tr>
<td>Anthropology: ANT 2, 3, 20</td>
</tr>
<tr>
<td>Art: ART 1A, 1B, 1W, 3, 10, 12A, 15A, 15B, 33, 34, 70, 72, 80</td>
</tr>
<tr>
<td>English: ENG 1B, 10, 17, 22, 24, 26, 31, 32, 41, 44A, 44B, 46A, 46B, 47A, 47B, 50, 51</td>
</tr>
<tr>
<td>Ethnic Studies: ETH 6, 12, 25</td>
</tr>
<tr>
<td>French: FRN 1, 2, 3</td>
</tr>
<tr>
<td>History: HIS 40, 47, 48, 51</td>
</tr>
<tr>
<td>Japanese: JPN 10, 11</td>
</tr>
<tr>
<td>Music: MUS 1A, 1B, 2, 5, 6, 7, 20, 21, 23.1, 23.2, 23.3, 23.4, 23.5, 24, 25, 26, 29.1, 29.2, 29.3, 29.4, 29.5, 34.1, 34.2, 34.3, 34.4, 50A, 50B, 52A, 52B</td>
</tr>
<tr>
<td>Philosophy: PHL 2, 8, 8, 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: THA 1, 110A, 122, 142, 170, 172, 180, 182, 190, 192</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 culture. 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 cannot 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>Communication Studies: COM 35</td>
</tr>
<tr>
<td>Counseling: COU 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, 6, 12, 25</td>
</tr>
<tr>
<td>Health Education: HED 6</td>
</tr>
<tr>
<td>History: HIS 10, 40, 46A, 46B, 48, 49A, 49B</td>
</tr>
<tr>
<td>Music: MUS 5, 6, 7</td>
</tr>
<tr>
<td>Sociology: SOC 42</td>
</tr>
<tr>
<td>Spanish: SPA 35</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 used.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students cannot 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 (formerly COU 80, 81, 83)</td>
</tr>
<tr>
<td>Business: BUS 1A, 5</td>
</tr>
<tr>
<td>Communication Studies: COM 1, 3, 5, 8, 35</td>
</tr>
<tr>
<td>Computer Science: CSS 1, 2A, 2B, 4, 31, 43, 122, 123</td>
</tr>
<tr>
<td>Counseling: COU 21, 26, 27, 35</td>
</tr>
<tr>
<td>English: ENG 1B, ENG 1B Multicultural Perspective, 2, 10</td>
</tr>
<tr>
<td>French: FRN 1, 2, 3</td>
</tr>
<tr>
<td>Japanese: JPN 10, 11</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, 122, 123</td>
</tr>
<tr>
<td>Philosophy: PHL 15</td>
</tr>
<tr>
<td>Spanish: SPA 1, 1S, 1S, 2S, 2X, 3, 3S, 4, 4S</td>
</tr>
</tbody>
</table>

**Language and Rationality Emphasis Units**
18.0
## CON’T OF GENERAL STUDIES WITH AN AREA OF EMPHASIS—ASSOCIATE OF ARTS DEGREE

<table>
<thead>
<tr>
<th>Course #</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>Communication and Analytical Thinking</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>General Education</td>
<td>21.0</td>
</tr>
<tr>
<td></td>
<td>Area of Emphasis</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>Electives (Courses numbered 1-199) are required when degree units plus GE units total are fewer than 60.0</td>
<td>21.0</td>
</tr>
<tr>
<td></td>
<td>DEGREE 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.

**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.
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 DeJesus-Riley at (831) 755-6787, adejesus@hartnell.edu; D-367

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 or</td>
<td>United States History A or</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-21</td>
<td>Social and Political Histories of the US</td>
<td>4.0</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-40</td>
<td>History of Women in the US</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 Anthropology: Cultural</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>5.0</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>

GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Language and Rationale (9 Units)</td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
</tr>
</tbody>
</table>

General Education 21.0

<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>History Required Courses and Restricted Electives</td>
<td>18.0-19.0</td>
</tr>
<tr>
<td>ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0</td>
<td>19.0-20.0</td>
</tr>
<tr>
<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.

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.

For more information contact:
Counseling Discipline, Building B
(831) 755-6820
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: 39.0 units
   A. Minimum units to meet CSU-GE breadth certification requirements, or
   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. 18.0 units
   1. 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)
   2. 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. Students can double count General Education courses with area of emphasis.

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.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology – ANT 1, 2, 3, 10, 15, 20</td>
</tr>
<tr>
<td>Math – MAT 13</td>
</tr>
<tr>
<td>Psychology – PSY 2 (1A)</td>
</tr>
<tr>
<td>Sociology – SOC 1</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art – ART 1A, 1B, 3, 6A, 10, 12A, 15A</td>
</tr>
<tr>
<td>Photography – PHO 1, 2</td>
</tr>
<tr>
<td>Digital Art – ART 70, 72, 73</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>English – ENG 1B, 2, 10</td>
</tr>
<tr>
<td>Communication Studies – COM 1, 3, 5, 8, 35 or COU 35</td>
</tr>
<tr>
<td>Philosophy – PHL 15</td>
</tr>
</tbody>
</table>

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.

✓ REQUIRED DEGREE COURSE OPTIONS
- Anthropology  - ANT 2
- Family and Consumer Studies  - FCS 14
- Child Development  - ECE 2, 12A
- Criminal Justice  - ADJ 1, 2, 3, 4, 5, 8
- Ethnic Studies  - ETH 3, 4
- Geography  - GEG 2
- Mathematics  - MAT 13
- Psychology  - PSY 2 (1A)
- Sociology  - SOC 1, 6

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.

✓ REQUIRED DEGREE COURSE OPTIONS
- Art  - ART 1A, 1B
- Geography  - GEG 2
- Philosophy  - PHL 6, 8

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.

✓ REQUIRED DEGREE COURSE OPTIONS
- Anthropology  - ANT 2, 3
- Art  - ART 1A, 1B, 3, 12A
- History  - 4A, 4B,
- Geography  - GEG 1, 2
- Philosophy  - PHL 2, 15

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.

✓ REQUIRED DEGREE COURSE OPTIONS
- American Sign Language  - ASL 80, 81, 83 (formerly COU 80, 81, 83)
- French  - FRN 1, 2, 3,
- Japanese  - JPN 10, 11
- Spanish  - SPA 1, 1S, 1X, 2, 2S, 2X, 3, 3S, 4, 4S, 35
- Geography  - GEG 2

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.

✓ REQUIRED DEGREE COURSE OPTIONS
- Music  - MUS 1A, 1B, 2, 5, 6, 7, 50A, 50B, 52A, 52B
- Theater Arts  - THA 1, 10, 11

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.

✓ REQUIRED DEGREE COURSE OPTIONS
- Philosophy  - PHL 6, 8, 10, 15
- History  - HIS 4A, 4B, 5A, 5B, 47
- Mathematics  - MAT 13

Philosophy Emphasis Units (18.0)
CON'T OF LIBERAL ARTS WITH AN AREA OF EMPHASIS—ASSOCIATE OF ARTS DEGREE

**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>Geography – GEG 2</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>
<tr>
<td><strong>Political Science Emphasis Units (18.0)</strong></td>
</tr>
</tbody>
</table>

**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>
<tr>
<td><strong>Psychology Emphasis Units (18.0)</strong></td>
</tr>
</tbody>
</table>

**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, 51</td>
</tr>
<tr>
<td>Anthropology – ANT 1, 2, 3</td>
</tr>
<tr>
<td>Sociology – SOC 1, 5, 41, 42</td>
</tr>
<tr>
<td>Economics – ECO 1, 5</td>
</tr>
<tr>
<td>Political Science – POL 1, 2, 3, 5, 6</td>
</tr>
<tr>
<td>Geography – GEG 1, 2</td>
</tr>
<tr>
<td>Family and Consumer Studies – FCS 14</td>
</tr>
<tr>
<td>Mathematics – MAT 13</td>
</tr>
<tr>
<td><strong>Sociology and Social Sciences Emphasis Units (18.0)</strong></td>
</tr>
</tbody>
</table>

**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 (39.0 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**
  - Minimum units to meet CSU-GE breadth certification requirements (39.0 units) 34.0-39.0
  - Minimum units to meet IGETC certification requirements (34.0-37.0 units)

**Electives (Courses numbered 1-99) are required when degree units plus GE units total are fewer than 60.0**

**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 Mathematics Associate's Degree program, 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.

In order to earn this degree, students must complete:

- Minimum of 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an “AA-T” or “AS-T” major as detailed in the degree section of the catalog. All courses in the major must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis (title 5 § 55063).
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 85 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 102 of the Hartnell College Catalog for more information).
- No additional local Associate degree requirements are applied.

<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-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>
</tbody>
</table>

SUBTOTAL UNITS (12.0)

<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>Restricted 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>

SUBTOTAL UNITS (3.0)

<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>Restricted 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>

SUBTOTAL UNITS (≥ 3.0)

SUBTOTAL UNITS (≥ 18.0)

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 (34-37.00 units) certification requirements 34.0-37.0

Mathematics Required Major and Restricted Electives 18.0
Electives(Courses numbered 1-99) required when degree units plus GE units total fewer than 60.0 3.0-8.0
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.
MATHEMATICS—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Mathematics program 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 mathematics program. 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 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: Leticia Contreras at (831) 770-7053, laccontreras@hartnell.edu, D-251
Gregory Perkins at (831) 755-6705, gperkins@hartnell.edu, D-253

PROGRAM OUTCOMES

Upon successful completion of the Mathematics program, 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.

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>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-4A</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-5A</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from list)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>MAT-12</td>
<td>Number Systems</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>MAT-16</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PHY-2A</td>
<td>College Physics</td>
<td>4.0</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>CHM-1A</td>
<td>General Chemistry</td>
<td>5.0</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>PHL-15</td>
<td>Critical Thinking and Logic</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-4</td>
<td>Introduction to Scientific Programming</td>
<td>4.0</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-5A</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-5A</td>
<td>Differential Equations</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-5A</td>
<td>Differential Equations</td>
<td>3.0</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>Mathematics Required Major Courses and Restricted Major Electives</td>
<td>21.0</td>
</tr>
<tr>
<td>General Education</td>
<td>21.0</td>
</tr>
<tr>
<td>ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0</td>
<td>18.0</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>60.0</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.
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

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 or Genre Perspective</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-1B</td>
<td>Music Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-5A</td>
<td>Harmony I</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-5B</td>
<td>Harmony IV</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-51A</td>
<td>Musicianship I</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-51B</td>
<td>Musicianship II</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-52A</td>
<td>Harmony III</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-52B</td>
<td>Harmony IV</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-53A</td>
<td>Musicianship III</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-53B</td>
<td>Musicianship IV</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Courses - PIANO</td>
<td>MUS-13A or Beginning Piano I</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Courses - ENSEMBLE</td>
<td>MUS-13B or Intermediate Piano</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Courses - ENSEMBLE</td>
<td>MUS-14 or Advanced Piano</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Courses - ENSEMBLE</td>
<td>MUS-15</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-20</td>
<td>Hartnell College Choir</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-21</td>
<td>Hartnell Chamber Singers</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-23.1</td>
<td>Hartnell Chorale</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-25</td>
<td>Hartnell College Wind Ensemble</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-26</td>
<td>Jazz Ensemble</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-29.1</td>
<td>Symphonic Band</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-34.1</td>
<td>Symphony Orchestra</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MUS-42</td>
<td>Digital Audio Recording</td>
<td>4.0</td>
</tr>
</tbody>
</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 Electives</td>
<td>MUS-43</td>
<td>MIDI Sequencing</td>
<td>2.0</td>
</tr>
<tr>
<td>Recommended Major Electives</td>
<td>MUS-10</td>
<td>Applied Music-Voice</td>
<td>1.0</td>
</tr>
<tr>
<td>Recommended Major Electives</td>
<td>MUS-17A-17D</td>
<td>Guitar</td>
<td>1.0</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>MUS-1A or Music Appreciation—Historical or Genre Perspective</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MUS-1B</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>MUS-1A or Music Appreciation—Historical or Genre Perspective</td>
<td>3.0</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>MUS-1B</td>
<td>3.0</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 (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

| General Education | 21.0 |
| Music Required Major Courses | 34.0 |
| ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0 | 5.0  |
| 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.
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 National League for Nursing Accrediting Commission.

Mission

The Hartnell College Nursing Program facilitates a learning environment in which students become safe professional nurses. Graduate nurses provide competent, compassionate, ethical, and culturally sensitive care. The faculty and students adopt an attitude of inquiry, where ideas are generated and the art of investigation is prized.

Vision

The Hartnell College Nursing Program is an influential resource for the health and well-being of the community. Faculty and students embrace excellence and accept the responsibility for advancing the art and science of the nursing profession.

Values

The mission and vision for the Hartnell College Nursing Program encompass the core values of caring, competence, collaboration, and curiosity.

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-7 or BIO-27</td>
<td>Principles of Microbiology</td>
<td>5.0 or 4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (≥ 90.0)

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>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td>Ethnic Groups Course (see catalog)</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Language and Rationality</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 to Public Speaking or Introduction to Communication</td>
<td>3.0 or 3.0</td>
</tr>
<tr>
<td></td>
<td>HES-120</td>
<td>American Heart Association Health Care Provider Basic Life Support Certification</td>
<td>(0.5)</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (21.0-24.5)

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 CPR for Healthcare Providers Certification course.

Hartnell College Catalog/2013-14
CON’T OF REGISTERED NURSING—ASSOCIATE OF SCIENCE DEGREE

<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</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>4.0</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Semester</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>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-43</td>
<td>Nursing Theory III</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-43.1</td>
<td>Nursing Clinical III</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-43.2</td>
<td>Clinical Reasoning Seminar III</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-43.3</td>
<td>Nursing Skills Lab III</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-50.43</td>
<td>Supervised Nursing Skills Practice III</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-44</td>
<td>Nursing Theory IV</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-44.1</td>
<td>Nursing Clinical IV</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-44.2</td>
<td>Clinical Reasoning Seminar IV</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>NRN-50.44</td>
<td>Supervised Nursing Skills Practice IV</td>
<td>0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NURSING AND ALLIED HEALTH ELECTIVES*</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>
<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.

TRANSFER STUDENTS

Hartnell, Monterey Peninsula, Cabrillo, and Gavilan Colleges are members of the collaborative baccalaureate of science degree in nursing (BSN) program at California State University, Monterey Bay. Students must be accepted to both Hartnell College Nursing Program and to California State University Monterey Bay. Information is available on the following websites: http://www.hartnell.edu/academics/health.html and http://nursing.csUMB.edu/.

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 is available online at http://www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.

Students transferring from other nursing programs seeking placement into the second, third, or fourth semesters of the Associate Degree in Nursing Program at Hartnell College should contact the Dean of Nursing and Allied Health (831) 770-6145. The Hartnell College Nursing Program Dean and academic counselors will evaluate all transfer student records for course work equivalency. Syllabi, course outlines, and catalogs may be requested for the evaluation.

ACCEPTANCE TO THE REGISTERED NURSING PROGRAM

The Registered 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. Information can be obtained from the website (http://www.hartnell.edu/academics/health.html), the Nursing and Allied Health Office, or the Hartnell College Nursing and Allied Health Program academic counselor. (Nursing and Allied Health Office 770-6146; Counseling: 755-6820).

Application forms for the RN Program and informational materials are available on the Hartnell College Nursing Program website (http://www.hartnell.edu/academics/health.html). Application forms are available in December of each year for the following Fall semester (August) 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 RN 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 RN program is based on recommendations from the California Community College Chancellors’ office and the Associate Degree Nursing Prerequisite Model for Admissions to Nursing Programs. Admission criteria include overall college GPA, English GPA, and core science GPA. A logistic regression formula is applied to the criteria and an Index Score is determined. This score is based on a complex formula that cannot be calculated by the applicant. The Hartnell College Nursing Program requires an Index Score of 80%
CON’T OF REGISTERED NURSING—ASSOCIATE OF SCIENCE DEGREE

to qualify for admission and a comprehensive score of 62% on the 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, personal essay, and performance ratings. 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 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. Current American Heart Association Healthcare Provider CPR Certification
5. Minimum score 62% on the standardized pre-readiness for nursing assessment exam (ATI TEAS V)
6. Ability to meet the Essential Capabilities requirements

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.

LICENSED VOCATIONAL NURSE TO REGISTERED NURSE

ASSOCIATE DEGREE IN NURSING LVN-to-RN

Licensed Vocational Nurses are eligible for advanced 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/academics/health.html). Accepted applicants are required to take standardized LVN-to-RN nursing content examinations which determine placement in the first, second, or third semester.

FOR MORE INFORMATION, CONTACT:  Hartnell College Nursing Program:  (831) 770-6146  Hartnell College Counselor: (831) 755-6820  nursingandalliedhealth@hartnell.edu
NURSING—VOCAATIONAL NURSING—CERTIFICATE OF ACHIEVEMENT

PROGRAM DESCRIPTION
The Hartnell College Vocational Nursing (VN) Program prepares qualified individuals to practice vocational nursing. Licensed vocational nurses perform essential nursing services under the supervision of a registered nurse or physician. They work in a variety of settings including, but not limited to, community agencies, medical offices, hospitals, and long-term care facilities. Hartnell College’s Vocational Nursing program is a 12-month program that includes classroom, laboratory, and clinical learning experiences. After completing the certificate program, students are eligible to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN).

Because the VN program is impacted, completion of program prerequisites does not guarantee admission to the Hartnell College Vocational Nursing Program. Information is available on the website www.hartnell.edu/nursingandalliedhealth/. Hartnell College Nursing Program: (831) 770-6146; Hartnell College Academic Counselor: (831) 755-6820.

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 patients, 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 of patients throughout the lifespan.
4. communicate with clarity, purpose and sensitivity with patients, families, communities, and inter-professional team members.
5. provide safe, and effective nursing care, including demonstrating 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 caring by providing patient centered care that is sensitive to patient’s preferences, values, and needs.
7. follow the rights of medication administration and administer medications with appropriate assessments and teaching.
8. advocate for patients and consumers through the involvement in community, healthcare policy, 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.

**Students will enroll in this course in the Fall Semester coinciding with Modules 2 and 3 for a total of 0.3 units.**

The Hartnell College Vocational Nursing Program has a separate admission application process from the Hartnell College admission process. Application materials, program information, and program cost projections are available on the Hartnell College website (www.nursingandalliedhealth@hartnell.edu). The completed application with official documents of verification must be submitted by the published deadline date. Additional costs for uniforms, clinical and skills supplies, and standardized tests are required. Students accepted for entry into the Vocational Nursing program will be required to attend a mandatory orientation. The orientation, policies and procedures and information on health/drug screening and background checks will be given. In addition, a list of required equipment and supplies and their costs is available through the Department of Nursing office.

Hartnell College Catalog/2013-14
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.

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>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHO-2</td>
<td>Beginning Black and White Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHO-3</td>
<td>Advanced Photography Lab</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHO-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>

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-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-6C‡</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>
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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</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education 21.0

<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>Photography Required Major Courses and Restricted Major Electives</td>
<td>24.0</td>
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</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.

†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>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>PHO-1 Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHO-2 Beginning Black and White Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHO-3 Advanced Photography Lab</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHO-4 Portfolio Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-70 Graphic Design/Computer Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART/PHO-30 Digital Photographic Imaging</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-12A Design</td>
<td>3.0</td>
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</table>

SUBTOTAL UNITS (21.0)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ART-77 Digital Video, Audio Editing and Production</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-75 3D Modeling and Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-1A Art History Survey I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-1B Art History Survey II</td>
<td>3.0</td>
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</tbody>
</table>

SUBTOTAL UNITS (3.0)

<table>
<thead>
<tr>
<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* 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>BUS-151** or MAT-151L1, L2, and L3** Business Mathematics or 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 more information 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
Rich Givens, Student Athlete Counselor at (831) 755-6840, rgivens@hartnell.edu

FOR MORE INFORMATION ON ADAPTIVE PHYSICAL EDUCATION CONTACT:
Melissa Stave at (831) 755-6876, mstave@hartnell.edu

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-111 or BIO-5, BIO-6, 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-2</td>
<td>Care and Prevention of Athletic Injuries</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-133</td>
<td>Elementary Statistics</td>
<td>5.0</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>HED-6P</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>CHEM-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-2T</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-33, 58, 59, 60</td>
<td>Racquet Activities (Tennis or Badminton)</td>
<td></td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-42, 44, 61, 62, 63, 68</td>
<td>Aquatic Activities (Beginning, Intermediate, Advanced, Swimming, Swim Fitness, Hydro Fitness or Water Jogging)</td>
<td></td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-37, 38, 40, 52, 53, 54, 55, 57, 64, 65, 70, 71, 72, 74, PEIM-17, 18, 19, 20, 21, 22, 23, 24, 25, 26</td>
<td>Team Activities</td>
<td></td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-27, 28, 29, 30, 31, 32, 34, 35, 36, 43, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60</td>
<td>Fitness Activities</td>
<td></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>
</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>LIB-60</td>
<td>Internet &amp; Information Literacy</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-6</td>
<td>Human Anatomy</td>
<td>4.0</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>COU-26</td>
<td>Learning Strategies</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PETH-3</td>
<td>Concepts of Fitness and Wellness</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PE-42</td>
<td>Leadership in Physical Education and Sports</td>
<td>2.0</td>
</tr>
</tbody>
</table>
### General Education Courses

<table>
<thead>
<tr>
<th>Category</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences</td>
<td>BIO-11R, or BIO-5, BIO-6 and BIO-8L#</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>
</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**: 0-4.0

### Total Units

- **General Education**: 21.0
- **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. Please consult with a Hartnell College counselor to review transfer requirements.
PHYSICS—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Physics program offers course work for a diverse range of students from the community starting with those merely wishing to learn more of the world around them and finishing with the student pursuing a four-year degree in science or engineering.

Physics courses are available at three different levels, all of which satisfy the needs of students wishing to transfer to four-year colleges and universities. The level of the physics course that students initially enroll in is largely dependent on their individual math skills. The emphasis at all levels is on developing an understanding and appreciation for the basic laws of our physical universe. This is done largely through the development of problem solving skills and laboratory investigations. The Physics program at Hartnell College is fortunate to possess an excellent inventory of laboratory apparatus for demonstrations and student use in the laboratories, and special projects.

Some positions for which four-year graduates in physics are qualified are in research, teaching, engineering, medicine, and industry.

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. Brooke Haag at (831) 770-7017, bhaag@hartnell.edu, N-10

PROGRAM OUTCOMES

Upon successful completion of the Physics program, a student should be able to:

- comprehend and articulate basic physics terminology.
- demonstrate proficiency in problem solving, especially with regard to basic physics problems involving major concepts, theories, and principles including, but not limited to:
  - conservation of momentum and energy.
  - Newtonian mechanics.
  - Maxwell’s laws.
  - fluid dynamics.
- collect and analyze data effectively using basic laboratory equipment and present results in formally structured laboratory reports.

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>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY-4B</td>
<td>General Physics/Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light and Modern Physics</td>
<td>4.0</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>
<td>4.0</td>
</tr>
<tr>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (27.0)***

### 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>CHM-1A</td>
<td>General Chemistry I</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM-1B</td>
<td>General Chemistry II</td>
<td>3.0</td>
</tr>
<tr>
<td>CSS-4</td>
<td>Introduction to Scientific Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>AST-1</td>
<td>Introduction to Astronomy</td>
<td>3.0</td>
</tr>
<tr>
<td>AST-1L</td>
<td>Astronomy Laboratory</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>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (≥ 21.0)***

1. 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.

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>21.0</td>
</tr>
<tr>
<td>Physics Required Courses</td>
<td>27.0</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>58.0</td>
</tr>
</tbody>
</table>
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 Political Science program, 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.

In order to earn this degree, students must complete:

- 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major as detailed in the degree section of the catalog. All courses in the major must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 85 of the Hartnell College Catalog for more information);
- Or the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 102 of the Hartnell College Catalog for more information).
- No additional local Associate degree requirements are applied.

<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>PCL-1</td>
<td>American Political Institutions</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PCL-2</td>
<td>Contemporary Governments Abroad</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PCL-3</td>
<td>Introduction to International Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PCL-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>
<tr>
<td>✓ REQUIRED GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</td>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units); OR</td>
<td>39.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements</td>
<td>34.00-37.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science Required Major and Restricted Electives</td>
<td>23.0</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>0.0-3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>60.0</td>
<td></td>
<td></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.
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 Matushita-Arao, PhD, at (831) 755-6781, yarao@hartnell.edu, E-316
Carol Kimbrough, MA, MFT, at (831) 755-6856, skimbrough@hartnell.edu, E-308

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.
- consider evidence, tolerate ambiguity, act ethically, and reflect other values that represent contemporary foundations of psychology as a discipline.

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-6</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-T11</td>
<td>Intro. to Human Anatomy &amp; Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-132</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (27.0)

<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>PSY-12</td>
<td>Theories of Personality</td>
<td>3.0</td>
</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-36</td>
<td>Psychology of &quot;La Mujer&quot;</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>ANT-1</td>
<td>Physical Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>ANT-2</td>
<td>Intro. to Anthropology, Cultural</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>
<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-T11†</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></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-132</td>
<td>Elementary Statistics</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

| General Education | 21.0 |
| Psychology Required Major Courses | 27.0 |

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0

| TOTAL UNITS | 60.0 |

† These courses 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 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.

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.

Total Program Units: 27
IGETC or CSU/GE Units: 34-39
Electives (as needed): 60 units
REAL ESTATE—ASSOCIATE OF ARTS DEGREE

**THIS PROGRAM IS CURRENTLY UNDER REVIEW, AND COURSE OFFERINGS WILL BE LIMITED FOR THE 2013-2014 ACADEMIC YEAR.**

**NEW STUDENTS WILL NOT BE ADMITTED INTO THE REAL ESTATE PROGRAM OR COURSES FOR THE 2013-14 ACADEMIC YEAR.**

**PROGRAM DESCRIPTION**

The Real Estate program prepares students to work in the field of residential real estate. Students receive training in real estate principles, practices, economics, appraisal, finance, escrow, and property management. The program prepares students to take the subject matter examinations required by the State of California for licensure as a Real Estate Salesperson and as a Real Estate Broker.

The State of California may have additional requirements for on-the-job experience or training and may change its requirements for licensure. If students have questions about licensing requirements, it is recommended that they contact Real Estate faculty or the California Department of Real Estate.

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:** Office of Academic Affairs at (831) 770-7090, E-101

**PROGRAM OUTCOMES:**

- Demonstrate knowledge of the procedures and requirements for obtaining a CA Real Estate Salesperson License.
- Demonstrate knowledge of the legal aspects of real estate, including law of contracts, disclosure obligations and real estate finance.
- Identify the factors affecting the economics of the housing industry.

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>RE-144</td>
<td>Principles of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-145</td>
<td>Real Estate Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-146</td>
<td>Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-147</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-148</td>
<td>Real Estate Appraisal I</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-149</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-1A</td>
<td>Accounting Principles</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>RE-150</td>
<td>Property Management</td>
</tr>
<tr>
<td>RE-153</td>
<td>Escrow Procedures</td>
</tr>
</tbody>
</table>

**RESTRICTED MAJOR ELECTIVES (Select a minimum of 6.0 units from the following)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
</tr>
<tr>
<td>MAT-123+</td>
<td>Intermediate Algebra</td>
</tr>
</tbody>
</table>

<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 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>

**ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0**

**TOTAL UNITS**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<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.
REAL ESTATE—CERTIFICATE OF ACHIEVEMENT

**THIS PROGRAM IS CURRENTLY UNDER REVIEW, AND COURSE OFFERINGS WILL BE LIMITED FOR THE 2013-2014 ACADEMIC YEAR.**

NEW STUDENTS WILL NOT BE ADMITTED INTO THE REAL ESTATE PROGRAM OR COURSES FOR THE 2013-14 ACADEMIC YEAR.

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>RE-144</td>
<td>Principles of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-145</td>
<td>Real Estate Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-146</td>
<td>Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-147</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-148</td>
<td>Real Estate Appraisal</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-149</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (18.0)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-1A</td>
<td>Accounting Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS-18</td>
<td>Legal Environment of Business</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS-32</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-150</td>
<td>Property Management</td>
<td>3.0</td>
</tr>
<tr>
<td>RE-153</td>
<td>Escrow Procedures</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

**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.
RESPIRATORY CARE PRACTITIONER—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION
The Hartnell College Respiratory Care Practitioner (RCP) program is a 4-semester course of study consisting of classroom, high-fidelity simulation, skills laboratory, seminar, and clinical experiences. Clinical experiences are in Monterey, Santa Clara, 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). After passing, graduates may practice as respiratory care practitioners in a variety of acute and community-based settings. The Hartnell College Respiratory Care Practitioner Program is in the accreditation process of the Commission on Accreditation for Respiratory Care (CoARC).

FOR MORE INFORMATION, CONTACT:
Hartnell College Nursing and Allied Health Program: (831) 770-6146
Email: nursingandalliedhealth@hartnell.edu
Hartnell College Counselor: (831) 755-6820

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-6L</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 Prerequisite Course for RCP Program</td>
<td>BIO-27</td>
<td>General Microbiology</td>
<td>5.0 or</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (≥ 23.5-27.5)

Please note: Additional Required Prerequisites for Respiratory Care Practitioner 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>
<tr>
<td>Ethnic Groups in the United States</td>
<td>ENG-1A</td>
<td>American Heart Association Health Care Provider</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (≥ 9.0-10.0)

| Language and Rationale              | ENG-1A     | College Composition and Reading                  | 3.0   |
| Communication and Analytical Thinking| MAT-123    | Intermediate Algebra                             | 5.0   |
|                                    | COM-1 or   | Introduction to Public Speaking or Introduction  | 3.0 or|
|                                    | COM-3      | to Communication                                 |       |
|                                    | HES-120    | Basic Life Support Certification                  | 0.5   |

SUBTOTAL UNITS (≥ 23.5-27.5)

1. 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.
2. Or any American Heart Association CPR for Healthcare Providers 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 80</td>
<td>Respiratory Care Practitioner Responsibilities</td>
<td>1.5</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RCP 81</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 Subtotal (9.5)</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 83</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>Second Semester Subtotal (12.5)</strong></td>
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<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>Third Semester Subtotal (11.5)</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>
<td>0.5</td>
</tr>
<tr>
<td><strong>Fourth Semester Subtotal (11.0)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL UNITS 44.5</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 is available online at [http://assist.org](http://assist.org). Please consult with a Hartnell College counselor to review transfer requirements.

**Acceptance to the Respiratory Care Practitioner Program**

The Respiratory Care Practitioner 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. Please refer to the website [http://www.hartnell.edu/academics/health.html](http://www.hartnell.edu/academics/health.html) or contact the Nursing and Allied Health Office or a Hartnell College Counselor for more information. (Department of Nursing and Allied Health Office 770-6146; Counseling: 755-6820)

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/academics/health.html](http://www.hartnell.edu/academics/health.html). Application forms are posted in December of each year for the following Fall semester (August) 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 Luis Obispo counties. Students accepted for entry into the Respiratory Care Practitioner program are required to attend the mandatory RCP Orientation Session. At the orientation, policies and procedures will be discussed and each admitted applicant will be given a New Student Information Packet, complete with the required health record, drug screening, and background check materials.

The Hartnell College Respiratory Care Practitioner Program is impacted because more students apply for admission than can be admitted. Selection is based on criteria established by the Respiratory Care Practitioner Program. Students considered for admission must complete anatomy, physiology, chemistry, and microbiology prerequisites with an overall GPA of 2.0 or higher. No grade less than “C” will be accepted. Multi-criteria screening factors may be evaluated, which includes healthcare experience, educational history, personal essay, letters of recommendation, and employment performance ratings.

**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 may not be accepted. A higher level of English (i.e., ENG 2 or ENG 1B) is accepted for admission GPA purposes. Science GPA Requirement: 2.0
4. Current American Heart Association Healthcare Provider CPR Certification
5. Meet the requirements of Essential Capabilities

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 Respiratory Care Practitioner 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.

**Baccalaureate Preparation**

Students should consult with a counselor and appropriate college catalog for specific transfer requirements.

**Respiratory Care Practitioner Students Transferring From Other Institutions**

Students from other Respiratory Care Practitioner programs seeking placement into the second, third, or fourth semesters of the Associate Degree in Respiratory Care Practitioner Program at Hartnell College should contact the Dean of Nursing and Allied Health (831) 770-6146. The Respiratory Care Practitioner Program Director and Academic Counselors will evaluate all transfer student records for course work equivalency. Syllabi, course outlines, and catalogs may be requested for the evaluation.
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 Anthropology, Cultural</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></td>
<td>or GEG-2</td>
<td>or Introduction to Geography: Cultural Elements</td>
<td></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>SOC-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>Physical 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</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td></td>
<td></td>
<td></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.

**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.
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 Vacafior at (831) 755-6786, avacaflor@hartnell.edu, D-371

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>
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<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>
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<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>
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<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>
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<tr>
<td>Restricted Major Elective</td>
<td>PSY-36</td>
<td>Psychology of “La Mujer”</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>
<tr>
<td>Restricted Major Elective</td>
<td>SPA-35</td>
<td>Literatura chicana</td>
<td>3.0</td>
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</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><strong>Natural Sciences</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social &amp; Behavioral Sciences</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Humanities</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ethnic Groups in the United States</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Language and Rationale (9 Units)</strong></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><strong>Communication and Analytical Thinking</strong> (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spanish Required Major Courses and Restricted Major Electives</strong></td>
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</tr>
<tr>
<td><strong>General Education</strong></td>
<td></td>
<td></td>
<td>21.0</td>
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<tr>
<td><strong>ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0</strong></td>
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<td></td>
<td>10.0</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></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.

**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 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
THEATER ARTS—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTIONS

Theater Arts or Drama is the study of human expression culminating in a live performance on stage. Theater 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. Theater 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 Theater 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 theater technician, concert venue, technician, theme park technician, stage manager, designer, art director, facilities manager, or technical director.

FOR MORE INFORMATION, CONTACT: Office of Academic Affairs and Accreditation at (831) 770-7090, E-101

PROGRAM OUTCOMES

Upon successful completion of the Theater 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>THA-1</td>
<td>Introduction to Theatre</td>
<td>3.0</td>
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<tr>
<td>Required Major Course</td>
<td>THA-3</td>
<td>History of Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>THA-10</td>
<td>Beginning Acting</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>THA-11</td>
<td>Intermediate Acting</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>
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</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</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(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</td>
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<tr>
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<td></td>
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<tr>
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<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
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</tr>
<tr>
<td>Ethnic Groups in the United States</td>
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<tr>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
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</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
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<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>
</tbody>
</table>

| Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS) | | | |

<table>
<thead>
<tr>
<th>General Education</th>
<th>21.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre Arts Required Major Courses and Restricted Major Electives</td>
<td>18.0</td>
</tr>
<tr>
<td>ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0</td>
<td>21.0</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.

*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: Center for Advanced Technology, (831) 755-6960, Alisal Campus, AC-A102

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>BUS/COM-5F</td>
<td>Introduction to Organizational Communication</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>AIT-169</td>
<td>Hazardous Materials and Industrial Safety</td>
<td>1.0</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>
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</table>

SUBTOTAL UNITS (26.0)

<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-4</td>
<td>Material Science</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>
<tr>
<td>Restricted Major Elective</td>
<td>WLD-145</td>
<td>Special Projects</td>
<td>1.0-2.0</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></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 Rationale (9 units)</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>BUS/COM-5F</td>
<td>Introduction to Organizational Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Welding Required Major Courses and Restricted Major Electives 36.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 3.0

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 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>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>
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<td>WLD-53</td>
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<td>Required Major Course</td>
<td>WLD-156</td>
<td>Toolmaking</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AIT-169</td>
<td>Hazardous Materials and Industrial Safety</td>
<td>1.0</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-4</td>
<td>Material Science</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>
<tr>
<td>Restricted Major Elective</td>
<td>WLD-145</td>
<td>Special Projects</td>
<td>1.0-2.0</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*</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

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite if any</th>
<th>Advisory if any</th>
<th>Weekly Hours</th>
<th>Course Description</th>
<th>Articulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT3A</td>
<td>Analytic Geometry and Calculus I (4)</td>
<td></td>
<td>Prerequisite: MAT 24 and MAT 25 with a grade of “C” or better or placement by Hartnell’s assessment.</td>
<td>Advisory:</td>
<td>Lec 4 Hrs</td>
<td>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]</td>
<td></td>
</tr>
</tbody>
</table>

### 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.
### 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](http://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 particular four-year institution. Counselors can always help them interpret or explain this information. Students may consult the ASSIST database at www.assist.org into their educational plans for transfer.

Many 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 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 Code</th>
<th>Course Title</th>
<th>C-ID Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-57</td>
<td>Agriculture Computer Applications</td>
<td>C-ID AG AB 108L</td>
</tr>
<tr>
<td>AIT-70</td>
<td>Intro to Mechanized Agriculture</td>
<td>C-ID AG MA 104L</td>
</tr>
<tr>
<td>ADJ-1</td>
<td>Introduction to Administration of Justice</td>
<td>C-ID AJ 110</td>
</tr>
<tr>
<td>ADJ-2</td>
<td>Community Relations and the Justice System</td>
<td>C-ID AJ 160</td>
</tr>
<tr>
<td>ADJ-3</td>
<td>Concepts of Criminal Law</td>
<td>C-ID AJ 120</td>
</tr>
<tr>
<td>ADJ-4</td>
<td>Criminal Evidence</td>
<td>C-ID AJ 124</td>
</tr>
<tr>
<td>ADJ-5</td>
<td>Criminal Court Process</td>
<td>C-ID AJ 122</td>
</tr>
<tr>
<td>ADJ-6</td>
<td>Criminal Investigation</td>
<td>C-ID AJ 140</td>
</tr>
<tr>
<td>ADJ-10</td>
<td>Juvenile Procedures</td>
<td>C-ID AJ 220</td>
</tr>
<tr>
<td>ADJ-50</td>
<td>Introduction to Corrections</td>
<td>C-ID AJ 200</td>
</tr>
<tr>
<td>ADJ-51</td>
<td>Control and Supervision in Corrections</td>
<td>C-ID SSCI 160</td>
</tr>
<tr>
<td>ART-1A</td>
<td>Art History Survey I</td>
<td>C-ID ARTH 110</td>
</tr>
<tr>
<td>ART-12A</td>
<td>Design</td>
<td>C-ID ARTS 100</td>
</tr>
<tr>
<td>ART-15A</td>
<td>Ceramics A</td>
<td>C-ID ARTS 230</td>
</tr>
<tr>
<td>ART-72</td>
<td>Introduction to Digital Arts</td>
<td>C-ID ARTS 250</td>
</tr>
<tr>
<td>ART-41A</td>
<td>Introduction to Jewelry and Metalsmithing</td>
<td>C-ID ARTS 281</td>
</tr>
<tr>
<td>ART-33</td>
<td>Weaving as an Art Form</td>
<td>C-ID ARTS 282</td>
</tr>
<tr>
<td>BUS-1A</td>
<td>Financial Accounting</td>
<td>C-ID ACCT 110</td>
</tr>
<tr>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>C-ID COMM 110</td>
</tr>
<tr>
<td>COM-8</td>
<td>Interpersonal Communication</td>
<td>C-ID COMM 130</td>
</tr>
<tr>
<td>COM/COU-35</td>
<td>Intercultural Communications</td>
<td>C-ID COMM 150</td>
</tr>
<tr>
<td>CSS-1</td>
<td>Introduction to Computer Science &amp; Programming Fundamentals</td>
<td>C-ID COMP 112</td>
</tr>
<tr>
<td>CSS-3</td>
<td>Computer Architecture and Assembly Language Programming</td>
<td>C-ID COMP 142</td>
</tr>
<tr>
<td>CSS-43</td>
<td>Computer Systems and Information Literacy</td>
<td>C-ID BUS 140</td>
</tr>
<tr>
<td>ECE-1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>C-ID ECE 120</td>
</tr>
<tr>
<td>ECE-2</td>
<td>Child, Family and Community Relations</td>
<td>C-ID CDEV 110</td>
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<tr>
<td>ECE-4</td>
<td>Introduction to Curriculum</td>
<td>C-ID ECE 130</td>
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<tr>
<td>ECE-10</td>
<td>Observation and Assessment</td>
<td>C-ID ECE 200</td>
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<tr>
<td>ECE-12A</td>
<td>Preschool Theory and Practice</td>
<td>C-ID ECE 210</td>
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<tr>
<td>ECE-19</td>
<td>Nutrition in the Child Care Setting</td>
<td>C-ID ECE 220</td>
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<tr>
<td>ECE-53</td>
<td>Teaching in a Diverse Society</td>
<td>C-ID ECE 230</td>
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<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>C-ID ENGL 100</td>
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<tr>
<td>ENG-1B</td>
<td>College Literature and Composition</td>
<td>C-ID ENGL 120</td>
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<tr>
<td>ENG-2</td>
<td>Critical Thinking and Writing</td>
<td>C-ID ENGL 105</td>
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<tr>
<td>ENG-31</td>
<td>Beginning Creative Writing</td>
<td>C-ID ENGL 200</td>
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<tr>
<td>ENG-44A</td>
<td>World Literature I</td>
<td>C-ID ENGL 140</td>
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<tr>
<td>ENG-44B</td>
<td>World Literature II</td>
<td>C-ID ENGL 145</td>
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<tr>
<td>ENG-46A</td>
<td>Survey of British Literature I</td>
<td>C-ID ENGL 160</td>
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<tr>
<td>ENG-46B</td>
<td>Survey of British Literature II</td>
<td>C-ID ENGL 165</td>
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<tr>
<td>ENG-47A</td>
<td>Survey of American Literature I</td>
<td>C-ID ENGL 130</td>
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<tr>
<td>ENG-47B</td>
<td>Survey of American Literature II</td>
<td>C-ID ENGL 135</td>
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<tr>
<td>ENG-48</td>
<td>Introduction to Children’s Literature</td>
<td>C-ID ENGL 180</td>
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<tr>
<td>FCS-14</td>
<td>Child Development</td>
<td>C-ID CDEV 100</td>
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<td>GEL-2</td>
<td>Introduction to Geology</td>
<td>C-ID GEOL 100</td>
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<td>GEL-36</td>
<td>California Geology</td>
<td>C-ID GEOL 200</td>
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<td>HIS-4A</td>
<td>Western Civilization A</td>
<td>C-ID HIST 170</td>
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<tr>
<td>HIS-4B</td>
<td>Western Civilization B</td>
<td>C-ID HIST 180</td>
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<tr>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>C-ID MATH 210</td>
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<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>C-ID MATH 220</td>
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<tr>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
<td>C-ID MATH 230</td>
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<td>MAT-4</td>
<td>Linear Algebra</td>
<td>C-ID MATH 250</td>
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<tr>
<td>MAT-5</td>
<td>Different Equations</td>
<td>C-ID MATH 240</td>
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<td>MET-1</td>
<td>Weather and Climate</td>
<td>C-ID GEOG 130</td>
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<td>MUS-1A</td>
<td>Music Appreciation—Historical Perspective</td>
<td>C-ID MUS 100</td>
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<tr>
<td>MUS-1B</td>
<td>Music Appreciation—Genre Perspective</td>
<td>C-ID MUS 100</td>
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<td>MUS-25</td>
<td>Hartnell College Wind Ensemble</td>
<td>C-ID MUS 180</td>
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<td>MUS-51A</td>
<td>Musicianship I</td>
<td>C-ID MUS 125</td>
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<tr>
<td>MUS-52B</td>
<td>Harmony IV</td>
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<tr>
<td>MUS-53B</td>
<td>Musicianship IV</td>
<td>C-ID MUS 155</td>
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<td>PETH-1</td>
<td>Introduction to Kinesiology</td>
<td>C-ID KIN 100</td>
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<td>PHL-10</td>
<td>Ethics</td>
<td>C-ID PHIL 120</td>
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<td>PHY-2A +</td>
<td>College Physics I</td>
<td>C-ID PHYS 100S</td>
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<td>PHY-2B</td>
<td>College Physics II</td>
<td>C-ID PHYS 105</td>
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<td>American Political Institutions</td>
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<td>PSY-2</td>
<td>General Psychology</td>
<td>C-ID PSY 110</td>
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<td>PSY-6</td>
<td>Social Psychology</td>
<td>C-ID PSY 170</td>
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<td>PSY-8</td>
<td>Introduction to Research Methods in Psychology</td>
<td>C-ID PSY 200</td>
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<tr>
<td>PSY-10</td>
<td>Introduction to Biological Psychology</td>
<td>C-ID PSY 150</td>
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<td>PSY-15</td>
<td>Introduction to Human Sexuality</td>
<td>C-ID PSY 130</td>
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<td>PSY-22</td>
<td>Abnormal Psychology</td>
<td>C-ID PSY 120</td>
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<td>PSY-25</td>
<td>Developmental Psychology</td>
<td>C-ID PSY 180</td>
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<td>PSY-33</td>
<td>Personal and Social Adjustment</td>
<td>C-ID PSY 115</td>
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<td>SOC-1</td>
<td>Introduction to Sociology</td>
<td>C-ID SOCI 110</td>
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<tr>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
<td>C-ID SOCI 115</td>
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<td>SOC-41</td>
<td>Marriage and Family</td>
<td>C-ID SOCI 130</td>
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<tr>
<td>SOC-42</td>
<td>The Sociology of Minority Relations</td>
<td>C-ID SOCI 150</td>
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<td>SPA-1</td>
<td>Elementary Spanish</td>
<td>C-ID SPAN 100</td>
</tr>
<tr>
<td>SPA-2</td>
<td>Elementary Spanish</td>
<td>C-ID SPAN 110</td>
</tr>
<tr>
<td>SPA-4</td>
<td>Intermediate Spanish</td>
<td>C-ID SPAN 210</td>
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<tr>
<td>THA-3</td>
<td>History of the Theatre</td>
<td>C-ID THTR 113</td>
</tr>
<tr>
<td>THA-10</td>
<td>Beginning Acting</td>
<td>C-ID THTR 151</td>
</tr>
</tbody>
</table>
ADMINISTRATION OF JUSTICE

ADJ1. Introduction to Administration of Justice (3)

Lec 3 Hrs
Provides an overview of the American criminal justice system and the various subsystems. Focuses on the roles and responsibilities 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 effects on law enforcement, punishment and rehabilitation. Also discusses ethics, education and training for professionalism in the social system.

[CSU; UC; CSU-GE; AREA D6, IGETC AREA 4]
[C-ID AJ 110]

ADJ2. Community Relations and the Justice System (3)

Pass/No Pass Option

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]

ADJ3. Concepts of Criminal Law (3)

Lec 3 Hrs
An introduction to the legal system, the difference between civil and criminal law, the sources of law, and the court system. The course 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]

ADJ4. Criminal Evidence (3)

Pass/No Pass Option

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]

ADJ5. Criminal Court Process (3)

Pass/No Pass Option

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]

ADJ8. Criminal Investigation (3)

Pass/No Pass Option

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]

ADJ10. Juvenile Procedures (3)

Lec 3 Hrs
Discussion of the theories of juvenile delinquency and juvenile justice. Introduction to the functions, organization and jurisdiction of juvenile agencies. Procedural steps in processing and detention of juveniles, from arrest and booking through trial and post-trial.

[CSU]
[C-ID AJ 220]

ADJ11. Law Enforcement Report Writing (3)

Lec 3 Hrs
An introductory course emphasizing the practical aspects of organizing and preparing law enforcement written reports.

[CSU]

ADJ12. Legal Aspects of Corrections (3)

Pass/No Pass Option

Lec 3 Hrs
An overview of the historical framework, concepts and precedents that guide correctional practice. Covers the corrections environment, civil rights of prisoners and liability of correctional officers.

[CSU]

ADJ21A. Narcotics and Dangerous Drugs (3)

Lec 3 Hrs
History, definition, identification, characteristic and treatment strategies of legal and illegal drugs and the enforcement of laws relating to them.

[CSU]

ADJ25. Introduction to Paralegal/Legal Assistantship (3)

Pass/No Pass Option

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]

ADJ30. Sexual Assault Investigation (3)

Pass/No Pass Option

Lec 3 Hrs
An in-depth study of the institutional response to victims of sexual assault. Covers 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]

ADJ33. Constitutional Law for Criminal Justice Professionals (3)

Pass/No Pass Option

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]

ADJ34. Civil Litigation (3)

Pass/No Pass Option

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]
ADJ36. Legal Research and Writing (3)  
**Pass/No Pass Option**  
**Lec** 3 Hrs
Provides students with the fundamentals of legal research. Research topics include law library references such as Shepard's Citations, West Digest system and key numbers, American Law Reports, legal periodicals, state revised statutes, annotated codes and on-line research. The course also focuses on the development of written communication skills essential to any law related career. Students will draft documents such as legal correspondence, memoranda, pleadings, motions, and discovery.  
[CSU]

ADJ45. Special Projects (1-3)  
Designed for administration of justice students who are interested in investigating topics beyond the scope of a regular administration of justice course. Students will gain hands-on experience in advanced administration of justice topics involving criminal justice.  
[CSU]

ADJ50. Introduction to Correctional Science (3)  
**Pass/No Pass Option**  
**Lec** 3 Hrs
The introductory course provides a historical overview of adult and juvenile corrections, including probation and parole, and follows the development of contemporary corrections philosophy. The focus is on the 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]

ADJ51. Criminology (3)  
**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 measures.  
[CSU; UC; CSU-GE, AREA D0; IGETC, AREA 4]  
[C-ID SOCI 160]

ADJ61. Control and Supervision in Corrections (3)  
**Pass/No Pass Option**  
**Lec** 3 Hrs
An overview of supervision of inmates in the local, state and federal correctional institutions. Covers institutional daily living, crisis situations, inmate subculture, violence, and the use of force on inmates. Also describes the role played by the offender and the correctional worker.  
[CSU]

ADJ102. PC832 Arrest and Firearms (3.5)  
**Pass/No Pass Option**  
**Advisory:** Prior to the start of ADJ 102, the California Commission for Peace Officers Standards and Training (POST) and the California Penal Code 13511.5 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.  
**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/chemical agents; 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.
Agriculture (3)

Agricultural Machinery Management (3)

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]

Hazardous Materials and Industrial Safety (1)

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 MEC 56 with a grade of "C" or better.

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.

[CSU]

Agricultural Structures Service & Safety (3)

Lec 2 Hrs; Lab 3 Hrs
An applied study of equipment service and safety practices as it pertains to the specific trades. Includes 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.

[CSU]

Agronomy (3)

Lec 2 Hrs; Lab 3 Hrs
Introduces students to the design, mechanical function, and applications of commercial refrigeration in the Salinas Valley. Formerly MEC 57. Not open to students who have completed MEC 57 with a grade of "C" or better.

[CSU]

Agricultural Electrical Systems (3)

Lec 2 Hrs; Lab 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, wire 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.

[CSU]

Agricultural Structures Fabrication (3)

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.

[CSU]
ABT267. Hazwoper-8 Hour Refresher Course (0.5)  
**Pass/No Pass Only**  
**Lec 0.5 Hr**  
Basic course covering toxicology, chemical hazards, types of protection, safe work practices, site control, decontamination contingency plan, and data collection and interpretation. Formerly AGR 267. Not open to students who have completed AGR 267 with a grade of "C" or better.

ABT41 Pesticide Applicator Certification Training (3)  
**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. Formerly AGR 61. Not open to students who have completed AGR 61 with a grade of "C" or better.  
[CSU]

ABT49. Introduction to Agriculture Business (3)  
**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. Formerly AGR 49. Not open to students who have completed AGR 49 with a grade of "C" or better.  
[CSU; UC]

ABT51. Agribusiness Management Project (2)  
**Advisory:** Introduction to Agriculture Business, with a grade of "C" or better.  
**Lec 1 Hr; Lab 3 Hrs**  
Students have the opportunity to gain real-world experience in the planning and management of a business related project under faculty supervision. The class will cover the development of a business plan or a marketing plan. The students will select a project in cooperation with a local company to complete the project in a group working cooperatively. Formerly AGR 24. Not open to students who have completed AGR 24 with a grade of "C" or better.  
[CSU]

ABT52. Sales and Service in Agribusiness (3)  
**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. Formerly AGR 52. Not open to students who have completed AGR 52 with a grade of "C" or better.  
[CSU]

ABT53. Agribusiness Economics (3)  
**Lec 3 Hrs**  
Designed to further a student's study in agriculture and agricultural production in response to changing economic conditions. Optimum methods of agricultural production as well as impacts of technological change will be discussed in evaluating market structure and price formulating factors for agricultural products and inputs. Formerly AGR 53. Not open to students who have completed AGR 53 with a grade of "C" or better.  
[CSU; UC]

ABT54. Agriculture Marketing (3)  
**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. Formerly AGR 54. Not open to students who have completed AGR 54 with a grade of "C" or better.  
[CSU; UC]

ABT55. Integrated Pest Management Principles in Entomology (3)  
**Lec 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]

ABT56. Integrated Pest Management Principles in Weed Science  
**Advisory:** BIO 10 or ABT 92 strongly advised.  
**Lec 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]

ABT58. Agriculture Laws and Regulations (3)  
**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. Formerly AGR 91. Not open to students who have completed AGR 91 with a grade of "C" or better.  
[CSU]

ABT71. Integrated Pest Management Principles in Plant Pathology (3)  
**Lec 2 Hrs; Lab 3 Hrs**  
This course is a study of agents, disease cycles, symptomology, and management of plant diseases. Management practices include prevention, cultural, chemical, and biological methods.  
[CSU]

ABT90. Soil Science (3)  
**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. Formerly AGR 90. Not open to students who have completed AGR 90 with a grade of "C" or better.  
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5A, C]
ABT92. Plant Science (3)  
**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. Formerly AGR 92. Not open to students who have completed AGR 92 with a grade of "C" or better.  
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5 B, C]

ABT93. Product Processing and Cooling (3)  
**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. Field trips will be required. Formerly AGR 93. Not open to students who have completed AGR 93 with a grade of "C" or better.  
[CSU]

ABT94. Agriculture Enterprise Project (2)  
**Lec 1 Hr; Lab 3 Hrs**  
Students will gain practical field experience in vegetable or horticultural crop production with an emphasis on organic certification. Working cooperatively in a small group, students will learn to develop a small scale production plan and complete the entire project cycle from ground preparation through harvest. Designed for students with a high level of commitment to agriculture. Formerly AGR 3. Not open to students who have completed AGR 3 with a grade of "C" or better.  
[CSU]

ABT96. Vegetable Crop Production (3)  
**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]

ABT97. Vineyard Production and Management (3)  
**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. Field trips to local and regional vineyard or winery locations will be required. Formerly AGR 97. Not open to students who have completed AGR 97 with a grade of "C" or better.  
[CSU; UC]

ABT98. Fertilizers and Plant Nutrition (3)  
**Lec 1 Hr; 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. Formerly AGR 98. Not open to students who have completed AGR 98 with a grade of "C" or better.  
[CSU]

ABT101. Organic Vegetable Production (1.5)  
**Lec 1 Hr; Lab 1.5 Hrs**  
Intended for Agricultural Production majors and continuing education adults with interest in improving organic farming operations or making a transition to organic production methods. Covers the practical aspects of developing a crop plan that meets USDA certification requirements and insures sustainable production for long-term farm viability. Students will develop an overall farm plan that includes the following areas of detail: diversifying market options, choosing appropriate crops, establishing 4-year rotations, planting annual covercrops, and managing soil fertility in relation to total plant nutrition. Formerly AGR 101. Not open to students who have completed AGR 101 with a grade of "C" or better.  
[CSU]

ABT102. Organic Field Production Methods (1.5)  
**Lec 1 Hr; Lab 1.5 Hrs**  
Intended for Agricultural Production majors and continuing education adults with interest in improving organic farming operations or making a transition to organic production methods. Covers the practical field methods involved in soil preparation, 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. Formerly AGR 102. Not open to students who have completed AGR 102 with a grade of "C" or better.  

ABT103. Agriculture Whole Farm Planning and Recordkeeping for Small Farmers (1.5)  
**Lec 1 Hr; Lab 1.5 Hrs**  
Intended for Agricultural Production majors and continuing education adults with interest in improving organic farming operations or making a transition to organic production methods. Covers the practical aspects of daily farm management. Students will summarize these 5 aspects into an integrated document for presentation at the final course of PEPA, Programa Educativo para Pequenos Agricultores (Education Program for Young People in Agriculture). Formerly AGR 103. Not open to students who have completed AGR 103 with a grade of "C" or better.  

ABT104. Agriculture Business Development for New Organic Farmers (1.5)  
**Lec 1 Hr; Lab 1.5 Hrs**  
Intended for Agricultural Production majors and continuing education adults with interest in starting up 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 PEPA, Programa Educativo para Pequenos Agricultores (Education Program for Young People in Agriculture). Formerly AGR 104. Not open to students who have completed AGR 104 with a grade of "C" or better.  

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ABT105. Agriculture Marketing
Opportunities and Growth for Organic Farming (1.5)
**Lec 1 Hr; Lab 1.5 Hrs**
Intended for Agricultural Production majors and continuing education adults with interest in improving organic farming operations or making a transition to organic production methods. Covers the marketing and sales options for organic produce with a focus on direct marketing to buyers. Students will research product offerings, delivery options, and pricing in a growing vegetable market that will be summarized into a presentation in the final courses of Programa Educativo para Pequenos Agricultores (Education Program for Young People in Agriculture). Formerly AGR 105. Not open to students who completed AGR 105 with a grade of "C" or better.

ABT110. Careers in Agriculture and Technology (2)
**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 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. Formerly AGR 110. Not open to students who completed AGR 110 with a grade of "C" or better.

ABT130. Introduction to Food Safety (1.5)
**Lec 1.5 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.

ABT131. Agricultural Practices for Food Safety (1.5)
**Lec 1.5 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.

ABT132. Food Safety Management (1.5)
**Lec 1.5 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 effect of management. Field trips may be required.

ABT133. Facility Management for Food Safety (1.5)
**Lec 1.5 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.

ABT134. Environment Effects on Food Borne Pathogens (1.5)
**Lec 1.5 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.

ABT135. Introduction to Food Microbiology (1.5)
**Advisory: Introductory course in Biology.**
**Lec 1 Hr; Lab 1.5 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.

ABT160. Introduction to Agriculture (3)
**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. Formerly AGR 160. Not open to students who have completed AGR 160 with a grade of "C" or better.

ABT258. Agriculture Ambassadors (2)
**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. Formerly AGR 258. Not open to students who have completed AGR 258 with a grade of "C" or better.

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## ALCOHOL AND OTHER DRUGS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOD1</td>
<td>Fundamentals of Chemical Dependency (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<tr>
<td></td>
<td>An introduction and overview of basic concepts of chemical dependency including the history of alcohol and other...</td>
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<td></td>
<td>mood-altering substances in the U.S. Myths and stereotypes of alcohol and drug use will be examined as well as...</td>
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<td>sociocultural factors that contribute to the use of drugs. Theories of chemical dependency and an overview of...</td>
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<td>the effects of various drug categories on human behavior, treatment and recovery approaches will be included.</td>
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<td>Designed for students interested in obtaining CAADAC certification.</td>
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<tr>
<td>AOD2</td>
<td>Pharmacology and Physiology of Alcohol and Other Drugs (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<tr>
<td></td>
<td>An in-depth look at the physiologic action and effects of alcohol and other psychoactive drugs on the body and...</td>
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<td></td>
<td>behavior. Emphasis is placed on the pharmacologic and neurobiological effects and medical consequences of abuse...</td>
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<td>and addiction. Includes the pharmacologic basis of medications used for various psychiatric disorders as well...</td>
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<td>as treatment considerations for substance abuse and dependency. Designed for students interested in obtaining...</td>
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<td></td>
<td>CAADAC certification.</td>
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<tr>
<td>AOD3</td>
<td>Intervention, Treatment and Recovery (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<tr>
<td></td>
<td>An introduction to the theory and practice of chemical dependency counseling with special emphasis on treatment...</td>
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<td>planning, implementation and documentation. The core functions of the chemical dependency counselor in the...</td>
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<td></td>
<td>early intervention, assessment and treatment planning phases of recovery counseling will be introduced and...</td>
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<td>developed. The need to interface with others in the medical and mental health community in developing a...</td>
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<td>multidimensional approach to treatment will be included. Designed for students interested in obtaining CAADAC...</td>
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<td>certification.</td>
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<tr>
<td>AOD4</td>
<td>Counseling Diverse Populations (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<tr>
<td></td>
<td>A counseling course that introduces the student to special population subgroups in alcohol and drug counseling...</td>
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<td>and the unique helping skills used to support these populations. Particular focus is placed on gender, race,...</td>
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<td>culture, age and sexual orientation as it relates to addiction and recovery.</td>
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<td>AOD5</td>
<td>Legal/Ethical Considerations and Professional Growth (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<tr>
<td></td>
<td>Explores the legal, ethical, professional and personal issues involved in the treatment of chemical dependency.</td>
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<td>Emphasis is placed on professional responsibility and patient rights as well as issues of the work place and...</td>
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<td>professional growth.</td>
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<tr>
<td>AOD6</td>
<td>Prevention, Education and Relapse Prevention (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<td>Conceptual frameworks, major research, epidemiology, environmental risk factors and the effectiveness of...</td>
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<td>various prevention strategies will be examined. In addition, client education strategies used in the...</td>
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<td>treatment and relapse prevention phases of chemical dependency will be highlighted.</td>
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<tr>
<td>AOD7</td>
<td>Individual Counseling Skills in Chemical Dependency (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<tr>
<td></td>
<td>An introduction to the basic skills and techniques of counseling for chemical dependency counselors. This course...</td>
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<td></td>
<td>describes characteristics of an effective counselor, explores several theoretical models of counseling, and...</td>
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<td>assists the individual to develop skills in active listening, building trust, reflecting feelings and content,...</td>
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<td>and using motivational interviewing techniques. Stages of therapy and life span issues will receive special...</td>
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<td>AOD8</td>
<td>Family and Group Counseling (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<td>A focus on family dynamics and group processes as they relate to chemical dependency. The dynamics of chemical...</td>
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<td>dependency within family systems will be explored and interventions designed to assist family members to understand...</td>
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<td>and cope with chemical dependency will be examined. In addition, group processes and dynamics will be...</td>
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<td>examined with an emphasis on developing skills for group leadership.</td>
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<tr>
<td>AOD9</td>
<td>Co-Occurring Disorders (3)</td>
<td>Lec</td>
<td>3 Hrs</td>
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<tr>
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<td>An introduction to the treatment needs of those who have one or more psychiatric disorders in combination with...</td>
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<td>a chemical dependency disorder. Focus is placed on identification, assessment, current treatment approaches,...</td>
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<td>medication, referral procedures, and interface with the professional mental health community.</td>
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</tbody>
</table>

**Prerequisites:**
- AOD 1
- AOD 2
- AOD 3
- AOD 4
- AOD 5
- AOD 6
- AOD 7
- AOD 8
- AOD 9 or PSY 22 with a grade "C" or better.

**Corequisite:**
- AOD 99

**Corequisite:**
- AOD 10

**Practicum Seminar (3)**

**Prerequisites:**
- AOD 1, AOD 2, AOD 3, AOD 4, AOD 5, AOD 6, AOD 7, AOD 8, and AOD 9 or PSY 22 with a grade "C" or better.

**Corequisite:**
- AOD 99

**Lec 3 Hrs**

**Course Title:**
- Chemical Dependency

**Lab 14 Hrs**

**Pass/No Pass Only**

**Corequisite:**
- AOD 10

**Corequisite:**
- AOD 99

**Course Title:**
- Practicum in Chemical Dependency (4)

**Practicum in Chemical Dependency (4)**

**Corequisite:**
- AOD 99

**Corequisite:**
- AOD 10

**Corequisite:**
- AOD 99

**Course Title:**
- Practicum in Chemical Dependency (4)

**Pass/No Pass Only**

**Corequisite:**
- AOD 10

**Corequisite:**
- AOD 99
American Sign Language I (3)
Pass/No Pass Option
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]

American Sign Language II (3)
Pass/No Pass Option
Prerequisite: COU 80 or ASL 1 with a grade of "C" or better.
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]

American Sign Language III (3)
Pass/No Pass Option
Prerequisite: Completion of COU 81 or ASL 2 with a grade of "C" or better.
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]

ANT1. Physical Anthropology (3)
Lec 3 Hrs
This course offers a survey of the evolution of mankind. It is designed to provide an introduction to the theory, principles and methodology employed to comprehend the process of evolution by emphasizing a biocultural approach to the discipline in order to understand the nature of our physical and cultural transformations. As such, it is a course that discusses the field of genetics and primate studies to analyze the origin of many of our biological and social characteristics. It then overviews the data pertaining to the environmental factors that forced our ancestors to produce culture and concludes by analyzing the paleoanthropological evidence that supports the theory of human evolution.
[CSU; UC; CSU-GE, AREA B2, D1; IGETC, AREA 5 A]

ANT2. Introduction to Cultural Anthropology (3)
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. Methodology, concepts, and theories will be presented in the development of an anthropological perspective.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]

ANT3. Introduction to Archeology (3)
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]

ANT10. California Indians (3)
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, ethno historical and historical data in order to understand the cultural experiences of modern-day indigenous communities.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]
APP120. 1st Year Commercial Electrical Appr. I (5)

Pass/No Pass Option
Prerequisite: MAT 121 with a grade of "C" or better; students must apply to and be accepted into the Inside Apprenticeship program at the International Brotherhood of Electrical Workers (IBEW) Local Union #234 Joint Apprenticeship and Training Committee in Castroville, California. In addition, students must register with the State of California, Division of Apprenticeship Standards and the Federal Department of Labor, Office of Apprenticeship as an Indentured Inside Electrical Apprentice. This limitation is authorized by Section 3074.3 of the State Labor Code.

Lec 5 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.

APP121. 1st Year Commercial Electrical Appr. II (5)

Prerequisite: APP 120 with a grade of "C" or better.

Lec 5 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. Begins with a study of electrical safety-related work practices and then moves into a review of blueprints and a study of industrial blueprints. Also included is a study of basic applied electronics with an emphasis on characteristics of semiconductors, power supplies, transistors and amplifiers.

APP122. 2nd Year Commercial Electrical Appr. I (5)

Prerequisite: APP 121 with a grade of "C" or better.

Lec 5 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. In this semester, the students will study the proper and safe use of electrical test instruments, gain an understanding of the structure and content of the National Electric Code, learn about alternating current and inductance, and use blueprints and specifications to identify and quantify electrical components involved in a construction project.

APP123. 2nd Year Commercial Electrical Appr. II (5)

Prerequisite: APP 122 with a grade of "C" or better.

Lec 5 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. Students will learn about capacitors and study the effects of capacitance, inductance and resistance on series, parallel and combination alternating current electrical systems. The concepts of circuit resonance and power factor will be cause-effect linked to circuit capacitive and inductive reactance values. Transformer theory of operation and real-world transformer connections will be taught and practiced. The National Electric Code will again be examined and more concepts from the Code will be learned in the last part of the semester.

APP124. 3rd Year Commercial Electrical Appr. I (5)

Prerequisite: APP 123 with a grade of "C" or better.

Lec 5 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. Begins with a study of electrical safety-related work practices and then moves into a review of blueprints and a study of industrial blueprints. Also included is a study of basic applied electronics with an emphasis on characteristics of semiconductors, power supplies, transistors and amplifiers.

APP125. 3rd Year Commercial Electrical Appr. II (5)

Prerequisite: APP 124 with a grade of "C" or better.

Lec 5 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. Begins with a study of grounding and bonding fundamentals for AC electrical systems, a review of transformer theory and application to three-phase transformers and the proper selection and use of Overcurrent Protection Devices to clear ground faults and short circuits.

APP126. 4th Year Commercial Electrical Appr. I (5)

Prerequisite: APP 125 with a grade of "C" or better.

Lec 5 Hrs
The 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. Students will learn about lightning protection, motors, and motor controls.

APP127. 4th Year Commercial Electrical Appr. II (5)

Prerequisite: APP 126 with a grade of "C" or better.

Lec 5 Hrs
The 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. Students will learn about digital electronics, programmable logic control, air conditioning and refrigeration, cable fault locating, cable tray systems and will continue their study of the National Electric Code.

APP128. 5th Year Commercial Electrical Appr. 1 (5)

Prerequisite: APP 127 with a grade of "C" or better.

Lec 5 Hrs
The 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. Students will learn about the installation, operation and maintenance of different types of fire alarms systems; the fundamentals of instrumentation and process control; security system installation and operation; and structured cabling systems.

APP129. 5th Year Commercial Electrical Appr. II (5)

Prerequisite: APP 128 with a grade of "C" or better.

Lec 5 Hrs
The 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. In this semester, the students will learn about the solar photovoltaic power generation systems, uninterruptible power supplies, fuel cells, high voltage testing, power distribution systems and power quality issues, building automation networks, and continue in their study of the National Electric Code.
APP150. **1st Year Residential Wireman Apprenticeship 1st Semester (4)***
*Pass/No Pass Option*
*Lec 3.5 Hrs; Lab 1.5 Hrs*
First semester of the first year in the three-year Residential Wiremen Apprenticeship Program leading to Residential Wireman certification in the residential electrical construction industry. Students must apply to and be accepted into the Residential Apprenticeship program at the International Brotherhood of Electrical Workers (IBEW) Local Union #234 Joint Apprenticeship and Training Committee in Castroville, California. In addition, students must register with the State of California, Division of Apprenticeship Standards as an Indentured Residential Electrical Apprentice. This limitation is authorized by Section 3074.3 of the State Labor Code.

APP151. **1st Year Residential Wireman Apprenticeship 2nd Semester (4)***  
*Prerequisite: Passing grade of 75% or better in APP 150.*  
*Lec 3.5 Hrs; Lab 1.5 Hrs*
Second semester of the first-year course in the three-year Residential Wireman Apprenticeship Program leading to Residential Wireman certification in the residential electrical construction industry.

APP152. **2nd Year Residential Wireman Apprenticeship 1st Semester (4)***  
*Prerequisite: Passing grade of 75% or better in APP 151.*  
*Lec 3.5 Hrs; Lab 1.5 Hrs*
Third course in the three-year Residential Wireman Apprenticeship Program leading to Residential Wireman certification in the residential electrical construction industry.

APP153. **2nd Year Residential Wireman Apprenticeship 2nd Semester (4)***  
*Prerequisite: Passing grade of 75% or better in APP 152.*  
*Lec 3.5 Hrs; Lab 1.5 Hrs*
Fourth course in the three-year Residential Wireman Apprenticeship Program leading to Residential Wireman certification in the residential electrical construction industry.

APP154. **3rd Year Residential Wireman Apprenticeship 1st Semester (4)***  
*Prerequisite: Passing grade of 75% or better in APP 153.*  
*Lec 3.5 Hrs; Lab 1.5 Hrs*
Fifth course in the three-year Residential Wireman Apprenticeship Program leading to Residential Wireman certification in the residential electrical construction industry.

APP155. **3rd Year Residential Wireman Apprenticeship 2nd Semester (4)***  
*Prerequisite: Passing grade of 75% or better in APP 154.*  
*Lec 3.5 Hrs; Lab 1.5 Hrs*
Sixth and final course in the three-year Residential Wireman Apprenticeship Program leading to Residential Wireman certification in the residential electrical construction industry.

APP245. **Special Projects (0.5-2)***  
*Pass/No Pass Option*
Supervised study and individualized instruction for apprentices entering a trade or transferring to a Hartnell College apprenticeship program at a time when regularly scheduled classes are not available.
ART1A. Art History Survey I (3)
Advisory: Completion of or concurrent enrollment in ENG 1A
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]

ART1B. Art History Survey II (3)
Advisory: Completion of or concurrent enrollment in ENG 1A
Lec 3 Hrs
A survey of the historical and formal development of art and architecture from the early Renaissance to the Contemporary period with a global perspective.
[CSU; UC; CSU-GE, AREA C1; IGETC AREA 3]

ART1W. Women in Art (3)
Lec 3 Hrs
A survey of the contributions of women artists from the middle ages to the present. The relationship between women, their art, and their roles in society will be analyzed and compared through the visual language of art.
[CSU; UC; CSU-GE, AREA C1; IGETC AREA 3]

ART3. Drawing and Composition (3)
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]

ART6A. Watercolors and Gouache (3)
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]

ART6B. Oils (3)
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]

ART6C. Acrylics (3)
Lec 2 Hrs; Lab 4 Hrs
Study of painting in opaque and transparent acrylics. Students will provide paint, brushes, and painting surfaces.
[CSU; UC]

ART10. Art Appreciation (3)
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]

ART12A. Design (3)
Lec 2 Hrs; Lab 3 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 provide paint, pencils, bushes, illustration board and paper.
[CSU; UC] [C-ID ARTS 100]

ART15A. Ceramics A (3)
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 wheel and the use of glazes. Students will provide clay, clay tools, and optional materials (aprons, sponges, towels, etc.)
[CSU; UC] [C-ID ARTS 230]

ART15B. Ceramics B (3)
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]

ART33. Weaving as an Art Form (3)
Lec 2 Hrs; Lab 4 Hrs
An introductory study of fiber and textile materials and processes and their use in creating art objects using off loom and loom woven structures as well as a variety of related dyeing and fiber processes.
[CSU] [C-ID ARTS 282]

ART34. Adv. Weaving As an Art Form (3)
Prerequisite: ART 33 with a grade of C or better.
Lec 2 Hrs; Lab 4 Hrs
An advanced study of textiles on the four shaft loom. Creation of textile art that is designed and woven in complex weave structures such as double weaves. The history and use of a variety of natural and synthetic fibers and basic textile conservation techniques will be studied.
[CSU]

ART41A. Jewelry I (3)
Lec 2 Hrs; Lab 4 Hrs
An introductory study of processes used in creating metal art objects. Emphasis on design and creation of small sculpture and jewelry through the development of technical skills and use of tools. Concentration on direct fabrication with introduction to indirect casting methods.
[CSU] [C-ID ARTS 281]

ART41B. Jewelry II (3)
Prerequisite: ART 41A with a grade of "C" or better.
Lec 2 Hrs; Lab 4 Hrs
Further study of processes used in creating metal art objects. Emphasis on design and creation of small sculpture and jewelry through the development of technical skills and use of tools. Continued study of direct fabrication but with concentration on casting methods.
[CSU]

ART45. Special Projects (1-3)
Individual projects concerned with material not normally a major part of a specific course. Projects may include production of an original artwork, an exhibition of this artwork, an extensive research paper, or a combination of the above.
[CSU]

ART46. Art Practicum (1-3)
Supervised studio work in a selected medium.
[CSU]

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]
ART51. Gallery Methods and Installation Procedures (3)

Lec 2 Hrs; Lab 3 Hrs

A study and practice of gallery operations including conversation, funding, institutional and private galleries, evaluation of exhibitions, and exhibition proposals, electronic galleries, and promotions.

[CSU]

ART52. Portfolio Development (1-3)

Advisory: Completion of at least two Studio classes in one specific medium, IE

ART 15A or 15B.

Lec 2 Hrs; Lab 3 Hrs

The course will examine 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]

ART70. Introduction to Graphic Design and Computer Graphics (3)

Lec 2 Hrs; Lab 3 Hrs

The study and application of the fundamentals of graphic design including history, theory and practice. This course brings together a blend of the aesthetic principles of design and hands-on computer-based production skills. Structuring graphic design information from visual design concept through final product, students will utilize the computer graphic applications of Adobe Illustrator, Adobe InDesign, and Corel Painter on the Macintosh computer.

[CSU; UC]

ART71. Introduction to 2D Digital Illustration (3)

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]

ART72. Introduction to Digital Arts (3)

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 exploitation 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]

ART73. 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]

ART74. Digital 3-D Design and Modeling (3)

Lec 2 Hrs; Lab 3 Hrs

This course will cover an 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]

ART75. 3D Modeling for Digital Animation (3)

Lec 2 Hrs; Lab 3 Hrs

This course will cover the techniques of 3D modeling for digital animation. Students will utilize the computer application LightWave 3D and or Maya for hands-on experience with modeling, the application of lighting and surfaces on 3D models, and rendering.

[CSU]

ART76. 3D Digital Animation (3)

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]

ART77. Introduction to Digital Video and Video Editing (3)

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 with Final Cut Pro and Adobe After Effects to create Quicktime movies for digital media presentations, DVD’s and the World Wide Web.

[CSU]

ART80. Introduction to Digital Photography and Photographic Imaging (3)

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]
ART84. Digital Art Portfolio & Business Practices (3)
Prerequisite: ART 70, ART 72, ART 77, ART 80 with a grade of "C" or better.
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]

ART101. Ceramics: Chinese and Korean Traditions (3)
Lec 2 Hrs; Lab 4 Hrs
Introduction to Ceramic Forms methods with Emphasis on Chinese and Korean Traditions.

ART102. Ceramics: Japanese Traditions (3)
Lec 2 Hrs; Lab 4 Hrs
Introduction to Ceramic Forms and Methods with Emphasis on Japanese Traditions.

ART103. Ceramics: Pre-Columbian Traditions (3)
Lec 2 Hrs; Lab 4 Hrs
Introduction to Ceramic Forms and Methods with Emphasis on Pre-Columbian Meso-american and Peruvian Traditions.

ART104. Ceramics: Pre-Columbian Traditions (3)
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.

ART105. Low-Fire Ceramics (1)
Lec 0.5 Hr; Lab 1.5 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.)
AST1. Introduction to Astronomy (3)
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 AST1L.
[CSU; UC; CSU GE, AREA B1; IGETC, AREA 5A]

AST1L. Astronomy Laboratory (1)
Corequisite: AST 1
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 5C]

AST45. Special Projects (1-3)
This special projects astronomy Laboratory is designed to enable the student to investigate topics beyond the scope of a regular astronomy course. Students will gain hands-on experience in reducing and analyzing astronomical data. Target students would be STEM (Science, Technology, Engineering, and Math) students of exceptional promise who would like to apply their skills and knowledge in advanced topics of astronomy and astrophysics.
[CSU]
ADT110. Diesel Engine Technology (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
Lec 2 Hrs; Lab 6 Hrs
This course explores principles, systems, service, and diagnosis procedures 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.

ADT101. Diesel Engine Rebuilding (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
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.

ADT110. Electrical and Electronic System (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
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.

ADT111. Electronic Systems and Controls (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
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.

ADT120. Climate Control (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
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.

ADT121. Preventive Maintenance (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
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.

ADT130. Brake Systems (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
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.

ADT131. Steering and Suspension Systems (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
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.

ADT140. Power Drive Train (4)
Advisory: ENG 101 or ESL 101 and MAT 121 with a grade of "C" or better.
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.

ADT141. Automatic Transmission (4)
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.
AUT50. Introduction to Automotive Repair (4)
**Pass/No Pass Option**

Lec 2 Hrs; Lab 6 Hrs

A basic course covering safety, the use of service publications, and the technical knowledge and skills in all areas of the vehicle to reach a minimum skill level. Completion of this course will provide terminal skills for employment as an automotive service station attendant. Completion of AUT 50A, and 50B is equivalent to 50.

[CSU]

AUT51. Auto Engine Performance and Diagnostics (4)

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, emissions controls diagnosis and repair. Proper use of tools and literature to perform adjustments and troubleshooting to maintain proper engine performance.

[CSU]

AUT61. Auto Machining I (4)

Lec 2 Hrs; Lab 6 Hrs


[CSU]

AUT62. Auto Machining II (4)

Lec 2 Hrs; Lab 6 Hrs

Automotive technician skill development with emphasis on precision and productivity in rebuilding, servicing, and installing engines. Research and preparation of equipment operation, and maintenance instruction. Reconditioning engine short block assemblies and components including assembly and testing. Compliance with automotive machine shop practice including engine repair, assembly, testing, and installation. Analysis of service and installation procedures. Parts and labor estimating.

[CSU]

AUT71. Auto Brake Systems and Controls (4)

Lec 2 Hrs; Lab 6 Hrs

Theory, service and repair of conventional ABS brake systems. Automotive repair exercises develop skills and knowledge in the use of equipment used in servicing automotive brake systems. 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.

[CSU]

AUT72. Fuel System and Emissions Control (4)

Lec 3 Hrs; Lab 3 Hrs

Covers fuel systems and emissions control systems, including theory of operation, diagnosis, adjustments and repair. Use of the ignition oscilloscope, dynamometer, and infrared gas analyzer is stressed. Fuel injectors, fuel pumps, intake manifolds and exhaust systems are covered in detail. Emission controls systems studied are positive crankcase ventilation, exhaust gas recirculation, evaporative emissions control, and exhaust gas treatment. Research applicable vehicle and service information, vehicle service history, service precautions, and technical service bulletins.

[CSU]

AUT73. Automotive Electricity and Electronics (4)

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]

AUT81. Auto Drive Train (4)

Lec 2 Hrs; Lab 6 Hrs

Covers drive trains and axles, drive train theory, clutches, manual transmissions/transaxles, drive shafts and universal joints, differentials and drive axles, four-wheel-drive systems, advanced four-wheel-drive systems, drive train electrical and electronic systems.

[CSU]

AUT82. Automatic Transmissions and Transaxles (4)

Lec 2 Hrs; Lab 6 Hrs

Covers drive train basics, drive train theory, general theories of operation, electronic controls, transmission designs, torque converters and oil pumps, hydraulic circuits and controls, gears and shafts, and reaction and friction units.

[CSU]

AUT83. Automotive Wheel Alignment and Suspension (4)

Lec 2 Hrs; Lab 6 Hrs

Covers toe, camber, caster, axle inclination, turning radius, and axle alignment affecting tire wear, directional stability, and handling. check and adjustment of manual steering gear, preload and backlash. Additionally, course content includes power steering system, operation of an electronically variable diameter power steering system, tire and wheel theory and service, hydraulic shock absorbers and McPherson strut suspensions theory.

[CSU]

AUT85. Transmission Troubleshooting Diagnosis & Repair (2)

**Prerequisite:** AUT 81A or 81B. All prerequisites must be completed with a grade of “C” or better.

Lec 1 Hr; Lab 3 Hrs

Transmission troubleshooting, remove, replace, and rebuild full standard and automatic transmissions.

[CSU]

AUT86. Automotive Electronics and Engine Performance (4)

Lec 2 Hrs; Lab 6 Hrs

Covers safety, basic electrical theories, electrical and electronic components, basic electrical troubleshooting and service, wire 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]

AUT103. Automotive Engines (4)

Lec 2 Hrs; Lab 6 Hrs

Covers engine construction, diagnosis, disassembly, engine operation, engine shop safety, diagnosing engine problems, engine removal, inspection, and in-chassis repairs. Additionally includes cleaning the engine; cylinder head, parts and service; cylinder head, springs, valves, and valve seats; power development, manifolds, superchargers; engine balancing, pistons, rings, and connecting rods; lubrication, cooling system, and engine repair and reassembly.

[CSU]

AUT110. Automotive Climate Control (4)

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.

[CSU]

AUT120. Introduction to Alternative Fuels and Electric Hybrid Vehicles (2)

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.

[CSU]
AUT121. Hybrid, Electric, and Fuel-Cell Vehicles (2)

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.

AUT145. Special Projects (0.5-2)
Pass/No Pass Option
Supervised study and laboratory practice involving special problems including trouble-shooting using electronic test equipment. Machine tool operation not covered in basic curriculum.

AUT179. 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.

AUT251. Automotive Inspection, Service, and Maintenance (3)
Pass/No Pass Option
Lec 1.5 Hrs; Lab 3.5 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.

AUT271. 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.)
BIO1. Fundamental Biological Concepts (5)
Pre requisite: MAT 123 or two -years of high school algebra; CHM 22 or CHM 60 or CHM 1A, or successful completion of any college -level chemistry course. All prerequisites must be completed with a grade of "C" or better.
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 5B, 5C]

BIO2. General Zoology (5)
Pre requisite: MAT 123 or two -years of high school algebra. All prerequisites must be completed with a grade of "C" or better.
Advisory: A college -level biology course.
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 5B, 5C]

BIO3. General Botany (5)
Pre requisite: MAT 123 or two -years of high school algebra. All prerequisites must be completed with a grade of "C" or better.
Advisory: A college -level biology course.
Lec 3 Hrs; Lab 6 Hrs
An introduction to the principles of plant biology with emphasis on their structure, function, reproduction, genetics, systematics, and ecology. Required for biology majors.
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5B, 5C]

BIO5. Human Anatomy (4)
Advisory: A college -level biology course.
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 to appeal primarily to physical education and nursing majors but may be profitably taken by any student.
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5B, 5C]

BIO6. Introductory Physiology (3)
Pre requisite: BIO 1 or BIO 5, and completion of any college -level chemistry course. All prerequisites must be completed with a grade of "C" or better.
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 5B]

BIO6L. Physiology Laboratory (2)
Corequisite: BIO 6
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 B2, B3; IGETC, AREA 5C]

BIO7. General Microbiology (5)
Pre requisite: CHM 1A 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 (e.g., BIO 5 and BIO 6/6L) is strongly recommended.
Lec 3 Hrs; Lab 6 Hrs
A general introduction to the study of bacterial, viruses, fungi, algae, and protozoa, with major emphasis on the study of bacteria. Aspects of microbiology important in health, sanitation, food processing, and biotechnology are emphasized. This course will include laboratory investigations of microbial ecology, bacterial genetics, and immunological assays in greater depth than in BIO 27. Recommended for students interested in the health professions, as well as those who require a transferable course with rigorous laboratory preparation.
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5B, 5C]

BIO10. General Biology (4)
Pass/No Pass Option
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 5B, 5C]

BIO11. Introductory Human Anatomy and Physiology (4)
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 5B, 5C]

BIO12. 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. See below.
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 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 5B]

BIO13. Introduction to Forensic DNA Analysis (3)
Pass/No Pass Option
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]

BIO18. Physiology of Human Health and Disease (3)
Lec 3 Hrs
Pre requisite: BIO 11 with a grade of "C" or better, or BIO 6, BIO 6L and BIO 5 with a grade of "C" or better.
Introduction to concepts of altered physiological function affecting individuals and the biologic basis for disease. Content includes basics of cellular biology, cancer, the infection process, and the immune system. Focus on specific body systems and common diseases.
[CSU; UC; CSU-GE, AREA B2; IGETC, AREA 5B]

BIO20. Field Biology/Natural Science (4)
Pass/No Pass Option
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 5B, 5C]
BIO27. 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.
Lec 3 Hrs; Lab 3 Hrs
A general introduction to the study of bacteria, viruses, fungi, algae, and protozoa, 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 5B, 5C]

BIO30. Marine Biology (4)
Pass/No Pass Option
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 5B, 5C]

BIO42. Human Biology (3)
Lec 3 Hrs
Topics in the life sciences that pertain directly to humans and are important to an understanding of one’s self and one’s world as well as being interesting and relevant to the present day human condition. [CSU; UC; CSU-GE, AREA B2, E; IGETC, AREA 5B]

BIO45. Special Projects (1-3)
Designed for biology students who are interested in investigating topics beyond the scope of an existing biology course. Students will gain hands-on experience in specialized biological research. [CSU]

BIO47. Ecology (4)
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 required. Recommended for science and non-science majors who desire a general knowledge and appreciation of ecosystems. [CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5B, 5C]

BIO48. Environmental Science (3)
Advisory: Students 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.
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 5B]

BIO48L. Environmental Science Laboratory (1)
Pass/No Pass Option
Corequisite: BIO 48
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 5C]
BUS1A. Financial Accounting (4)
Pass/No Pass Option
Advisory: Successful completion
BUS 152 and BUS 32. Eligibility for ENG 1A and MAT 123.
Lec 3.5 Hrs; Lab 1.5 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 other to make decisions. The courses 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]

BUS1B. Managerial Accounting (4)
Pass/No Pass Option
Prerequisite: BUS 1A Financial Accounting with a grade of "C" or better.
Lec 3.5 Hrs; Lab 1.5 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]

BUS5. Introduction to Organizational Communication (3)
Advisory: ENG 101 or ESL 101 with a grade of "C" or better.
Lec 3 Hrs
Presents the oral communication skills required to succeed in different business contexts. Areas of study include communication theory in dyads, small group, leaderless groups and business presentations. Areas of study include: sexual harassment, meeting organization, problem solving and negotiations, interviewing, and cultural issues in the workplace. Not open to students who have completed COM-5 or SPE-5 with a grade of "C" or better. [CSU; CSU-GE, AREA A1]

BUS18. Legal Environment of Business (4)
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 discrimination, business organization formats, the legal aspects of partnerships and corporations, securities regulation, and domestic and international governmental relations. [CSU; UC]

BUS32. Introduction to Business (3)
Pass/No Pass Option
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]

BUS34. Entrepreneurship: Small Business Management (3)
Pass/No Pass Option
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]

BUS45. Special Projects (0.5-3)
Pass/No Pass Option
Prerequisite: Permission of instructor and review approval of the Area Dean.
Designed for business students who are interested in investigating topics beyond the scope of a regular business course. Students will gain hands-on experience in advanced business topics involving project management. [CSU]

BUS50. Introduction to PC Applications (4)
Pass/No Pass Option
Advisory: Keyboarding speed of 25 words a minute recommended.
Lec 3.5 Hrs; Lab 1.5 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]

BUS100. Introduction to Basic Computer Applications (0.5-2)
Pass/No Pass Only
Lec 1.5-6 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.

BUS110. Beginning Keyboarding and Document Formatting (3)
Pass/No Pass Option
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.

BUS110A. Beginning Keyboarding (1)
Pass/No Pass Option
Lec 0.5 Hr; Lab 1.5 Hrs
Introduction to keyboarding and basic techniques using the touch system on the computer. Not open to students who have completed BUS 110B, 111, 112, 140A, or 140B with a grade of "C" or better.

BUS110B. Beginning Formatting and Document Processing (2)
Pass/No Pass Option
Advisory: BUS 110A or keyboarding skill using the touch system.
Lec 1.5 Hrs; Lab 1.5 Hrs
Basic document processing using the touch system. Emphasis on speed and accuracy on straight copy. 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.
BUS111. 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.*

**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.

BUS128. Professionalism in the Workplace (2)
**Pass/No Pass Option**

**Lec 2 Hrs**
Designed to assist potential employees develop the personal qualifications, interpersonal skills, and values that are in demand in the workplace.

BUS129. Practical Customer Service Skills (2)
**Pass/No Pass Option**

**Lec 2 Hrs**
Introduction to customer service skills and their applications as required in the workplace.

BUS131. Business English (3)
**Pass/No Pass Option**

**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.

BUS140A. Keyboarding Speed and Accuracy (0.5)
**Pass/No Pass Option**

**Advisory: BUS 110A or BUS 110. Lab 27 Hrs**
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.

BUS140B. Keyboarding Speed and Accuracy (0.5)
**Pass/No Pass Option**

**Prerequisite: Completion of BUS 140A with a grade of "C" or better. Lab 27 Hrs**
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.

BUS150. Basic Computer Applications (2)
**Pass/No Pass Option**

**Lec 1.5 Hrs; Lab 1.5 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.

BUS150.15. Word Processing (3)
**Pass/No Pass Option**

**Advisory: Keyboarding speed of 25 words a minute recommended. Lec 2 Hrs; Lab 3 Hrs**
The use of word processing features/commands to create and edit business documents using a computer. Not open to students who have completed BUS/CSS 150.13, BUS/CSS 150.14, BUS/CSS 150A or BUS/CSS 150B.

BUS150.25. Electronic Spreadsheets (3)
**Pass/No Pass Option**

**Advisory: Keyboarding speed of 25 words a minute recommended. Lec 3 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.

[BUS150.26.

BUS151. Business Mathematics (3)
**Pass/No Pass Option**

**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 financial statements.

BUS152. Introduction to Accounting (4)
**Pass/No Pass Option**

**Lec 3.5 Hrs; Lab 1.5 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.

BUS154. Computerized Accounting – Quick Books (3)
**Pass/No Pass Option**

**Prerequisite: BUS 1A or BUS 152. All prerequisites must be completed with a grade of "C" or better. Lec 2 Hrs; Lab 3 Hrs**
This course provides instruction in computer assisted accounting, including the simulation of the accounting cycle. Topics include general ledger, accounts receivable, accounts payable, transactions and reports, financial statements analysis, depreciation, payroll, and program setup.

BUS172. Machine Calculations on the Microcomputer (1)
**Pass/No Pass Option**

**Advisory: Completion of BUS 151, Business Mathematics is strongly recommended. Lab 3 Hrs**
Use of the 10-key pad on the microcomputer to develop speed and accuracy by touch and proficiency in solving practical business problems.

BUS172.1. Machine Calculations Skill Building (0.5)
**Pass/No Pass Option**

**Advisory: Completion of BUS 151 (Business Arithmetic) is strongly recommended. Lab 1.5 Hrs**
Use of the 10-key pad on the microcomputer to develop speed and accuracy by touch.

BUS172.2. Machine Calculations Applications (0.5)
**Pass/No Pass Option**

**Prerequisite: BUS 172.1 with a grade of "C" or better. Advisory: Completion of BUS 151 (Business Arithmetic) is strongly recommended. Lab 1.5 Hrs**
Use of the 10-key pad on the microcomputer to solve practical business problems.

BUS173. Filing Procedures and Records Management (3)
**Pass/No Pass Option**

**Lec 3 Hrs**
Introduction to filing procedures and rules; emphasizes principles and practices of effective records management for manual and computerized records systems.

BUS175. Business Communications (3)
**Advisory: Minimum keyboarding skill of 25 words per minute is recommended. Pass/No Pass Option**

**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.
BUS177. Proofreading & Editing Skills (3)
   **Pass/No Pass Option**
   **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.

BUS180. Medical Terminology I (3)
   **Lec 3 Hrs**
Study of medical vocabulary. Of particular value to those pursuing a career as medical office personnel.

BUS190. Career Management (2)
   **Pass/No Pass Option**
   **Lec 2 Hrs**
Emphasis on career planning, the job application process and documents, job application skills, and career planning.

BUS194. Human Relations in Business (3)
   **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.

BUS200. Computer Basics (0.5-2)
   **Pass/No Pass Only**
   **Lab 1.5-6 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.

BUS209A. Computers for ESL Students A (0.5)
   **Lab 0.5 Hr**
This course focuses on introductory computer concepts for ESL students. Topics covered include the Basics of Computers, Windows Concepts, and WordPad. Student will progress at an individual pace. This course does not meet the Business Office Technology certificate or degree requirements.

BUS209B. Computers for ESL Students B (0.5)
   **Lab 0.5 Hr**
Students develop the skills and knowledge of the Microcomputer in a format tailored specifically for ESL students. Topics covered include email, Internet, file management and MS Word. This course does not meet the Business Office Technology certificate or degree requirements.
CHM1A. General Chemistry I (5)
Prerequisite: MAT 123 with a grade of "C" or better; and CHM 22 with a grade of "C" or better.
Lec 3 Hrs; Lab 6 Hrs
Basic principles of chemistry: atomic structure, periodic relationships, chemical nomenclature, chemical equations, solutions, stoichiometry, chemical energetics, gas laws, states of matter, acid-base theory, chemical equilibrium, chemical bonding and molecular structure.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5A, 5C]

CHM1B. General Chemistry II (5)
Prerequisite: CHM 1A with a grade of "C" or better.
Lec 3 Hrs; Lab 6 Hrs
A continuation of CHM 1A: bonding in organic compounds and coordination compounds; the solution process and solution properties, chemical equilibrium and the application of equilibrium principles to qualitative and quantitative analysis in the laboratory; thermodynamics, reaction rates, oxidation-reduction processes and electrochemistry, nuclear chemistry.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5A, 5C]

CHM12A. Organic Chemistry I (5)
Prerequisite: CHM 1B with a grade of "C" or better.
Lec 3 Hrs; Lab 6 Hrs
First course of a two-course organic chemistry series. Intended for students whose Majors require a full year of organic chemistry (chemistry, chemical engineering, pre-medical, pre-dental, pre-veterinary, pre-pharmacy, and biology majors). Contents include: a survey of structures, nomenclature, properties, and reactivity of the various functional groups; mechanistic pathways; stereochemistry; spectroscopy; synthesis; biologically important molecules; and selected topics.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5A, 5C]

CHM12B. Organic Chemistry II (5)
Prerequisite: CHM 12A with a grade of "C" or better.
Lec 3 Hrs; Lab 6 Hrs
Second course in a two course organic chemistry series. Intended for students whose Majors require a full year of organic chemistry (chemistry, chemical engineering, pre-medical, pre-dental, pre-veterinary, pre-pharmacy, and biology majors). Contents include: a survey of structures, nomenclature, properties, and reactivity of the various functional groups; mechanistic pathways; stereochemistry; spectroscopy; synthesis; biologically important molecules; and selected topics.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5A, 5C]

CHM22. The Science of Chemistry (4)
Prerequisite: MAT-121 with a grade of "C" or better.
Lec 4 Hrs; Lab 3 Hrs
A survey of the fundamental concepts of chemistry: measurement; classification of matter, atomic structure, the periodic table, chemical bonding, nomenclature, chemical equations and stoichiometry, gas laws, solutions, reactions in aqueous solution, acid and bases, oxidation-reduction, nuclear chemistry. Designed for students with no prior background in chemistry.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5A, 5C]

CHM23. Organic and Biological Chemistry for Health Sciences (4)
Prerequisite: CHM 22 or 1A with a grade of "C" or better or high school chemistry with a grade of "B" or better.
Lec 3 Hrs; Lab 3 Hrs
An in-depth study of the principles of organic and biological chemistry related to the health science field. Appropriate for most baccalaureate programs in nursing, dental hygiene, physical therapy, physical education, and health sciences generally. Does not meet chemistry requirement for premedicine or predentistry majors.
[CSU; CSU-GE, AREA B1, B3]

CHM45. Special Projects (1-3)
Special projects in chemistry. The student will engage in the study of a special topic of mutual interest to both the instructor and the student. Study may consist of either library research or laboratory work or a combination of both.
[CSU]

CHM60. Principles of Chemistry (4)
Advisory: Eligibility for MAT 121.
Lec 3 Hrs; Lab 3 Hrs
Designed for majors in registered nursing, animal health technology, physical education, peace officer training, and general education. Atomic structure and its relationship to chemical formulas, equations and equation writing, solutions, the covalent bond and organic compounds, aspects of biochemistry, carbohydrates, proteins and fats. Eligibility for MAT 121 is recommended.
[CSU; CSU-GE, AREA B1, B3]
COM1. Introduction to Public Speaking (3)
Prerequisite: Eligibility for ENG 1A
Lec 3 Hrs
Focuses on the student’s ability to present his/her ideas in the public setting with confidence and poise. Students will learn basic methods of designing and delivering speeches to reach a variety of audiences and will be required to create and deliver an electronic presentation. Theory and techniques of public speaking in democratic society will be covered as well as discovery, development, and criticism of ideas in public discourse through research, reasoning, organization, composition, presentation, and evaluation of various types of speeches. 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]

COM3. Introduction to Communication (3)
Prerequisite: Eligibility for ENG 1A
Lec 3 Hrs
Allows the student to explore all aspects of communication. Introduction to communication theory in interpersonal, small group, public speaking and mass communication. Emphasis is placed on analytical and organizational skills in communication in each of the four contexts. Participation in exercises in listening, verbal and non-verbal behaviors, and cultural and intercultural communication is required. The student will be required to perform at least three public presentations during the course. Not open to students who have completed SPE 3 with a grade of “C” or better.
[CSU; UC CSU-GE, AREA A1; IGETC, AREA 1]
CSS1. Intro. to Computer Science & Programming Fundamentals (4)  
**Pass/No Pass Option**  
**Prerequisite:** Eligibility for MAT 123.  
**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.  
[CSU; UC] [C-ID COMP 112]

CSS2A. Object Oriented Programming (4)  
**Pass/No Pass Option**  
**Prerequisite:** CSS 1 with a grade of "C" or better.  
**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]

CSS2B. Data Structures & Algorithms (4)  
**Prerequisite:** CSS 2A with a grade of "C" or better.  
**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]

CSS3. Computer Architecture and Assembly Language Programming (4)  
**Pass/No Pass Option**  
**Prerequisite:** CSS 1 with a grade of "C" or better.  
**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]

CSS4. Introduction to Scientific Programming (4)  
**Prerequisite:** MAT 2 or 3A with a grade of "C" or better.  
**Lec 3 Hrs; Lab 3 Hrs**  
Introduces the fundamental 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]

CSS7. Discrete Structures (4)  
**Prerequisite:** MAT 25 and CSS 1 with a grade of "C" or better.  
**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]

CSS15. Introduction to E-Commerce (4)  
**Advisory:** Successful completion of CSS 43 (previously CIS 11), CSS/LBT 90 (previously CIS 90), or BUS/CSS 109 (previously CIS 109).  
**Lec 3 Hrs; Lab 3 Hrs**  
Introduction to key issues and strategies for e-commerce planning. Includes examining the concepts and types of e-commerce, examining methods for effective e-commerce solutions, describing the e-commerce development process, creating a business case for an e-commerce solution, specifying functional requirements for an e-commerce solution, specifying technical requirements for an e-commerce solution managing online content, and key issues in designing for international audiences.  
[CSU]

CSS25. Multimedia Integration (3)  
**Pass/No Pass Option**  
**Lec 2 Hrs; Lab 3 Hrs**  
A focus will be placed on the history and influence of learning through the use of multiple-applications. Basic concepts such as text, audio, video, and user interface will be examined. Technical and design ideas will be examined for use in diverse learning situations. Students will develop the appropriate skill necessary to integrate multiple applications into learning presentations, on line design and learning through multimedia.  
[CSU]

CSS27. Digital Project Management and Content Development (4)  
**Pass/No Pass Option**  
**Lec 3 Hrs; Lab 3 Hrs**  
This course will give students a hands-on approach to working with clients that 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]

CSS29. Programming for Multimedia (3)  
**Pass/No Pass Option**  
**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 skills necessary to integrate programming into multimedia projects. Technical and design ideas will be examined for each component of multimedia programming, focusing on CSS, java scripting, and action-scripting.  
[CSU]

CSS31. Database Management (4)  
**Pass/No Pass Option**  
**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]
CSS41. Operating Systems (4)
Prerequisite: CSS 1 with a grade of "C" or better.
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]

CSS43. Computer Systems and Information Literacy (4)
Pass/No Pass Option
Lec 3 Hrs; Lab 3 Hrs
An overview of the computer information systems, languages, computer applications, and the role of computers in the evolution of an information-based society. Topics include computer terminology, application programs, email, networks, word processing, spreadsheets, presentation software, the Internet, using and evaluating information from electronic sources, and conducting library research online. Formerly CIS 11. Not open to students with credit for CIS 48, BUS 48, BUS 39.009 or CIS 39.009. [CSU; UC] [C-ID BUS 140]

CSS45. Applied Projects (1-3)
Pass/No Pass Option
Prerequisite: Any CSS course with a grade of "C" or better.
Individual investigation of topics and problems beyond the scope of regular Computer Science and Information Systems courses. [CSU]

CSS60B. 3-D Game Development (4)
Pass/No Pass Option
Prerequisite: CSS 60A or CSS 1 with a grade of "C" or better.
Lec 3 Hrs; Lab 3 Hrs
Introduction to designing and implementing games using a 3D engine. Students will work to create one or more levels from start to finish, including any needed modifications to game mechanics, controls, and cameras. Topics include aesthetics, environment building, lighting, texturing, resource placement, player guidance, player controls, camera controls, scripting, and game mechanics in 3D. Course contents follow the IDGA Curriculum Framework. [CSU]

CSS66. Introduction to Geographic Information Systems (GIS) (4)
Pass/No Pass Option
Lec 3 Hrs; Lab 3 Hrs
An introduction to geographical information systems (GIS), including their use, input, analysis and output of spatial data. Topics include elements of a GIS, data structures and their management, and basic-input and output functions and mapping possibilities. Includes hands-on exposure to computers and state of the art GIS application software. GIS software package is provided during laboratory. Not open to students who have completed AGR 66, AIT 66, or DRA 66 with a grade of "C" or better. [CSU]

CSS78. Beginning Flash Game Design and Programming (4)
Pass/No Pass Option
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]

CSS84. Beginning Digital Cartooning In Flash (4)
Pass/No Pass Option
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]

CSS107. Internship in Computer Science and Information Systems (3)
Pass/No Pass Only
Lec 1 Hr; Lab 6 Hrs
Prerequisite: CSS 1, CSS 12, CSS 31, CSS 170A, 170B with a grade of "C" or better.
The course provides students with work experience in computer information systems with one or more local business or organization. Classroom discussions relate course vocational students' experiences to selected readings and topics in computer science and information systems. Continuous evaluations will be conducted by field supervisors in each agency in coordination with the instructor. A written term project relating to the job experience or literature research will be required.

CSS110. Computer Science and Information Systems Topics (2-4)
Pass/No Pass Option
Prerequisite: CSS 1 with a grade of "C" or better.
Lec 2-4 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.

CSS121A. Network Fundamentals (4)
Lec 3 Hrs; Lab 3 Hrs
Pass/No Pass Option
Prerequisite: CSS 1 with a grade of "C" or better.
Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. Uses the OSI and TCP layered models to examine roles of protocols and services at the application, network, data link, and physical layers. 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. (Equivalent to CCNA Exploration Curriculum Course: Network Fundamentals) [CSU]

CSS121B. Routing Protocols and LAN Switching (5)
Prerequisite: CSS 121A with a grade of "C" or better.
Lec 3 Hrs; Lab 6 Hrs
Pass/No Pass Option
Describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Emphasizes primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. Additionally, provides a comprehensive, theoretical, and practical approach to learning the technologies and protocols needed to design and implement a converged switched network. Explains how to configure a switch for basic functionality and how to implement Virtual LANs, VTP, and Inter-VLAN routing in a converged network. (Equivalent to CCNA Exploration Curriculum Courses: Network Fundamentals) [CSU]
CSS121C. Accessing the Wide Area Network (WAN) (4)
Pass/No Pass Option
Prerequisite: CSS 121B with a grade of "C" or better.
Lec 3 Hrs; Lab 3 Hrs
Covers the WAN technologies and network services required by converged applications in enterprise networks. Uses the Cisco Network Architecture to introduce integrated network services and explains how to select the appropriate devices and technologies to meet network requirements. Implements and configures common data link protocols and how to apply WAN security concepts, principles of traffic, access control, and addressing services. (Equivalent to CCNA Exploration Curriculum Course: Accessing the WAN) [CSU]

CSS122. Computer Security Principles (4)
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. Emergency scenarios for physical security of network security, infrastructure security, remote access, wireless and instant messaging, intrusion detection and network baselines. 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]

CSS126. Dreamweaver (4)
Pass/No Pass Option
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, editing and maintaining websites as well as, Java scripting, basic chat rooms, bulletin board, guest books, and other complex components of Dreamweaver and web authoring. [CSU]

CSS127. Flash Design (4)
Pass/No Pass Option
Lec 3 Hrs; Lab 3 Hrs
A focus on the creation of Flash websites, movies, and multimedia. The course will focus on the skills necessary for the effective use of Flash. 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]

CSS169. Computer Maintenance and Repair (4)
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.

CSS170A. 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.

CSS205. Intro. to Microcomputers (1)
Pass/No Pass Option
Lec 0.5 Hr; Lab 1.5 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.
CON101. Introduction to Sustainable Construction (3)  
**Pass/No Pass Option**  
**Lec 3 Hrs**  
The first required core course of the Sustainable Construction Program offers 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 or CON 120 with a grade of "C" or better.

CON104. Print Reading & Modeling (3)  
**Pass/No Pass Option**  
**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]

CON121. 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.

CON123. Sustainable Design Studio (3)  
**Pass/No Pass Option**  
**Prerequisite:** CONS 101 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.

CON125. Green Building Materials and Methods (3)  
**Pass/No Pass Option**  
**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.

CON126. Green Building Remodel and Retrofit (3)  
**Pass/No Pass Option**  
**Lec 3 Hrs**  
**Advisory:** CONS 101, CONS 104, and CONS 125.  
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.

CON128. Sustainable Building Design (3)  
**Pass/No Pass Option**  
**Lec 2 Hrs; Lab 3 Hrs**  
**Advisory:** CONS 101, CONS 104, and/or CONS 125.  
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.

CON129. Managing Off-Site Impacts of Construction (3)  
**Pass/No Pass Option**  
**Advisory:** CONS 101 or the student should have adequate preparation through exposure to or experience in Green Building.  
**Lec 3 Hrs**  
Off-site impacts of construction projects can include storm water damage, waste generation, and air, light, and noise pollution. Students will learn about engineering solutions, erosion control, waste management, and emissions reduction. A field trip to the Monterey Peninsula Waste Management Park is required. Not open to students who have completed CON 129 with a grade of "C" or better.

CON130. Heavy Equipment and Highway Construction (3)  
**Pass/No Pass Option**  
**Advisory:** CONS 101  
**Lec 3 Hrs**  
Provides a comprehensive overview of highway and heavy construction. Emphasis is placed on communications, plans, specifications, and grade control; equipment; below grade construction and earthmoving; plant operations; paving and structures. Prepares the student to pass the NCCER (National Center for Construction Education and Research) Competency Test for this level of instruction. Class will make a field visit to a highway construction job. Not open to students who have completed CON 130 with a grade of "C" or better.

CON132. Masonry and Concrete (3)  
**Pass/No Pass Option**  
**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.

CON134. Plumbing and HVAC (3)  
**Pass/No Pass Option**  
**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 students who have completed CON 70 with a grade of "C" or better.  

[CSU]

CON136. Electrical (3)  
**Pass/No Pass Option**  
**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 students who have completed CON 71 with a grade of "C" or better.  

[CSU]

CON140. Construction Management and Scheduling (3)  
**Pass/No Pass Option**  
**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.

CON142. Estimating (3)  
**Pass/No Pass Option**  
**Advisory:** CONS 140  
**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]

CON144. Construction Law and Contracts (3)  
**Pass/No Pass Option**  
**Advisory:** CONS 140  
**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]

CON145. Special Projects (0.5-2)  
This course is designed to allow students to study a specialized area of construction or to develop further knowledge in an area that they have already studied in construction. Such areas could include computer applications, management techniques, new or special materials, and new methods or construction processes.
CONS146. Building Regulations and Permit Processes (3)
Pass/No Pass Option
Lec 3 Hrs
Topics include types of construction and permits, building code sections, planning and zoning regulations, required drawings and reports, and sustainable urban planning. Not open to students who have completed CON 81 with a grade of "C" or better.

CONS149. Commercial Construction (3)
Pass/No Pass Option
Advisory: CONS 101, CONS 104, and CONS 125
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.

CONS150. Construction Field Practice I (6)
Pass/No Pass Option
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.

CONS151. Construction Field Practice II (6)
Pass/No Pass Option
Prerequisite: CONS 150 with a grade of "C" or better
Lec 2 Hrs; Lab 12 Hrs
Continuation of practical applications of 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. 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.

CONS152. Construction Field Practice III (6)
Pass/No Pass Option
Prerequisite: CONS 151 with a grade of "C" or better
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.

CONS154. Technology Tools for Construction (3)
Pass/No Pass Option
Advisory: Students should be familiar with standard computer functions prior to enrolling in this course.
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.

CO-OP WORK
EXPERIENCE EDUCATION

CO-OP99. Occupational Cooperative Work Experience Education (1-16)
Pass/No Pass Option
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 8 units may be earned during one term in general work experience education in combination with CWE 99. A total of 16 units may be earned in combination with CWE 99.

CWE99. General Cooperative Work Experience Education (1-16)
Pass/No Pass Option
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.
COUNSELING

COU1. Student Success Seminar (3)
Advisory: Recommended for all first time college students
Pass/No Pass Option
Lec 3 Hrs
Introduction to the college experience for first year students through the exploration and application of psychological, social, physical principles and life management skills that impact lifelong learning, well being and success. Students will examine wellness and lifestyle choices, effective learning strategies, career exploration, educational and transfer planning and apply creative and critical thinking techniques.
[CSU; UC; CSU-GE, AREA E]

COU21. Student Skills for Success:
Orientation (0.3)
Pass/No Pass Only
An introduction to college, which provides new students with a better understanding of the college environment. Topics include: Hartnell College campus and community resources and services, learning strategies and educational planning. Students will have a better understanding of general education requirements, college policies, registration procedures, Certificate or Associate’s degree requirements, and university transfer. (Students returning after a break in enrollment may petition to repeat this course)
[CSU]

COU23. Student Skills for Success:
Career Development (3)
Pass/No Pass Option
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]

COU27. Life Planning (3)
Pass/No Pass Option
Lec 3 Hrs
Key life issues and questions will be investigated and evaluated to create a life span. Action steps will be identified and selected to enable students to be better equipped to select a college major and understand the importance of relationships and develop an appreciation of divergent cultural views.
[CSU; CSU-GE, AREA E]

COU30. Career Interest and Ability Assessment (1)
Pass/No Pass Only
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]

COU35. Intercultural Communication (3)
Lec 3 Hrs
Introduces intercultural communication in domestic and/or global contexts. Students will study intercultural communication among people in the United States such as Mexican-American, Hispanic, Native American, Asian American, and African American and world cultures, such as India, Japan, Europe, Africa, North Central and South America. 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 COM-35 or SPE-35 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA D7, IGETC, AREA 4]

COU 80, 81, 83 have been changed to ASL 1, 2, 3.
Please see the ASL course listings section for additional information.

COU123. Student Skills for Success:
Career/Internship Preparation (1)
Pass/No Pass Only
Lec 1 Hr
Designed to assist students in preparation for internships and careers. Students will learn proper career preparation tools including resume writing, interview skills, personal statements, and educational planning.

COUNSELING—LEARNING SKILLS

LSK105. Emotional Management Skills (1.5)
Pass/No Pass Only
Lec 1 Hr
Introduction to specific behavioral approaches designed to identify and manage negative feelings. Positive peer support and self-talk skills designed to help students 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."

LSK126. Learning Strategies (1.5)
Pass/No Pass Only
Lec 1.5 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.

LSK210. Learning Skills Assessment (0.3-0.5)
Pass/No Pass Only
Intensive learning skills assessment for students with possible learning disabilities including dyslexia through self appraisal and diagnostic evaluation. Strengths and weaknesses in basic skills as well as learning modalities will be assessed.

LSK211. Learning Skills Lab (0.5)
Pass/No Pass Only
Designed to provide students with identified learning disabilities or other educational learning challenges and limitations individualized, computer assisted and small group instruction. Application and study of assistive technology, accommodation strategies, and use of supportive learning services. Formerly COU 211.
DRA50. Intro. to Drafting and Design (3)  
**Pass/No Pass Option**  
**Lec 2 Hrs; Lab 3 Hrs**  
Introduces graphic communication as a tool used in a variety of industries such as, architecture, engineering, interior design, and construction. Emphasis is placed on design principles and processes involved in creating and producing drawings. Topics include technical sketching, lettering, line types, and applied drafting. The 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]

DRA52. Introduction to AutoCAD (3)  
**Pass/No Pass Option**  
**Advisory:** Concurrent enrollment in or completion of DRA 50 is recommended.  
**Lec 2 Hrs; Lab 3 Hrs**  
This course introduces computer-aided drafting (CAD) and examines the hardware that makes up a CAD workstation. It also covers the operating system (Microsoft Windows) that enables the equipment to function as a unit. The course shows how to use AutoCAD to set up drawings and construct lines, circles, arcs, other shapes, geometric constructions, dimensioning, and text. Students will use display and edit drawing 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]

DRA53. Advanced AutoCAD (3)  
**Pass/No Pass Option**  
**Prerequisite:** DRA 52 with a grade of “C” or better.  
**Lec 2 Hr; 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]

DRA54. AutoCAD 3D Modeling (3)  
**Pass/No Pass Option**  
**Prerequisite:** DRA 53 with a grade of “C” or better.  
**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]

DRA58. Computer-Aided Mechanical Drafting (3)  
**Pass/No Pass Option**  
**Advisory:** Concurrent enrollment or completion of DRA 50, DRA 52.  
**Lec 2 Hrs; Lab 3 Hrs**  
A study of orthographic projection with precision dimensioning, includes tolerance and fit, geometric tolerance, different types of sectional views, and fastening devises for manufacturing industries. Emphasis placed on modern and applied drafting and methods established by the American National Standard Institute (ANSI). Computer aided drafting and design tools such as AutoCAD and Solidworks will be used.  
[CSU]

DRA64. Industrial Print Reading (2)  
**Pass/No Pass Option**  
**Lec 2 Hrs**  
This course covers the fundamentals of interpreting and understanding of drawings used in engineering, industry and manufacturing.  
[CSU]

DRA70. Architectural Design and Visual Communication I (3)  
**Pass/No Pass Option**  
**Advisory:** DRA 50 or one year of high school drafting is recommended.  
**Lec 2 Hrs; Lab 3 Hrs**  
Fundamental issues, concepts, and processes, involved in two- and three-dimensional architectural drawing 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]

DRA71. Architectural Design and Visual Communication II (3)  
**Pass/No Pass Option**  
**Advisory:** DRA 70 or ART 70 or 80.  
**Lec 2 Hrs; Lab 3 Hrs**  
Course will extend and add to competency achieved in two- and three-dimensional architectural drawing 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]

DRA72. Architectural Design and Visual Communication III (3)  
**Pass/No Pass Option**  
**Advisory:** ART 70 or 80 or DRA 70 or 71  
**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]
ECE1. Principles and Practices of Teaching Young Children (3)
Lec 3 Hrs
An examination of the underlying philosophies and theoretical principles of developmentally appropriate practices applied to programs, environments emphasizing 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 professionals practices promoting advocacy, ethics and professional identity.
[CSU] [C-ID ECE 120]

ECE2. Home, School & Community Relations (3)
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 CDEV 110]

ECE4. Introduction to Curriculum (3)
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]

ECE10. Observation and Assessment (3)
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] [C-ID ECE 200]

ECE11. Cognitive Activities and Materials (3)
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.
[CSU]

ECE12A. Preschool Theory and Practicum (4)
Prerequisite: ECE 14, ECE 4, ECE 10, ECE 1 with a grade of “C” or better.
Advisory: ENG 101 or ESL 101
Other: TB Clearance
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]

ECE12B. Advanced Theory and Practicum in ECE (4)
Prerequisite: ECE 12A with a grade of “C” or better
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]

ECE16. Preschool Curriculum: Music (1)
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]

ECE17. Preschool Curriculum: Movement (1)
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]

ECE18. Communication Skills in E.C.E. (2)
Lec 2 Hrs
Designed to give students increased knowledge and skills in basic communication with adults and children. Students will learn to identify and practice specific skills which promote an effective communication process.
[CSU]

ECE19. Safety, Health and Nutrition in the Child Care Setting (3)
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]

ECE20. Infant and Toddler Development (3)
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] [C-ID ECE 230]

ECE21. Infant/Toddler: Group Care (1)
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]
ECE22. Infant/Toddler: Family Relations of Diverse Backgrounds (1)
   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 the infant/toddler program, parent involvement, parent education, staff/parent relationships, and caregiver/parent coping skills.
   [CSU]

ECE23. Infant/Toddler Education: Cognitive and Language Learning (2)
   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]

ECE24. Infant/Toddler: Family Relations (3)
   Advisory: It is recommended that students complete ECE 20, Infant/Toddler Development and/or ECE 26 Introduction to Special Education before enrolling in this course.
   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 include laws, regulations, rights of families and young children with special needs, theories, research, and best practices of early childhood education.
   [CSU]

ECE26. Children with Special Needs (3)
   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]

ECE27. Principles and Practices in Guiding Children’s Behaviors (3)
   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]

ECE45. Special Projects (1-3)
   Designed for early childhood education students who are interested in developing skills and knowledge beyond the scope of an existing early childhood education course. Students will gain hands-on experience in advanced methodology, curriculum, or assessment/evaluation of children in an early childhood education setting.
   [CSU]

ECE53. Teaching in a Diverse Society (3)
   Lec 3 Hrs
Examination of the major social, economic, and psychological factors involved in interactions and relationships that contribute to personal and group differences and how these factors impact working with young children and their families in early education programs. Various strategies for working with diversity issues in the classroom will be explored, with emphasis on an anti-bias approach. Includes self-examination and reflection activities dealing with bias, discrimination, and systemic oppression. Consideration of practices that promote equity and a deeper understanding of how to best support all children as they gain a sense of identity and become competent members of our diverse society.
   [CSU] [C-ID ECE 230]

ECE54. Language and Early Literacy Curriculum (3)
   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.
   [CSU]

ECE70A. 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
   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]

ECE70B. Advanced Administration of Child Development Programs (3)
   Prerequisite: ECE 70A with a grade of “C” or better.
   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]

ECE71. Supervision of Adults in an ECE Setting (2)
   Prerequisite: Eligibility for English 1A.
   Advisory: Students must have completed core courses and electives in ECE and 16 units in general education to enroll in this class.
   Lec 2 Hrs
   Designed for supervisors, head teachers, 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 copy of Child Development Teacher permit on the first day of class.
   [CSU]

ECE101. Orientation: Early Childhood Education (1)
   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).
ECE193. Topics in ECE: Early Childhood Leadership, Advocacy, Parent Relations, and Management (0.5)

Pass/No Pass Only

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.

ECE194. Topics in ECE: Early Childhood Philosophies, Curriculum and Innovative Teaching Methodologies (0.5)

Pass/No Pass Only

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.

ECE195 A-N. Topics in ECE: Curriculum (0.5-3)

Pass/No Pass Only

Topics organized as workshops, conferences, and/or seminars center on specific activities, resources, and current trends in curriculum and learning environments in response to the current training needs and interests of ECE educators, students, and community employers.

Topics:
A. Developmentally Appropriate Materials for ECE settings.
B. Classroom environments that promote learning.
C. Music Experiences.
D. Music Curriculum
E. Movement Experiences
F. Math/Science Experiences
G. Emergent Curriculum
H. Large and Small Group Experiences
I. Sensory Integration and Learning
K. Cultural Diversity Issues
L. Multicultural curriculum
M. Activities to promote literacy
N. Learning centers for ECE programs

ECE196 A-J. Topics in ECE: Program Management (0.5-3)

Pass/No Pass Only

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

ECE197 A-G. Guidance, Observation, Assessment of Children (0.5-3)

Pass/No Pass Only

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.

ECE198 A-I. Topics in ECE: Curricular Approaches (0.5-3)

Pass/No Pass Only

Topics organized as workshops, conferences, and/or seminars that center on specific activities, resources, and current trends impacting ECE programs, in response to training and interests of ECE educators, students, and community employers.

ECE199. Selected Topics in E.C.E. (0.3-2)

Pass/No Pass Only

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.

ECE200. Parent Enrichment (0.3-1)

Pass/No Pass Only

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

ECO1. Principles of Macroeconomics (3)
Prerequisite: MAT 123 with a grade of "C" or better.
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]

ECO5. Principles of Microeconomics (3)
Prerequisite: MAT 123 with a grade of "C" or better.
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]

ECO45. Special Projects (1-3)
A supervised program of independent research and study in Economics. Completion of ECO 1 or 5 recommended.
[CSU]

EDUCATION

EDU1. Multicultural Perspectives in Education (3)
Advisory: ENG 1A.
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 involves 45 hours of supervised participation at a school site and may require students to complete a background check as required by their school site.
[CSU; UC; CSU-GE, AREA D3, D7]

EDU10. Foundations of Success (2.5)
Pass/No Pass Only
Lec 1.5 Hrs; Lab 3 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, effectively leading and participating in teams, identifying opportunities and threats to success, and exploring the culture of knowledge work.

EDU111. Team Self-Management (2)
Pass/No Pass Only
Lec 2 Hrs
Fundamentals of project management with a self-managed team. Application of team skills and project management skills to a research project.

EDU112. Team Self-Management (3.5)
Lec 3 Hrs; Lab 1.5 Hrs
Students develop project management skills in team leadership by learning to delegate tasks and supervise project development, problem solving, presentation, and research skills in the context of a survey-based research project on a community issue related to social justice (the pursuit of equity for populations, who are, currently and historically, marginalized, exploited, disempowered, or violated based on their social group membership.)
EGN1. Introduction to Engineering and Related Technologies (3)  
**Pass/No Pass Option**  
**Lec 2 Hrs; Lab 3 Hrs**  
An overview of different aspects of the engineering profession such as: scholastic requirements, employment opportunities, design challenges, prerequisites for various engineering majors, engineering responsibilities, aims of technical engineering training, code of ethics, and the purpose of engineering technology methods. Students will frequently use project management concepts and work in teams on problem solving and design projects.  
[CSU; UC]

EGN2. Engineering Graphics/CAD (4)  
**Pass/No Pass Option**  
**Advisory: DRA 50**  
**Lec 3 Hrs; Lab 3 Hrs**  
The principles and application of engineering drawing, including orthographic projections, freehand sketching, pictorial drawings, dimensioning, sections, auxiliary, and graphical analysis in solving engineering problems are the core of this course. Students will extensively use AutoCAD as a computer-aided drafting design tool to complete the required projects. This course will also cover the engineering design process and project management.  
[CSU; UC]

EGN3. Renewable Energy & Energy Efficiency (3)  
**Pass/No Pass Option**  
**Lec 2 Hrs; Lab 3 Hrs**  
An introduction to engineering through green, renewable, sustainable, and environmental technology. The course will focus on renewable and alternative energy sources, including solar, wind, hydropower, geothermal, and fuel cells. Technological opportunities for improving end-use energy efficiency.  
[CSU; UC]

EGN4. Materials Science (3)  
**Prerequisite:** CHM 1A and PHY 4A with a grade of "C" or better (PHY 4A may be taken concurrently)  
**Lec 2 Hrs; Lab 3 Hrs**  
Physical, electrical and mechanical properties of materials including metals, alloys, ceramics, semi-conductors, polymers, and composite materials. Emphasis on atomic and crystalline structures, heat treatment, phase equilibria, transformations, energy bands in solids, studies of grain structure, and corrosion. Laboratory work in metals, corrosion, magnetic properties and plastics.  
[CSU; UC]

EGN6. Introduction to Circuit Analysis (4)  
**Prerequisite:** PHY 4B with a grade of "C" or better.  
**Corequisite:** MAT 5  
**Lec 3 Hrs; Lab 3 Hrs**  
An introduction to basic circuit laws and network theorems, analysis of various types of DC and AC circuits, purely resistive networks, RL, RC, and RLC circuits, and solid state devices. Examines network theorems, mesh and nodal analysis, superposition theorems, complex-frequency concepts, the characteristics of operational amplifiers and computer circuit analysis. Laboratory component introduces the instruments and experimental techniques of electrical circuits and provides experiences with the theoretical concepts of the course. Students also use software to simulate and design circuits.  
[CSU; UC]

EGN8. Engineering Statics (3)  
**Prerequisite:** PHY 4A and MAT 3B with a grade of "C" or better. (Math 3B may be taken concurrently.)  
**Lec 3 Hrs**  
Analyzes force vectors on structures in equilibrium, properties of forces, moments, couples and resultants, conditions for equilibrium, friction, centroids, and moments of inertia. Included are equilibrium of rigid bodies, trusses, frames, and machines, as well as the calculation of centers of mass, centroids, friction, distributed forces, beams, shear and moment diagrams, and moments of inertia.  
[CSU; UC]

EGN12. Engineering Design with Solid Works (3)  
**Pass/No Pass Option**  
**Advisory: EGN 2**  
**Lec 2 Hrs; Lab 3 Hrs**  
Introduces students to the engineering design processes utilizing 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.  
[CSU; UC]

EGN45. Special Projects (1-3)  
This course is designed for Science, Technology, Engineering, and Math (STEM). Students of exceptional promise who are interested in investigating topics beyond the scope of a regular engineering course. Students will gain hands-on experience in advanced engineering topics involving project management.  
[CSU]
ENG1A. College Composition and Reading (3)  
**Prerequisite:** ENG 101 or ESL 101 with a grade of "C" or better or placement by Hartnell's assessment.  
**Lec** 3 Hrs  
Introduction to composition with emphasis on writing of exposition, and reading of selected works from a variety of academic and cultural contexts, and writing from research. Students will write a minimum of 6,500 words in graded assignments.  
[CSU; UC; CSU-GE AREA A2, A3; IGETC, AREA 1]  
[C-ID ENGL 100]

ENG1B. College Literature and Composition (3)  
**Prerequisite:** ENG 1A with a grade of "C" or better.  
**Lec** 3 Hrs  
English 1B is an introductory literature survey course that focuses on reading and writing about four basic literary genres: drama, poetry, short story, and the novel. The course provides instruction and practice in critical thinking and forming literature based arguments. This course introduces the major schools of literary and cultural theory common to study in the humanities. Students will write a total of 6,000 words including essays, journals, and homework assignments.  
[CSU; UC; CSU-GE AREA A2, C2; IGETC, AREA 3]  
[C-ID ENGL 120]

ENG2. Critical Thinking and Writing (3)  
**Prerequisite:** Completion of ENG 1A with a grade of "C" or better.  
**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, A4; IGETC, AREA 1]  
[C-ID ENGL 105]

ENG10. Introduction to Linguistics (3)  
**Prerequisite:** Completion of ENG 1A with a grade of "C" or better.  
**Lec** 3 Hrs  
Introduction into the study of human language. Includes an inquiry into the nature of language, change and diversity, sound patterns, transformational grammar, language acquisition, and the relationship between linguistics and allied disciplines.  
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

ENG17. The Contemporary Shakespeare (3)  
**Prerequisite:** Eligibility for ENG 1A.  
**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 C2; IGETC, AREA 3]

ENG22. Studies in Poetry (3)  
**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]

ENG24. The Short Story (3)  
**Prerequisite:** Completion of ENG 1A with a grade of "C" or better.  
**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]

ENG26. Chicano Literature (3)  
**Prerequisite:** Completion of ENG 1A with a grade of "C" or better.  
**Lec** 3 Hrs  
An introduction to the study of Chicana/o Literature from the oral tradition, "el cuento," to the written contemporary works of authors such as Valdez, Cisneros, Villasenor, and Soito.  
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

ENG31. Beginning Creative Writing (3)  
**Prerequisite:** Eligibility for ENG 1A.  
**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]

ENG32. Intermediate Creative Writing (3)  
**Prerequisite:** Completion of ENG 31 with a grade of "C" or better.  
**Lec** 3 Hrs  
This 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]

ENG33. Advanced Creative Writing (3)  
**Prerequisite:** Completion of ENG 32 with a grade of "C" or better.  
**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 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]

ENG41. Art of Steinbeck (3)  
**Prerequisite:** Eligibility for ENG 1A.  
**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]

ENG44A. World Literature I (3)  
**Prerequisite:** Completion of ENG 1A with a grade of "C" or better.  
**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]

ENG44B. World Literature II (3)  
**Prerequisite:** Completion of ENG 1A with a grade of "C" or better.  
**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]
ENG46A. Survey of British Literature I (3)
Prerequisite: Completion of ENG 1A with a grade of "C" or better.
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]

ENG46B. Survey of British Literature II (3)
Prerequisite: Completion of ENG 1A with a grade of "C" or better.
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 cultural significance.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3] [C-ID ENGL 165]

ENG47A. Survey of American Literature I (3)
Prerequisite: Completion of ENG 1A with a grade of "C" or better.
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]

ENG47B. Survey of American Literature II (3)
Prerequisite: Completion of ENG 1A with a grade of "C" or better.
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 their literary, historical, and cultural significance.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3] [C-ID ENGL 135]

ENG48. Introduction to Children's Literature (3)
Advisory: Completion of ENG 1A with a grade of "C" or better.
Lec 3 Hrs
This is a literature course, focused on the literary analysis of books written for school-age children and adolescents. It introduces the history, forms, and functions of literature for children, and provides a variety of critical tools for reading, discussing, and writing about literary as well as pedagogical discourses. Readings, lectures, class discussion, and writing assignments will develop students' awareness of social and educational issues that impact the use of children's literature both in and outside the classroom, their ability to read texts carefully and with attention to literary merit, and their ability to write clear, thoughtful and persuasive prose.
[CSU; UC] [C-ID ENGL 180]

ENG50. Film Appreciation to 1960 (3)
Lec 3 Hrs
This course is 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 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]

ENG51. Film Appreciation 1960 to the Present (3)
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]

ENG101. Intermediate Composition and Reading (3)
Prerequisite: ENG 253 or ESL 265 with a grade of "C" or better or placement by Hartnell's assessment.
Lec 3 Hrs
Development of reading and 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

ENG253. Fundamentals of Composition and Reading (5)
Lec 5 Hrs
Development of writing and reading skills with emphasis on elements of the sentence, paragraph, and the short essay.

ENG300. GED/Language Arts, Reading
Noncredit
Lab 5 Hrs
Prepares students to pass the language arts reading component of the GED test and includes content for nonfiction texts and literary texts (prose fiction, poetry, and drama). Focuses on comprehension, application, analysis, and synthesis thinking skills.

ENG301. GED/Language Arts, Writing
Noncredit
Lab 5 Hrs
Prepares students to pass the language arts writing component of the GED test and consists of content for essay writing including organization of written materials, correct sentence structure, correction of errors in usage, and writing mechanics (punctuation, spelling, and capitalization). Focuses on sentence correction, revision, and restructuring.
ENGLISH AS A SECOND LANGUAGE

ESL101. 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.
Lec 5 Hrs
Development of college reading and composition skills for students whose first language is not English and/or students who want more help with grammar and vocabulary. Focuses on writing essays from readings and college classroom participation skills. Prepares students for ENG-1A.

ESL225. Grammar and Writing I (5)
Corequisite: ESL 225L
Lec 5 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. 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. Formerly ESL 125. Not open to students who have completed ESL 125 with a grade of "C" or better.

ESL225L. Grammar and Writing I - Lab (1)
Pass/No Pass Only
Corequisite: ESL-225
Lab 3 Hrs
Individualized lab instruction in support of the ESL 225 curriculum for high-beginning level ESL students. Formerly ESL 125L. Not open to students who have completed ESL 125L with a grade of "Pass" or "CR".

ESL227A. Low-Beginning Speaking and Listening (3)
Pass/No Pass Option
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. Formerly ESL 127A. Not open to students who have completed ESL 226 with a grade of "C" or better.

ESL227B. Beginning Speaking and Listening (3)
Pass/No Pass Option
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.

ESL228. Reading and Vocabulary I (4)
Pass/No Pass Option
Lec 4 Hrs
Reviews basic literacy, introduces general and academic vocabulary, and develops basic reading comprehension skills for high-beginning level ESL students. 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. Formerly ESL 128. Not open to students who have completed ESL 128 with a grade of "C" or better.

ESL233. Grammar, Vocabulary, and Reading 2 (7)
Prerequisite: ESL 225 with a grade of "C" or better
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.

ESL237A. High-Beginning Speaking and Listening (3)
Pass/No Pass Option
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.

ESL237B. Low-Intermediate Speaking and Listening (3)
Pass/No Pass Option
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.

ESL243. Grammar, Vocabulary, and Reading 3 (7)
Prerequisite: ESL 233 with a grade of "C" or better.
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.

ESL246. Listening and Speaking 3 (3)
Pass/No Pass Option
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.

ESL252. English Pronunciation and Spelling (3)
Lec 3 Hrs
Contrasts English pronunciation and spelling with that of Spanish. Includes practice of single sounds, words, expressions, and extended speech. Though the course is designed for Spanish speakers, non-Spanish speakers can also benefit from this course. Formerly ESL 152. Not open to students who completed ESL 152 with a grade of "C" or better.

ESL255. Grammar and Writing 4 (5)
Prerequisite: ESL 245 with a grade of "C" or better, or placement by Hartnell’s assessment.
Corequisite: ESL 255L
Lec 5 Hrs
Focus on classroom participation skills. Prepares students for the ESL 255 curriculum for high-intermediate to low-advanced students, using contemporary and literary texts that emphasize critical reading skills. Formerly ESL 155. Not open to students who have completed ESL 155 with a grade of "Pass" or "CR".

ESL255L. Grammar and Writing 4-Lab (1)
Pass/No Pass Only
Corequisite: ESL 255
Lab 3 Hrs
Self-paced individualized lab instruction in support of the ESL 255 curriculum for intermediate ESL students. Formerly ESL 155L. Not open to students who have completed ESL-155L with a grade of "Pass" or "CR".

ESL258. Reading and Vocabulary 4 (4)
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.

ESL265. Academic Writing and Reading I (5)
Prerequisite: ESL 255 and ESL 258 with grades of "C" or better or placement by Hartnell’s assessment.
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 completed ESL 165 with a grade of "C" or better.
ESL290A. English Lab A (1)  
**Pass/No Pass Only**  
**Lab 3 Hrs**  
This self-paced 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 simple present, present continuous, future, simple past tenses, imperatives, parts of speech, possessive forms, and count/non-count nouns.

ESL290B. English Lab B (1)  
**Pass/No Pass Only**  
**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 past tense sequences, the past continuous tense, gerunds and infinitives, comparatives and superlatives, definite and indefinite articles, and introduction to the present perfect tense and subjunctive clauses.

ESL290C. English Lab C (1)  
**Pass/No Pass Only**  
**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 tense and subjunctive clauses.

ESL290D. English Lab D (1)  
**Pass/No Pass Only**  
**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.

ESL310. Basic English Pronunciation  
**Noncredit**  
**Lab 5 Hrs**  
This intensive course is designed to teach beginning ESL students the basic pronunciation and discrimination of English sounds (phonemes.)

ESL320. Basic English Pronunciation II  
**Noncredit**  
**Lab 5 Hrs**  
Designed for high-beginning to low-intermediate ESL students. Helps students develop accurate spoken English. Listening skills are also developed.

ESL330. Basic English Pronunciation III  
**Noncredit**  
**Lab 5 Hrs**  
Designed for Spanish speaking students, but speakers of other languages can also benefit from the course. Helps low-intermediate students develop accurate spoken English. Contrasts English sounds and spellings with Spanish sounds and spellings. Listening skills are also developed.

ESL410. Conversation and Vocabulary I  
**Noncredit**  
**Lec 2.3 Hrs**  
Develops vocabulary and conversation skills for low-beginning English. It provides the tools to participate in personal and professional daily life interactions.

ESL420. Conversation and Vocabulary II  
**Noncredit**  
**Lec 2.3 Hrs**  
Develops vocabulary and conversation skills for beginning level English. It provides the tools to participate in personal and professional daily life interactions.

ESL430. Conversation and Vocabulary III  
**Noncredit**  
**Lec 2.3 Hrs**  
Develops vocabulary and conversation skills for high-beginning level English; it provides the tools to participate in personal and professional daily life interactions.

ESL440. Conversation and Vocabulary IV  
**Noncredit**  
**Lec 2.3 Hrs**  
Develops vocabulary and conversation skills for low-intermediate level English; it provides the tools to participate in personal and professional daily life interactions.

ESL510. Grammar Skills I  
**Noncredit**  
**Lec 2.3 Hrs**  
Emphasize English reading, writing, listening, and speaking skills with a grammar foundation for low-beginning ESL students.

ESL520. Grammar Skills II  
**Advisory:** Students should be able to perform course objectives from ESL 510.  
**Noncredit**  
**Lec 2.3 Hrs**  
Emphasize English reading, writing, listening, and speaking skills with a grammar foundation for beginning ESL students.

ESL530. Grammar Skills III  
**Advisory:** Students should be able to perform course objectives from ESL 520.  
**Noncredit**  
**Lec 2.3 Hrs**  
Emphasizes English reading, writing, listening, and speaking skills with a grammar foundation for high-beginning ESL students.
ETH1. Introduction to Ethnic Studies (3)  
**Lec 3 Hrs**  
A survey and comparative analysis of the cultural, economic, political and social factors in the experiences of racial and ethnic groups in the United States, including a historical and contemporary examination of white supremacy in the United States.  
[CSU; UC; CSU-GE, AREA D3, IGETC, AREA 4]

ETH2. Chicano Leadership (3)  
**Lec 3 Hrs**  
Multidisciplinary survey of Chicano leadership including a discussion of the history, politics, culture, and organizational efforts of Chicanos at the local, state, and national levels.  
[CSU; UC; CSU-GE, AREA D3, IGETC, AREA 4]

ETH3. Chicanos in American Society (3)  
**Lec 3 Hrs**  
A multi-disciplinary approach to the study of the effects of U.S. institutions on Chicanos; including the relationship between institutions and the nature of inequality in the U.S. and the ways political institutions affect the degree of political socialization of Chicanos.  
[CSU; UC; CSU-GE, AREA D3, IGETC, AREA 4]

ETH4. Chicano Culture (3)  
**Lec 3 Hrs**  
A multidisciplinary approach to the study of the Chicano experience and culture as expressed in everyday life. The course includes a discussion of Chicano values, norms, language, and belief systems; and the diversity of the Chicano experience.  
[CSU; UC; CSU-GE, AREA D3, IGETC, AREA 4]

ETH5. Chicano Politics and the American Political System (3)  
**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]

ETH6. La Chicana (3)  
**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]

ETH12. Chicano Cinema (3)  
**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]

ETH25. American Indian Literature (3)  
**Prerequisite:** Eligibility for ENG 1A.  
**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 D3, IGETC, AREA 3]

ETH30. Introduction to Teaching Ethnic Minority Children (3)  
**Lec 1.5 Hrs; Lab 4.5 Hrs**  
Introduction to teaching techniques relevant to ethnic minority children in public education. Includes work in classroom under supervision of instructor.  
[CSU]

ETH31. Teaching Ethnic Minority Children (3)  
**Prerequisite:** ETH 30 with a grade of "C" or better.  
**Lec 1.5 Hrs; Lab 4.5 Hrs**  
Introduction to classroom management, curriculum development and teaching strategies relevant to ethnic minority children in public education.  
[CSU]
FCS14. Child Development (3)
Advisory: ENG 101 or ESL 101
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]

FCS22. Essentials of Nutrition (3)
Advisory: Eligibility for ENG 1A; Basic math computations (percentages and fractions)
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]

FCS23. Nutrition (3)
Advisory: Eligibility for ENG 1A; Completion of CHM 50 (or CHM 22 or One year of high school chemistry), BIO 6 and MAT 201 are recommended.
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]

FRN1. Elementary French I (5)
Pass/No Pass Option
Lec 5 Hrs
Fundamentals of French with emphasis on listening, speaking, reading, and writing. Structured lessons include cultural components in the foods, lifestyles, arts, history, and literature of French-speaking peoples.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 6]

FRN2. Elementary French 2 (5)
Pass/No Pass Option
Prerequisite: Completion of FRN 1 with a grade of "C" or better or two years of high school French.
Lec 5 Hrs
Continued emphasis on oral communication in French, including additional readings on French-speaking cultures around the world. Introduction to French songs, poetry, and films. It is strongly recommended that the continuity of the study of French not be interrupted.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 6]

FRN3. Intermediate French (4)
Pass/No Pass Option
Prerequisite: FRN 2 or three years of high school French or its equivalent, or demonstration of language competency to level. All prerequisites must be completed with a grade of "C" or better.
Lec 4 Hrs; Lab 1 Hr
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 6]
GEOGRAPHY

GEG1. Introduction to Geography: Physical Elements (3)
   Lec 3 Hrs
   Examination of the various components of the natural environment, including the processes involved in their development and their relationship to humankind.
   [CSU; UC; CSU-GE, AREA B1, D5; IGETC, AREA 5]

GEG2. Introduction to Geography: Cultural Elements (3)
   Lec 3 Hrs
   The basic cultural elements of geography, including population distribution, land use patterns, transportation, and the use of natural resources in manufacturing, mining, agriculture, forestry and fisheries. Major geographic regions of the world are introduced.
   [CSU; UC; CSU-GE AREA D5; IGETC, AREA 4]

GEG10. Geography and World Affairs: A Regional Approach (3)
   Advisory: Completion of ENG 101.
   Lec 3 Hrs
   A general survey of the world's geographic regions. A study of historical development, cultures, economics, and spatial relationship of the geographic realms.
   [CSU; UC; CSU-GE, AREA D5; IGETC AREA 4]

GEOLOGY

GEL1. Dynamic Earth (4)
   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 5A, 5C]

GEL2. Introduction to Geology (3)
   Lec 3 Hrs
   Introduction to phenomena and basic principles of geology emphasizing plate tectonics. Includes laboratory 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; IGETC, AREA 5A] [C-ID GEOL 100]

GEL6. History of the Earth (4)
   Lec 3 Hrs; Lab 3 Hrs
   Introduction to the geologic history of the earth, using plate tectonic concepts, stratigraphy, geologic dating, fossils and evolution. Emphasis on the origin and evolution of continents, oceans, the atmosphere and life on earth. Designed to accommodate both non-science and science majors. Students will supply: calculator, scale, protractor, colored pencils, 10X hand lens.
   [CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5A, 5C]

GEL25. Environmental Geology (3)
   Lec 3 Hrs
   Introduction to the problems of volcanism, earthquakes, fire, floods, landslides, and other geologic hazards; air and water pollution, hazardous materials, strategic resources, energy, climate change, and land use planning. Applications to Monterey County emphasized. Students will supply: calculator, scale, protractor, and colored pencils.
   [CSU; UC; CSU-GE, AREA B1, E; IGETC, AREA 5A]

GEL36. California Geology (3)
   Lec 2 Hrs; Lab 3 Hrs
   Varied landscapes of California interpreted by introductory plate tectonics. Volcanism, earthquakes, and other geologic processes are studied in relation to the origins and features of the geomorphic provinces of the state. Provinces include the Sierra Nevada, Coast Ranges, Transverse Ranges, Cascades, Klamath Mountains, Modoc Plateau, Central Valley, Mojave, and the Basin and Range.
   [CSU; UC; CSU-GE, AREA B1; IGETC, AREA 5A, 5C] [C-ID GEOL 200]

GEL45. Special Projects (1-3)
   Pass/No Pass Only
   Advanced laboratory or field work in earth science.
   [CSU]
HED2. Individual Health (3)

Lec 3 Hrs

Individual health status and its relationship to community and national health problems.
[CSU; UC; CSU-GE, AREA E]

HED6. Multicultural Health Beliefs (3)

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 socioeconomic 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]

HED7. Women’s Health (3)

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]

HED8. Weight Management Through Fitness and Nutrition (3)

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.
[CSU]

HED55. Health Education-Advanced First Aid (3)

Lec 3 Hrs

Advanced fundamentals of first aid that will include adult, child and infant CPR, bandaging, splinting, and responding to emergencies. Course includes American Red Cross Professional Rescuer/Healthcare Provider theory and demonstration with certification cards given to qualifying students who complete all American Red Cross requirements. (There is an additional fee in order to obtain the cards.)
[CSU; UC]

HES3. Emergency Medical Technician 1 (Ambulance) (5.5)

Prerequisite: HES-120 with a grade of "C" or better or American Health Care Provider CPR card.
Corequisite: B1O 11 or BIO 5 and BIO 6 and BIO 6L
Lec 4.5 Hrs; Lab 3 Hrs

The EMT-1 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, student will be issued a Course Completion Certificate that is required for EMT-1A or EMT-INA certification through the Monterey County Department of Health.
[CSU]

HES120. CPR for Health Care Providers (0.5)

Pass/No Pass Only

Lec 0.5 Hr

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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Lecture Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS4A</td>
<td>Western Civilization A (3)</td>
<td>3</td>
<td>Lec</td>
<td>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]</td>
</tr>
<tr>
<td>HIS4B</td>
<td>Western Civilization B (3)</td>
<td>3</td>
<td>hrs</td>
<td>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]</td>
</tr>
<tr>
<td>HIS5A</td>
<td>World History A (3)</td>
<td>3</td>
<td>hrs</td>
<td>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]</td>
</tr>
<tr>
<td>HIS5B</td>
<td>World History B (3)</td>
<td>3</td>
<td>hrs</td>
<td>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]</td>
</tr>
<tr>
<td>HIS6</td>
<td>History of Mexico (3)</td>
<td>3</td>
<td>hrs</td>
<td>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]</td>
</tr>
<tr>
<td>HIS10</td>
<td>History of California (3)</td>
<td>3</td>
<td>hrs</td>
<td>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. This course may be offered on an outline platform such as ecollege. [CSU; UC; CSU-GE, AREA D6; IGETC AREA 3]</td>
</tr>
<tr>
<td>HIS17A</td>
<td>United States History A (3)</td>
<td>3</td>
<td>Lec</td>
<td>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]</td>
</tr>
<tr>
<td>HIS17B</td>
<td>United States History B (3)</td>
<td>3</td>
<td>Lec</td>
<td>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]</td>
</tr>
<tr>
<td>HIS21</td>
<td>Social and Political Histories of the United States (4)</td>
<td>4</td>
<td>Lec</td>
<td>A social and political history of the United States from the Indigenous Past to Reconstruction focusing on a pluralistic and multicultural interpretation of American society and the evolution of the major political and social institutions of the United States. Attention is given to regional differences, the role of immigration in the formation of American society and race, ethnicity, culture, class, sex, gender, and environment in the evolution of U.S. politics and social life. [CSU; UC; CSU-GE, AREA D6, D8; IGETC, AREA 4]</td>
</tr>
<tr>
<td>HIS40</td>
<td>History of Women in the U.S. (3)</td>
<td>3</td>
<td>Lec</td>
<td>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]</td>
</tr>
<tr>
<td>HIS45</td>
<td>Special Projects (1-3)</td>
<td>1-3</td>
<td>hrs</td>
<td>A supervised program of independent research and study into a particular field of history. Completion of or concurrent enrollment in History 4A, 4B, 17A, or 17B. [CSU]</td>
</tr>
<tr>
<td>HIS46A</td>
<td>Race and Ethnicity in American History A (3)</td>
<td>3</td>
<td>Lec</td>
<td>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]</td>
</tr>
<tr>
<td>HIS46B</td>
<td>Race and Ethnicity in American History B (3)</td>
<td>3</td>
<td>Lec</td>
<td>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]</td>
</tr>
<tr>
<td>HIS47</td>
<td>Religions of the World (3)</td>
<td>3</td>
<td>Lec</td>
<td>A survey of the world’s major religions with emphasis on their 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]</td>
</tr>
<tr>
<td>HIS48</td>
<td>African-American History and Culture (3)</td>
<td>3</td>
<td>hrs</td>
<td>A survey of the history and culture of African Americans from their origins in Africa to the present in the entire area which is now the United States. [CSU; UC; CSU-GE, AREA D6; IGETC AREA 3]</td>
</tr>
<tr>
<td>HIS49A</td>
<td>Chicano History A (3)</td>
<td>3</td>
<td>Lec</td>
<td>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]</td>
</tr>
<tr>
<td>HIS49B</td>
<td>Chicano History B (3)</td>
<td>3</td>
<td>hrs</td>
<td>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]</td>
</tr>
<tr>
<td>HIS51</td>
<td>Women in History (3)</td>
<td>3</td>
<td>hrs</td>
<td>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]</td>
</tr>
</tbody>
</table>
INSTRUCTIONAL AIDE

INS250. Tutor Training (.3-1)
Pass/No Pass Only
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.

INS301. Supervised Tutoring (0)
No Grade
Course provides tutoring through the Academic Learning Center's Tutorial Program. Course 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.

INTERDISCIPLINARY STUDIES

IDS1. Boronda Study Group (3)
Pass/No Pass Only
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]

IDS2. Boronda Study Group – Life and Culture (3)
Pass/No Pass Only
Prerequisite: Completion of IDS 1 with a grade of "C" or better.
Lec 3 Hrs
Advisory: Selection by the Boronda Scholarship Committee.
A survey of the history, culture and civilization of the host country with emphasis on art, music, and literature.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3B]

JAPANESE

JPN10. Japanese Language and Culture I (5)
Pass/No Pass Option
Lec 5 Hrs
Designed for beginners only. This course introduces hiragana and katakana, essential spoken Japanese communication skills, and basic elements of Japanese language and culture. Emphasizing pronunciation and grammar, it covers a variety of conversational situations essential to successful interaction with Japanese speaking people. Students learn basic survival Japanese phrases and useful expressions plus important elements of Japanese culture and customs.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3B]

JPN11. Japanese Language and Culture II (5)
Pass/No Pass Option
Prerequisite: JPN 10 with a grade of "C" or better.
Lec 5 Hrs
Continuation of Japanese Language and Culture I with further development of listening, speaking, reading and writing skills. This course introduces new sentence patterns as well as a variety of new conversational situations in a contemporary Japanese context. The student should have acquired basic Japanese writings of hiragana and katakana before enrolling in this course.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3B]
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 located near the Evergreen Valley College 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.

JAJ and JFS course do not follow the Hartnell College numbering pattern. All courses are degree applicable; courses followed by a [CSU] notation transfer to CSU.

JAJ1. 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 s/he has no criminal history background that would disqualify him/her from owning, possessing, or having a firearm under his/her control.
Total Hrs: Lec 4; Lab 132

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]

JAJ2. Basic Police Academy, Requalification (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 s/he has no criminal history background that would disqualify him/her from owning, possessing, or having a firearm under his/her control.
Total Hrs: Lec 4; Lab 132

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]

JAJ4. 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.
Total Hrs: Lab 24

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]

JAJ6. Basic Police Academy, Modular I (13)
Prerequisite: Successful completion of POST Level I course entry requirements, POST entry reading and writing exam, and the Academy physical agility requirements. Requires medical insurance, California Driver's License and medical clearance by a licensed physician. 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 has no criminal history background that would disqualify him/her from owning, possessing, or having a firearm under his/her control.
Total Hrs: Lec 68; Lab 468

This 536-hour course is certified by the Commission on POST and meets the content and hour requirements established by POST for Level I Reserve Peace Officers. Combined with Level III and Level II modular certificates, this course meets the regular basic academy requirements.

[CSU]

JAJ7. Basic Police Academy, Modular II (6.5)
Prerequisite: Completion of the basic police academy modular level III course and completion of POST Level II course entry requirements. Medical insurance, California Driver's License and medical clearance by a licensed physician. 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 has no criminal history background that would disqualify him/her from owning, possessing, or having a firearm under his/her control.
Total Hrs: Lec 43; Lab 217

This 260-hour course is certified by the Commission on POST and meets the content and hour requirements established by POST for Level II Reserve Peace Officers. Meets academy requirements when combined with Level I and Level III certificates.

[CSU]
JAJ8. Basic Police Academy, Modular III (4)
Prerequisite: Medical insurance, California Driver's License and medical clearance by a licensed physician. 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.
Total Hrs: Lec 29; Lab 135
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. Meets the regular basic academy requirements when combined with current PC 832 certificate and Level I and Level II certificates.

[CSU]

JAJ9. School Security Guard (0.5)
Pass/No Pass Only
Total Hrs: Lec 1; Lab 31
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]

JAJ11. Special Weapons & Tactics (SWAT) (1-2)
Pass/No Pass Only
Total Hrs: Lec 8-17; Lab 32-63
This 40-80 hour variable-unit 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]

JAJ12. Canine Update (0.5)
Pass/No Pass Only
Total Hrs: Lec 4; Lab 12
This 16-hour course addresses basic and advanced techniques of K-9 performance and problem solving. Reviews techniques including the proper use of hard and soft sleeves, hidden sleeve, muzzle and bite suit, and presents safety techniques for working with law enforcement K-9's and K-9 first aid procedures.

[CSU]

JAJ13. Firearms Update (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 4-8; Lab 12-32
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]

JAJ14. Officer Safety/Field Tactics (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 4-8; Lab 12-32
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]

JAJ15. Radar Training (0.5)
Pass/No Pass Only
Total Hrs: Lec 2; Lab 30
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]

JAJ16. Gang Training (0.5)
Pass/No Pass Only
Total Hrs: Lab 29
Instructed from a regional point of view to assist law enforcement personnel 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.

[CSU]

JAJ17. Accident Investigation (1)
Pass/No Pass Only
Total Hrs: Lec 8; Lab 24
Designed to provide officers with necessary investigative skills to enable them to properly conduct thorough preliminary and follow-up investigations of vehicular collisions. Augments training in vehicle accident investigation presented in the basic academy course and provides specialized, advanced training in more sophisticated concepts and techniques of vehicle collision investigation which are applicable to follow-up investigations.

[CSU]

JAJ22. Law Enforcement Seminar/ Conference (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 7-8-8; Lab 2-32
This 8-40 hour variable-unit course is designed as a symposium in Law Enforcement. Topics are designed for the in-service education and training of personnel employed by criminal justice agencies.

[CSU]

JAJ24. Perishable Skills Program (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 7-8-13; Lab 2-11
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.

[CSU]

JAJ25. Crime Prevention Through Environmental Design (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 1-3; Lab 23-32
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.

JAJ26. Child Victim Interviewing (0.5)
Pass/No Pass Only
Total Hrs: Lec 4; Lab 12
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.

JAJ27. Crisis Intervention Training Academy (1)
Pass/No Pass Only
Total Hrs: Lec 8; Lab 32
Covers safe and secure assessment and transport of an individual in a crisis as a result of a mental disorder and who meets the criteria established in Welfare & Institution Code section #5150 to a designated mental health facility.

JAJ28. Defensive Tactics Instructor (1-2)
Pass/No Pass Only
Total Hrs: Lab 36-72
This 40-80 variable-unit course meets the training requirements of the Commission on POST. Covers control techniques, weapon retention, legal issues, and training for currently employed law enforcement officials to become instructors in defensive tactics. This course may be repeated for new content, ongoing training or updating.

[CSU]

JAJ30. Developing a Personal Philosophy of Leadership (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 8-8; Lab 1-32
Designed for sworn and non-sworn professionals in police and public safety organizations. Provides a critical component of a larger, multi-tiered system of leadership training that includes core values, learning activities, and formal professional education.
JAJ31. Leadership—Leading Others (1)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 8; Lab 32  
Designed to provide students with effective leadership skills by exploring team building and management, delegation, coaching, mentoring, and interpersonal leader-follower relationships. Topics include the communication process, empowering others, conflict resolution methods, leading in a diverse environment, and facilitating change.

JAJ32. Organizational Leadership (0.5-4)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 4-16; Lab 12-144  
Provides the participant with an opportunity to explore the leadership process within organizational settings. Covers the components and processes of a learning organization and insights into the concept of defensive reasoning within organizations.

JAJ33. Ethics and the Challenge of Leadership (1)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 8; Lab 32  
Participation in case study examination, video analysis, and critical thinking to explore diversity and ethical dilemmas. Presentation and class dialogue define the challenges of a leader in today's diverse and dynamic organizations.

JAJ34. 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.  
**Total Hrs:** Lec 17; Lab 63  
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.

JAJ35. Homicide Investigation (0.5-1)  
**Total Hrs:** Lec 1-8; Lab 23-32  
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.

JAJ99. Basic Motorcycle (2)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 8; Lab 72  
Provides basic skills for motorcycle traffic patrol duties. Core patterns are set for BMW, Kawasaki and Harley-Davidson motorcycles.  
[CSU]

JAJ100. Correctional Officer Basic (5-10)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 20-40; Lab 180-360  
This 200-400 hour variable-unit course is designed to meet the California Corrections Standard Authority (CSA) requirements for entry-level training of Correctional Officers for adult institutions. Included are lecture and practical application skills and knowledge focusing on roles and responsibilities of the adult corrections officer, Title 15, Title 24, professionalism and ethics, and proper techniques to maintain the safety and security of inmates.  
[CSU]

JAJ101. Juvenile Corrections Officer (4.5)  
**Total Hrs:** Lec 20; Lab 156  
During this 176-hour Juvenile Corrections Officer course, students meet the Corrections Standards Authority (CSA) requirements for entry-level training of juvenile institutional staff. Designed for students wanting to become Juvenile Correction Officers.  
[CSU]

JAJ102. Probation Officer Core (5)  
**Total Hrs:** Lec 40; Lab 160  
This 200-hour course provides the student with the basic concepts and skills necessary to perform the job of probation officer within the State of California. This course is certified by the State Board of Corrections.  
[CSU]

JAJ103. Field Training Officer (1)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 8; Lab 32  
This 40-hour course meets minimum California Commission on POST training requirements for Field Training officers and follows the guidelines and standards under 832.3 of the Penal Code.  
[CSU]

JAJ104. Basic Records Course (1)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 8; Lab 32  
This 40-hour course is certified by the Commission on POST and is designed for Records Clerks or Dispatchers who have records functions/responsibilities at their agencies. Provides records personnel with the skills and knowledge necessary to effectively meet the demands of their specific assignment.  
[CSU]

JAJ107. Instructor Development (0.5-1)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 1-8; Lab 23-32  
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]

JAJ109. First Aid and CPR (0.5-1)  
**Total Hrs:** Lec 7.8; Lab 2-32  
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.

JAJ110. Uni Camp Counselor Training (1.5-4)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 1-20; Lab 77-130  
Provides the training for the UCLA Uni Camp Counselors. Includes expectations, legal issues, child development, programs, youth development, child safety and emergency procedures and evacuations. The training ranges from planning the games and songs that help set the mood of a camp, how to speak in front of a crowd, to very serious matters such as child development, active listening, and behavioral management. Training complies with the American Camp Association Standards for Counselors.

JAJ201. Chemical Agent—Non Lethal (0.5)  
**Total Hrs:** Lec 7.8; Lab 2  
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.  
[CSU]

JAJ202. Field Training Program - Law Enforcement (12-26)  
**Pass/No Pass Only**  
**Total Hrs:** Lec 50-105; Lab 430-935  
This 480-1040 variable-unit practicum course introduces employees to the job requirements of the Law Enforcement officer including legal aspects, procedures, policies, and agency protocols. Provides necessary training, supervision, and performance assessment of a California law enforcement officer-trainee including legal standards, community expectations, agency protocols, and calls for service. Meets minimum certification standards required by POST and is mandated for all California Peace Officers according to POST regulation. May be certified for non-POST agencies, the course may be certified as determined by the agency.  
[CSU]
This 8-80 hour variable-unit course develops and refines leadership skills for law enforcement and correctional supervisors. Review of basic leadership, communication skills, team building, conflict management, legal responsibilities, stress management, workplace diversity, sexual harassment, performance skills, briefing skills, and situational decision-making in order to obtain the highest level of performance and accountability.

JAJ204. Annual Training for Corrections (0.5) 
Pass/No Pass Only
Total Hrs: Lec 1; Lab 23
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.

JAJ205. Background Investigator (0.5) 
Pass/No Pass Only
Total Hrs: Lab 39
This POST-certified course is designed to provide students with the skills to be accomplished background investigators. Includes fundamentals of background investigation, interviewing, the use of psychological screening, polygraphs, legal aspects of background investigation, and verbal/non-verbal communication. [CSU]

JAJ206. Citizen Police Academy (0.5) 
Pass/No Pass Only
Total Hrs: Lec 2; Lab 30
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.

JAJ207. Skills and Knowledge Modular Training (0.5-2) 
Pass/No Pass Only
Total Hrs: Lec 7.8-16; Lab 2-64
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.

JAJ210. Basic Public Safety Dispatcher (3) 
Total Hrs: Lec 24; Lab 96
This 120-hour course is designed to provide dispatchers with the necessary skills and knowledge to perform their job. Includes computer systems familiarization, legal updates, and communication techniques.

JAJ211. Public Safety Dispatch - Update (1-5) 
Prerequisite: Students must be employed as a Public Safety Dispatcher
Total Hrs: Lec 8-20; Lab 32-180
This 40-200 variable-unit course is designed to provide experienced dispatchers with the necessary skills and knowledge to remain current. Includes computer systems familiarization, legal updates, and communication techniques. Contains POST curriculum and local training mandates.

JAJ212. Emergency Medical Dispatch (0.5-1) 
Pass/No Pass Only
Total Hrs: Lec 1-4; Lab 23-36
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 telecommunication, allocation of EMS resources, medicolegal considerations, introduction to the Pre-Arrival Instruction Program, treatment sequence cards, pre-arrival instruction cards, interactive scenarios, multi-casualty incident/disasters, quality assurance program, and critical incident stress management.

JAJ214. Basic Police Academy (22-27) 
Prerequisite: POST approved pre-entry English skills and physical abilities assessment examinations provided by the Academy.
Medical insurance, California Driver's License and medical clearance by a licensed physician. [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.]
Total Hrs: Lec 95-110; Lab 795-970
This 880-1080 hour course is certified by the Commission on POST and meets the statutory basic training requirements for California Peace officers. Follows the instructional framework and minimum hour and content requirements established by POST. Meets the requirements for employed peace officer students; open to 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. [CSU]

JAJ215. Police Supervisor (2) 
Pass/No Pass Only
Total Hrs: Lec 8; Lab 72
This 80-hour course emphasizes the basic elements of supervision and how they may be applied to police work. Includes essentials of good leadership, basic needs of human beings, and ways to stimulate subordinates to better performance. [CSU]

JAJ216. Basic Fire Dispatcher (2) 
Pass/No Pass Only
Total Hrs: Lec 8; Lab 72
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.

JAJ220. Advanced Officer Training (0.5-2) 
Pass/No Pass Only
Total Hrs: Lec 4-8; Lab 12-72
Provides agency discretionary training and/or required mandated training according to the Commission on Peace Officer Standards and Training (POST), Correction Standards Authority (CSA), State Fire Training (SFT) or other regulatory agency. Related topics include state/legislatively mandated training, perishable skills, first aid/CRP, officer safety, legal updates, and cultural awareness. This course may be certified to meet continuing professional training standards prescribed by POST, CSA, SFT or other regulatory agency where appropriate.

JAJ221. Field Evidence Technician (2) 
Pass/No Pass Only
Total Hrs: Lec 8; Lab 72
Designed for recently—assigned evidence technicians in the field, or those persons 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. [CSU]

JAJ223. Narcotics Enforcement 11550 (0.5-1) 
Pass/No Pass Only
Total Hrs: Lec 4-8; Lab 12-32
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]
JAJ224. Communications Training Officer (1)
Total Hrs: Lec 8; Lab 32
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.

JAJ225. Bicycle Patrol (0.5)
Prerequisite: Students must currently be employed as a peace officer and must in good physical condition and free of injuries.
Total Hrs: Lab 24
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.

JAJ226. Computer Crime Training (0.5-1)  
Pass/No Pass Only
Total Hrs: Lec 7.8-8; Lab 2-32
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.

JAJ227. Livestock Theft/Rural Crime (1)  
Total Hrs: Lec 8; Lab 32
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.

JAJ230. DUI—Field Sobriety Testing (0.5-1)  
Pass/No Pass Only
Total Hrs: Lec 1-8; Lab 23-32
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.

JAJ232. Skill Training for Security Guards (0.5-1)  
Pass/No Pass Only
Total Hrs: Lec 4-7.8; Lab 2-44
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).
JFS1A. Fire Command 1A (1)  
**Total Hrs: Lec 8; Lab 32**  
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]

JFS1B. Fire Command 1B (1)  
**Prerequisite:** JFS 1A with a grade of "C" or better  
**Total Hrs: Lec 8; Lab 32**  
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]

JFS1C. Fire Command 1C (1)  
**Prerequisite:** JFS 1A with a grade of "C" or better  
**Pass/No Pass Only**  
**Total Hrs: Lec 8; Lab 32**  
Designed around the responsibilities of the Company Officer at a wildland/urban interface incident. Introduces personnel to urban/interface and unfamiliar situations. [CSU]

JFS3. Fire Management 1 - Management/Supervisor for Company Officers (1)  
**Total Hrs: Lec 8; Lab 32**  
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]

JFS4A. Fire Management 2A - Organizational Development and Human Relations (1)  
**Total Hrs: Lec 8; Lab 32**  
This 40-hour course 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]

JFS4B. Fire Management 2B - Fire Service Financial Management (1)  
**Prerequisite:** JFS 4A with a grade of "C" or better  
**Total Hrs: Lec 8; Lab 32**  
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]

JFS4E. Fire Management 2E - Contemporary Issues and Concepts (1)  
**Prerequisite:** JFS 4A with a grade of "C" or better  
**Total Hrs: Lec 8; Lab 32**  
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]

JFS5. Fire Investigation 1A - Fire Cause & Origin Determination (1)  
**Total Hrs: Lec 8; Lab 32**  
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]

JFS6A. Fire Apparatus Driver/Operator 1A (1)  
**Pass/No Pass Only**  
**Total Hrs: Lec 4; Lab 36**  
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]

JFS6B. Fire Apparatus Driver/Operator 1B - Pump Operations (1)  
**Prerequisite:** JFS 6A with a grade of "C" or better  
**Total Hrs: Lec 4; Lab 36**  
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]

JFS7A. Fire Prevention 1A - Fire Inspection Practices (1)  
**Prerequisite:** Firefighter 1A and 1B Certification or equivalent  
**Pass/No Pass Only**  
**Total Hrs: Lec 8; Lab 32**  
Required course for Level 1 Fire Prevention Officer 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]

JFS7B. Fire Prevention 1B - Code Enforcement (1)  
**Prerequisite:** JFS 7A with a grade of "C" or better  
**Total Hrs: Lec 8; Lab 32**  
Provides fire prevention professionals with the base level of knowledge necessary to inspect fire protection systems and special hazards. [CSU]

JFS7C. Fire Prevention 1C Flammable Liquids and Gases (1)  
**Prerequisites:** JFS 7B with a grade of "C" or better  
**Total Hrs: Lec 8; Lab 32**  
This 40-hour course is designed for fire prevention, suppression, public education, and fire investigation personnel. Focuses on the special hazards associated with flammable and combustible liquids and gases. Topics include bulk storage and handling and transportation of flammable gases and liquids. [CSU]

JFS8. Fire Fighter I Academy (8-18)  
**Pass/No Pass Only**  
**Total Hrs: Lec 30-75; Lab 290-645**  
Includes 320-720 hours of instruction on basic fire fighting skills and laws and regulations affecting the fire service. Provides students with knowledge and skills to safely perform under minimal supervision, essential and advanced fire ground tasks, basic rescue, basic fire prevention and fire investigation tasks, and to use, inspect, and maintain fire fighting and rescue equipment. Curriculum is intended to provide California State minimum required training in the field of fire technology as it relates to firefighters. [CSU]

JFS9A. Fire Instructor 1A (1)  
**Total Hrs: Lec 8; Lab 32**  
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]
JFS10. Rescue Systems I - Fundamentals of Heavy Rescue (1)
Prerequisite: Fire Fighter Certification
Total Hrs: Lec 8; Lab 32
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.

JFS13. Confined Space Rescue (1)
Pass/No Pass Only
Total Hrs: Lec 8; Lab 32
Provides information to identify confined spaces and permit-required confined spaces, evaluate hazardous atmospheres, determine adequate levels of personal protection, identify techniques needed for hazard mitigation, identify basic operational positions, recognize responsibilities set by CAL-OSHA, and prepare for confined space rescue operations.

JFS14. Fire CDF Academy (2-4)
Total Hrs: Lec 8-16; Lab 72-144
Provides basic firefighter instruction oriented about the equipment used 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.

JFS15. CDF Fire Academy-Seasonal Refresher (0.5-2)
Prerequisite: JFS 14
Total Hrs: Lec 1-8; Lab 23-72
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 I a basic knowledge which is needed prior to emergency response.

JFS18. Helitack Academy (1)
Total Hrs: Lec 8; Lab 32
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.

JFS30. Paramedic Core (11-14)
Pass/No Pass Only
Total Hrs: Lec 48-54; Lab 392-504
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. Instruction focuses on theory/concepts. 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.

JFS40. California ROSS Dispatcher (0.5-1)
Prerequisite: Students must be qualified as (Fire) Support Dispatchers
Pass/No Pass Only
Total Hrs: Lec 1-4; Lab 23-36
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.

JFS41. Incident Command for High Rise Firefighting Operations (0.5)
Total Hrs: Lec 4; Lab 12
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.

JFS150. Emergency Medical Technician (3-5)
Total Hrs: Lec 9.5-20; Lab 115.5-180
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.

JFS151. Emergency Medical Technician—Refresher (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 1-8; Lab 23-32
This 24-40 hour EMT-Basic Refresher curriculum is competency based. Divided into six modules that follow the National Standard Curricula.

JFS161. I-300 Intermediate Incident Command System (0.5)
Pass/No Pass Only
Total Hrs: Lab 27
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.

JFS162. I-400 Advanced ICS (0.5)
Prerequisite: I-300 Intermediate ICS or an equivalent working knowledge of ICS
Pass/No Pass Only
Total Hrs: Lec 1; Lab 23
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.

JFS201. Auto Extrication (0.5)
Total Hrs: Lec 4; Lab 12
Familiarization and knowledge of automobile construction technology and the equipment used at auto accidents to free trapped patients includes safe and efficient operation of tools and equipment at the emergency scene.

JFS202. Hazardous Materials 1A - Basic Chemistry of Hazardous Materials (1)
Total Hrs: Lec 8; Lab 32
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.
JFS203. Hazardous Materials 1B - Applied Chemistry/Field ID of Chemicals (1)
Prerequisite: JFS 202 with a grade of "C" or better
Total Hrs: Lec 8; Lab 32
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.

JFS204. Hazardous Materials 1C - Incident Considerations (1)
Prerequisite: JFS 203 with a grade of "C" or better
Total Hrs: Lec 8; Lab 32
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.

JFS205. Hazardous Materials 1D - Tactical Field Operations (1)
Prerequisite: JFS 204 with a grade of "C" or better
Total Hrs: Lec 8; Lab 32
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.

JFS206. Hazardous Materials 1F - Special Mitigation Techniques (1)
Prerequisite: JFS 205 with a grade of "C" or better
Total Hrs: Lec 8; Lab 32
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.

JFS207. Hazardous Materials 1G – Advanced Field Operations (1)
Prerequisite: JFS 206 with a grade of "C" or better
Total Hrs: Lec 8; Lab 32
Culmination of Modules 1A-1F in an environment of "hands-on" full-scale exercises for included evaluation of performance as a member of a haz mat team in a series of simulated haz mat incidents.

JFS208. Fire Officer Supervisor (2)
Prerequisite: Employment with a Fire Department as a full time first line officer.
Pass/No Pass Only
Total Hrs: Lec 8; Lab 72
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. [CSU]

JFS211. Haz Mat—Awareness/Operational (0.5)
Pass/No Pass Only
Total Hrs: Lec 1; Lab 23
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 environment from the effects of the release. Protecting nearby persons, property, or the environment from the effects of the release.

JFS212. Hazardous Material Incident Commander Training (0.5)
Total Hrs: Lec 1; Lab 23
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.

JFS216. Fire Continued Professional Training (0.5-4)
Pass/No Pass Only
Total Hrs: Lec 7.8-8; Lab 2-192
Provides training required by the California State Fire Marshall to keep firefighters current with new equipment, policies, laws, and skills needed to be prepared in the line of duty.

JFS218. Paramedic—Internship (12-18) Pass/No Pass Only
Total Hrs: Lec 60-80; Lab 420-640
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.

JFS219. Paramedic—Clinical (4-7) Pass/No Pass Only
Total Hrs: Lec 16-28; Lab 144-252
Required clinical training (part two) following completion of the didactic phase (part one) of paramedic training: conducted at local contracted hospitals for a minimum of 160 hours to a 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 completion of the clinical internship and a clinical closeout meeting.

JFS272. Wildland Fire Origin and Cause Determination FI-210 (0.5)
Total Hrs: Lec 1; Lab 31
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. Provides the necessary knowledge and a basic skill required for the position and addresses the concepts that meet the minimum national performance standards for a Wildland Fire Investigator.

JFS289. Low-Angle Rope Rescue (0.5-1) Pass/No Pass Only
Total Hrs: Lec 4-12; Lab 12-12
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.

JFS290. Intermediate Wildland Fire Behavior, Certified at Level I S-290 (1)
Total Hrs: Lec 4; Lab 36
This variable course is intended to meet S-290 requirements for wildland fire management. Addresses wildland fire behavior, safe and effective tactics, and scene management.
LIB2. Introduction to the Academic Library and Information Competency (1)  
Pass/No Pass Option  
Self-Paced: 3 Hrs  
A self-paced introduction to the college library, its resources, and information competency skills necessary for student success and lifelong learning.  
[CSU; UC]

LIB5. Information Competency in the Sciences and Applied Technology (1)  
Pass/No Pass Option  
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]

LIB6. Information Competency in the Social Sciences (1)  
Pass/No Pass Option  
Lec 1 Hr  
An introduction to the information competency skills required to locate, evaluate, and cite materials in the social sciences.  
[CSU; UC]

LIB7. Information Competency in Literature and the Fine Arts (1)  
Pass/No Pass Option  
Lec 1 Hr  
An introduction to the information competency skills required to locate, evaluate, and cite materials in literature and the fine arts.  
[CSU; UC]

LIB45. Special Projects (0.5-3)  
Pass/No Pass Option  
This is a program of specific study for students who are interested in investigating topics, problems or projects beyond the scope of a standard Library course.  
[CSU]

LIB90. Internet & Information Literacy (3)  
Advisory: Microsoft Office experience  
Lec 3 Hrs  
Examines the organizational structure, resources and uses of the Internet. Includes exploration of visible and invisible Web resources, development of effective online research strategies, demonstration of information competency skills, electronic portfolio construction and publishing, designing information for the World Wide Web, ethical use of information and Internet resources, and exploration of emerging Internet technologies. Not open to students who have completed CSS 90 or LBT 90.  
[CSU]

MAT2. Calculus for Managerial, Life, and Social Sciences (4)  
Prerequisite: MAT 123 with a grade of "C" or better or placement by Hartnell's assessment.  
Advisory: MAT 25  
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]

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.  
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]

MAT3B. Analytic Geometry and Calculus II (4)  
Prerequisite: MAT 3A with a grade of "C" or better.  
Lec 4 Hrs  
The second course in a three-course series. A study of techniques of integration, applications of integration, parametric equations, polar coordinates, infinite series, and an introduction to differential equations.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 220]

MAT3C. Analytic Geometry and Calculus III (4)  
Prerequisite: MAT 3B with a grade of "C" or better.  
Lec 4 Hrs  
The third course in a three-course series. A study of functions of several variables, vectors, surfaces, vector-valued functions, partial differentiation, multiple integrals, and topics in vector calculus.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 230]

MAT4. Linear Algebra (3)  
Prerequisite: MAT 3B with a grade of "C" or better.  
Lec 3 Hrs  
A study of matrices, linear systems of equations, determinants, vector spaces, subspaces, linear independence, linear transformations, eigenvalues and eigenvectors.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]  
[C-ID MATH 250]

MAT5. Differential Equations (3)  
Prerequisite: MAT 3C with a grade of "C" or better.  
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]

MAT10. Math for Liberal Arts (3)  
Prerequisite: MAT 123 with a grade of "C" or better or placement by Hartnell's assessment.  
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, numeration 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]

MAT12. Number Systems (3)  
Prerequisite: MAT 123 with a grade of "C" or better or placement by Hartnell's assessment.  
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, numeration systems, and geometric concepts.  
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]

MAT13. Elementary Statistics (5)  
Prerequisite: MAT 123 with a grade of "C" or better or placement by Hartnell's assessment.  
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]
MAT16. Finite Mathematics (3)
Prerequisite: MAT 123 with a grade of "C" or better or placement by Hartnell's assessment.
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 function, systems of linear equations and inequalities, and matrices with applications to business, economics, social sciences, computer sciences. This course is primarily for students in business, social science, and computer science.
[CSU; UC; CSU-GE, AREA B4; IGETC, AREA 2]

MAT24. Trigonometry (3)
Prerequisite: MAT 123 or MAT 123L4 with a grade of "C" or better or placement by Hartnell's assessment.
Advisory: MAT 122: Plane or students should be familiar with high school level Geometry.
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; UC; CSU-GE, AREA B4]

MAT25. Pre-Calculus Mathematics (4)
Prerequisite: MAT 123 or MAT 123L4 with a grade of "C" or better or placement by Hartnell's assessment.
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]

MAT45. Special Projects (1-3)
Pass/No Pass Option
Designed for Science, Technology, Engineering, and Math students who are interested in investigating topics beyond the scope of existing mathematics courses. Students will gain experience with advanced mathematics using project management skills.
[CSU]

MAT121. Elementary Algebra (5)
Prerequisite: MAT 201 or BUS 151 with a grade of "C" or better or placement by Hartnell's assessment.
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, Math 121L2.

MAT121L1. Elementary Algebra Level 1 (1.25)
Prerequisite: MAT 201 or MAT 201L3 or BUS 151 with a grade of "C" or better or placement by Hartnell's assessment.
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.

MAT121L2. Elementary Algebra Level 2 (1.25)
Prerequisite: MAT 121L1 with a grade of "C" or better.
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.

MAT121L3. Elementary Algebra Level 3 (1.25)
Prerequisite: MAT 121L2 with a grade of "C" or better.
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.

MAT121L4. Elementary Algebra Level 4 (1.25)
Prerequisite: MAT 121L3 with a grade of "C" or better.
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. Final examination will include topics from all levels (L1-L4) of the course. Not open to students who have completed MAT 121 with a grade of "C" or better.

MAT122. Plane Geometry (4)
Prerequisite: MAT 121 or MAT 121L4 with a grade of "C" or better or placement by Hartnell's assessment.
Lec 4 Hrs
Constructions, proofs, congruent triangles, similar polygons, parallel lines, quadrilaterals, circles, areas, inequalities, loci, regular polygons, and circles.

MAT123. Intermediate Algebra (5)
Prerequisite: MAT 121 or MAT 121L4 with a grade of "C" or better or placement by Hartnell's assessment.
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 with a grade of "C" or better.

MAT123L1. 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 or placement by Hartnell's assessment.
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.

MAT123L2. Intermediate Algebra Level 2 (1)
Prerequisite: MAT 123L1 with a grade of "C" or better.
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.

MAT123L3. Intermediate Algebra Level 3 (1.5)
Prerequisite: MAT 123L2 with a grade of "C" or better.
Lab 4.5 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.

MAT123L4. Intermediate Algebra Level 4 (1.5)
Prerequisite: MAT 123L3 with a grade of "C" or better.
Lab 4.5 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 or order to optimize success in the nursing program.
### MATHEMATICS

**MAT151L1. 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.

**MAT151L2. 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, 123, or a math course numbered below 100.

**MAT151L3. 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.

**MAT200. 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.

**MAT200L. Arithmetic of Whole Numbers (1)**  
**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 200L with a grade of "C" or better.

**MAT201. Pre-Algebra (3)**  
**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.

**MAT201L1. Pre-Algebra Level 1 (1)**  
**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 with a grade of "C" or better.

**MAT201L2. Pre-Algebra Level 2 (1)**  
**Prerequisite: Completion of MAT 201L1 with a grade of "C" or better.**  
**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 with a grade of "C" or better.

**MAT201L3. Pre-Algebra Level 3 (1)**  
**Prerequisite: Completion of MAT 201L2 with a grade of "C" or better.**  
**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 with a grade of "C" or better.

**MAT205. Individualized Study I (0.5)**  
**Pass/No Pass Only**  
**Lab 1.5 Hrs**  
A course for the student interested in reviewing and reinforcing specific computational skills and mathematical concepts within the scope of MAT 201, 121 and/or 123. May be taken concurrently with one of the above-mentioned courses.

**MAT206. Individualized Study II (0.5)**  
**Pass/No Pass Only**  
**Lab 1.5 Hrs**  
A course for the students interested in reviewing and reinforcing mathematical concepts covered in MAT 122, 10, 12, 13, 16, 24, 25, 2, 3A, 3B, 3C, 4 and/or 5. May be taken concurrently with one of the above-mentioned courses.

**MAT301. GED/Mathematics**  
**Noncredit**  
**Lab 5 Hrs**  
Prepares students to pass the mathematics component of the GED test and includes content for number operations and number sense, measurement and geometry, data analysis, statistics and probability, and algebra. Focuses on comprehension, application, analysis, and synthesis thinking skills.
METEOROLOGY

MET1. Weather and Climate (3)
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] [C-ID GEOG 130]

MUS1A. Music Appreciation - Historical Perspective (3)
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. Development of skills in handwritten notation and aural identification of musical phenomena is expected.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3] [C-ID MUS 100]

MUS1B. Music Appreciation - Genre Perspective (3)
Lec 3 Hrs
A survey of Western music with special emphasis on listening, understanding, and enjoyment of musical masterworks in such varied genres as the art song, opera, oratorio, mass, symphony, and chamber music.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3] [C-ID MUS 100]

MUS2. Music Fundamentals (3)
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]

MUS5. Ethnic Musics in the U.S. (3)
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]

MUS6. Hawaiian Music (3)
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]

MUS7. Jazz Appreciation (3)
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]

MUS10. Applied Music - Voice (1)
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]

MUS13A. Beginning Piano I (1)
Corequisite: MUS 19
Advisory: Concurrent enrollment in MUS 2 is recommended.
Lec 1 Hr; Lab 2 Hrs
Beginning piano study including introduction to the keyboard and music reading.
[CSU; UC]

MUS13B. Beginning Piano II (1)
Prerequisite: MUS 13A or equivalent with a grade of "C" or better.
Corequisite: MUS19
Advisory: Concurrent enrollment in Music 2 is recommended.
Lec 1 Hr; Lab 2 Hrs
Continuation of beginning piano study.
[CSU; UC]

MUS14. Intermediate Piano (1)
Prerequisite: MUS 13B with a grade of "C" or better.
Advisory: Concurrent enrollment in MUS 19 recommended.
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.
[CSU; UC]

MUS15. Advanced Piano (1)
Prerequisite: MUS 14 with a grade of "C" or better.
Advisory: Concurrent enrollment in MUS 19 recommended.
Lec 1 Hr; Lab 2 Hrs
Advanced piano study, a continuation of Music 14.
[CSU; UC]

MUS17A. Beginning Guitar I (1)
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]
MUS17B. Beginning Guitar II (1)
Prerequisite: MUS 17A with a grade of "C" or better.
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]

MUS17C. Intermediate Guitar I (1)
Prerequisite: MUS 17B with a grade of "C" or better.
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]

MUS17D. Intermediate Guitar II (1)
Prerequisite: MUS 17C with a grade of "C" or better.
Lec 1 Hr; Lab 2 Hrs
Continued instruction on guitar at the upper intermediate level including 2nd and 3rd positions, vibrato, harmonics, classical and intermediate level including 2nd and 3rd position, study of classical and intermediate level including 2nd and 3rd position. Study of techniques for playing 20th and 3rd position, study of classical and repertoire. Students must bring their own unamplified guitar.
[CSU; UC]

MUS19. Music Practicum (1)
Pass/No Pass Only
Supervised practice in instrumental or vocal music.
[CSU; UC]

MUS20. Hartnell College Choir (1)
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.
[CSU; UC]

MUS21. Hartnell Chamber Singers (1)
Advisory: Members selected from the Hartnell Choir by audition.
Lab 3 Hrs
A vocal ensemble devoted to the study and performance of musical literature suited to a small group of singers.
[CSU; UC]

MUS23.1. Hartnell Chorale – Renaissance/Baroque Emphasis (1)
Advisory: Intended for persons with previous choral experience.
Lec 1 Hr; Lab 2 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]

MUS23.2. Hartnell Chorale - Classic/Romantic Emphasis (1)
Advisory: Intended for persons with previous choral experience.
Lec 1 Hr; Lab 2 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]

MUS23.3. Hartnell Chorale - 20th Century Emphasis (1)
Advisory: Intended for persons with previous choral experience.
Lec 1 Hr; Lab 2 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]

MUS23.4. Hartnell Chorale - 20th Century “Pops” Emphasis (1)
Advisory: Members selected from the Hartnell Choir by audition.
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]

MUS23.5. Hartnell Chorale - 21st Century Emphasis (1)
Advisory: Intended for persons with previous choral experience.
Lec 1 Hr; Lab 2 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; UC]

MUS24. Estudiantina Hartnell (1)
Lab 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 contemporary music as performed by Estudiantinas/Tunas in the Spanish speaking world. Students will both sing in Spanish and play traditional instruments such as the guitar, bandurria, mandolin, violin, string bass, and pandero. Some instruments are available for student use.
[CSU; UC]

MUS25. Hartnell College Wind Ensemble (1)
Lec 1 Hr; Lab 2 Hrs
A performance group studying literature for the small wind ensemble. Performances include concerts and playing at college and community events. Open to all students who play a wind or percussion instrument. Music majors specializing in instrumental music are expected to participate for two years.
[CSU; UC][C-ID MUS 180]

MUS26. Jazz Ensemble (1)
Lab 3 Hrs
A performance group studying literature for the jazz ensemble. Performances include concerts and laying at college and community events. Open to all students who play piano, bass, drums, guitar, saxophone, trumpet or trombone.
[CSU; UC]

MUS29.1. Symphonic Band - 18th Century Emphasis (1)
Advisory: Intended for persons with previous band instrument experience.
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.
[CSU; UC]

MUS29.2. Symphonic Band - 19th Century Emphasis (1)
Advisory: Intended for persons with previous band instrument experience.
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.
[CSU; UC]
MUS29.3. Symphonic Band - 20th Century Emphasis (1)
Advisory: Intended for persons with previous band instrument experience.
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]

MUS29.4. Symphonic Band - 20th Century "Pops" Emphasis (1)
Advisory: Intended for persons with previous band instrument experience.
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. Some instruments are available for student use.
[CSU; UC]

MUS29.5. Symphonic Band - 21st Century Emphasis (1)
Advisory: Intended for persons with previous band instrument experience.
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. Some instruments are available for student use.
[CSU]

MUS34.1. Symphony Orchestra - 18th Century Emphasis (1)
Advisory: Intended for persons with previous orchestral instrument experience.
Lab 3 Hrs
A symphony orchestra which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 18th century music.
[CSU; UC]

MUS34.2. Symphony Orchestra - 19th Century Emphasis (1)
Advisory: Intended for persons with previous orchestral instrument experience.
Lab 3 Hrs
A symphony orchestra which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 19th century music.
[CSU; UC]

MUS34.3. Symphony Orchestra - 20th Century Emphasis (1)
Advisory: Intended for persons with previous orchestral instrument experience.
Lab 3 Hrs
A symphony orchestra 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]

MUS34.4. Symphony Orchestra - 20th Century "Pops" Emphasis (1)
Advisory: Intended for persons with previous orchestral instrument experience.
Lab 3 Hrs
A symphony orchestra 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]

MUS34.5. Symphony Orchestra - 21st Century Emphasis (1)
Advisory: Intended for persons with previous orchestral instrument experience.
Lab 3 Hrs
A symphony orchestra which rehearses and performs a wide range of musical literature with special emphasis on the study of techniques for performing 21st century music.
[CSU; UC]

MUS42. Digital Audio Recording (2)
Lec 1.5 Hrs; Lab 1.5 Hrs
Introduction to digital audio recording using a computer. Includes basic acoustics, fundamentals of audio recording, basics of digital audio, multi-track recording, CD creation, and microphone selection and placement. Creation of original "sound design" projects.
[CSU]

MUS43. MIDI Sequencing (2)
Prerequisite: MUS 42 with a grade of "C" or better.
Lec 1.5 Hrs; Lab 1.5 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]

MUS45. Special Projects (1-3)
Individual projects concerned with material not normally a major part of a specific course. Projects may include preparation for a public recital, a original composition, an extensive research paper, or a combination of the above.
[CSU]

MUS50A. Harmony I (3)
Prerequisite: MUS 2 with a grade of "C" or better.
Corequisite: MUS 51A
Advisory: Familiarity with musical notation and the piano keyboard.
Lec 3 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.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

MUS50B. Harmony II (3)
Prerequisite: MUS 50A with a grade of "C" or better.
Corequisite: MUS 51B
Lec 3 Hrs
Continuation of MUS 50A. The diatonic system of harmony from an analytical and practical point of view, including voice leading, musical analysis, and chord usage.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

MUS51A. Musicianship I (2)
Prerequisite: MUS 2 with a grade of "C" or better.
Corequisite: MUS 50A
Advisory: Familiarity with Musical notation and the piano keyboard.
Lec 2 Hrs
The elements of musical notation. Sight-singing, and ear-training using diatonic materials.
[CSU; UC] [C-ID MUS 125]

MUS51B. Musicianship II (2)
Prerequisite: MUS 51A with a grade of "C" or better.
Corequisite: MUS 50B
Lec 2 Hrs
Continuation of MUS 51A. Sight singing and ear training using diatonic materials.
[CSU; UC]

MUS52A. Harmony III (3)
Prerequisite: MUS 50B with a grade of "C" or better.
Corequisite: MUS 53A
Lec 3 Hrs
Chromatic harmony, form, musical analysis, and orchestration.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

MUS52B. Harmony IV (3)
Prerequisite: MUS 52A with a grade of "C" or better.
Corequisite: MUS 53B
Lec 3 Hrs
Continuation of chromatic harmony, and introduction of 20th century harmonic techniques, form, music analysis, and orchestration.
[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3] [C-ID MUS 160]
MUS53A. Musicianship III (2)
Prerequisite: MUS 51B with a grade of "C" or better.
Corequisite: MUS 52A
Lec 2 Hrs
Sight-singing, ear-training, dictation and analysis of exercises involving melodic modulations and chromatic harmonies drawn from 19th Century music literature.

MUS53B. Musicianship IV (2)
Prerequisite: MUS 53A with a grade of "C" or better.
Corequisite: MUS 52B
Lec 2 Hrs
Sight-singing, ear-training, dictation and analysis of exercises involving impressionistic, early 20th Century, and contemporary melodies and harmonies with examples drawn from 20th Century literature.

MUS120A. Introduction to Musical Theatre Production: Concept and Development (0.5-4)
Pass/No Pass Only
Lab 0.5-12 Hrs
An introduction to the production of the musical play with an emphasis on the concept and development of script, design elements, and performance techniques.

MUS120B. Introduction to Musical Theatre Production: Implementation and Practice (0.5-4)
Pass/No Pass Only
Lab 0.5-12 Hrs
An introduction to the production of the musical with an emphasis on the implementation and practice of rehearsal and production techniques.

MUS120C. Introduction to Musical Theatre Production: Execution and Assessment (0.5-4)
Pass/No Pass Only
Lab 0.5-12 Hrs
An introduction to the production of the musical with an emphasis on the execution of a fully realized production.

MUS121. Musical Theatre: Modern Musicals in Rehearsal (0.5-3)
Pass/No Pass Only
Lab 0.5-9 Hrs
Extensive practice in the development of the modern musical, with an emphasis on performance and stage management.

MUS122. Musical Theatre: Modern Musicals In Performance (0.5-3)
Pass/No Pass Only
Lab 0.5-9 Hrs
Play presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the modern musical play.

MUS123. Musical Theatre: The Ensemble Musical in Rehearsal (0.5-4)
Pass/No Pass Only
Lab 0.5-12 Hrs
The rehearsal and development of the ensemble musical, in a performance setting with an emphasis on performance or stage management.

MUS124. Musical Theatre: The Ensemble Musical in Performance (0.5-3)
Pass/No Pass Only
Lab 0.5-9 Hrs
Play presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the ensemble musical play.

MUS125. Musical Theatre - World Theatre Musicals in Rehearsal (0.5-4)
Pass/No Pass Only
Lab 0.5-12 Hrs
Extensive practice in the development of the world theatre musical, with an emphasis on performance and stage management.

MUS126. Musical Theatre - World Theatre Musicals in Performance (0.5-3)
Pass/No Pass Only
Lab 0.5-12 Hrs
Presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the world theatre musical.

MUS127. Musical Theatre: Revival Musicals in Rehearsal (0.5-4)
Pass/No Pass Only
Lab 0.5-12 Hrs
The rehearsal and development of the revival musical, with an emphasis on performance and stage management.

MUS128. Musical Theatre: Revival Musicals in Performance (0.5-3)
Pass/No Pass Only
Lab 0.5-9 Hrs
Play presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the revival musical play.
NRN30. Basics of Pharmacology for Nursing Practice (1)
**Corequisite:** NRN 41, NRN 41.1, NRN 41.2, NRN 41.3
**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]

NRN41. Nursing Theory I (4)
**Prerequisite:** Admission into the Hartnell College Registered Nursing Program.
**Corequisite:** NRN 110, NRN 41.1, NRN 41.2, NRN 41.3, NRN 30
**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]

NRN41.1. Nursing Clinical I (4)
**Pass/No Pass Only**
**Prerequisite:** Admission to the Hartnell College Registered Nursing Program.
**Corequisite:** NRN 41, NRN 41.2, NRN 41.3, NRN 30
**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]

NRN41.2. Clinical Reasoning Seminar I (1)
**Prerequisite:** Admission to the Hartnell College Registered Nursing Program.
**Corequisite:** NRN 41, NRN 41.1, NRN 41.3, NRN 30
**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]

NRN41.3. Nursing Skills Lab I (1)
**Prerequisite:** Admission to the Hartnell College registered nursing program.
**Corequisite:** NRN 30, NRN 41, NRN 41.1, NRN 41.2, NRN 50.41
**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]

NRN42. Nursing Theory II (4)
**Prerequisite:** NRN 41 with a grade of “C” or better.
**Corequisite:** NRN 42.1, NRN 42.2, and NRN 42.3
**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]

NRN42.1. Nursing Clinical II (4)
**Pass/No Pass Only**
**Prerequisite:** NRN 41.1 with a grade of “C” or better.
**Corequisite:** NRN 42, NRN 42.2, and NRN 42.3
**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]

NRN42.2. 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
**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]

NRN42.3. 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 and NRN 50.42
**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]

NRN43. Nursing Theory III (4)
**Prerequisite:** NRN 42 with a grade of “C” or better.
**Corequisite:** NRN 43.1, NRN 43.2, and NRN 43.3
**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]

NRN43.1. Nursing Clinical III (4)
**Pass/No Pass Only**
**Prerequisite:** NRN 42.1 with a grade of “C” or better.
**Corequisite:** NRN 43, NRN 43.2, and NRN 43.3
**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]

NRN43.2. Clinical Reasoning Seminar III (1)
**Prerequisite:** NRN 20 or NRN 42.2 with a grade of “C” or better.
**Corequisite:** NRN 43, NRN 43.1, and NRN 43.3
**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]
NRN43.3. 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 and NRN 50.43

Lec 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]

NRN44. Nursing Theory IV (4)
**Prerequisite:** NRN 43 with a grade of "C" or better.
**Corequisite:** NRN 44.1 and NRN 44.2

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]

NRN44.1. Nursing Clinical IV (5)
**Pass/No Pass Only**
**Prerequisite:** NRN 43.1 with a grade of "C" or better.
**Corequisite:** NRN 44, NRN 44.2 and NRN 50.44

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]

NRN44.2. Clinical Reasoning
Seminar IV (1)
**Prerequisite:** NRN 43.2 with a grade of "C" or better.
**Corequisite:** NRN 44 and NRN 44.1

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]

NRN45. Special Projects (1-3)
**Pass/No Pass Only**
This course is designed for nursing students who are interested in researching topics beyond the scope of a regular nursing course. The course details will depend on the topic chosen and its scope. The individualized course is based on the selected research or application of nursing theory within a simulated or actual clinical environment. [CSU]

NRN50. Supervised Nursing Laboratory Practice (0.3-1)
**Pass/No Pass Only**
**Corequisite:** NRN 41.3, NRN 42.3, NRN 43.3 or NRN 44.1

Lab 1-3 Hrs
Designed for the registered nursing student. In a simulated patient care environment, it facilitates, through individual and group coursework, instruction, supervised practice, and evaluation in the mastery of basic to advanced nursing skills. Number of hours of required attendance varies from 1-3 hours per week based on units enrolled. [CSU]

NRN50.41. Supervised Nursing Skills Practice I (0.5)

**Corequisite:** NRN 41.3

Lab 1.5 Hrs
Supervised practice for the mastery of basic nursing skills. Student performance is evaluated and documented through competency testing using established standardized criteria. [CSU]

NRN50.42. Supervised Nursing Skills Practice II (0.5)
**Prerequisite:** NRN 50.41 with a grade of "C" or better.
**Corequisite:** NRN 42.3

Lab 1.5 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]

NRN50.43. Supervised Nursing Skills Practice III (0.5)
**Prerequisite:** NRN 50.42 with a grade of "C" or better.
**Corequisites:** NRN 43.3

Lab 1.5 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]

NRN50.44. Supervised Nursing Skills Practice IV (0.5)
**Prerequisite:** NRN 50.43 with a grade of "C" or better.
**Corequisites:** NRN 44.1

Lab 1.5 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]

NRN60.1. Clinical Simulations for Nursing and Allied Health I (0.5)
**Prerequisite:** HES 53 or NRN 110 or NVN 119B or RCP 110 with a grade of "C" or better.

**Pass/No Pass Only**
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 adult 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]
NURSING – REGISTERED

NUR60.2. Clinical Simulations for Nursing and Allied Health II (0.5)
Prerequisite: HES 53 or NRN 110 or NVN 119B or RCP 110 with a grade of "C" or better.
Pass/No Pass Only
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]

NUR60.3. Clinical Simulations for Nursing and Allied Health III (0.5)
Prerequisite: HES 53 or NRN 110 or NVN 119B or RCP 110 with a grade of "C" or better.
Pass/No Pass Only
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]

NUR60.4. Clinical Simulations for Nursing and Allied Health IV (0.5)
Prerequisite: HES 53 or NRN 110 or NVN 119B or RCP 110 with a grade of "C" or better.
Pass/No Pass Only
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]

NUR110. Foundations for Success for Registered Nursing Students (1.5)
Pass/No Pass Only
Advisory: Admission to the Registered Nursing Program
Lec: .75 Hrs; Lab: 2.25 Hrs
Introduction to professional behaviors, attitudes, and values that lead to academic and professional success in the information economy and in health care. Topics include building self-managed teams, effectively leading and participating in teams, identifying opportunities and threats to success, and exploring the culture of knowledge work, with application of content to the health care setting. Historical trends that influenced the role of the nurse as a knowledge-worker and corresponding educational preparation will be explored. Test-taking strategies, study skills, individual learning styles, and stress reduction techniques are discussed in order to optimize success in the nursing program.

NUR225. Success Strategies for 1st Semester RN Students (0.5)
Pass/No Pass Only
Corequisite: NRN 41
Lab: 1.5 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.

NUR226. Success Strategies for 2nd Semester RN Students (0.5)
Pass/No Pass Only
Corequisite: NRN 42
Lab: 1.5 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.

NUR227. Success Strategies for 3rd Semester RN Students (0.5)
Pass/No Pass Only
Corequisite: NRN 43
Lab: 1.5 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.

NUR228. Success Strategies for 4th Semester RN Students (0.5)
Pass/No Pass Only
Corequisite: NRN 44
Lab: 1.5 Hrs
Designed for fourth semester registered nursing students interested in reinforcing content presented in NRN-44 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.
NVN119A. Vocational Nursing: Theory I (3)
Prerequisite: Admission into the Vocational Nursing Program.
Corequisite: NVN 119B
Lec 3 Hrs
Application of the nursing process for the study of vocational nursing. The focus is on fundamental concepts.

NVN119B. Vocational Nursing: Clinical Knowledge Practice I (4)
Prerequisite: Admission into the Vocational Nursing Program. Students must meet the Essential Capabilities and Functional Requirements.
Corequisite: NVN 119A, NVN 150, and NVN 130A
Lab 12 Hrs
Application of the nursing process for the practice of fundamental vocational nursing skills.

NVN120A. Vocational Nursing: Theory II (3)
Prerequisite: NVN 119A and NVN 130A with a grade of "C" or better.
Corequisite: NVN130B
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.

NVN120B. Clinical Knowledge Practice II (2)
Pass/No Pass Only
Prerequisite: NVN119B with a grade of "C" or better.
Corequisite: NVN120A and NVN130B
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.

NVN120C. Vocational Nursing: Clinical II (2)
Pass/No Pass Only
Prerequisite: NVN 119B with a grade of "C" or better and students must meet the Essential Capabilities and Functional Requirements.
Corequisite: NVN120B and NVN150
Lab 6 Hrs
Application of the nursing process when caring for older adults with chronic health conditions.

NVN121A. Vocational Nursing: Theory III (4)
Prerequisite: NVN 119A and NVN 130A with a grade of "C" or better.
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.

NVN121B. Clinical Knowledge Practice III (2)
Prerequisite: NVN 119B with a grade of "C" or better.
Corequisite: NVN 121A
Lab 6 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.

NVN121C. Vocational Nursing: Clinical III (2)
Pass/No Pass Only
Prerequisite: NVN 119B with a grade of "C" or better and students must meet the Essential Capabilities and Functional Requirements.
Corequisite: NVN 121B and 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.
Lab 6 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.

NVN122A. Vocational Nursing: Theory IV (4)
Prerequisite: NVN 120A and NVN 130B with a grade of "C" or better.
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.

NVN122B. Clinical Knowledge Practice IV (1)
Pass/No Pass Only
Prerequisite: NVN 120C with a grade of "C" or better.
Corequisite: NVN 122A
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.

NVN122C. Vocational Nursing: Clinical IV (3)
Pass/No Pass Only
Prerequisite: Students must meet the Essential Capabilities and Functional Requirements.
Corequisite: NVN 122B
Lab 9 Hrs
Application of the nursing process when caring for adults with acute and/or mental health conditions.

NVN123A. Vocational Nursing: Theory V (3)
Prerequisite: NVN 122A with a grade of "C" or better.
Corequisite: NVN 130C
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.

NVN123B. Clinical Knowledge Practice V (3)
Prerequisite: NVN 122B with a grade of "C" or better.
Corequisite: NVN 123A
Lab 6 Hrs
Application of the nursing process when caring for adults with complex health conditions and when in the role of a vocational nurse leader.

NVN130A. Basic Pharmacology A (1)
Prerequisite: Admission into the Vocational Nursing program.
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.

NVN130B. Basic Pharmacology B (1)
Prerequisite: NVN 130A with a grade of "C" or better.
Corequisite: NVN 121A
Lab 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.

NVN130C. Basic Pharmacology C (1)
Prerequisite: NVN 130B with a grade of "C" or better.
Lab 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.

NVN131. Growth and Development Across the Lifespan (3)
Prerequisite: PSY 2 with a grade of "C" or better.
Advisory: ENG 1A
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. 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]
NVN150.1. Supervised Vocational Nursing Skills Practice I Practicum (0.3)
Pass/No Pass Only
Other: Enrollment in LVN Program first three modules.
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 evaluations. 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.

NVN210. Intravenous Therapy and Blood Withdrawal Techniques (2)
Prerequisite: NVN-123C with a grade of "C" or better or status as a Licensed Vocational Nurse.
Lec 1.7 Hrs; Lab 0.9 Hr
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 issue of certificate to the LVN.

NVN226. Success Strategies for Beginning VN Students (0.5)
Pass/No Pass Only
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.
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.

NVN227. Success Strategies for Completing VN Students (0.5)
Pass/No Pass Only
Prerequisite: NVN 121A with a grade of "C" or better or Approval for readmission into the Vocational Nursing Program.
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.
**OCEANOGRAPHY**

OCN1. Oceanography (3)

**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 geology, waves, tides and tidal currents, as well as the biological and environmental aspects of the oceans.  
[CSU; UC; CSU-GE, AREA B1; IGETC AREA 5A]

**PHOTOGRAPHY**

PHO1. Introduction to Photography (3)

**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]

PHO2. Beginning Black and White Photography (4)

**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]

PHO3. Advanced Photography Lab (3)

**Prerequisite:** PHO 2 with a grade of “C” or better.

**Lec 1.5 Hrs; Lab 4.5 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]

PHO4. Portfolio Photography (3)

**Prerequisite:** PHO 3 with a grade of “C” or better.

**Lec 1.5 Hrs; Lab 4.5 Hrs**

Emphasizes the development of a photographic portfolio in which the student establishes near professional level skills in their choice of photographic mediums.  
[CSU]

PHO45. Special Projects (1-3)

**Lab 3-9 Hrs**

Individual research and investigation within specialized creative art areas. Designed to fit student's individual interests.  
[CSU]

PHO46. Photography Practicum (1-3)

Supervised lab, studio, and location work in photography.  
[CSU]
PEAC27. Hiking and Backpacking (2)  
**Lec 1 Hr; Lab 3 Hrs**  
An introduction to the sport of hiking and backpacking. Emphasis on the basics of minimum impact camping, wilderness safety and navigation, shelter use and selection, backcountry cooking, wilderness medicine, clothing and equipment selection, group dynamics, and leadership skills. This course requires day and overnight participation on field trips. Formerly PE 32. Not open to students who have completed PE 32 with a grade of “C” or better. [CSU; UC]

PEAC28. Pilates Matwork  
**Lec 75 Hrs; Lab 2.25 Hrs**  
Designed to enhance the fundamental understanding of Core Strength and Stabilization as it applies to movement. Proper progression of form and technique will be explored. This class is appropriate for beginners as well as those with experience. Formerly PE 1.243. [CSU; UC]

PEAC29. Introduction to Mountain Biking (1.5)  
**Lec .75 Hrs; Lab 2.25 Hrs**  
Designed to offer the novice/beginner cyclist the opportunity to learn to ride efficiently and safely, perform general bike maintenance, and gain experience riding trails of the Monterey Bay Area. Formerly PE-1.244. [CSU; UC]

PEAC30. Introduction to Triathlon and Skill Development (2)  
**Pass/No Pass Option Lec 1 Hrs; Lab 3 Hrs**  
Students will learn to design and implement personal training programs for triathlon events, including developing skills in open water swimming, cycling, and running. This course will provide focused emphasis on combining these skills for effective triathlon competition. Formerly PE 1.242. [CSU; UC]

PEAC31. Introduction to Bowling (1.5)  
**Pass/No Pass Option Lec .75 Hr; Lab 2.25 Hrs**  
Designed to develop skills necessary to improve student performance in the sport of Bowling. Fundamentals, technique, rules, scoring, history and etiquette of the game of Bowling will be emphasized. Progressive instruction emphasizes individual skill development, spot bowling and participation in a league situation. Students will need to provide their own bowling shoes or will be required to pay a fee for rental of bowling shoes. Formerly PE 1.241. [CSU; UC]

PEAC32. Core Strengthening and Flexibility (1.5)  
**Pass/No Pass Option Lec .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. [CSU; UC]

PEAC33. Badminton (1.5)  
**Pass/No Pass Option Lec .75 Hrs; Lab 2.25 Hrs**  
Introduce students to the techniques, knowledge, and strategies of badminton involving the fundamentals skills of badminton, such as: serve, forehand, primary shots, court strategy, rules, and etiquette of the game. Formerly PE 1.239. [CSU; UC]

PEAC34. Stability Ball Training (1.5)  
**Lec .75-.75 Hrs; Lab .75-2.25 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. [CSU; UC]

PEAC35. Weight Training for Women (1.5)  
**Pass/No Pass Option Lec .75 Hrs; Lab 2.25 Hrs**  
An introduction to the study of free-weight lifting for women to specifically address their fitness concerns and special needs. Establishes opportunity for the further development of body flexibility, strength, and cardiovascular fitness for the female student. This class will focus on the practical application of free-weight lifting. Students will set up and design a personal weight-training program to fit their individual goals. Formerly PE 1.236. [CSU; UC]

PEAC36. Yoga (1-1.5)  
**Pass/No Pass Option Lec .75-.75 Hrs; Lab .75-2.25 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. [CSU; UC]

PEAC37 Intermediate Baseball (1.5)  
**Lec .75 Hrs; Lab .75-2.25 Hrs**  
Concepts and skills required to be a successful college athlete on a baseball team. Lecture, demonstration and field participation will be required. Review of offensive and defensive fundamentals, positional strategies, fitness and rules will be emphasized. Formerly PE 1.234. [CSU; UC]

PEAC38. Advanced Baseball (1-1.5)  
**Lec .75-.75 Hrs; Lab .75-2.25 Hrs**  
Instruction and practice in offensive and defensive fundamentals with emphasis on strategies and techniques of baseball. Formerly PE 1.189. [CSU; UC]

PEAC42. Hydro-Fitness (1.5)  
**Lec .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. [CSU; UC]
PEAC43. Strength Training (1.5)  
**Lec.** .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. Formerly PE 1.226.  
[CSU; UC]

PEAC44. Water Jogging (1.5)  
**Lec.** .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.  
[CSU; UC]

PEAC45. Special Projects (1-3)  
Designed for physical education students who are interested in investigating topics beyond the scope of an existing Physical Education course. Students will gain hands-on experience in specialized Physical Education research.  
[CSU]

PEAC46. Circuit Endurance Training (1.5)  
**Lec.** .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. Formerly PE-1.204. Not open to for credit to students who have completed PE-1.204 with a grade of “C” or better.  
[CSU; UC]

PEAC47. Strength Conditioning Lab (1.5)  
**Lec.** .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.  
[CSU; UC]

PEAC49. Aerobic Strength Conditioning (1.5)  
**Lec.** .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. Formerly PE 1.196.  
[CSU; UC]

PEAC50. Power Lifting (1.5)  
**Lec.** .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.  
[CSU; UC]

PEAC51. Wellness Through Walking (1.5)  
**Pass/No Pass Option**  
**Lec.** .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.  
[CSU; UC]

PEAC52. Volleyball (1.5)  
**Lec.** .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.  
[CSU; UC]

PEAC53. Track and Field (1-1.5)  
**Lec.** .75-.75 Hrs; **Lab.** .75-.2.25 Hrs  
Track and field fundamentals that develop aerobic fitness and physical conditioning which emphasize the importance and development of flexibility to improve running efficiency and injury prevention. Formerly PE 1.185.  
[CSU; UC]

PEAC54. Softball (1-1.5)  
**Lec.** .75-.75 Hrs; **Lab.** .75-.2.25 Hrs  
Techniques, rules, and practice in the sport of softball. Basic fundamentals and slow pitch are emphasized. Formerly PE 1.184.  
[CSU; UC]

PEAC55. Soccer (1.5)  
**Lec.** .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.  
[CSU; UC]

PEAC56. 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.  
[CSU; UC]

PEAC57. Advanced Distance Running (1.5)  
**Lec.** .75 Hrs; **Lab.** 2.25 Hrs  
Developed techniques in distance running methods, developing aerobic endurance, flexibility and overall physical fitness. Formerly PE-1.180. Not open to students who have completed PEAC 57 (PE 1.180) with a grade of “C” or better.  
[CSU; UC]

PEAC58. Beginning Tennis (1-1.5)  
**Lec.** .75-.75 Hrs; **Lab.** .75-2.25 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. Formerly PE 1.170.  
[CSU; UC]

PEAC59. Intermediate Tennis (1-1.5)  
**Lec.** .75-.75 Hrs; **Lab.** .75-2.25 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. Formerly PE 1.171.  
[CSU; UC]
### Physical Education

**PEAC60. Advanced Tennis (1.5)**  
**Lec. 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.  
[CSU; UC]

**PEAC61. Beginning Swimming (1.5)**  
**Pass/No Pass Option**  
**Lec. 75 Hrs; Lab 2.25 Hrs**  
Beginning skills and techniques introduced and practiced, allowing the student to become comfortable in the water.  
[CSU; UC]

**PEAC62. Intermediate Swimming (1.5)**  
**Pass/No Pass Option**  
**Lec. 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, beginning back stroke, back crawl and side stroke. Formerly PE-1.161.  
[CSU; UC]

**PEAC63. Advanced Swimming (1.5)**  
**Pass/No Pass Option**  
**Lec. 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. Formerly PE 1.162.  
[CSU; UC]

**PEAC64. Beginning Golf (1.5)**  
**Lec. 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.  
[CSU; UC]

**PEAC65. Advanced Golf (1.5)**  
**Lec. 75 Hrs; Lab 2.25 Hrs**  
Course provides instruction in the advanced techniques and strategies of golf. Formerly PE-1.151.  
[CSU; UC]

**PEAC66. Zumba Aerobics I (1.5)**  
**Pass/No Pass Option**  
**Lec. 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.  
[CSU; UC]

**PEAC67. Aerobics I (1)**  
**Pass/No Pass Option**  
**Lec. 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.  
[CSU; UC]

**PEAC68. Swim Fitness (1.5)**  
**Lec. 75 Hrs; Lab 2.25 Hrs**  
Intermediate swimming techniques practiced while improving endurance and cardiovascular fitness. Not open for credit to students who have completed PE-1.134 with a grade of “C” or better.Formerly PE-1.134.  
[CSU; UC]

**PEAC69. Introduction to Weight Training (0.5-2)**  
**Pass/No Pass Option**  
**Lec. 25-.75 Hrs; Lab .75-3.75 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.  
[CSU; UC]

**PEAC70. Basketball (1.5)**  
**Lec. 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.  
[CSU; UC]

**PEAC71. Fundamentals of Basketball (1-1.5)**  
**Lec. 75-.75 Hrs; Lab 75 Hrs; Lab 75-2.25 Hrs**  
Advanced techniques and strategies of basketball as played at the intercollegiate and professional levels. Skills, strategies and rules of the game are discussed and analyzed while engaging in supervised and repetitive competition.  
[CSU; UC]

**PEAC72. Intermediate Basketball (1.5)**  
**Lec. 75 Hrs; Lab 75 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.  
[CSU; UC]

**PEAC74. Advanced Volleyball (1.5)**  
**Lec 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. Formerly PE 1.225.  
[CSU; UC]
PEAC75. Fundamentals of Football (1.5)  
**Lec.** .75 Hrs; **Lab.** 2.25 Hrs  
Designed to develop the specific skills, techniques, and physical conditioning necessary to compete in intercollegiate football. Emphasis on individual game and special team skills, strategies and the NCAA rules of football. Formerly PE 1.230.  
[CSU; UC]

PEAC81 Introduction to Water Polo (1.5)  
**Lec.** .75 Lab 2.25  
**Pass/No-Pass Option**  
Fundamentals and rules of water polo are introduced with the use of inner tubes for ease of learning and adaptability for the less proficient swimmers.  
[CSU; UC]

PEAC82. Stress Reduction (1.5)  
**Pass/No-Pass Option**  
**Lec.** .75 Lab 2.25  
A physical education class emphasizing a wide variety of stretching and relaxation techniques such as Tai Chi, as well as breathing exercises for stress reduction to help round out one’s overall physical fitness program. Course will begin with a health screening and baseline or functional capacity fitness assessment. Formerly PE 1.206.  
[CSU; UC]

PEAC223. Physical Fitness Assessment – Cardio Vascular (.3)  
**Pass/No Pass Only**  
A course designed to assess the physical fitness level of the student based on established criteria and standards. In addition to assessment, students will determine strategies to improve individual fitness levels and quality of life. Formerly PE 223.

PEAC224. Fitness Education and Assessment (.3)  
**Pass/No Pass Only**  
Designed to assess the physical fitness levels of individual students based on established criteria and standards. In addition to assessment, students will determine fitness goals and strategies to improve individual fitness levels required by students who are in training or established sworn peace officers. Formerly PE 224.

PEAD84. Adaptive Circuit Endurance Training (1-1.5)  
**Lec.** .75-.75 Hrs; **Lab.** .75-.25 Hrs  
Designed for the physically challenged students to enhance their strength and cardiovascular endurance by using progressive resistance machines to develop muscle strength, endurance and flexibility. This class is offered on an open/entry, open/exit basis. Students should complete an application in the DSP&S Office for verification of eligibility for this class.  
[CSU; UC]

PETH1. Introduction to Kinesiology (3)  
**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 PE 20 with a grade of “C” or better.  
[CSU; UC; CSU-GE, AREA E]  
[C-ID KIN 100]

PETH2. Care and Prevention of Athletic Injuries (4)  
**Lec.** 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. Not open to students who have completed PETH 2 or PE 15 with a grade of “C” or better.  
[CSU; UC]

PETH2A. Introduction to Practical Field Experience in the Care and Prevention of Athletic Injuries: (2)  
**Advisory: PETH 2, Care and Prevention of Athletic Injuries**  
**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. Not open to students who have completed PE 101A or PE 116 with a grade of “C” or better.  
[CSU; UC]

PETH2B. Intermediate Practical Field Experience in the Care and Prevention of Athletic Injuries (2)  
**Advisory: PETH 2**  
**Lab.** 6 Hrs  
Intermediate skills developed in 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. Not open to students who have completed PETH2B or PE 117 with a grade of “C” or better.  
[CSU]

PETH2C. Advanced Practical Field Experience in the Care and Prevention of Athletic Injuries (2)  
**Advisory: PETH 2, Care and Prevention of Athletic Injuries**  
**Lab.** 6 Hrs  
Advanced principles 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. Not open to students who have completed PETH 2C or PE 118 with a grade of “C” or better.  
[CSU]

PETH3. Concepts of Fitness and Wellness (3)  
**Lec.** 2 Hrs; **Lab.** 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. Formerly PE 16. Not open to students who have completed PE 3 or PE 16 with a grade of “C” or better.  
[CSU]

PETH4 Mental Skills for Sports Performance (3)  
**Lec.** 3 Hrs  
Techniques for developing and refining psychological skills to enhance athletic growth and performance. Students will establish a learning and social environment that will enhance the effectiveness of coaches and other mentors. Course topics will assist students to maximize their athletic skill and development while addressing such issues as staleness, burnout, injury and injury prevention and the eventual retirement of the athlete.  
[CSU; UC; CSU-GE, AREA E]

PETH5. Sport in Society (3)  
**Lec.** 3 Hrs  
An overview of the historical development of sports and current roles of sport in society. Includes interaction of sport with societal values and ethics and outcomes affecting professional and collegiate sports.  
[CSU; UC; CSU-GE, AREA D7]

PETH9A Theory & Analysis of Cross Country I (2)  
**Lec.** 2 Hrs  
Beginning/intermediate techniques and strategies of cross country as played at the intercollegiate and professional levels. Skills, strategies and rules of the game are discussed and analyzed while engaging in supervised and repetitive competition.  
[CSU; UC]
PETH9B  Theory & Analysis of Cross Country II (2)
Lec 2 Hrs
Advanced techniques and strategies of cross country 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 competition.
[CSU; UC]

PETH10A.  Theory & Analysis of Football I (2)
Lec 1.5 Hrs; Lab 1.5 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. Not open to students who have completed PETH 10A or PE 51A with a grade of "C" or better.
[CSU; UC]

PETH10B.  Theory & Analysis of Football II (2)
Lec 1.5 Hrs; Lab 1.5 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. Not open to students who have completed PETH 10B or PE-51B with a grade of "C" or better.
[CSU; UC]

PETH10C.  Theory & Analysis of Football III (2)
Lec 1.5 Hrs; Lab 1.5 Hrs
Intermediate and advanced 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. Not open to students who have completed PETH 10C or PE 51C with a grade of "C" or better.
[CSU; UC]

PETH10D.  Theory & Analysis of Football IV (2)
Lec 1.5 Hrs; Lab 1.5 Hrs
Advanced 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. Not open to students who have completed PETH 10D or PE-51D with a grade of "C" or better.
[CSU; UC]

PETH11A.  Theory & Analysis of Basketball I (2)
Lec 2 Hrs
Intermediate/advanced techniques and strategies of basketball as played at the intercollegiate and professional levels are discussed and analyzed while engaging in supervised and repetitive play. Theory and applications of coaching basketball, rules, interpretation and psychological motivation will be stressed. Formerly PE 52A.
[CSU; UC]

PETH11B.  Theory & Analysis of Basketball II (2)
Lec 2 Hrs
Advanced techniques and strategies of basketball as played at the intercollegiate and professional levels are discussed and analyzed while engaging in supervised and repetitive play. Theory and applications of coaching basketball, rules, interpretation and psychological motivation will be stressed. Emphasis will focus on coaching strategies and techniques for the students wishing to coach basketball. Formerly PE 52B.
[CSU; UC]

PETH12A.  Theory & Analysis of Baseball I (2)
Lec 2 Hrs
Intermediate/advanced techniques and strategies of baseball 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 53A.
[CSU; UC]

PETH12B.  Theory & Analysis of Baseball II (2)
Lec 2 Hrs
Advanced techniques and strategies of baseball as played at the intercollegiate and professional levels. Skills, strategies and the rules of the game are discussed and analyzed while engaging in supervised and repetitive play. Formerly PE 53B.
[CSU; UC]

PETH13A.  Theory & Analysis of Track I (2)
Lec 2 Hrs
Beginning/intermediate techniques and strategies of track and field 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 competition. Formerly PE 54A.
[CSU; UC]

PETH13B.  Theory & Analysis of Track II (2)
Lec 2 Hrs
Advanced techniques and strategies of track and field 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 competition. Formerly PE 54B.
[CSU; UC]

PETH14A.  Theory and Analysis of Volleyball I (2)
Lec 2 Hrs
Advanced techniques and strategies of volleyball as played at the intercollegiate and professional levels are discussed and analyzed while engaging in supervised and repetitive play. Theory and applications of coaching volleyball, rules, interpretation and psychological motivation will be stressed. Formerly PE 55A.
[CSU; UC]

PETH14B.  Theory and Analysis of Volleyball II (2)
Lec 2 Hrs
Advanced techniques and strategies of volleyball as played at the intercollegiate and professional levels are discussed and analyzed while engaging in supervised and repetitive play. Theory and applications of coaching volleyball, rules, interpretation and psychological motivation will be stressed. Emphasis will focus on coaching strategies and techniques for the students wishing to coach volleyball. Formerly PE 55B.
[CSU; UC]

PETH15A.  Theory & Analysis of Soccer I (2)
Lec 2 Hrs
Beginning/intermediate techniques and strategies of soccer as played at the intercollegiate and professional levels. Skills, strategies and rules of the game are discussed and analyzed while engaging in supervised and repetitive competition. Formerly PE 58A.
[CSU; UC]

PETH15B.  Theory & Analysis of Soccer II (2)
Lec 2 Hrs
Provides students with the advanced concepts, theories and techniques of coaching and playing intercollegiate and interscholastic soccer. Formerly PE 58B.
[CSU; UC]
PETH16A. Theory & Analysis of Softball (2)

Lec 2 Hrs
Intermediate/advanced techniques and strategies of softball as played at the intercollegiate levels. Intermediate/advanced skills, strategies and rules of the game are discussed and analyzed while engaging in supervised and repetitive play. Formerly PE 59A.

[CSU; UC]

PETH16B. Theory & Analysis of Softball (2)

Lab 2 Hrs
A lecture course designed to develop a thorough understanding of the game of softball. Individual skills, intermediate skills, offensive and defensive strategies, theories and techniques of coaching and rules of the game are discussed and analyzed. Formerly PE 59B.

[CSU; UC]

PEIN17. Intercollegiate Basketball for Men (1.5)

Lab 5 Hrs
Advanced techniques and strategies for competitive intercollegiate basketball competition. Approximately twenty-eight intercollegiate scheduled games. Formerly PE-3.511. May be taken up to four times for credit.

[CSU; UC]

PEIN18. Intercollegiate Basketball for Women (1.5)

Lab 5 Hrs
Advanced techniques and strategies of women’s competitive intercollegiate basketball competition. Approximately twenty-eight scheduled games. Formerly PE-3.512. May be taken up to four times for credit.

[CSU; UC]

PEIN19. Intercollegiate Football (2)

Lab 10 Hrs
Advanced techniques and strategies of competitive intercollegiate football competition. Approximately ten intercollegiate scheduled games. Formerly PE 3.513. May be taken up to two times for credit.

[CSU; UC]

PEIN20. Intercollegiate Soccer (3)

Lab 10 Hrs
An advanced course designed to develop techniques and strategies of intercollegiate soccer competition. Approximately twenty-five games are scheduled. Formerly PE-3.514. Not open to students who have completed PE-3.514. MAY be taken up to four times for credit.

[CSU; UC]

PEIN21. Intercollegiate Softball for Women (3)

Lab 10 Hrs
Advanced techniques and strategies of competitive intercollegiate softball competition. Thirty-two intercollegiate games. Formerly PE-3.515.

[CSU; UC]

PEIN22. Intercollegiate Volleyball for Women (2)

Lab 10 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 two times for credit.

[CSU; UC]

PEIN23. Intercollegiate Cross-Country (2)

Lab 10 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 two times for credit.

[CSU; UC]

PEIN24. Intercollegiate Track and Field (3)

Lab 10 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]

PEIN25. Intercollegiate Sports Conditioning (1.5)

Lab 5 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]

PEIN26. Intercollegiate Baseball (3)

Lab 10 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]

PEIN30. Preseason Sport Conditioning, Basketball (1.5)

Lec .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 flexibility, endurance, speed, and skill to minimize injury potential to men/women interested in intercollegiate basketball in a preseason setting. May be taken up to 4 times.

[CSU]

PEIN32. Pre-Season Sport Conditioning (1)

Lec .75 Hrs; Lab .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]

PEIN40. Nontraditional Season, Basketball (1)

Lec .75 Hrs; Lab .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]
PEIN41. Nontraditional Season, Soccer (1.5)  
**Lec** .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]**

PEIN42. Nontraditional Season, Volleyball (1.5)  
**Lec** .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]**

PEIN43. Nontraditional Season, Baseball (1.5)  
**Lec** .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]**

PEIN44. Nontraditional Season, Softball (1.5)  
**Lec** .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]**

PEIN45. Nontraditional Season, Track and Field (1.5)  
**Lec** .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 4 times. **[CSU]**

PEIN46. Nontraditional Season, Football (1.5)  
**Lec** .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]**
PHY2A. College Physics I (4)
Prerequisite: MAT 24 with a grade of
"C" or better.
Lec 4 Hrs; Lab 3 Hrs
Lectures and laboratories covering vectors,
motion, forces, gravity, satellites, work,
energy, momentum, rotational motion,
mechanical properties of matter and heat.
Required for pre-medical, pre-dental,
biochemistry, pharmacy and physical therapy
majors.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]
[C-ID PHYS 105; C-ID PHYS 100S with PHY2B]

PHY2B. College Physics II (4)
Prerequisite: PHY 2A with a grade of
"C" or better.
Lec 4 Hrs; Lab 3 Hrs
A continuation of PHY 2A. Lectures and
laboratories covering waves, sound, light
electricity, magnetism, atomic and nuclear
physics. Required for pre-medical, pre-
dental, biochemistry, pharmacy and physical
therapy majors.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]
[C-ID PHYS 110; C-ID PHYS 100S with PHY2A]

PHY4A. General Physics/Mechanics (4)
Prerequisite: MAT 3A with a grade of
"C" or better.
Lec 4 Hrs; Lab 3 Hrs
Lectures and laboratories covering vectors,
particle kinematics and dynamics, work,
energy, momentum, angular momentum,
conservation laws, rigid bodies,
oscillations. Required for engineering and
physical science majors. Strongly
recommended for math majors.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5A, 5C]
[C-ID PHYS 205]

PHY4B. General Physics/Electricity and
Magnetism (4)
Prerequisite: PHY 4A with a grade of
"C" or better.
Lec 4 Hrs; Lab 3 Hrs
Lectures and laboratories covering 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 5A, 5C]

PHY4C. General Physics/Waves, Heat,
Light and Modern Physics (4)
Prerequisite: PHY 4A with a grade of
"C" or better.
Lec 4 Hrs; Lab 3 Hrs
Lecture and laboratory hours covering:
waves, sound, thermal properties of
matter, kinetic theory of gases, heat
transfer, laws of thermodynamics, heat
engines, reflection, refraction, interference,
diffraction of light, lens systems,
electromagnetic waves, Special Theory of
Relativity, photoelectric effect, Compton
effect, Bohr Model for the hydrogen atom,
elementary quantum mechanics. Required
for engineering and physical science
majors. Strongly recommended for math
majors.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5A, 5C]

PHY10. Introduction to Physics (4)
Advisory: MAT 121 or MAT 151
Lec 3 Hrs; Lab 3 Hrs
A brief presentation of some of the more
important and interesting phenomena in
physics. Lecture and laboratory covering
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. Open to
students with or without high school
physics, but not open to those who have
credit for or are taking concurrently PHY
2A, 2B, 4A, 4B, or 4C.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5A, 5C]

PHY45. Special Projects (1-3)
Laboratory work in the field of physics.
Enables the student to investigate topics
beyond the scope of the regular physics
courses.
[CSU]
POL1. American Political Institutions (3)
   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 D6; IGETC, AREA 4]
[C-ID POLS 110]

POL2. Contemporary Governments Abroad (3)
   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 D6; IGETC, AREA 4]

POL3. Introduction to International Relations (3)
   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, and pursuing peace. Topics include the evolution of world politics, levels of analysis and foreign policy, nationalism, globalization and transnationalism, the nation-state, inter-governmental organizations, national power, international law and justice, national security, and international security. Contemporary issues in international relations will be presented from a variety of viewpoints.
[CSU; UC; CSU-GE, AREA D6; IGETC, AREA 4]

POL45. Special Projects (1-3)
   Lec 3 Hrs
A supervised program of independent research and study in Political Science. Completion of Political Science 1 or the equivalent recommended.
[CSU]
PSY2. General Psychology (3)  
Advisory: Eligibility for ENG 1A  
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]

PSY6. Social Psychology (3)  
Advisory: PSY 2, Eligibility for ENG 1A  
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]

PSY8. Research Methods in Psychology (3)  
Prerequisite: PSY 2 and MAT 13 with a grade of “C” or better.  
Advisory: Eligibility for ENG 1A  
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]

PSY10. Introduction to Biological Psychology (3)  
Prerequisite: PSY 2 with a grade of “C” or better.  
Advisory: Eligibility for ENG 1A  
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 5B]  
[C-ID PSY 150]

PSY12. Theories of Personality (3)  
Advisory: PSY 2 with a grade of “C” or better.  
Lec 3 Hrs  
A comparative analysis of the major theories of personality integrating research and assessment techniques. Theoretical perspectives will include psychoanalytic, psychodynamic, humanistic, behavioral, cognitive, trait, social learning, and cross-cultural approaches.  
[CSU; UC; CSU-GE, AREA D9; IGETC, AREA 4]

PSY14. Child Psychology (3)  
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 human development.  
[CSU; UC CSU-GE AREA D9, E; IGETC, AREA 4]

PSY15. Human Sexuality (3)  
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]

PSY22. Abnormal Psychology (3)  
Prerequisite: PSY 2 with a grade of “C” or better.  
Advisory: Eligibility for ENG 1A.  
Lec 3 Hrs  
An introduction to the research and theories regarding the major types of psychopathology, including schizophrenia, and 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]

PSY25. Developmental Psychology: Lifespan (3)  
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 E; IGETC, AREA 4]  
[C-ID PSY 180]

PSY30. Forensic Psychology (3)  
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, and evaluating civil matters including family court. [CSU]

PSY33. Personal and Social Adjustment (3)  
Advisory: Eligibility for ENG 1A  
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]

PSY36. Psychology of “La Mujer” (3)  
Advisory: Eligibility for ENG 1A  
Lec 3 Hrs  
Explores the developmental processes of the Chicana/Latina psyche from birth to death to include the study of the behavioral, physiological, and psychological experiences that inform behavior and self-image. Analyzes the Chicana/Latina by addressing the following course themes: racism, sexism, gender, feminism, work, sexuality, education, and the structure of social inequality. Students will explore methods to enhance the development of Chicana/Latina women’s full potential and optimum mental health.  
[CSU; UC; CSU-GE, AREA D3, D4, D7, E; IGETC, AREA 4]

PSY41. Psychology of Human Relations (3)  
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]

PSY42. Psychology of Women (3)  
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 not 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]
RTV79. Broadcast Video and Television Production (3)
**Lec** 2 Hrs; **Lab** 3 Hrs
A basic course in the use and operation of broadcast video and television equipment utilizing camera, lenses, switching, sound, lights, sets, graphics, and video recording. This course will deliver instruction in all aspects of studio television production and direction through a series of group projects in a variety of genres. This course will provide experience for students interested in careers in broadcast journalism, documentary film-making, corporate communications, screenwriting, advertising and public relations. This course will involve lecture at Hartnell College along with lab instruction incorporating scouting locations, interviewing participants, and team production work at a local television studio facility. [CSU]

THIS PROGRAM IS CURRENTLY UNDER REVIEW, AND COURSE OFFERINGS WILL BE LIMITED FOR THE 2013-2014 ACADEMIC YEAR.

RE140. Real Estate License Preparation (3)
**Pass/No Pass Option**
**Prerequisite:** RE 144 with a grade of “C” or better or concurrent enrollment.
**Lec** 3 Hrs
The student is introduced to study materials useful in preparing for the Real Estate Salesman and Broker Examinations. Subject matter that should be concentrated upon for the examination is emphasized with practice exams similar to, but not taken from, California Real Estate Exam.

RE144. Principles of Real Estate (3)
**Lec** 3 Hrs
Emphasis on consumer education in the overall sale, purchase and finance of residential real estate in the state of California. This class meets one of the three requirements set by the State of California for the Real Estate Salesperson examination.

RE145. Real Estate Practices (3)
**Lec** 3 Hrs
An introduction to the practical application of the real estate knowledge necessary when working in real estate. This class meets one of the three requirements set by the State of California for the Real Estate Salesperson examination.

RE146. Legal Aspects of Real Estate (3)
**Pass/No Pass Option**
**Lec** 3 Hrs
A study of California real estate law, including real property law, governmental regulation of property, contracts, agency, and practical concerns relating to real estate sales agents and brokers. This course is required for the California real estate broker’s license.

RE147. Real Estate Finance (3)
**Pass/No Pass Option**
**Advisory:** RE 144 with a grade of “C” or better.
**Lec** 3 Hrs
Study and analysis of money markets, prime rates, discount rates, real estate financing and the rules involved in financing residential, multi-family and commercial property. Includes the study of the Federal Reserve Bank and how it works in the monetary system. This is a required course for the California Department of Real Estate Broker Exam.

RE148. Real Estate Appraisal (3)
**Pass/No Pass Option**
**Advisory:** RE 144 with a grade of “C” or better.
**Lec** 3 Hrs
Introduction to the appraisal process, particularly as it relates to single-family dwellings. Topics include: different approaches to determining property value, the appraisal process, data collection and analysis, building classifications and financial institutions. Case studies are supplemented by fieldwork and the use of the short forms used in the appraisal.

RE149. Real Estate Economics (3)
**Pass/No Pass Option**
**Lec** 3 Hrs
A practical study of the economic aspects of real estate designed to provide a grasp of the factors that affect and create value in today’s market place. This course covers the different factors that will affect the value of real estate due to supply and demand, financial requirements and the overall economic situation in the local, state, federal and world economy.

RE150. Property Management (3)
**Lec** 3 Hrs
Acquaints students with Real Estate Management. Includes responsibilities, procedures, operating statement preparation, income and expense analysis, leasing, neighborhood analysis as well as income and market analysis, and the management of various types of properties.

RE153. Escrow Procedures (3)
**Lec** 3 Hrs
An introduction to the terminology and mechanics of escrow functions involved in real estate transactions. Specifically designed with particular emphasis on the mechanics of taking, processing and closing escrows.
RCP 50. Respiratory Care Practitioner
Responsibilities (1.5)
Corequisite: RCP 53, RCP 110
Lec .75 Hr, Lab 2.3 Hrs
Introduces the language of healthcare as a 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, health care reimbursement, infection control, and patient education are emphasized.
[CSU]

RCP 51. Pharmacology and Medication Administration (3)
Prerequisite: Admissions to the Respiratory Care Practitioner Program
Corequisite: RCP 53
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: Admissions to the Respiratory Care Practitioner Program
Corequisite: RCP 53
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: Admissions to the Respiratory Care Practitioner Program
Corequisite: RCP 50, RCP 51, RCP 52, RCP 54
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 bronchodiator 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: Admissions to the Respiratory Care Practitioner Program
Corequisite: RCP 53
Pass/No Pass Only
Lab 1.5 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 56. Diagnostic Studies and Respiratory Care (3)
Prerequisite: RCP 50 with a grade of "C" or better.
Corequisite: RCP 63
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, the nutritional assessment, polysomnography, pulmonary rehabilitation, and home care evaluation are presented.
[CSU]

RCP 561. Respiratory Therapeutics (3)
Prerequisite: RCP 51 with a grade of "C" or better.
Corequisite: RCP 63
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, the nutritional assessment, polysomnography, pulmonary rehabilitation, and home care evaluation are presented.
[CSU]

RCP 562. Cardiopulmonary Pathophysiology (2)
Prerequisite: RCP 52 with a grade of "C" or better.
Corequisite: RCP 63
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)
Pass/No Pass Only
Prerequisite: RCP 53 with a grade of "C" or better.
Corequisite: RCP 60, RCP 61, RCP 62 and RCP 64
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)
Pass/No Pass Only
Prerequisite: RCP 54 with a grade of "C" or better.
Corequisite: RCP 63
Lab 1.5 Hrs
Application of the respiratory care process for the study of beginning respiratory care skills required for bedside care. Emphasis is on cardiopulmonary assessment, interpretation of lab data, obtaining an arterial blood gas (ABG) sample, oxygen delivery, 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 (2)
Prerequisite: RCP 60 with a grade of "C" or better.
Corequisite: RCP 73
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.
[CSU]
RCP71. Basic Mechanical Ventilation (3)  
**Prerequisite:** RCP 61 with a grade of "C" or better.  
**Corequisite:** RCP 73  
**Lec** 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 are reviewed. Patient management, mechanical ventilation and cardiopulmonary monitoring, mode selection with rationale, and trouble-shooting of mechanical ventilation are reviewed.  
[CSU]

RCP72. Neurologic and Traumatic Conditions (2)  
**Prerequisite:** RCP 62 with a grade of "C" or better.  
**Corequisite:** RCP 73  
**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 characterization and ventilation in situations of neurological and traumatic injury is emphasized.  
[CSU]

RCP73. Intermediate Clinical Experience (4)  
**Pass/No Pass Only**  
**Prerequisite:** RCP 63 with a grade of "C" or better.  
**Corequisite:** RCP 70, RCP 71, RCP 72 and RCP 74  
**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.  
[CSU]

RCP74. Supervised Practice; Intermediate (0.5)  
**Pass/No Pass Only**  
**Prerequisite:** RCP 64 with a grade of "C" or better.  
**Corequisite:** RCP 73  
**Lab** 1.5 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.  
[CSU]

RCP80. Advanced Life Support (1.5)  
**Pass/No Pass Only**  
**Prerequisite:** RCP 70 with a grade of "C" or better.  
**Corequisite:** RCP 83  
**Lec** 1 Hr; **Lab** 1.5 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.  
[CSU]

RCP81. Advanced Mechanical Ventilation (3)  
**Prerequisite:** RCP 71 with a grade of "C" or better.  
**Corequisite:** RCP 83  
**Lec** 3 Hrs  
Advanced critical care strategies including interpretation of airway flow and waveform graphics are reviewed. Laboratory data, radiographic results, acid-base balance, and kidney function are analyzed related to ventilation status. Indications and hazards of intubation, chest drains, fiberoptic bronchoscopy, and in-hospital transport from infancy through adulthood are discussed. Advanced ventilator applications and weaning strategies are discussed, and cardiopulmonary pharmacology is reinforced. Patient and family education and support is promoted.  
[CSU]

RCP82. Clinical Reasoning Seminar (2)  
**Prerequisite:** RCP 72 with a grade of "C" or better.  
**Corequisite:** RCP 83  
**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.  
[CSU]

RCP83. Advanced Clinical Experience (4)  
**Pass/No Pass Only**  
**Prerequisite:** RCP 73 with a grade of "C" or better.  
**Corequisite:** RCP 80, RCP 81, RCP 82, and RCP 84  
**Lab** 12 Hrs  
Advanced respiratory care practitioner skills, including wave form 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 variety of clinical settings.  
[CSU]

RCP84. Supervised Practice: Advanced (0.5)  
**Pass/No Pass Only**  
**Prerequisite:** RCP 74 with a grade of "C" or better.  
**Corequisite:** RCP 83  
**Lab** 1.5 Hrs  
Founational to 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 students the opportunity to discuss theoretical concepts and practice clinical skills to increase student success within the respiratory care program.  
[CSU]

RCP110. Foundations for Success (1.5)  
**Prerequisite:** Admissions to the Respiratory Care Practitioner Program  
**Pass/No Pass Option**  
**Lec** .75 Hr; **Lab** 2.3 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.  

RCP225. Success Strategies for 1st Semester RCP Students (0.5)  
**Prerequisite:** Admission to the RCP program or permission of the Director of RCP program following withdrawal from or failure in any RCP 50 series course (RCP 50, 51, 52, 53, 54).  
**Pass/No Pass**  
**Lab** 1.5 Hrs  
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.
SCI124. Science, Technology, Engineering and Mathematics (STEM) Internship Preparation (1)

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 abstract writing, poster creation, Excel, project management, PowerPoint, presentation delivery, and discipline specific skills. Prospective interns will work to develop attitudes that promote discussion, observation, teamwork, network building, and personal confidence.

SCI300. GED/Science

Noncredit
No Grade
Lab 5 Hrs

Prepares students to pass the science component of the GED test and includes content for life science, earth and space science, and physical science. Focuses on comprehension, application, analysis, and evaluation skills.

SS300. GED/Social Studies

Noncredit
No Grade
Lab 5 Hrs

Prepares students to pass the social studies component of the GED test and includes content for US history, world history, civics and government, geography, and economics. Focuses on comprehension, application, analysis, and synthesis thinking skills.

SOC1. Introduction to Sociology (3)

Lec 3 Hrs

A general introduction to the study of social interaction and the organization of modern society. Topics include culture; social structure; socialization; deviance and crime; class, ethnicity, and gender; social institutions; collective behavior and social movements; and demography and urbanization.

[CSU; UC; CSU-GE, AREA D0; IGETC, AREA 4]
[C-ID SOCI 110]

SOC41. Marriage and the Family (3)

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 historic settings.

[CSU; UC; CSU-GE, AREA D0; E; IGETC, AREA 4]
[C-ID SOCI 130]

SOC42. The Sociology of Minority Relations (3)

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]

SOC45. Special Projects (1-3)

A supervised program of observation of the work of social agencies in the community or a program of research into a particular area of the discipline of sociology. Completion of SOC 1 recommended.

[CSU]
SPA 1. Elementary Spanish (5)

Pass/No Pass Option

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 1 or SPA 1X with a grade of "C" or better.

[CID SPAN 100]

SPA1X. Elementary Spanish for Spanish Speakers (5)

Pass/No Pass Option

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]

SPA 2. Elementary Spanish (5)

Pass/No Pass Option

Prerequisite: SPA 1X or SPA 1S or SPA 1 with a grade of "C" or better or demonstration of language proficiency to level.

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 life, people, and 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]

[CID SPAN 110]

SPA2S. Elementary Spanish for Spanish Speakers (5)

Pass/No Pass Option

Prerequisite: SPA 1S or SPA 1X or SPA 1 with a grade of "C" or better or demonstration of language proficiency to level.

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]

SPA2X. Elementary Spanish for Chicano Students (5)

Pass/No Pass Option

Prerequisite: SPA 1X or SPA 1S or SPA 1 with a grade of "C" or better or demonstration of language proficiency to level.

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]

SPA3. Intermediate Spanish (5)

Pass/No Pass Option

Prerequisite: SPA 2 or SPA 2S or SPA 2X with a grade of "C" or better, or demonstration of proficiency to level.

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 3 with a grade of "C" or better.

[CSU; UC-CSU-GE; AREA C2; IGETC, AREA 3B, 6]

SPA3S. Intermediate Spanish for Spanish Speakers (5)

Pass/No Pass Option

Prerequisite: SPA 2S or SPA 2X or SPA 2 with a grade of "C" or better or demonstration of language proficiency to level.

Lec 5 Hrs
A parallel SPA 3 course for Spanish speakers, conducted totally in Spanish with emphasis on written composition, reading and writing, difficult grammatical problems, and Hispanic arts and literature. 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]

SPA 4. Intermediate Spanish (5)

Pass/No Pass Option

Prerequisite: SPA 3 or 3S with a grade of "C" or better, four years of high school Spanish, or demonstration of proficiency to level.

Lec 5 Hrs
Continuation of Spanish 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 3B, 6]

[CID SPAN 210]

SPA4S. Intermediate Spanish for Spanish Speakers (5)

Pass/No Pass Option

Prerequisite: SPA 3S or SPA 3X with a grade of "C" or better or demonstration of proficiency to level.

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]

SPA 35. Literatura chicana (3)

Pass/No Pass Option

Prerequisite: SPA 2, SPA 2S, or SPA 2X with a grade of "C" or better.

Advisory: ENG 101 or ESL 101 with a grade of "C" or better.

Lec 3 Hrs
This course will be taught in Spanish. A survey of Chicana/Chicano literature focusing on important themes and issues as they relate to the Chicana/Chicano experience in American society. Readings may include poetry, novels, short stories, theater, and essays. Since much of the reading material is written in English or in a bilingual mode, students must be able to read in English and be able to read, write, and speak in Spanish.

[CSU; UC-CSU-GE, AREA C2; IGETC, AREA 3]

SPA 45. Special Projects (1-3)

Pass/No Pass Option

Prerequisite: Three years of high school Spanish or two semesters college Spanish. All prerequisites must be completed with a grade of "C" or better.

Individual and group investigation of topics and problems beyond the scope of regular Spanish courses.

[CSU]
THA1. Introduction to Theatre (3)

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. Introduction to Theatre is required of all theatre arts majors.

[CSU; UC; CSU-GE, AREA C1, IGETC, AREA 3]

THA3. History of the Theatre (3)

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.

[CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

[C-ID THTR 113]

THA10. Beginning Acting (3)

Lec 2 Hrs; Lab 3 Hrs

Designed to teach the basic skills, concepts, and methods of modern, realistic, acting techniques and its principles. Physical, emotional and mental phases of acting are studied and practiced in scripted dramatic scenes, improvisations, and theatre exercises. Emphasis is given in the areas of physical movement, diction, observation, concentration, imagination, and "intentional acting." Students will be performing a final scene and will need to acquire the entire script from which that scene is taken.

[CSU; UC][C-ID THTR 151]

THA11. Intermediate Acting (3)

Lec 2 Hrs; Lab 3 Hrs

Designed to build on the basics of beginning actor training. Stanislavski-based and other modern acting systems are explored through exercises, written analysis, and scene/monologue study with an emphasis on creating a truthful characterization, living moment to moment in the imaginary circumstances of the character. The major styles of acting are discussed and explored as well as artistic and creative development, theatre discipline and ethics, and professional standards. Students will be performing a final scene and will need to acquire the entire script from which that scene is taken.

[CSU; UC]

THA90A. Theatre Outreach Projects: Concept and Development (0.5-4)

Pass/No Pass Only

Focuses on the initial stages of development of specific on-campus events and festivals; productions for youth (touring, on-campus, or in classroom residencies), senior adults, or other underserved groups; presentations for charity events and social organizations; or programs that will assist other organizations with staging theatre events and festivals.

[CSU]

THA90B. Theatre Outreach Projects: Implementation and Practice (0.5-4)

Pass/No Pass Only

Focuses on the rehearsal and continued development of specific on-campus events and festivals; productions for youth (touring, on-campus, or in classroom residencies), senior adults, or other underserved groups; presentations for charity events and social organizations; or programs that will assist other organizations with staging theatre events and festivals.

[CSU]

THA90C. Theatre Outreach Projects: Execution and Assessment (0.5-4)

Pass/No Pass Only

Focuses on the production and evaluation of specific on-campus events and festivals; performances for youth (touring, on-campus, or in classroom residencies), senior adults, or other underserved groups; presentations for charity events and social organizations; or programs that will assist other organizations with staging theatre events and festivals.

[CSU]

THA91A. New Works Project: Concept and Development (0.5-4)

Pass/No Pass Only

Focuses on adaptation of original ideas and/or existing novels, poetry, journals, memoirs, and other non-dramatic texts into theatrical form, and will culminate in a preliminary timeline for its development.

[CSU; UC]

THA91B. New Works Project: Implementation and Practice (0.5-4)

Pass/No Pass Only

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]

THA91C. New Works Project: Execution and Assess. (0.5-4)

Pass/No Pass Only

Focuses on rehearsal and presentation of new theatrical texts under development.

[CSU; UC]

THA92A. Solo Artist Project: Concept and Development (0.5-4)

Pass/No Pass Only

Focuses on the selection of material or the development of an original project for the Solo Artist, which includes the actor, musician or dancer and their collaborators (director, designer, choreographer, composer, and writer).

[CSU; UC]

THA92B. Solo Artist Project: Implementation and Practice (0.5-4)

Pass/No Pass Only

Focuses on the development of an approved script, or of an original project concept/idea designed by the solo artist through research, rehearsal, and progress previews.

[CSU; UC]

THA92C. Solo Artist Project: Execution and Assessment (0.5-4)

Pass/No Pass Only

Focuses on final rehearsal and presentation of an approved script or of an original work for the solo artist (actor, musician or dancer).

[CSU; UC]

THA100A. Introduction to Ensemble Play Production: Concept/Development (0.5-4)

Pass/No Pass Only

An introduction to the production of the ensemble play with an emphasis on the concept and development of script, design elements, rehearsal and performance techniques, and the ensemble itself.

THA100B. Introduction to Ensemble Play Prod. - Implementation/Practice (0.5-4)

Pass/No Pass Only

An introduction to the production of the ensemble play with an emphasis on the implementation and practice of rehearsal and production techniques.

THA100C. Introduction to Ensemble Play Prod. Execution/Assessment (0.5-4)

Pass/No Pass Only

An introduction to the production of the modern play with an emphasis on the execution of a fully realized production.

THA101. Ensemble Theatre: Modern Plays in Rehearsal (0.5-4)

Pass/No Pass Only

The rehearsal and development of the modern ensemble play, in a performance setting with an emphasis on performance and stage management.

THA102. Ensemble Theatre: Modern Plays In Performance (0.5-3)

Pass/No Pass Only

Play presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the ensemble-oriented modern play.
THA110A. Introduction to Modern Play Production: Concept and Development (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the modern play with an emphasis on the concept and development of script, design elements, and performance techniques.

THA110B. Introduction to Modern Play Production: Implementation and Practice (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the modern play with an emphasis on the implementation and practice of rehearsal and production techniques.

THA110C. Introduction to Modern Play Production: Execution and Assessment (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the musical play with an emphasis on the execution of a fully realized production.

THA120A. Introduction to Musical Theatre Prod.: Concept and Development (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the musical play with an emphasis on the concept and development of script, design elements, and performance techniques.

THA120B. Introduction to Musical Theatre Production: Implementation and Practice (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the musical with an emphasis on the implementation and practice of rehearsal and production techniques.

THA120C. Introduction to Musical Theatre Production: Execution and Assessment (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the musical with an emphasis on the execution of a fully realized production.

THA121. Musical Theatre: Modern Musicals in Rehearsal (0.5-4)  
Pass/No Pass Only  
Extensive practice in the development of the modern musical, with an emphasis on performance and stage management.

THA122. Musical Theatre: Modern Musicals In Performance (0.5-3)  
Pass/No Pass Only  
Play presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the modern musical play.

THA130A. Introduction to World Theatre Production: Concept and Development (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the world theatre play with an emphasis on the concept and development of script, design elements, rehearsal and performance techniques.

THA130B. Introduction to World Theatre Production: Implementation and Practice (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the world theatre play with an emphasis on the concept and development of script, design elements, rehearsal and performance techniques.

THA130C. Introduction to World Theatre Production: Execution and Assessment (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the world theatre play with an emphasis on the execution of a fully realized production.

THA135. World Theatre - Revival Plays in Rehearsal (0.5-4)  
Pass/No Pass Only  
Extensive practice in the development of the revival of a period world theatre play, with an emphasis on performance and stage management.

THA136. World Theatre - Revival Plays in Performance (0.5-3)  
Pass/No Pass Only  
Play presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the world theatre revival play.

THA140A. Introduction to Revival Play Production: Concept/Development (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the revival play with an emphasis on the concept and development of script, design elements, rehearsal and performance techniques, and the ensemble itself.

THA140B. Introduction to Revival Play Production: Implementation/Practice (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the revival play with an emphasis on the implementation and practice of rehearsal and production techniques.

THA140C. Introduction to Revival Play Production: Execution/Assessment (0.5-4)  
Pass/No Pass Only  
An introduction to the production of the revival play with an emphasis on the execution of a fully realized production.

THA141. The Modern Revival Play in Rehearsal (0.5-4)  
Pass/No Pass Only  
The rehearsal and development of the modern revival of a period play, with an emphasis on performance and stage management.

THA142. The Modern Revival Play in Performance (0.5-3)  
Pass/No Pass Only  
Play presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the modern revival play.

THA170. Proscenium Stage Scenic Construction (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic skills, concepts, and methods of beginning and intermediate scenic construction execution for the proscenium stage. 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 a play, musical or a series of the two.

THA172. Thrust and Three-Quarter Stage Scenic Const. (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic skills, concepts, and methods of beginning and intermediate scenic construction execution for the thrust and/or three-quarter stage. 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 a play, musical or a series of the two.

THA174. Proscenium Stage Scenic Painting and Properties Techniques (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic skills, concepts, and methods of beginning and intermediate scenic painting and properties execution for the proscenium stage. The course will cover the theater plant, theater personnel, scenic painting and properties execution, and their applications. Students will work on a series of projects which will culminate in finished scenic painting and properties execution for a play, musical or a series of the two.
THA176. Thrust and Three-Quarter Stage Scenic Painting and Properties Techniques (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic skills, concepts, and methods of beginning and intermediate scenic painting and properties execution for the thrust/three quarter stage. Covers the theater plant, theater personnel, scenic painting and properties execution, and their applications. Students will work on a series of projects which will culminate in finished scenic painting and properties execution for a play, musical or a series of the two.

THA180. Proscenium Stage Costuming Techniques (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic skills, concepts, and methods of beginning and intermediate costume construction and execution for the proscenium stage. The course will cover the theater plant, theater personnel, costume construction, and its applications. Students will work on a series of projects which will culminate in finished costume design for a play, musical or a series of the two.

THA182. Thrust and Three-Quarter Stage Costuming Techniques (0.5-6)  
Pass/No Pass Only  
This course is designed to teach the basic skills, concepts, and methods of beginning and intermediate costume construction and execution for the thrust and three-quarter stage. The course will cover the theater plant, theater personnel, costume construction and wardrobe applications. Students will work on a series of projects which will culminate in finished costumes design for a play, musical or a series of the two.

THA184. Proscenium Stage – Make Up/Hair Tech. Beg/Int. (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic techniques for the effective application of theatrical makeup and hair at the beginning and intermediate level for the proscenium stage. The student will gain a practical, working knowledge of the principles of highlighting, shadowing, and contouring the human face with makeup in a laboratory environment. 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.

THA186. Thrust & 3/4 Stage – Make-up/Hair Techniques Beg/Int (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic techniques for the effective application of theatrical makeup and hair at the beginning and intermediate level for the thrust and three-quarter stage. The student will gain a practical, working knowledge of the principles of highlighting, shadowing, and contouring the human face with makeup in a laboratory environment. 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. Dressing techniques for the thrust and three-quarter stage that calls for careful attention to acute details will also be covered. Students will work on a series of projects which will culminate in finished makeup design for a play, musical or a series of the two.

THA190. Proscenium Stage Lighting, Sound, and Rigging Techniques (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic skills, concepts, and methods of beginning and intermediate lighting, sound and rigging execution for the proscenium stage. Students will work on a series of projects which will culminate in finished lighting, 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 emphasized.

THA192. Thrust and Three-Quarter Stage Light, Sound, and Rigging Techniques (0.5-6)  
Pass/No Pass Only  
Designed to teach the basic skills, concepts, and methods of beginning and intermediate lighting, sound and rigging execution for the thrust/three quarter stage. Students will work on a series of projects which will culminate in finished lighting and sound and 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 emphasized.
WLD52. Sheet Metal Fabrication (2)
Pass/No Pass Option
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]

WLD53. Welding Fabrication (2)
Pass/No Pass Option
Prerequisite: WLD 150 or WLD 151 with a grade of "C" or better.
Lec 1 Hr; Lab 3 Hrs
Practical experience in metal fabrication, production welding and maintenance welding techniques. Study and practice in measurement, blueprint 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]

WLD54. Advanced Welding (2)
Pass/No Pass Option
Prerequisite: WLD 150 or WLD 151 with a grade of "C" or better.
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]

WLD55. Ornamental Ironwork (2)
Pass/No Pass Option
Advisory: WLD 150 (previously WLD 50) and or WLD 151 (previously WLD 51).
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.

WLD56. Toolmaking (2)
Pass/No Pass Option
Advisory: Completion of WLD 150 (previously WLD 50) and or WLD 151 (previously WLD 51)
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.
Administration and Faculty

DR. WILLARD LEWALLEN, SUPERINTENDENT/PRESIDENT

Dean of Institutional Planning and Effectiveness................................................................. Vacant

Vice President of Academic Affairs......................................................................................... Vacant
  Dean of Academic Affairs, Advanced Technology......................................................... Zahi Kanaan-Atallah
  Director of Community Collaboratives and Articulation .............................................. Molly Lewis
  Director of Agriculture Business & Technology Institute...................................................... Vacant
  Dean of Academic Affairs, South County Education Services........................................... Renata Funke
  Dean of Academic Affairs, Instructional Programs and Support....................................... Stephanie Low
  Director of The Western Stage......................................................................................... Jon Selover
  Education and Artistic Program Administrator.............................................................. Melissa Chin-Parker
  Director of Child Development Center............................................................................ Linda Taylor
  Dean of Academic Affairs, Learning Support and Resources............................................ Vacant
  Director of High School Equivalency Program............................................................... Carla Johnson
  Dean of Academic Affairs, Nursing and Allied Health Programs...................................... Vacant
  Dean of Academic Affairs, Instructional Programs and Support......................................... Vacant
  Director of Athletics........................................................................................................ Dan Teresa

Vice President of Student Affairs......................................................................................... Romero Palomo
  Dean of Student Affairs, Enrollment Services................................................................. Mary Dominguez
  Dean of Student Affairs, Student Success.......................................................................... Vacant
  Director of Student Affairs, Student Life.............................................................................. Vacant
  Director of Student Affairs, Categorical Programs............................................................ Paul Casey
  Director of SSS TRIO Program......................................................................................... Manuel Bersamin

Vice President of Administrative Services........................................................................ Al Muñoz
  Associate Vice President of Human Resources/Equal Employment Opportunity .......... Terri Pyer
  Controller.......................................................................................................................... Vacant
  Grants Manager.................................................................................................................. Sharon Alheit
  Facilities Director, Operations, Maintenance & Asset Management................................. Joseph Reyes
  Manager of Food Services.................................................................................................. Michael Cunnane

Vice President of Information and Technology Resources.............................................. Matthew Coombs
  Director of Information Technology Systems................................................................. Vacant

Executive Director of Institutional Advancement............................................................ Jaqueline Cruz
  Director of Communications............................................................................................ Vacant
  Director of Development................................................................................................. Loyanne Flinn de Guaracha
  Director of Math & Science Institute............................................................................... Andy Newton
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