HARTNELL COLLEGE

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

2012 – 2013 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.
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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

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

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OPEN ENROLLMENT

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

CLASS SCHEDULE

Guaranteed Schedule of Classes!

What does guaranteed schedule mean?
It means that every single class contained in the printed schedule is guaranteed to be offered. Current financial constraints have forced community colleges to limit their educational offerings. This schedule offers fewer classes than were offered last year but is designed to provide general education and major requirements.

Why are you doing this?
It’s our promise to you, the student, that we will do what we say we are going to do. If we say we will offer the class you need to take on Tuesday evenings at 6 p.m., and you change your schedule and your life so that you can take that class, we won’t pull it out at the last minute.

What if I’d rather take it on Wednesday mornings?
You should check the schedule to see it that is an option, as many of our courses are offered in multiple sections at different locations. But, if we guarantee Tuesday evening, sorry, that is not a guarantee for Wednesday morning.

Is this schedule final?
It is final in the sense that you can rely on the fact that every class that is contained in the printed schedule will be offered. However, we hope to be able to respond to demand by adding sections after the guaranteed sections fill.

Does that mean I could just say I want any class at any time, and you’d create a schedule just for me?
Well . . . ah . . . no! But you sound like someone who might like to check out our online courses, since there is often a bit more flexibility there. We’re not offering individualized schedules to suit everyone’s particular needs. But we ARE offering you an early opportunity to make arrangements to be able to plan your life around the schedule. You can count on this schedule.

To reserve your seat in any class for which you meet the prerequisites, register early and pay all fees before the deadline. Students who have not paid before that deadline will be dropped and the seats will be made available for other students.

For a complete listing of new classes that become available, go to http://www.hartnell.edu/academics/schedules/Activated_Sections.pdf

CLASS SCHEDULING

Day Classes
Day classes are offered from 6 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 pm.

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

Condensed Courses
Hartnell offers courses in a condensed format that can 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. The College facilities consist of the Center for Assessment and Lifelong Learning, College Center, College Annex, Child Development Center, Merrill Hall (Science), Classroom Administration Building, Library, Physical Education and Athletic facilities, Human Resources, and Performing and Visual Arts facilities.

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 10 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.

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.

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 ASHC student body card can be used as a debit card to pay for meals. 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 pm

Summer session
Monday – Thursday: 7:30 am - 2 pm

College Store

The Hartnell College Bookstore offers students a place to meet all their course materials needs as they offer new and used textbooks, a cost savings textbook rental program, general and reference books, emblematic clothing, gifts and school supplies. The bookstore is owned and operated by Follett Higher Education Group.

The bookstore also offers textbook buyback on titles with current market value. Books may be sold back during regular business hours with a valid student ID card.

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 am – 5 pm

The bookstore offers extended hours through the first two weeks of both Fall and Spring semesters. Please refer to the bookstore website for special hours: www.hartnell.bkstr.com

THE COLLEGE

VISITORS TO THE COLLEGE

Parents, the general public, and other interested persons are invited to visit the campus. Visitors should stop at the Office of the Vice President of Student Affairs located in the CALL Building 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 HCC104 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 am – 9 pm
- Friday: 8 am – 4 pm
- Saturday: 10 am – 2 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 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. Silliman. 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 Learning**

Hartnell College offers online classes and Polycom’s video-conferencing equipment for real-time interactive video and audio distant learning 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 court 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 Departments. For more information, call (831) 770-7039.

**Cultural Programs**

Hartnell College provides support for a wide range of cultural programs. A variety of performing arts activities are presented throughout the year.
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.

Initially, the Foundation’s primary focus was raising scholarship funds. Over the years, this focus broadened. In 1985, Mr. and Mrs. Villeroy Gleason bequeathed their residence in King City to the Foundation. The Foundation held its first capital campaign for the King City Education Center, raising over $600,000 towards that facility which opened in 2001. Over 1,500 students now attend classes in King City and are able to complete their AAAS degrees solely through that facility, if desired.

In 2011, the Hartnell College Foundation celebrated the successful completion of its first major comprehensive campaign, raising over $12 million. Funds have been used to revitalize the academic programs in agriculture, construction and nursing; to expand scholarships; and to support the sciences, arts, athletics, and humanities, including The Western Stage. The new Ag Business and Technology Institute has been established, followed by the Center for Sustainable Design & Construction. Nursing and health sciences have received significant support and the Foundation is working on raising funds for Phase II of the Athletics Master Plan.

In recent years, the Foundation scholarship endowment has been bolstered by numerous bequests including Eugene and Eracia Harden, Dorcas Davenport Brown, California Rodeo, Inc., Henry J. Willis, Betty Hathaway, Terezina A. Hackney, and Elmer and Dorothy Eade, Stuart F. Dufour (president emeritus), Ruth Kaiser, Kenneth Whalen and Marcos and Vivian Duran among others. The Foundation accepts gifts of cash, gifts in kind, real estate, stocks or securities, appreciated art, annuities, trusts, life income trusts; gifts in memoriam, wills and bequests. For more information on Foundation programs and planned giving, contact Jackie Cruz, Executive Director of Advancement at (831) 755-6810 or visit our website at www.hartnell.edu/foundation.

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.

En el seguimiento de estudios académicos y otros colegios que patrocinan actividades que promueven el desarrollo intelectual y personal, todos los estudiantes deberán de ser libres de discriminación ilegal por parte de cualquier miembro de la comunidad académica. (Estudiantes que sean molestados por los actos de otros estudiantes, tienen que recurrir al código de conducta estudiantil.)

Él colegió Hartnell asegura que sus programas y actividades, incluyendo empleo, están disponibles a todas las personas calificadas sin tomar en cuenta su raza, color, religión, sexo, orientación sexual, edad, incapacitado, estado civil, ascendencia, origen nacional o estado veterano.

Si el estudiante siente que ha sufrido una discriminación, acoso o represalia de alguien maestro, administrador, empleado de oficina, puede obtener una forma en la oficina del Vise-Presidente (831) 755-6822 de ayuda estudiantil para presentar su queja. La queja se necesita precitar dentro del año en el que ocurrió el incidente.

Las pólizas de colegio acerca de discriminación, acoso y represalia están de acuerdo con las leyes federales y estatales con los códigos de educación del estado de California.

SEXUAL HARASSMENT POLICY

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

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

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

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

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

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

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

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

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

Distributing literature or soliciting petition signatures at any place or time other than that designated, or in any manner other than that specified by the Vice President of Student Affairs or designee, is strictly prohibited.
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 a contrary evidence of intent.
6. manifest residency intent if the student is under 19 years of age, by both students and his/her parents maintaining a home in California continuously for the last two years, unless there is contrary evidence of intent.

If manifest intent cannot be shown within No. 5 and No. 6 above, the student is required to provide evidence of intent to make California his/her permanent home. Objective manifestations of this intent include, but are not limited to:
1. payment of California state income tax as a resident.
2. registering to vote and voting in California.
3. acquiring driver’s license.
4. obtaining a California voter registration card.
5. enrolling in and paying tuition for classes.
6. possession of permanent address in California.
7. possessing California driver’s license.
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. becoming 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.

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

Admission
An international student designee is available to assist with the school admission procedures and the required documentation for the student F-1 visa. Admission and I-20 requirements include:
1. completed International Student Application form.
2. original high school/college transcript(s), including an English translation and explanation of the grading system.
3. original score from the Test of English as a Foreign Language (TOEFL). Hartnell requires a score of 600 or higher on the paper-based test, 140 or higher on the computer-based test, or 80 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 $14,000.

The complete application packet must be on file in the International Student Office by:
- June 15 Fall Semester
- Nov. 15 Spring Semester
- April 15 Summer Session

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

The complete application packet including a copy of the student’s I-20 and transfer form must be on file by:
- June 15 Fall Semester
- Nov. 15 Spring Semester
- April 15 Summer Session

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.

Non-Residents
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).

F-1 Visa Requirement
International students must enroll in a minimum of 12.0 units by the end of each fall and spring semester. Failure to comply will result in dismissal.

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

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

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

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

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

Housing
Hartnell College does not have residential facilities on campus. The international student designee will assist students in securing accommodations, but the College is not responsible for arranging housing.

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

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 intstd@hartnell.edu to schedule an appointment, or visit our website at www.hartnell.edu/students/international
CONCURRENT ENROLLMENT

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 Services) 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 a Hartnell College counselor

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 a Hartnell College counselor

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

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

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

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 GE Certifications forwarded, enrollment verifications, and/or receive other services related to student records. Once the student has cleared the obligation with the College, the impoundment of records will be removed.

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INDEX
### 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 correlating 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: Credit for External Examinations

<table>
<thead>
<tr>
<th>Subject Exam</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>Hartnell Equivalent</td>
<td>CSU GE Area</td>
<td>CSU Units Awarded</td>
</tr>
<tr>
<td>AP Art - History of Art</td>
<td>ART 1A</td>
<td>3.0 Languages</td>
<td>C1 or C2</td>
</tr>
<tr>
<td>AP Art - Studio-Art 2D</td>
<td>None - Elective only</td>
<td>3.0 Languages</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Art - Studio- Art 3D</td>
<td>None - Elective only</td>
<td>3.0 Languages</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Art - Studio Art - Drawing</td>
<td>None - Elective only</td>
<td>3.0 Languages</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Biology</td>
<td>BIO 10 + 2 Elective</td>
<td>6.0 Science</td>
<td>B2 &amp; B3</td>
</tr>
<tr>
<td>AP Chemistry</td>
<td>CHM 1A + 1 Elective</td>
<td>6.0 Science</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP Chinese Language and Culture</td>
<td>None - Elective only</td>
<td>6.0 Languages</td>
<td>C2</td>
</tr>
<tr>
<td>AP Computer Science E4</td>
<td>CSS 2A</td>
<td>4.0 Languages</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Computer Science E5</td>
<td>CSS 2A + 2 Elective</td>
<td>6.0 Languages</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Economics - Microeconomics</td>
<td>ECO 5</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D2</td>
</tr>
<tr>
<td>AP Economics - Macroeconomics</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>ENG 1A + 3 Elective</td>
<td>6.0 Languages</td>
<td>B2 &amp; C2</td>
</tr>
<tr>
<td>AP Environmental Science</td>
<td>BIO 48 + BIO 48L</td>
<td>4.0 Science</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP French - French Language</td>
<td>FRN 1 + 1 Elective</td>
<td>6.0 Languages</td>
<td>C2</td>
</tr>
<tr>
<td>AP French - French Literature</td>
<td>None-6 Electives only</td>
<td>6.0 Languages</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Germanic Language</td>
<td>None-6 Electives only</td>
<td>6.0 Languages</td>
<td>C2</td>
</tr>
<tr>
<td>AP Government &amp; Politics: U. S.</td>
<td>POL 1</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D6 or US</td>
</tr>
<tr>
<td>AP Gov. &amp; Politics: Comparative</td>
<td>POL 2</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D8</td>
</tr>
<tr>
<td>AP History - European History</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>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>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>None- Elective Only</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D5</td>
</tr>
<tr>
<td>AP Japanese Language and Culture</td>
<td>JPN 10 + 1 Elective</td>
<td>6.0 Languages</td>
<td>C2</td>
</tr>
<tr>
<td>AP Latin - Latin Literature</td>
<td>None - Elective Only</td>
<td>6.0 Languages</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Latin - Vergil</td>
<td>None - Elective Only</td>
<td>3.0 Languages</td>
<td>C2</td>
</tr>
<tr>
<td>AP Math Statistics</td>
<td>MAT 13</td>
<td>5.0 Languages</td>
<td>B4</td>
</tr>
<tr>
<td>AP Math (Calculus AB)4</td>
<td>MAT 3A</td>
<td>4.0 Languages</td>
<td>B4</td>
</tr>
<tr>
<td>AP Math (Calculus BC)</td>
<td>MAT 3A</td>
<td>4.0 Languages</td>
<td>B4</td>
</tr>
<tr>
<td>AP Math (Calculus BC/AB) Subscore4</td>
<td>None - Elective Only</td>
<td>3.0 Languages</td>
<td>B2</td>
</tr>
<tr>
<td>AP Music - Theory</td>
<td>MUS 50A + 3 Electives</td>
<td>6.0 Languages</td>
<td>n/a</td>
</tr>
<tr>
<td>AP Physics B4</td>
<td>PHY 2A + 2 Electives</td>
<td>6.0 Science</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP Physics C4 (Mechanics)</td>
<td>PHY 4A</td>
<td>4.0 Science</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP Physics C5 (Electricity &amp; Magnets)</td>
<td>None-Elective Only</td>
<td>4.0 Science</td>
<td>B1 &amp; B3</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>PSY 2</td>
<td>3.0 Soc. &amp; Beh.</td>
<td>D9</td>
</tr>
<tr>
<td>AP Spanish - Spanish Language</td>
<td>SPA 1, 1S or 1X + 1 Elective</td>
<td>6.0 Languages</td>
<td>C2</td>
</tr>
<tr>
<td>AP Spanish - Spanish Literature</td>
<td>None-Elective Only</td>
<td>6.0 Languages</td>
<td>C2</td>
</tr>
</tbody>
</table>
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.

If 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.

Note: The Term Elective(s) means units

<table>
<thead>
<tr>
<th>Subject Exam</th>
<th>Minimum Score</th>
<th>Hartnell Equivalent</th>
<th>Associated Area</th>
<th>CSU GE Area</th>
<th>CSU Units Awarded</th>
<th>IGETC Area</th>
<th>IGETC Units Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5</td>
<td>3.0 GE Nat. Sci.</td>
<td>B2</td>
<td>3.0 GE + 3 Electives</td>
<td>5-Bio/Env Lab</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>3.0 GE Nat. Sci.</td>
<td>B1</td>
<td>3.0 GE + 3 Electives</td>
<td>5-Phy/Env Lab</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>5</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>D2</td>
<td>3.0 GE + 3 Electives</td>
<td>4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>5</td>
<td>3.0 GE Nat Sci. or Soc. &amp; Beh.</td>
<td>D5</td>
<td>3.0 GE + 3 Electives</td>
<td>4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>5</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>C2 or D6</td>
<td>3.0 GE + 3 Electives</td>
<td>3 or 4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Language A1 (any language) HL</td>
<td>4-4A or CSU/ 5-IGETC</td>
<td>5.0 GE 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</td>
<td>4-4A or CSU/ 5-IGETC</td>
<td>5.0 GE 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>4-4A or CSU/ 5-IGETC</td>
<td>5.0 GE Lang. &amp; Rat. or Humanities</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>LOTE</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>5</td>
<td>3.0 GE Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE + 3 Electives</td>
<td>2</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Physics HL</td>
<td>5</td>
<td>3.0 GE Nat. Sci.</td>
<td>B1</td>
<td>3.0 GE + 3 Electives</td>
<td>5-Bio/Env Lab</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Psychology HL</td>
<td>5</td>
<td>3.0 GE 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>4-4A or CSU/ 5-IGETC</td>
<td>3.0 GE 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>Associated Area</th>
<th>CSU GE Area</th>
<th>CSU Units Awarded</th>
<th>IGETC Area</th>
<th>IGETC Units Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>D8</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>3.0 GE Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Analyzing and Interpreting Lit.</td>
<td>50</td>
<td>3.0 GE Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>3.0 GE Nat. Sci.</td>
<td>B2</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>3.0 GE Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>50</td>
<td>3.0 GE Nat. Sci.</td>
<td>B1</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>3.0 GE Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>College Algebra-Trigonometry</td>
<td>50</td>
<td>3.0 GE Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
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<tr>
<td>English Literature</td>
<td>50</td>
<td>3.0 GE Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Financial Accounting</td>
<td>50</td>
<td>3.0 GE Electives</td>
<td>Lang. &amp; Rat.</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>French I Level I</td>
<td>50</td>
<td>5.0 GE Humanities</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>n/a</td>
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<td></td>
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<tr>
<td>French II Level II</td>
<td>50</td>
<td>5.0 GE Humanities</td>
<td>B2</td>
<td>3.0 GE + 12 Electives</td>
<td>n/a</td>
<td>n/a</td>
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</tr>
<tr>
<td>German I Level I</td>
<td>50</td>
<td>5.0 GE Humanities</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>German II Level II</td>
<td>60</td>
<td>5.0 GE Humanities</td>
<td>C2</td>
<td>3.0 GE + 12 Electives</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
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<tr>
<td>History, United States I</td>
<td>50</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>D6 + US 1</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>History, United States II</td>
<td>50</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>D6 + US 1</td>
<td>3.0 GE</td>
<td>n/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 Soc. &amp; Beh.</td>
<td>E</td>
<td>3.0 GE</td>
<td>n/a</td>
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<tr>
<td>Humanities</td>
<td>50</td>
<td>3.0 GE Humanities</td>
<td>C2</td>
<td>3.0 GE</td>
<td>n/a</td>
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<td></td>
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<tr>
<td>Info Systems and Computer Applications</td>
<td>50</td>
<td>3.0 Electives</td>
<td>Lang. &amp; Rat.</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Intro Business Law</td>
<td>50</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Intro Psychology</td>
<td>50</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>D9</td>
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<tr>
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<td>D0</td>
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<td>n/a</td>
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<td>Natural Sciences</td>
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<td>B1 or B2</td>
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<td>Pre-Calculus</td>
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<td>3.0 GE Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
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<td>Principles of Accounting</td>
<td>50</td>
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<td>n/a</td>
<td>3.0 Electives</td>
<td>n/a</td>
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<td></td>
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<tr>
<td>Principles of Accounting</td>
<td>50</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>D2</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
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<tr>
<td>Principles of Management</td>
<td>50</td>
<td>3.0 Electives</td>
<td>n/a</td>
<td>3.0 Electives</td>
<td>n/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>3.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>n/a</td>
<td>6.0 Electives</td>
<td>n/a</td>
<td>n/a</td>
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<td>50</td>
<td>5.0 GE Humanities</td>
<td>n/a</td>
<td>3.0 Electives</td>
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<td>n/a</td>
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<td>63</td>
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<td>C2</td>
<td>3.0 GE + 12 Electives</td>
<td>n/a</td>
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<tr>
<td>Trigonometry</td>
<td>50</td>
<td>3.0 GE Lang. &amp; Rat.</td>
<td>B4</td>
<td>3.0 GE</td>
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<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>C2 or D6</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>3.0 GE Soc. &amp; Beh.</td>
<td>D6</td>
<td>3.0 GE</td>
<td>n/a</td>
<td>n/a</td>
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</table>

Note: The Term Elective(s) means units

1 These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area.

2 Areas of California State University-General Education (CSU-GE) Breadth (A1 through E)

3 Areas of Intersegmental General Education Transfer Curriculum (IGETC) (1 through 6)

4 If a student passes more than one AP exam in Calculus or computer science, only one examination may be applied to CSU baccalaureate.

5 If 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.
SERVICES 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 Coast Guard Institute: [www.uscg.mil/hq/cgi/Resources/Institute_Forms/CG_form_1564.html](http://www.uscg.mil/hq/cgi/Resources/Institute_Forms/CG_form_1564.html)

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 any one of these methods: by US mail, by email, or by phone approximately 2–3 weeks prior to registration starting.

Continuing students may register using PAWS online registration [www.hartnell.edu](http://www.hartnell.edu) or ASAP* Phone Registration at (831) 755-6755.

Students who miss a registration appointment time may register any day after until the Saturday 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](http://www.hartnell.edu) or ASAP* Phone Registration at (831) 755-6755.

Students who miss a registration appointment time may register any day after until the Saturday at noon before the semester begins, or for short courses, up until the day before 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.
Steps to Enroll at Hartnell College

STEP 1
a) Complete and submit an Application for Admission. Apply online at www.hartnell.edu or complete the Application available in the schedule of classes or from the Admission’s & Records Office. Mail, fax, or submit the application in person to the Admissions & Records Office, in the CALL Building.
b) If needed, apply NOW for Financial Aid. Apply online at www.fafsa.ed.gov for federal grants. For enrollment fees only, complete the BOGFW application in the schedule of classes and mail, fax, or submit the form to the Financial Aid Office. For more information, call the Financial Aid Office at (831) 755-6806.

STEP 2
Submit other college/university official transcripts to Admissions & Records Office at least two weeks before registering. Check for prerequisites for all your classes. See a counselor for a Prerequisite Clearance Form. Prerequisite Clearance Forms may take two working days to process, so plan ahead!

STEP 3
a) Make an appointment AND complete the STAAR* Assessment. Call (831) 759-6054 for an appointment at least two weeks before registering.
b) Hartnell highly recommends students attend an Orientation session. Please contact the Counseling Office at (831) 755-6820 to schedule an Orientation session.

STEP 4
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. Bring copies of official transcripts from high school and/or colleges attended.

STEP 5
Register online at www.hartnell.edu and click PAWS for Students or register using ASAP* Telephone Registration at (831) 755-6755. Classes fill quickly so register as early as possible.

STEP 6
Pay all registration fees online or by phone by the deadline dates printed in the current semesters Schedule of Classes to avoid being dropped for non-payment.

STEP 7
Obtain or update your Student ID Card. Present your receipt of payment to the ASHC Office HCC104.

STEP 8
Follow up with your counselor and/or check your eligibility for Special Student Services Programs. Call (831) 755-6820 early in the semester to check on your current progress and/or to develop a comprehensive educational plan.

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. Copies of the schedule are available in the Admissions & Records Office. In addition to the schedule of classes, students may also access the schedule of classes on the Hartnell website at www.hartnell.edu. 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.

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
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 2012-2013 academic year has been set at $179 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 $225 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 Residence Requirements for Admissions section of this catalog. Further information concerning tuition and special circumstances for determining California residency is available at the Admissions & Records Office.

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

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

Student 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 Free Fare Zone, free access to Hartnell’s Western Stage Regular Season performances, Monterey Bay Aquarium, etc.

Photo identification is required when you use many 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 100%Refund if Withdrawal Scheduled:
4-week session completed by the end of
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
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
Hartnell College **REQUIRES** students to complete prerequisites as pre-enrollment preparation. Prerequisites listed in the College Catalog/Schedule include:

1. courses for which a specific prerequisite has been established;
2. sequential course work in a degree-applicable program, and;
3. courses in which an equivalent prerequisite exists at a four-year transfer college or university.

### 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**. 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.
2. Student and counselor both sign the **Prerequisite Clearance Form**.
3. Unofficial transcripts, official transcripts or assessment scores are attached to the Prerequisite Clearance form.

   A. If the prerequisite clearance 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.

### 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)

All Prerequisite Clearance Forms require two-working days to process. Students will be able to register by PAWS Web Registration or ASAP* Telephone 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.
4. The College has not developed the prerequisite according to its established procedures or has not developed the prerequisite in accord with existing statues.

Prerequisite Challenge Forms are to be filed with the appropriate Dean and/or Vice President. Those specifying criteria are to be filed with the appropriate Dean and/or Vice President of the area in which the course is taught. The appropriate Dean and/or Vice President will review documentation provided and render a decision. If approved, the students will be notified to take the approved Prerequisite Challenge form to the Admissions & Records Office to enroll in the challenged class.

If disapproved, the appropriate Dean and/or Vice President will discuss his/her decision with the student.
STUDENT SERVICES

Student Services 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 Services is a leader and catalyst for action and change within the Hartnell Community College District.

Counseling and Guidance

Professional counseling and guidance 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. 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, 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 CALL129 (Center for Assessment and Lifelong Learning Building) or call (831) 755-6820.

STUDENT DEVELOPMENT SERVICES

Matriculation

Matriculation is a process designed to support and encourage student success, and it also ensures fair and consistent assessment, course placement, and equal access to campus resources. Matriculation brings the college and the student into an agreement for the purpose of realizing the student’s 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 the process unless there are specific exemptions. 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 it also ensures fair and consistent assessment, course placement, and equal access to campus resources. Matriculation brings the college and the student into an agreement for the purpose of realizing the student’s 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 the process unless there are specific exemptions. 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.

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

There are several components of the matriculation process. The activities for pre-enrollment services have come to be known by the acronym, STAAR* - Success Through Assessment/orientation, Advisement and Registration. These early matriculation components are crucial to student success. The matriculation “partnership” begins when a student submits an Application for Admission. This form is available in each semester’s Schedule of Classes. (For additional information on the Admissions process, see the Admissions section of the Hartnell College Catalog.) It is also available online at www.hartnell.edu.

FREQUENTLY ASKED QUESTIONS (FAQS)

WHAT IS 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.

Who has to take the placement assessment?

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

- students enrolling in less than 6 units, not related to English, ESL, or Math OR for courses for which an English, ESL or Math prerequisite has been established.
- 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 three years and have presented a copy of these scores to a Hartnell College counselor for review and documentation;
- 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 and/or Math (Calculus AP).
**STUDENT SERVICES**

Who has to complete Orientation?
All new students are highly recommended to attend Orientation EXCEPT:

- students who have earned an AA/AS or more advanced degree;
- students who are enrolling in less than 6 units;
- students who have a goal of "personal interest" only;
- students who have completed an orientation at Hartnell or at another college or university.

I think I may be exempt from having to take Orientation. What should I do?
See a counselor and work with the counselor to complete a Prerequisite Clearance form. When you meet with the counselor, be sure to bring any relevant documentation with you.

Should I see a Counselor?
Yes! All students are encouraged to schedule an appointment with a counselor for educational planning, course selection, career development, major selection, individual counseling, personal development, connecting to other services, and referral programs on and off campus. To schedule an appointment with a counselor, call (831) 755-6820.

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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 CALL110. The STAAR Assessment is generally offered Monday through Friday and some Saturdays. The placement assessment is by appointment only. To make a STAAR Assessment Appointment, call (831) 755-6054.

What do I need to bring with me when I take the placement assessment?
You will not be tested unless you have a photo identification, such as a driver’s license or an ID card.

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

Can I take the placement assessment more than once?
Students may take the placement assessment a second time under the following conditions:
1. at least 14 days have passed since the first test (to allow for extra preparation and study),
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.

What if I want to take the placement assessment a third time?
In order to take the placement assessment a third time, you must meet with the Vice President ofStudent Affairs and a counselor. You may make an appointment with the Vice President by calling (831) 755-6822.

I’m a high school student. May I take the placement assessment at my high school?
The placement assessment is usually offered at local high schools as part of Hartnell’s K-16 Program each spring. Check with your high school counselor about the dates and availability.

Do I need to bring my high school transcripts to my counseling appointment?
Yes! Transcripts are essential in education planning with your counselor. However, high school classes cannot be used to meet prerequisites for college-level courses.

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

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How long is my placement assessment valid?
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 Assessment Center staff has materials and sample questions to help you prepare. The materials and sample questions are available free of charge and can be picked up at the Assessment Center. 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.

How long does it take for the placement assessment?
Most placement assessments take approximately two hours; however, there is no time limit.

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 do I receive the results of the placement assessment?
A printed copy of your scores is available immediately upon completion of the placement assessment. Counselors and the Assessment Center staff will also have access to your results.

When I complete the placement assessment what is the next step?
The next step is to enroll in and complete an Orientation session.

What is an Orientation?
Orientation is designed specifically to help students succeed in college. Orientation provides important information on Hartnell policies, procedures, academic requirements, educational costs, student support services, college success techniques and strategies, and other important topics. Upon the completion of Orientation, students will have knowledge of general education, college policies, university transfer requirements, and certificate and degree requirements.

Who should complete Orientation?
All new Hartnell College students should enroll and complete the Orientation before or during their first semester.

There are two ways to complete the Orientation:
1. Call for an Orientation appointment at (831) 755-6820. Orientations are being held during the day, evening, and some weekends. Sessions are offered at the Main Campus, Alisal Campus, and King City Center.
2. Complete the online version. Online Orientation can be found at www.hartnell.edu/orientation
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.

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 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/Career Center
The Transfer Center/Career Center provides information and offers workshops on choosing a college, transfer admission requirements, completing admission applications, writing the application essay, and financial aid. Transfer Center/Career Center staff can provide details about special Transfer Admission Agreements that Hartnell has developed with a number of four-year institutions that can guarantee students transfer admission. Students with a clear transfer objective are more likely to meet transfer requirements in a timely manner. They can make the best use of their time and course work by deciding on a transfer institution and major as soon as possible. Students unable to make these decisions when they enter Hartnell College may follow a general transfer pattern of courses while availing themselves of Transfer Center/Career Center resources in making transfer plans.

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

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

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 their major as a junior. Check with a Hartnell Counselor regarding Major Preparation Recommendations for your particular program and institution selection.

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

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

The Transfer Center/Career Center and Counseling Department sponsors Transfer Day/College Night each Fall. Call (831) 759-6007 to schedule an appointment with the Transfer counselor.

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.
STUDENT FINANCIAL AID

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

Students are encouraged to call or visit the Financial Aid Office (FAO) which is located in the CALL Building, 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 2012-2013 year awards will range from $607-$5550.

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) will become eligible to participate in the BOG Fee Waiver program on January 1, 2013. A special application form will be available for this purpose, on or before January 1, 2013.

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

Cal Grants (A, B, and C)
The State of California, through the Student Aid Commission, offers and administers several grant programs for undergraduate students. These include Cal Grant, A, B, and C. A student can receive only one type of Cal Grant.
Cal Grant A: To be used at a four-year university.
Cal Grant B: First year students attending two or four-year institutions.
Cal Grant C: Students enrolled in a vocational two-year program.

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 guarantee of employment.

Additional information can be found at www.hartnell.edu/financial_aid.

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

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

Quantitative Standard
Students must complete a certain percentage of units attempted in order to make progress toward their goal. Students must have completed at least 67% of their cumulative units attempted. NOTE: Attempted units are defined as any units you remain enrolled in after the add/drop period each semester and appears on your transcript.

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

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

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 AVAS 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 an 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 2012-2013, 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, financial need, scholastic 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

Cooperative Agencies Resources for Education (CARE)
As a supplemental component of EOPS, CARE provides educational support services designed for the academically under-prepared, low income and single parent population. Grants and allowances for educationally related expenses (such as meals on campus, parking permits, bus passes, 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.

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

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.

The Hartnell College EOPS 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;

The Eureka California Career Information System, available through the Web. Hartnell College Career Center, provides up-to-date computerized labor market and educational information.

For more information, call the Career Center at (831) 755-6007.

Transfer Center/Career Center
The Transfer Center/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 Transfer Center/Career Center, provides up-to-date computerized labor market and educational information.

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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 the College Center Annex, Room 110. 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.)

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 the CALL Building, Room 107 or call (831) 755-6760.

For Adaptive PE, contact Melissa Stave in PE144 or (831) 755-6876 or email at mstave@hartnell.edu.

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

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 inststud@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 CALL110, or call (831) 755-6806.

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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:

- be educationally disadvantaged
- be interested in transferring to a four-year institution;
- have an academic need and a GPA of 2.0 or higher; and
- be a US citizen or legal resident;
- be eligible to take Math 121 (Elementary Algebra) or higher-level math;
- have attended federally designated high school;
- be under 24 years of age;
- 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
- be a first-generation college student.

For more information and/or an appointment, call, email, or stop by the TRIO Student Study Center located in the College Annex Room 113, (831) 759-6013.

Director: Manuel Bersamin
e-mail: mbersami@hartnell.edu
Clerical Assistant: Eva Diaz
e-mail: ediaz@hartnell.edu
Counselor: Norm Nichols
e-mail: nnichols@hartnell.edu
Counselor: Nancy Villicana
e-mail: 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 Merrill Hall may be rented at the Cashier’s Office in the CALL Building.

LOST & FOUND

Found articles should be turned in to Campus Security (HCC135) or the mailroom located next to the Cashier’s Office in the CALL Building. Lost articles can be claimed in the mailroom in the CALL Building.

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 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 the College Center, HCC101A. 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, HCC101 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
- Tuition waivers for students who qualify
- Work-Study Eligible
- GAIN Participants
- Board of Governors Fee Waiver
- Eligible for EOPS
- Under 24 years old and living independently
- First-generation college student
- Under 24 years old and living independently
- Began with math assessment below MAT121

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:

- First-generation college student
- Under 24 years old and living independently
- Began with math assessment below MAT121

Financial Criteria:

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

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, an “A” in a class worth three units, a “C” in a class worth two units, an “F” in a class worth three units, and a “B” in a class worth one unit would have a GPA (Grade Point Average) of 2.38, calculated as follows:

| 4 units of B x 3 points | = 12 grade points |
| 3 units of A x 4 points | = 12 grade points |
| 2 units of C x 2 points | = 4 grade points |
| 3 units of F x 0 points | = 4 grade points |
| 1 unit of B x 3 points  | = 3 grade points |
| 13 total units attempted| = 31 total grade points |

31 Grade Points = 2.38 Average (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" is made up or the time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed. The "I" must be made up no later than the last class day of the semester following the one in which the "I" grade was assigned; otherwise, the in lieu grade will automatically be entered on the transcript. Students may not register for the same course in order to make up the incomplete work. The "I" symbol shall not be used in calculating units attempted nor for grade points. The student may petition the instructor for a time extension (one additional semester only) due to extenuating circumstances.

Withdrawal (Symbol "W")
Students' withdrawal from a class or classes shall be authorized through the last day of the 14th week (or 75%) of the instructional term. No "W" will be given after the 14th week. After the fourteenth week, the only grades given will be "A," "B," "C," "D," "F," "NP," or "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, 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. Call the ASAP* (Admissions Services Available by Phone) at (831) 755-6755 to hear their grades.
2. Access PAWS for students at www.hartnell.edu. Students may print their own grade reports.
3. Stop by the Admissions & Records Office with a picture ID to obtain a printed copy of semester grades.

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.

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Hartnell Transcripts
Upo...
Grade Change Policy

The determination of a student's grade by the instructor will be final in the absence of mistake, fraud, bad faith, or incompetency. Grades cannot be changed by retaking examinations or submitting additional coursework after the semester is completed unless an incomplete grade has been issued.

Students should submit a request in writing directly to the faculty member within one year after completing the course for which the grade change is being requested. If the faculty member is not available, the request should be submitted through the appropriate Vice President; however, only the faculty member that assigned the original grade may authorize a change of grade.

Grade Change Petitions must be hand-delivered by the instructor or appropriate Associate Vice President to the Admissions & Records Office for processing.

Note: Except in the cases of mistake, fraud, bad faith, or incompetency, a grade assigned by an instructor is not a grievable issue as described by the California Education Code (Section 76224): "... when grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, and in the absence of mistake, fraud, bad faith, or incompetency, shall be final."

Academic Renewal Procedures

A student who wishes to qualify for a degree, certificate, or General Ed Certification may request that up to 30 semester units of substandard course work taken at Hartnell may be disregarded in grade point computation.

Approval of the request is subject to the following conditions:

1. The student completes and submits a written Academic Renewal Student Petition form to a counselor who verifies that the following conditions have been met:
   a. The work completed in the term(s) under consideration is substandard and not representative of present scholastic ability and level of performance.
   b. 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.
   c. Two years (4 semesters, excluding summer) have elapsed since the most recent work to be disregarded was completed.
   d. The student has completed 30 semester units leading to a certificate, associate degree, or university transfer requirements at Hartnell with at least a 2.5 GPA since the end of the term to be disregarded. Work completed at another institution cannot be used to satisfy this requirement.

2. The petition is then submitted to the Admissions & Records Manager for approval or disapproval.

If the request is approved, the student’s permanent record will be annotated to indicate that the discounted courses do not apply toward the degree, certificate, or General Ed Certification requirements concerned. However, all work remains on the record. This policy only applies to Hartnell degree requirements and it may not be accepted at other institutions.

Repetition of Courses

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.
Auditing Classes

The Governing Board of Hartnell College has adopted a policy authorizing the auditing of courses pursuant to Education Code 72252.3. The following regulations have been developed for course audit.

General Regulations

1. Auditors must be eligible for admission to the College as regularly enrolled students.
2. Students may audit a designated course only if they have previously taken the course and received a passing grade or must have repeated a performance, skill, or activity course three times, the maximum number permitted by state regulations.
3. Auditors are required to attend the first class meeting. However, auditors will only be permitted to register for the course at the add/drop period and on a space-available basis.
4. Faculty members instructing audit-eligible courses have the right to refuse auditors.
5. No transcript of record will be maintained for audit classes.
6. No transfer from audit to credit status or the reverse will be permitted.
7. A non-refundable audit fee of $15 per unit payable at the time of enrollment as an auditor.
8. Students enrolled in ten or more credit units will not be charged a fee for auditing three or fewer units per semester.
9. Regular material fees and/or course costs will be charged to auditors.
10. Auditors will be allowed to purchase parking permits.
11. Auditors will not be charged the regular Enrollment Fee which is paid for credit enrollment. (Step 11 should be combined with Step 7)
12. 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 during the add/drop period.
2. If the instructor approves, s/he signs the form.
3. The auditor then secures the signature of an appropriate Associate Vice President.
4. The auditor returns the completed petition to Admission and Records.
5. The auditor pays a non-refundable audit fee of $15 per unit payable at the Cashier’s Office and will be charged for all instructional materials.

Credit by Examination

As authorized by the Administrative Code, Title V, Section 55753, credit by examination may be granted based on the following:

1. Students petitioning for Credit by Examination must have completed a minimum of six semester units at Hartnell College. Students must have a cumulative grade point average of 2.0 or better.
2. Cooperatively working with the current instructor of record, the student will complete the Credit by Examination form and obtain appropriate signatures from the instructor and appropriate Dean/Associate VP of department. The instructor and the appropriate Vice President must approve the Petition for Credit by Examination.
3. A Completed Petition for Credit by Examination must be submitted to The Office of Instruction to receive college credit for a course listed in the College Catalog. The petition must indicate the experience that has prepared the student to take the examination.
4. Students must meet all course prerequisites.
5. Students must pay all fees associated with this Credit by Examination.

A student will not be permitted to challenge a course in which she/he was enrolled in the current or preceding semester.

The grade earned on the examination will be entered on the student’s permanent transcript and clearly annotated to reflect that credit was earned by examination. An examination may not be repeated.

The examination may be written, oral, and/or demonstrative/ manipulative.

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.

Units from challenged courses do NOT count toward the college’s graduation residence requirements, selective service deferment, veterans’ or social security benefits, financial aid, or scholastic honors.

The student will be charged the same per-unit fee for her/his residency status as for any other course.

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 more 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.

PROBATION AND DISMISSAL

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. Students who have 12 units or more attempted, due to entries of "W," "I," and "NP" will be placed on academic probation.
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 pattern. For example, the student's enrollment pattern for two consecutive semesters of 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%.

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.

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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.
4. Once a waiver is approved, the student will be allowed to register in basic skills classes up to the maximum unit limit approved.
   If the waiver is denied, the counselor shall refer the student to appropriate adult education programs or community services.

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

STUDENT CONDUCT and DUE PROCESS

Student Rights

In joining the academic community, students enjoy the right of freedom to learn and share responsibility in exercising that freedom. Students, as well as other members of the academic community, are expected to conduct themselves in accordance with the standards of the College which are designed to perpetuate its educational purposes.

When a student is charged with misconduct, such a charge will be processed in accordance with the College’s Student Conduct and Due Process Policy in order to protect the student’s rights and the College’s interest. Copies of the Students’ Rights, Responsibilities, and Grievance Procedures are available from the Office of Student Affairs and on Hartnell’s website.

Privacy Rights of Students

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

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

2. Degrees, awards, and scholarships received by students, including honors and President’s or Dean’s List recognition.

3. Names, addresses, phone and fax numbers of graduates and former students for publication in the College alumni directory and only with their consent.

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

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

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

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

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

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 prejudicial or capricious decisions in the academic evaluation of a student’s performance.

4. Other complaints as determined and defined by 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 footwear.

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

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

1. In-class cheating: During an examination or on any work for which the student will receive a grade or points, unauthorized looking at or procuring information from any unauthorized sources or from any other student’s work.

2. Out-of-class cheating: unauthorized acquisition, reading or knowledge of test questions prior to the testing date and time; changing any portion of a returned graded test or report and resubmitting as original work to be regraded; or presenting the work of another as one’s own for a grade of points.

3. Plagiarism: unauthorized use of expression of ideas from either published or unpublished work(s) as a student’s own work for a grade in a class. This also includes the violation of copyright laws, including copying of software packages.

4. Furnishing false information: forgery, falsification, alteration, or misuse of College documents, records, or identification in class or in laboratory situations.

Instructor Disciplinary Action When Cheating/Plagiarism Occurs

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

1. Issue an oral or written notification and warn the student that further acts of this sort will result in additional disciplinary action.

2. Issue a “NP” or a failing grade (“F”) for the assignment in question. The faculty will refer the case to the Vice President of 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, s/he should contact the Vice President of Student Affairs within five working days of notification of the disciplinary action.

Hartnell College Catalog/2012-13
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 disgraces 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., obstruction or disruptions of 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.
JOIN THE ALUMNI ASSOCIATION

Now on Web Site

http://www.hartnell.edu/alumni

Keep in touch. Register now to stay involved and keep up to date with Hartnell’s progress and events. You will receive the Foundation Newsletter with campus happenings. View our Alumni Success Stories at http://www.hartnell.edu/alumni/success_stories.html. If you would like to submit your story, please call us at (831) 755-6810.

For news from the Hartnell College Foundation, visit: www.hartnell.edu/foundation. Alumni may make donations to Hartnell by visiting the web site, by telephone at (831) 755-6810, or at giving@hartnell.edu.

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 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.
TUTORIAL CENTER

Tutoring Services are available to all registered students free of charge. Tutors 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 are encouraged to apply in the Annex. Questions may be asked in person or by calling (831) 755-6815.

Computer Center

The Computer Center, located in CAB 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.

Language Lab

The Language Lab, located in CAB 359A, 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.

Tutorial Center

Tutoring services are available to all registered students free of charge. Tutors 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 are encouraged to apply in the Annex. Questions may be asked in person or by calling (831) 755-6815.

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 PE114 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
PE 106
rgivens@hartnell.edu

Joanne Venegas – Eligibility Assistant
(831) 755-6830
PE 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, wall climbing, and an athletic training room.
### HARTNELL COLLEGE DEGREES AND CERTIFICATES

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

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

Not all courses required for listed programs may be offered during this catalog cycle. Please contact a counselor for current Information (831) 755-6820.
GENERAL INFORMATION - 2012-2013 Graduation Requirements for the Associate Degree

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

- 3.25 - 3.49 cum laude
- 3.50 - 3.74 magna cum laude
- 3.75 - 4.00 summa cum laude

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

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

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

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

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

PROGRAM DISCONTINUANCE
In order to maintain academic programs that meet current community and industry demands, programs are reviewed on a regular basis. If a program is found to not meet current community and industry demands and is therefore discontinued, the College will provide students the opportunity to complete the remaining required major coursework if the students

a. have a declared major associated with the program; and
b. 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 coursework 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 MAT 123 (5 units) or completion of any math course in which MAT 123 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.

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 41 of this catalog for additional information.

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## ASSOCIATE DEGREE REQUIREMENTS

### ASSOCIATE DEGREE GENERAL EDUCATION COURSE LIST 2012-2013

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

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- ART1B Art History Survey II
- ART1AW Women in Art
- ART3 Drawing and Composition
- ART10 Art Appreciation
- ART12A Design
- ART15A Ceramics A
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- ENG17 The Contemporary Shakespeare
- ENG22 Studies in Poetry
- ENG23 The Short Story
- ENG26 Chicano Literature
- ENG31 Beginning Creative Writing
- ENG32 Intermediate Creative Writing
- ENG33 Advanced Creative Writing
- ENG41 Art of Steinbeck
- ENG44A World Literature I
- ENG44B World Literature II
- ENG46A Survey of British Literature I
- ENG46B Survey of British Literature II
- ENG47A Survey of American Literature I
- ENG47B Survey of American Literature II
- ENG50 Film Appreciation to 1960
- ENG51 Film Appreciation 1960 to the Present

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- ETH12 Chicana Cinema
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- MUS29.5 Symphonic Band-21st Century Emphasis
- MUS34.1 Symphony Orchestra-18th Century Emphasis
- MUS34.2 Symphony Orchestra-19th Century Emphasis
- MUS34.3 Symphony Orchestra-20th Century Emphasis
- MUS34.4 Symphony Orchestra-20th Century “POPS” Emphasis
- MUS50A Harmony I
- MUS50B Harmony II
- MUS52A Harmony III
- MUS52B Harmony IV

### PHL
- PHL2 Introduction to Philosophy
- PHL6 Introduction to Philosophy: Greek to Medieval Period
- PHL8 Introduction to Philosophy: Renaissance to the Twentieth Century
- PHL10 Ethics

### PHO
- PHO1 Introduction to Photography
- PHO2 Beginning Black and White Photography
- PHO4 Portfolio Photography

### SPA
- 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
- SPA35 Literatura chicana

### THA
- THA1 Introduction to Theatre
- THA3 History of Theatre
- THA18 Voice and Diction
- THA110A Intro to Modern Play Production: Concept and Development
- THA122 Musical Theatre: Modern Musicals In Performance
- THA123 Musical Theatre: The Ensemble Musical In Rehearsal
- THA142 The Modern Revival Play In Performance
- THA170 Proscenium Stage Scenic Construction
- THA172 Thrust and Three-Quarter Stage Scenic Construction
- THA180 Proscenium Stage Costuming Techniques
- THA182 Thrust and Three-Quarter Stage Costuming Techniques
- THA190 Proscenium Stage Lighting, Sound and Rigging Techniques
- THA192 Thrust & Three-Quarter Stage, Light, Sound and Rigging Techniques
## ASSOCIATE DEGREE REQUIREMENTS

### ETHNIC GROUPS IN THE UNITED STATES (3 Units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT10</td>
<td>California Indians</td>
</tr>
<tr>
<td>ANT15</td>
<td>North American Indians</td>
</tr>
<tr>
<td>AOD4</td>
<td>Counseling Diverse Populations</td>
</tr>
<tr>
<td>COM35</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>COU35</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>ECE53</td>
<td>Teaching in a Diverse Society</td>
</tr>
<tr>
<td>EDU 1</td>
<td>Multicultural Perspectives in Education</td>
</tr>
<tr>
<td>ENG1A</td>
<td>College Composition and Reading/Multicultural Perspective*</td>
</tr>
<tr>
<td>ENG1B</td>
<td>College Composition and Reading/Multicultural Perspective</td>
</tr>
<tr>
<td>ETH1</td>
<td>Introduction to Ethnic Studies</td>
</tr>
<tr>
<td>ETH2</td>
<td>Chicano Leadership</td>
</tr>
<tr>
<td>ETH3</td>
<td>Chicano in American Society</td>
</tr>
<tr>
<td>ETH4</td>
<td>Chicano Culture</td>
</tr>
<tr>
<td>ETH6</td>
<td>La Chicana</td>
</tr>
<tr>
<td>ETH12</td>
<td>Chicano Cinema</td>
</tr>
<tr>
<td>ETH25</td>
<td>American Indian Literature</td>
</tr>
<tr>
<td>HED6</td>
<td>Multicultural Health Beliefs</td>
</tr>
<tr>
<td>HIS10</td>
<td>History of California</td>
</tr>
<tr>
<td>HIS40</td>
<td>History of Women in the US</td>
</tr>
<tr>
<td>HIS46A</td>
<td>Race and Ethnicity in American History A</td>
</tr>
<tr>
<td>HIS46B</td>
<td>Race and Ethnicity in American History B</td>
</tr>
<tr>
<td>HIS48</td>
<td>African-American History and Culture</td>
</tr>
<tr>
<td>HIS49A</td>
<td>Chicano History A</td>
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<tr>
<td>HIS49B</td>
<td>Chicano History B</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>SOC42</td>
<td>The Sociology of Minority Relations</td>
</tr>
<tr>
<td>SPA35</td>
<td>Literatura chicana</td>
</tr>
</tbody>
</table>

### LANGUAGE AND RATIONALITY (9 Units)

#### A. Written Composition (3 Units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG1A</td>
<td>College Composition and Reading/ Multicultural Perspective</td>
</tr>
<tr>
<td>ENG1A</td>
<td>College Composition and Reading/ Multicultural Perspective</td>
</tr>
</tbody>
</table>

#### 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  Pre-Calculus Mathematics
   - 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
   - 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 Competency
   - CSS122  Computer Security Principles
   - CSS123  Network Security Principles

### LANGUAGE AND RATIONALITY (continued)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COU23</td>
<td>Student Skills for Success: Career Development</td>
</tr>
<tr>
<td>COU26</td>
<td>Student Skills for Success: Learning Strategies</td>
</tr>
<tr>
<td>COU27</td>
<td>Life Planning</td>
</tr>
<tr>
<td>COU35</td>
<td>Intercultural Communication</td>
</tr>
</tbody>
</table>

#### JPN10  Japanese Language & Culture I

#### JPN11  Japanese Language & Culture II

#### LIB2   Information Competency in the Sciences & Applied Technology.

#### LIB5   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

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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.
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 to 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

Hartnell College has established Guaranteed Transfer Agreements, which guarantee qualifying students admission to many of the University of California and California State University campuses and to Santa Clara University. To be eligible, students must have completed a minimum of 30 transferable units and have a grade point average that meets the acceptable admission requirements at the university of their choice.

For more information and/or to apply for a Guaranteed Transfer Agreement, the student should contact a Hartnell College counselor, the Transfer Center at (831) 759-6007, or visit the Transfer Center.

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.35. 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.

UNIVERSITY OF CALIFORNIA (UC)
10 CAMPUSES

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

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

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

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

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

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

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

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

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

**Area A: Communication & Critical Thinking**

(9 Units Required)

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

**A1 ORAL COMMUNICATION**

(3 units required)

<table>
<thead>
<tr>
<th>COM1</th>
<th>Introduction to Public Speaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM3</td>
<td>Intro. to Communications</td>
</tr>
<tr>
<td>COM5/BUSS</td>
<td>Intro. to Organizational Communication</td>
</tr>
</tbody>
</table>

**A2 WRITTEN COMMUNICATION**

(3 units required)

<table>
<thead>
<tr>
<th>ENG1A</th>
<th>College Composition and Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG1B</td>
<td>College Literature and Composit ion</td>
</tr>
</tbody>
</table>

**A3 CRITICAL THINKING**

(3 units required)

<table>
<thead>
<tr>
<th>ENGS</th>
<th>Critical Thinking and Writing</th>
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</thead>
<tbody>
<tr>
<td>PHL15</td>
<td>Critical Thinking and Logic</td>
</tr>
</tbody>
</table>

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**Area B: Physical Universe and Its Life Forms**

(9 Units Required)

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

**B1 PHYSICAL UNIVERSE**

(3 units required)

<table>
<thead>
<tr>
<th>ABT90</th>
<th>Soil Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST1</td>
<td>Introduction to Astronomy</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>GEG1</td>
<td>Introduction to Geography: Physical Elements</td>
</tr>
<tr>
<td>GEL1</td>
<td>Dynamic Earth</td>
</tr>
<tr>
<td>GEL2</td>
<td>Introduction to Geology</td>
</tr>
<tr>
<td>GEL6</td>
<td>History of the Earth</td>
</tr>
<tr>
<td>GEL25</td>
<td>Environmental Geology</td>
</tr>
<tr>
<td>GEL36</td>
<td>California Geology</td>
</tr>
<tr>
<td>MET1</td>
<td>Meteorology-Weather and Climate</td>
</tr>
<tr>
<td>OCN1</td>
<td>Oceanography</td>
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**Area B: Physical Universe**

(continued)

<table>
<thead>
<tr>
<th>PHY2A</th>
<th>College Physics I</th>
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<tbody>
<tr>
<td>PHY2B</td>
<td>College Physics II</td>
</tr>
<tr>
<td>PHY4A</td>
<td>General Physics/Mechanics</td>
</tr>
<tr>
<td>PHY4B</td>
<td>General Physics/Electricity &amp; Magnetism</td>
</tr>
<tr>
<td>PHY4C</td>
<td>General Physics/Waves, Heat, Light</td>
</tr>
<tr>
<td>PHY10</td>
<td>Introduction to Physics</td>
</tr>
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</table>

**B2 LIFE FORMS**

(3 units required)

<table>
<thead>
<tr>
<th>ABT92</th>
<th>Plant Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT1</td>
<td>Intro. to Anthropology: Physical</td>
</tr>
<tr>
<td>BIO1</td>
<td>Fundamental 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>BIO6</td>
<td>Introductory Physiology</td>
</tr>
<tr>
<td>BIO6L</td>
<td>Physiology Laboratory</td>
</tr>
<tr>
<td>BIO7</td>
<td>General Microbiology</td>
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<td>BIO10</td>
<td>General Biology</td>
</tr>
<tr>
<td>BIO11</td>
<td>Intro Human Anatomy and Physiology</td>
</tr>
<tr>
<td>BIO12</td>
<td>Introduction to Genetics</td>
</tr>
<tr>
<td>BIO13</td>
<td>Introduction to Forensic DNA Analysis</td>
</tr>
<tr>
<td>BIO18</td>
<td>Physiology of Human Health and Disease</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>BIO42</td>
<td>Human Biology</td>
</tr>
<tr>
<td>BIO47</td>
<td>Ecology</td>
</tr>
<tr>
<td>BIO48</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>PSY10</td>
<td>Introduction to Biological Psychology</td>
</tr>
</tbody>
</table>

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Area B: Physical Universe (continued)

B3 LABORATORY ACTIVITY

ABT90 Soil Science
ABT92 Plant Science
AST1L Astronomy Laboratory
BIO1 Fund. Biological Concepts
BIO2 General Zoology
BIO3 General Botany
BIO5 Human Anatomy
BIO6L Physiology Laboratory
BIO7 General Microbiology
BIO10 General Biology
BIO11 Introductory Human Anatomy and Physiology
BIO20 Field Biology/Natural Science
BIO27 Principles of Microbiology
BIO30 Marine Biology
BIO47 Ecology
BIO48L Environmental Science Lab
CHM1A General Chemistry I
CHM1B General Chemistry II
CHM12A Organic Chemistry I
CHM12B Organic Chemistry II
CHM22 The Science of Chemistry
CHM23 Organic and Biological Chem. for Health Sciences
CHM60 Principles of Chemistry
GEL1 Dynamic Earth
GEL6 History of the Earth
PHY2A College Physics I
PHY2B College Physics II
PHY4A General Physics/Mechanics
PHY4B General Physics/Electricity and Magnetism
PHY4C General Physics/Waves, Heat, Light, and Modern Physics
PHY10 Introduction to Physics

B4 MATHEMATICAL CONCEPTS, QUANTITATIVE REASONING & APPLICATIONS (3 units required)

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

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)

ART1A Art History Survey I
ART1B Art History Survey II
ART1W Women in Art
ART10 Art Appreciation
DAN7 Dance Appreciation
ENG50 Film Appreciation To 1960
ENG51 Film Appreciation 1960-Present
MUS1A Music Appreciation-Historical Perspective
MUS1B Music Appreciation-Genre Perspective
MUS2 Music Fundamentals
MUS5 Ethnic Musics in the U.S.
MUS6 Hawaiian Music
MUS7 Jazz Appreciation
MUS50A Harmony I
MUS50B Harmony II
MUS52A Harmony III
MUS52B Harmony IV
PHO1 Introduction to Photography
THA1 Introduction to Theatre
THA3 History of Theatre

C2 HUMANITIES (LITERATURE, PHILOSOPHY, FOREIGN LANGUAGE)

ASL2 American Sign Language II
ASL3 American Sign Language III
ENG1B College Literature & Comp.
ENG10 Introduction to Linguistics
ENG17 The Contemporary Shakespeare
ENG22 Studies in Poetry
ENG24 The Short Story
ENG26 Chicano Literature
ENG31 Beginning Creative Writing
ENG32 Intermediate Creative Writing
ENG33 Advanced Creative Writing
ENG41 Art of Steinbeck
ENG44A World Literature I
ENG44B World Literature II
ENG46A Survey of British Literature I
ENG46B Survey of British Literature II
ENG47A Survey of American Literature I
ENG47B Survey of American Literature II

Area D Humanities (continued)

HIS5A World History A
HIS5B World History B
HIS6 History of Mexico
HIS40 History of Women in the U.S.
HIS47 Religions of the World
JPN10 Japanese Language & Culture I
JPN11 Japanese Language & Culture II
PHL2 Introduction to Philosophy
PHL6 Introduction to Philosophy: Greek to Medieval Period
PHL8 Introduction to Philosophy: Renaissance to the Twentieth Century
PHL10 Ethics
SPA1 Elementary Spanish
SPA1X Spanish for Chicano Students
SPA1S Elementary Spanish Speakers
SPA2 Elementary Spanish
SPA2S Elementary Spanish Speakers
SPA2X Spanish for Chicano Students
SPA3 Intermediate Spanish
SPA3S Intermediate Spanish Speakers
SPA4 Intermediate Spanish
SPA4S Intermediate Spanish Speakers
SPA35 Literatura chicana

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) 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 US History and Political Institution course a 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.

Hartnell College Catalog/2012-13
Area D: Social, Political & Economic Institutions (9 Units Required)

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

D1 through D0 (*see note)

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
SOC42 The Sociology of Minority Relations

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
HIS46A Race and Ethnicity in American Hist A
HIS 46B 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

Area D: Social, Political (continued)

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
HIS 46B 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
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
ADJ51 Criminology
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
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 2012/13

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

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

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 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 Shakespeare
ENG 22 Studies in Poetry
ENG 24 The Short Story
ENG 26 Chicano Literature
ENG 41 Art of Steinbeck
ENG 44A World Literature I
ENG 44B World Literature II
ENG 46A Survey of British Literature I
ENG 46B Survey of British Literature II
ENG 47A Survey of American Literature I
ENG 47B Survey of American Literature II
ENG 50 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 Ethics
PHL 10
SPA 3 Intermediate Spanish
** SPA 3S Intermediate Spanish
SPA 4 Intermediate Spanish
** SPA 4S Intermediate Spanish
SPA 35 Literatura chicana

** Indicates that transfer credit may be limited by UC or CSU or both. Please consult with a counselor.
### Area 4 - Social & Behavioral Sciences

Courses from at least two disciplines (minimum 3 courses/9 semester units required).

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

### 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.

- **ABT 90** Soil Science
- **ANT 1** Introduction to Anthropology: Physical
- **AST 1** Introduction to Astronomy
- **CHM 1A** General Chemistry I
- **CHM 1B** General Chemistry II
- **CHM 12A** Organic Chemistry I
- **CHM 12B** Organic Chemistry II
- **GEO 1** Geology of Earth
- **GEO 2** Geologic Elements
- **GEO 6** Earth Materials
- **GEO 10** Earth Materials
- **GEO 24** Earth Materials
- **MET 1** Meteorology - Weather and Climate
- **OGN 1** Oceanography
- **PHY 2A** College Physics I
- **PHY 2B** College Physics II
- **PHY 4A** General Physics/Mechanics
- **PHY 4B** General Physics/Electricity and Magnetism
- **PHY 4C** General Physics/Waves, Heat, Light and Modern Physics
- **PHY 10** Introduction to Physics

### Biological Sciences Courses

All courses with a lab component are bold face type.

- **ABT 92** Plant Science
- **BIO 1** Fundamental Biological Concepts
- **BIO 2** General Zoology
- **BIO 3** General Botany
- **BIO 5** Human Anatomy
- **BIO 6** Introductory Physiology
- **BIO 6L** Physiology Laboratory
- **BIO 7** General Microbiology
- **BIO 10** General Biology
- **BIO 11** Introductory Human Anatomy and Physiology
- **BIO 12** Introduction to Genetics
- **BIO 18** Physiology of Human Health and Disease
- **BIO 20** Field Biology/Natural Science
- **BIO 27** Principles of Microbiology
- **BIO 30** Marine Biology
- **BIO 42** Human Biology
- **BIO 47** Ecology
- **BIO 48** Environmental Science
- **BIO 48L** Environmental Science Laboratory
- **PSY 10** Introduction to Biological Psychology

#### 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:

- **ASL1** American Sign Language I
- **ASL2** American Sign Language II
- **ASL3** American Sign Language III
- **FRN 1** Elementary French
- **FRN 2** Elementary French
- **FRN 3** Intermediate French
- **JPN 1** Japanese Language and Culture I
- **JPN 10** Japanese Language and Culture II
- **SPA 1** Elementary Spanish
- **SPA 1B** Elementary Spanish
- **SPA 1S** Elementary Spanish Speakers
- **SPA 1X** Elementary Spanish Speakers
- **SPA 2** Elementary Spanish
- **SPA 2S** Elementary Spanish Speakers
- **SPA 2X** Elementary Spanish for Chicano Students
- **SPA 3** Intermediate Spanish
- **SPA 3S** Intermediate Spanish Speakers
- **SPA 4** Intermediate Spanish
- **SPA 4S** Intermediate Spanish Speakers

### NOTES:

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

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)
ADMINISTRATION OF JUSTICE—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Administration of Justice Associate’s Degree program includes the theory and practice of law enforcement, correctional science and paralegal/legal assistantship. Law enforcement courses focus on police activities including effective patrol services to the public. Correctional science courses instruct on the incarceration process as well as rehabilitation of the offender. Paralegal/legal assistantship courses overview the preparation of cases for court under the supervision of an attorney.

Administration of Justice offers a wide range of career opportunities, including, police officer or deputy sheriff, correctional officer, probation officer, parole agent and paralegal. Working professionals in criminal justice and corrections can earn significant pay increases by obtaining an Associate’s Degree in Administration of Justice. Courses in Administration of Justice also prepare students for transfer into four-year degree programs in criminal justice and paralegal.

The Administration of Justice Associate’s Degree offers specialized electives to enhance a student’s career opportunities. Students who wish to pursue careers in the following areas are recommended to complete:

<table>
<thead>
<tr>
<th>Correctional Science</th>
<th>Complete restricted degree electives ADJ-12, ADJ-50, and ADJ-61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paralegal/Legal Assistant</td>
<td>Complete restricted degree electives ADJ-25, ADJ-34, and ADJ-98; 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 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, CAB 218
Lindsey Bertomen at 831-755-6742, lbertomen@hartnell.edu, CAB 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: Multicultural Diversity/Discrimination</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 Procedures</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>

<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-45</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 Arrest and Firearms</td>
<td>3.5</td>
</tr>
</tbody>
</table>
CON’T OF ADMINISTRATION OF JUSTICE—ASSOCIATE OF SCIENCE DEGREE

| Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS) | Course Title | Units |
| Social & Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS) | | |
| Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS) | | |
| Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS) | | |
| Language and Rationality (9 Units) | | |
| A. Written Composition | ENG-1A College Composition and Reading | 3.0 |
| B. Communication and Analytical Thinking | MAT-123* Intermediate Algebra | 5.0 |

General Education 21.0

Administration of Justice Required Major Courses and Restricted Major Electives 30.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 9.0

TOTAL UNITS 60.0

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

These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. 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.

| REQUIRED MAJOR COURSES | Course No. | Course Title | Units |
| Required Major Course | ADJ-1 | Introduction to Administration of Justice | 3.0 |
| Required Major Course | ADJ-2 | Community Relations: Multicultural Diversity/Discrimination | 3.0 |
| Required Major Course | ADJ-3 | Concepts of Criminal Law | 3.0 |
| Required Major Course | ADJ-4 | Criminal Evidence | 3.0 |
| Required Major Course | ADJ-5 | Criminal Procedures | 3.0 |
| Required Major Course | ADJ-11 | Law Enforcement Report Writing | 3.0 |
| Required Major Course | ADJ-21A | Narcotics and Dangerous Drugs | 3.0 |

SUBTOTAL UNITS (21.0)

| OTHER REQUIRED COURSES | Course No. | Course Title | Units |
| Required Course | ENG-1A | College Composition and Reading | 3.0 |
| Required Course | MAT-121* | Elementary Algebra | (5.0) |

TOTAL UNITS (≥ 24.0)

*Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of "C" or better.
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, 831-755-6960, Alisal Campus, A102
Steven Triano, 831-755-6961, striano@hartnell.edu, Alisal Campus, 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>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)

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>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-54</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-1A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS-18</td>
<td>The Legal Environment of Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (14.0)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT-94</td>
<td>Agriculture Enterprise Project</td>
<td>2.0</td>
</tr>
<tr>
<td>AIT-70</td>
<td>Introduction to Mechanized Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-41</td>
<td>Pesticide Applicator Certification Training</td>
<td>3.0</td>
</tr>
<tr>
<td>AIT-81</td>
<td>Applied GPS Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>ABT-83</td>
<td>Product Processing &amp; Cooling</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-86</td>
<td>Vegetable Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-97</td>
<td>Vineyard Production &amp; Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-98</td>
<td>Fertilizers &amp; Plant Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>ABT-160</td>
<td>Introduction to Agriculture</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (14.0)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>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>

<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>
</tbody>
</table>

General Education 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
AGRICULTURE—BUSINESS EMPHASIS—ASSOCIATE OF SCIENCE DEGREE
AGRICULTURE—PRODUCTION EMPHASIS—ASSOCIATE OF SCIENCE DEGREE (Continued)

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.
† These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.

AGRICULTURE—BUSINESS EMPHASIS—CERTIFICATE OF ACHIEVEMENT
AGRICULTURE—PRODUCTION 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>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-90‡</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 14.0 units in one of the areas of emphasis listed below

<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>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (14.0)

<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-94</td>
<td>Agriculture Enterprise Project</td>
<td>2.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>AIT-70</td>
<td>Introduction to Mechanized Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-41</td>
<td>Pesticide Applicator Certification Training</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>ABT-80</td>
<td>Product Processing &amp; Cooling</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-96</td>
<td>Vegetable Crop Production</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-97</td>
<td>Vineyard Production &amp; Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-98</td>
<td>Fertilizers &amp; Plant Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ABT-160</td>
<td>Introduction to Agriculture</td>
<td>3.0</td>
</tr>
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</table>

SUBTOTAL UNITS (14.0)

<table>
<thead>
<tr>
<th>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>or Academic Writing &amp; Reading II</td>
<td></td>
</tr>
<tr>
<td>Required Course</td>
<td>ESL-101*</td>
<td>or Elementary Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (31.0)

*Eligibility for ENG-1A fulfills this requirement.
**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.
AGRICULTURE—AGRICULTURAL AND INDUSTRIAL TECHNOLOGY—INDUSTRIAL MECHANICS—CERTIFICATE OF ACHIEVEMENT

PROGRAM DESCRIPTION
Agricultural and Industrial Technology is an inter-disciplinary program designed to prepare the student for positions of employment requiring a general background in the application of technology or transfer to the state university system. The introductory program in Industrial Mechanics is intended to allow students to acquire a solid base of skills in a variety of mechanical areas. More advanced skills can be learned in courses leading to the Industrial Technician certificate.

Typical careers in the area of Agricultural & Industrial Technology might include: farm shop and equipment dealer mechanic, processing facility maintenance worker or supervisor, parts technician, refrigeration technician, or equipment fabricator.

FOR MORE INFORMATION CONTACT: Ko Cooper at (831) 759-6088, Alisal Campus, A102

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 or</td>
<td>(3.0)</td>
</tr>
<tr>
<td></td>
<td>ESL-101*</td>
<td>Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-151L1,</td>
<td>Technical Mathematics Levels 1, 2, and 3**</td>
<td>(3.0)</td>
</tr>
<tr>
<td></td>
<td>L2, and L3**</td>
<td></td>
<td></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: Ko Cooper at (831) 759-6088, Alisal Campus, A102

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*</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0) or (5.0)</td>
</tr>
<tr>
<td></td>
<td>ESL-101*</td>
<td></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 (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 Foodborne 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</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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 98 (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/recovery 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; CAB 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 AOD-1</td>
<td>Fundamentals of Chemical Dependency</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-2</td>
<td>Pharmacology and Physiology of Alcohol and Other Drugs</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-3</td>
<td>Intervention, Treatment and Recovery</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-42</td>
<td>Counseling Diverse Populations</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-5</td>
<td>Legal/Ethical Considerations and Professional Growth</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-6</td>
<td>Prevention, Education and Relapse Prevention</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-7</td>
<td>Individual Counseling Skills in Chemical Dependency</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-8</td>
<td>Family and Group Counseling</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-10</td>
<td>Chemical Dependency Practicum Seminar</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course AOD-99</td>
<td>Practicum in Chemical Dependency</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>Required Major Course BIO-111</td>
<td>Introduction to Human Anatomy &amp; Physiology</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Required Major Course PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
<td></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 AOD-9 or PSY-22</td>
<td>Co-Occurring Disorders or Abnormal Psychology</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Restricted Major Electives PSY-33 or PSY-41</td>
<td>Personal and Social Adjustment or Psychology of Human Relations</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (38.0)

<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 PSY-10</td>
<td>Introduction to Biological Psychology</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Recommended Major Elective PSY-22</td>
<td>Abnormal Psychology</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Recommended Major Elective PSY-33</td>
<td>Personal and Social Adjustment</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Recommended Major Elective PSY-41</td>
<td>Psychology of Human Relations</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Recommended Major Elective PSY-42</td>
<td>Psychology of Women</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Recommended Major Elective SOC-5</td>
<td>Introduction to Social Problems</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Recommended Major Elective SOC-41</td>
<td>Marriage and the Family</td>
<td>3.0</td>
<td></td>
</tr>
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</table>

SUBTOTAL UNITS (6.0)

<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>BIO-111</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-21</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-44</td>
<td>Counseling Diverse Populations</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationale (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-120</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education 21.0

Alcohol and Drug Abuse Counseling Required Major Courses and Restricted Major Electives 44.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 66.0

TOTAL UNITS 65.0

‡ These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
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, CAB 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>
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</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>Required Course</td>
<td>ESL-101*</td>
<td>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (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, CAB 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>Intermediate Algebra 5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-1B</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-3</td>
<td>Art History Survey I</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>
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</table>

SUBTOTAL UNITS (21.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ART-6A</td>
<td>Watercolors and Gouache</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-15B</td>
<td>Ceramics B</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-33</td>
<td>Weaving</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-41A</td>
<td>Jewelry I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-50</td>
<td>Gallery Management</td>
<td>3.0</td>
</tr>
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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 (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ART-1A*</td>
<td>Art History Survey I</td>
<td>3.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></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 (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education 21.0

Art Required Major Courses and Restricted Major Electives 24.0

ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0 15.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a 'C' or better.

†These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
ART—TWO-DIMENSIONAL EMPHASIS—CERTIFICATE OF ACHIEVEMENT
ART—THREE-DIMENSIONAL EMPHASIS—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-3</td>
<td>Drawing and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-15A</td>
<td>Ceramics A</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
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</table>

**SUBTOTAL UNITS (12.0)**

<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-6B</td>
<td>Oils</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-6C</td>
<td>Acrylics</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-50</td>
<td>Gallery Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-10</td>
<td>Art Appreciation</td>
<td>3.0</td>
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</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-101*</td>
<td>Intermediate Composition and Reading or</td>
<td>(3.0)</td>
</tr>
<tr>
<td></td>
<td>Academic Writing &amp; Reading II</td>
<td></td>
</tr>
<tr>
<td>BUS-151**</td>
<td>Business Mathematics or Technical Mathematics</td>
<td>(3.0)</td>
</tr>
<tr>
<td></td>
<td>Levels 1, 2, and 3</td>
<td></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.
AUTOMOTIVE TECHNOLOGY—AUTOMOTIVE SHOP MANAGEMENT—ASSOCIATE OF SCIENCE DEGREE

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

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-61</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-110</td>
<td>Automotive Business and Shop Management</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>3.0</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 (Selected a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)

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

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

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-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, C101

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>
</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>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT-50</td>
<td>Introduction to Automotive Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>AUT-51</td>
<td>Auto Engine Performance and Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>AUT-71</td>
<td>Automotive Brakes and Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>AUT-73</td>
<td>Automotive Electricity and Electronics</td>
<td>4.0</td>
</tr>
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<td>AUT-81</td>
<td>Automotive Drive Train</td>
<td>4.0</td>
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<td>AUT-82</td>
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<td>Automotive Wheel Alignment and Suspension</td>
<td>4.0</td>
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<td>4.0</td>
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<td>AUT-103</td>
<td>Automotive Engines</td>
<td>4.0</td>
</tr>
<tr>
<td>AUT-110</td>
<td>Automotive Climate Control</td>
<td>4.0</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* 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>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

### PROGRAM DESCRIPTION

The Automotive Technology—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, C101

### 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.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT-150</td>
<td>Introduction to Heavy Duty Diesel Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>AUT-151</td>
<td>Heavy Duty Diesel Preventive Maintenance</td>
<td>3.0</td>
</tr>
<tr>
<td>AUT-152</td>
<td>Heavy Duty Diesel Electrical and Basic Electronics</td>
<td>4.0</td>
</tr>
<tr>
<td>AUT-153</td>
<td>Heavy Duty Diesel Brakes, Steering and Suspension</td>
<td>3.0</td>
</tr>
<tr>
<td>AUT-154</td>
<td>Heavy Duty Diesel Engine Performance and Diagnostics</td>
<td>4.0</td>
</tr>
<tr>
<td>AUT-155</td>
<td>Heavy Duty Diesel Climate Control</td>
<td>3.0</td>
</tr>
<tr>
<td>AUT-156</td>
<td>Heavy Duty Diesel Engine Rebuild</td>
<td>3.0</td>
</tr>
<tr>
<td>AUT-157</td>
<td>Heavy Duty Diesel Electronic Systems and Controls</td>
<td>4.0</td>
</tr>
<tr>
<td>AUT-158</td>
<td>Heavy Duty Diesel Power Drive Train</td>
<td>3.0</td>
</tr>
<tr>
<td>AUT-159</td>
<td>Heavy Duty Diesel Automatic Transmissions</td>
<td>4.0</td>
</tr>
<tr>
<td>AIT-176</td>
<td>Hydraulics &amp; Pneumatics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (38.0)**

### 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>

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

**General Education**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Technology—Heavy Duty Diesel Required Major Courses</td>
<td>38.0</td>
</tr>
</tbody>
</table>

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

**TOTAL UNITS**

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

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>
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<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>
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<tr>
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<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>
</tbody>
</table>

<table>
<thead>
<tr>
<th>✓ OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or</td>
<td>ESL-101*</td>
<td>Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (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, aedens@hartnell.edu, MER 14
Jeffery Hughey at 831-770-7054, jhughey@hartnell.edu, MER 26C
Ann Wright at 831-770-6112, awright@hartnell.edu, MER 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>
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</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-13A</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-2</td>
<td>Pre-Calculus</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-2A/2B</td>
<td>College Physics</td>
<td>8.0</td>
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<tr>
<td>or</td>
<td>PHY-4A/4B/4C</td>
<td>General Physics</td>
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</table>

SUBTOTAL UNITS (42.0-46.0)

<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>BIO-7</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>
</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</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>
</tbody>
</table>

A. Written Composition
| ENG-1A | College Composition and Reading | 3.0 |

B. Communication and Analytical Thinking
| MAT-13A | Elementary Statistics | (5.0) |
| MAT-25A | Pre-Calculus | (4.0) |

General Education 21.0

Biology Required Major Courses 42.0-46.0

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

TOTAL UNITS 63.0-67.0

✓ These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
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 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: Robert Maffei at 831-755-6744, rmaffei@hartnell.edu, CAB 365
Carol Hobson at 831-755-6852, chobson@hartnell.edu, CAB 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—Financial</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>3.0</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-1A</td>
<td>Principles of Economics—Macros</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-13</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>

SUBTOTAL UNITS (32.0)

<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-16</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-2</td>
<td>Calculus for Managerial, Life, and Social Sciences</td>
<td>4.0</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>HIS-17A or HIS-17B</td>
<td>United States History A or United States History B</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>POL-1</td>
<td>American Political Institutions</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>
</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>ECO-14</td>
<td>Principles of Economics—Macro</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></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>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>MAT-15F</td>
<td>Elementary Statistics</td>
<td>(3.0)</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>
<tr>
<td>General Education</td>
<td></td>
<td></td>
<td>21.0</td>
</tr>
<tr>
<td>Business Administration Required Major and Restricted Electives</td>
<td></td>
<td></td>
<td>32.0</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>7.0</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td></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.

Hartnell College Catalog/2012-13
BIZN 112* Computers and Business Applications 3.0
Required Major Course
BUS-131 Business English 3.0
Required Major Course
BUS-132 Business Communication 3.0
Required Major Course
BUS-134 Business Law 3.0
Required Major Course
BUS-140A & B Operating Systems 1.0
Required Major Course
BUS-140C & D Microsoft Office Applications 1.0
Required Major Course
BUS-140E & F Course Management and Delivery 1.0
Required Major Course
MAT-124 Intermediate Algebra 5.0
Recommended Major Elective BUS-128 Professionalism in the Workplace 2.0
Recommended Major Elective BUS-133 Power Point Presentation Skills 2.0
Recommended Major Elective BUS-135 Introduction to Organizational Communication 3.0
Recommended Major Elective BUS-136 Excel Spreadsheet Skills 2.0
Required Major Course
Introduction to Organizational Communication 3.0
Required Major Course
Microsoft Word Microcomputer Applications 4.0
Required Major Course
Business English 3.0
Required Major Course
Keyboarding Speed and Accuracy 1.0
Required Major Course
Word Processing 3.0
Required Major Course
Machine Calculations on the Microcomputer 1.0
Required Major Course
Filing Procedures and Records Management 3.0
Required Major Course
Business Communications 3.0
Required Major Course
Proofreading and Editing Skills 3.0
Required Major Course
Career Management 2.0
Required Major Course
Human Relations in Business 3.0

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.

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.

*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](http://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.

### BUSINESS OFFICE TECHNOLOGY—BOOKKEEPING—CERTIFICATE OF ACHIEVEMENT

<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 or BUS-110A and BUS-110B</td>
<td>Beginning Keyboarding and Document Formatting or Beginning Keyboarding and Beginning Formatting and Document Processing</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-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>

#### OTHER REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<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>BUS-151**</td>
<td>Business Mathematics</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (30.0)

* Eligibility for ENG-1A fulfills this requirement.

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

### BUSINESS OFFICE TECHNOLOGY—INFORMATION PROCESSING—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of “C” or better must be maintained in all certificate-applicable units.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>BUS-50</td>
<td>Introduction to PC Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-111</td>
<td>Intermediate Office Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-128</td>
<td>Professionalism in the Workplace</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-129</td>
<td>Practical Customer Service Skills</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-131</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BUS-140A &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>

#### OTHER REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<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>BUS-151**</td>
<td>Business Mathematics</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

TOTAL UNITS (27.0)

* Eligibility for ENG-1A fulfills this requirement.

**Eligibility for MAT-123 or completion of any course for which MAT-121 is a prerequisite with a grade of “C” or better.
CHEMISTRY—ASSOCIATE OF SCIENCE DEGREE

PROGRAM DESCRIPTION

The Chemistry program at Hartnell College is designed to meet the needs of the diverse community of interests served by the community college. A full program of chemistry for the aspiring professional scientist is offered through general chemistry and a two-semester course in organic chemistry. A separate track is offered for nursing and allied health students which includes general inorganic, organic and biochemistry. The Chemistry discipline also has a strong commitment to the student with little or no prior chemistry background. The entire program is taught with a strong laboratory emphasis, and in the more advanced classes, students receive hands-on experience with a wide variety of instruments.

Four-year graduates in chemistry are qualified for positions in research, industry, education, engineering, and the allied medical fields.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Lawrence Yee at 831-755-8887, lyee@hartnell.edu, MER24A

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-13‡</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 &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>8.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (45.0)

<table>
<thead>
<tr>
<th>✓ RECOMMENDED MAJOR ELECTIVES (Select from the following; none required)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-6</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light and Modern Physics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<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</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 Rationality (9 Units)</td>
<td>A. Written Composition</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>B.</td>
<td>MAT-13‡</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>MAT-25‡</td>
<td>Pre-Calculus</td>
<td>4.0</td>
</tr>
</tbody>
</table>

General Education 21.0

Chemistry Required Major Courses 45.0

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

TOTAL UNITS 66.0

‡These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
CHICANO STUDIES—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The Chicano Studies program provides organized studies in the heritage of Chicanos and fosters and expands general understanding of the cultural contributions of this group. The Chicano Studies courses give students opportunities to develop competence in and an understanding of the language, history, and culture of Chicanos, as well as current issues affecting the Chicano community. Completion of the Chicano Studies major enhances students’ qualifications for positions in schools, community groups, governmental organizations, and private enterprises.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Hermelinda Rocha-Tabera at 831-755-6750, hrocha@hartnell.edu, CAB 369

PROGRAM OUTCOMES:

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

- demonstrate knowledge of the history of Chicanos in the United States including an evaluation of the Chicano political experience with respect to local and national leaders.
- apply critical thinking skills in reading, comprehending, and interpreting Chicano Studies scholarship including the ideas of the major thinkers who have influenced Chicano Studies past and present.
- demonstrate knowledge of Chicano culture including and analysis of the cultural expressions of Chicanos including but not limited to popular culture, literature, and cinema.
- distinguish variations within the Chicano community with respect to class, culture, gender, ethnicity, race, and sexuality.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

**REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS-49A</td>
<td>Chicano History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-49B</td>
<td>Chicano History B</td>
<td>3.0</td>
</tr>
<tr>
<td>ETH-3I</td>
<td>Chicanos in American Society</td>
<td>3.0</td>
</tr>
<tr>
<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:**

**RESTRICTED MAJOR ELECTIVES—CULTURE (Select a minimum of 3.0 units from the following):**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETH-POL-5</td>
<td>Chicano Politics and the American Political System</td>
<td>3.0</td>
</tr>
<tr>
<td>ETH-2</td>
<td>Chicano Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>ETH-6</td>
<td>La Chicana</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**RESTRICTED MAJOR ELECTIVES—LITERATURE (Select a minimum of 3.0 units from the following):**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1B</td>
<td>College Reading and Composition: Chicano Perspective</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG-26</td>
<td>Chicano Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ETH-12</td>
<td>Chicano Cinema</td>
<td>3.0</td>
</tr>
<tr>
<td>SPA-35</td>
<td>Literatura chicana</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**RECOMMENDED ELECTIVES (Select from list; none required):**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA-2, SPA-2S, or SPA-2X</td>
<td>Elementary Spanish or higher</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>3.0</td>
</tr>
<tr>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Electives:**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETH-3I</td>
<td>Chicanos in American Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Language and Rationale (9 Units):**

- **A. Written Composition**: ENG-1A College Composition and Reading 3.0
- **B. Communication and Analytical Thinking**: MAT-123 Intermediate Algebra 5.0

**General Education**: 21.0

**Chicano Studies Required Major Courses and Restricted Major Electives**: 18.0

**Electives (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0**: 21.0

**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 AA degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.

Hartnell College Catalog/2012-13
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, hough@hartnell.edu, CAB 355

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).
- Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 80 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 98 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>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-3</td>
<td>Introduction to Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-8</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-20</td>
<td>Argumentation and Debate</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM/CSU-35</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (15.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-2</td>
<td>Introduction to Anthropology: Cultural</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>COM/BUS-5</td>
<td>Introduction to Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENC-2</td>
<td>Critical Thinking and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PSY-2</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>SOC-1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (3.0)

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES (Students can double count General Education courses with major courses.)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Minimum units to meet CSU-GE breadth certification requirements (39 units) OR 39.0</td>
<td></td>
</tr>
<tr>
<td>B. Minimum units to meet IGETC (34-37.00 units) certification requirements 34.0-37.0</td>
<td></td>
</tr>
<tr>
<td>Communication Studies Required Major and Restricted Electives</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>3.0-8.0</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.

Hartnell College Catalog/2012-13
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, CAB 355

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.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-3</td>
<td>Introduction to Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-8</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>COM-COU-35</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SUBTOTAL UNITS (12.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<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>BUS-175</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-194</td>
<td>Human Relations in Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>COMBUS-5</td>
<td>Introduction to Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>THA-13</td>
<td>The Language of Acting</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>SOC-41</td>
<td>Marriage and Family Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PSY-41</td>
<td>Psychology of Human Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-2</td>
<td>Introduction to Anthropology: Cultural</td>
<td>3.0</td>
</tr>
<tr>
<td>SUBTOTAL UNITS (9.0)</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 (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-123</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>General Education</td>
<td>21.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Studies Required Major Courses and Restricted Major Electives</td>
<td>21.0</td>
<td></td>
<td></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>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>60.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

†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.
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 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, 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</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-122</td>
<td>Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-170A</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</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>Ethnic Groups in the United States</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality</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 (36.0)**

**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>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-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-122</td>
<td>Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>CSS-170A</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>OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or ESL-101</td>
<td></td>
<td>or Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>MAT-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.
COMPUTER SCIENCE AND INFORMATION SYSTEMS—DIGITAL AND WEB DESIGN 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.

DIGITAL AND WEB DESIGN OPTION
This certificate or degree program is designed for those interested in designing effective and persuasive digital and web media. This option emphasizes the following competencies: managing the development and delivery of comprehensive, integrated digital media, and schedule, customer liaison skills and client interaction, and integrating all facets of digital media into an effective product.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty member on how best to complete the program in which you are enrolled.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Christine Svendsen at 831-755–6851, svendsen@hartnell.edu, CAB 205

PROGRAM OUTCOMES
Upon successful completion of the Computer Science and Information Systems—Digital and Web Design Option program, a student should be able to:

- anticipate, identify and solve technical and design issues by applying current media design standards
- demonstrate strong interpersonal skill, communicate effectively with technical and non-technical colleagues, work effectively on a team
- apply knowledge in a variety of computer skill and proficiency areas including programming languages, software applications, and hardware setup and configuration.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS-1</td>
<td>Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-25</td>
<td>Multimedia Integration</td>
<td>3.0</td>
</tr>
<tr>
<td>CSS-27</td>
<td>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-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)**

### 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-43</td>
<td>Computer Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-128</td>
<td>Dreamweaver</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-127</td>
<td>Flash Design</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (12.0)**

### GENERAL EDUCATION COURSES

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

#### Social & Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)

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

#### Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)

#### Language and Rationality (9 Units)

<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>

**GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>21.0</td>
</tr>
</tbody>
</table>

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

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

**TOTAL UNITS (63.0)**

*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/2012-13
# 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>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-31</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>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>

**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, Alisal Campus, A104

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.

**REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CSS-1 Introduction to Computer Science and Programming Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-41 Operating Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-43 Computer Systems and Information Literacy</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-121A Networking Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-121B Routing Protocols and LAN Switching</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-121C Accessing the Wide Area Network (WAN)</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-122 Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-123 Network Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-169 Computer Maintenance and Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CSS-170A Networking Administration and Storage Management</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>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ENG-1A 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 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>
</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>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION COURSES SUBTOTAL UNITS (41.0)**

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

**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>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-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-169</td>
<td>Computer Maintenance and Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-121A</td>
<td>Networking Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-121B</td>
<td>Routing Protocols and LAN Switching</td>
<td>5.0</td>
</tr>
<tr>
<td>CSS-121C</td>
<td>Accessing the Wide Area Network (WAN)</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-122</td>
<td>Computer Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-123</td>
<td>Network Security Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS 170A</td>
<td>Networking Administration and Storage Management</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Subtotal Units (41.0)**

<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>ESL-101</td>
<td>Academic Writing &amp; Reading II</td>
<td>(5.0)</td>
</tr>
<tr>
<td>MAT-123**</td>
<td>Intermediate Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**Total Units (41.0)**

*Eligibility for ENG-1A fulfills this requirement.

**Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.
CONSTRUCTION—SUSTAINABLE CONSTRUCTION—ASSOCIATE OF SCIENCE DEGREE

PROGRAM 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>Sustainable Design</th>
<th>Construction Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete electives CONS 126, CONS 128, CONS 130, CONS 132, CONS 134, CONS 136, CONS 150, CONS 151, CONS 154</td>
<td>Complete electives CONS 126, CONS 128, CONS 150, CONS 151, DRA 52, DRA 70, DRA 71, CSS 66</td>
<td>Complete electives CONS 140, CONS 144, CONS 146, CONS 149, CONS 150, CONS 151, CONS 152, CONS 154</td>
</tr>
</tbody>
</table>

FOR MORE INFORMATION, CONTACT:  
John Anderson, 755–6962, janderson@hartnell.edu, Alisal Campus, A109  
Advanced Technology at 831-755-6960, Alisal Campus

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>

<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>Restriction Major Elective</td>
<td>CONS-140</td>
<td>Construction Management and Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>Restriction Major Elective</td>
<td>CONS-142</td>
<td>Construction Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>Restriction Major Elective</td>
<td>CONS-144</td>
<td>Contract and Labor Law for Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Restriction Major Elective</td>
<td>CONS-146</td>
<td>Building Regulations and Permit Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>Restriction Major Elective</td>
<td>CONS-149</td>
<td>Commercial Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Restriction Major Elective</td>
<td>CONS-151</td>
<td>Construction Field Practice II</td>
<td>6.0</td>
</tr>
<tr>
<td>Restriction Major Elective</td>
<td>CONS-152</td>
<td>Construction Field Practice III</td>
<td>6.0</td>
</tr>
<tr>
<td>Restriction Major Elective</td>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<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>
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<tr>
<td>Recommended Major Elective</td>
<td>EDU-110</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>
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<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 Drafting and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>DRA-71</td>
<td>Advanced Architectural Drafting 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 Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
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Hartnell College Catalog/2012-13
<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<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>CONS-101</td>
<td>Introduction to Sustainable Construction</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>CONS-104</td>
<td>Print Reading &amp; Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>CONS-140</td>
<td>Construction Management and Scheduling</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**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, A109 Advanced Technology at (831) 755-6960, Alisal Campus

**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.

**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-140</td>
<td>Construction Management and Scheduling</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**RESTRICTED MAJOR ELECTIVES**

(Select a minimum of 6.0 units from the following): **SUBTOTAL UNITS (12.0)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONS-129</td>
<td>Managing Offsite Impacts of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-142</td>
<td>Construction Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-144</td>
<td>Contract and Labor Law for Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-146</td>
<td>Building Regulations and Permit Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-150</td>
<td>Construction Field Practice I</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-151</td>
<td>Construction Field Practice II</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-152</td>
<td>Construction Field Practice III</td>
<td>6.0</td>
</tr>
<tr>
<td>CONS-154</td>
<td>Technology Tools for Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**REQUIRED BASIC COMPETENCY**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-101* or 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 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.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CONS-101</td>
<td>Introduction to Sustainable Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-104</td>
<td>Print Reading &amp; Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-126</td>
<td>Green Building Remodel and Retrofit</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>SUBTOTAL UNITS (12.0)</strong></td>
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<td></td>
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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>Sustainable Building Design</td>
<td>3.0</td>
</tr>
<tr>
<td>CONS-129</td>
<td>Managing Diffuse 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>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><strong>SUBTOTAL UNITS (6.0)</strong></td>
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</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* or ESL-101*</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0)</td>
</tr>
<tr>
<td>MAT-151L, L2, and L3**</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>(3.0)</td>
</tr>
<tr>
<td><strong>TOTAL UNITS (18.0)</strong></td>
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</table>

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.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>CONS-101</td>
<td>Introduction to Sustainable Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CONS-104</td>
<td>Print Reading &amp; Modeling</td>
<td>3.0</td>
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<tr>
<td>Required Major Course</td>
<td>CONS-121</td>
<td>Principles of Sustainable Design</td>
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<tr>
<td>Required Major Course</td>
<td>CONS-123</td>
<td>Sustainable Design Studio</td>
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<td>Required Major Course</td>
<td>CONS-125</td>
<td>Green Building Materials and Methods</td>
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<tr>
<td>Required Major Course</td>
<td>CONS-128</td>
<td>Sustainable Building Design</td>
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RESTRICTED MAJOR ELECTIVES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>CONS-126</td>
<td>Green Building Remodel and Retrofit</td>
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<tr>
<td>CONS-129</td>
<td>Managing Diffuse Impacts of Construction</td>
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<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>
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<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>
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</tr>
<tr>
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<td></td>
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OTHER REQUIRED COURSES

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<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<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>MAT-151L, L2, and L3**</td>
<td>Technical Mathematics Levels 1, 2, and 3</td>
<td>(3.0)</td>
</tr>
<tr>
<td><strong>TOTAL UNITS (18.0)</strong></td>
<td></td>
<td></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.
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, CALL Building
(831) 755-6820
DIGITAL ARTS—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

The Digital Arts program offers a certificate and associate degree in Digital Arts and Digital Arts with animation specialization. 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.

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.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degree or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty member on how best to complete the program in which you are enrolled.

FOR MORE INFORMATION, CONTACT:  Jerri Nemiro at 831-755-6797, jnemiro@hartnell.edu, VAF 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 design digital principles.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Each course listed below has prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ART-12A</td>
<td>Design</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-71</td>
<td>Introduction to 2D Digital Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-73</td>
<td>Introduction to Digital Illustration for Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-74</td>
<td>Digital Three Dimensional Design and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-76</td>
<td>3D Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-77</td>
<td>Introduction to Digital Video and Video Editing</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-80</td>
<td>Introduction to Digital Photography and Photographic Imaging</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (24.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 9.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ART-75</td>
<td>3D Modeling for Digital Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-7</td>
<td>Drawing and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ART-85</td>
<td>Interactive Digital Media Interface Design</td>
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</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9.0)

<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 one course from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select one course from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>ART-72</td>
<td>Introduction to Digital Arts</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 (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Completion of MAT-123 or completion of any math in which MAT-121 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>ART-70</td>
<td>Graphic Design/Computer Graphics</td>
<td>3.0</td>
</tr>
<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-80</td>
<td>Introduction to Digital Photography and Photographic Imaging</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-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>
</tbody>
</table>

**REQUAID MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>ART-12A</td>
<td>Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-85</td>
<td>Interactive Digital Media Interface Design</td>
<td>3.0</td>
</tr>
<tr>
<td>PHO-1</td>
<td>Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART-52</td>
<td>Portfolio Development</td>
<td>1.0-3.0</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* or ESL-101</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0)</td>
</tr>
<tr>
<td>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(5.0)</td>
</tr>
</tbody>
</table>

**OTHER REQUIRED COURSES**

*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 also satisfies 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, 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 I</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-71</td>
<td>Architectural Design and Visual Communication II</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-72</td>
<td>Architectural Design and Visual Communication III</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>EGN-2</td>
<td>Engineering Graphics/CAD</td>
<td>4.0</td>
</tr>
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</table>

SUBTOTAL UNITS (28.0)

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 5.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>DRA-54</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-86</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>

SUBTOTAL UNITS (5.0)

<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 and 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>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>ART-71 or PHO-1</td>
<td>Introduction to 2D Digital Illustration or Introduction to Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Language and Rationale (9 units)</td>
<td>A. Written Composition</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>5.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General Education 21.0

Drafting and Design Engineering Technology Required Major Courses and Restricted Major Electives 33.0

ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0 6.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.

These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course 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/2012-13
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-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-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*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or</td>
<td>ESL-101</td>
<td>Academic Writing &amp; Reading II</td>
<td>(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-52</td>
<td>Introduction To AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-53</td>
<td>Advanced AutoCAD</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-54</td>
<td>AutoCAD 3DModeling</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>DRA-64</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*</td>
<td>Intermediate Composition and Reading</td>
<td>(3.0)</td>
</tr>
<tr>
<td>or</td>
<td>ESL-101</td>
<td>Academic Writing &amp; Reading II</td>
<td>(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
Andrea Zarate at 831-755-6885, azarate@hartnell.edu

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 supportive, 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 at any CSU campus. Please consult with a counselor for more information.

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 80 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 98 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-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>

SUBTOTAL UNITS (25.0)

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
B. Minimum units to meet IGETC (34-37.00 units) certification requirements

Early Childhood Education Required Major and Restricted Electives

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></td>
<td>Infant/Toddler</td>
</tr>
<tr>
<td></td>
<td>Special Needs</td>
</tr>
<tr>
<td></td>
<td>Curriculum</td>
</tr>
<tr>
<td></td>
<td>Experience Days</td>
</tr>
<tr>
<td></td>
<td>Site Supervisor</td>
</tr>
<tr>
<td></td>
<td>Program Director</td>
</tr>
</tbody>
</table>

FOR MORE INFORMATION, CONTACT: Jeanne Hort-Garcia at 831-759-6065, jhorigarcia@hartnell.edu
Andrea Zarate at 831-755-6885, azarate@hartnell.edu

PROGRAM OUTCOMES

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- work with families and their children to build respectful, supportive relationships for optimum growth and development of young children.
- connect with community agencies and programs to support children, families, and the early education and care profession.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>ECE-101</td>
<td>Orientation to ECE</td>
<td>1.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-2</td>
<td>Home, School and Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-4</td>
<td>Introduction to Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-10</td>
<td>Observation and Assessment</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-12A</td>
<td>Preschool Theory &amp; Practicum</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-19</td>
<td>Safety, Health, and Nutrition in the Child Care Setting</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ECE-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>

SUBTOTAL UNITS (26.0)
CON’T OF EARLY CHILDHOOD EDUCATION—ASSOCIATE OF SCIENCE DEGREE

### RESTRICTED MAJOR COURSES (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>ECE-11</td>
<td>Cognitive Activities and Materials</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-12B</td>
<td>Advanced Theory &amp; Practicum in ECE</td>
<td>4.0</td>
</tr>
<tr>
<td>ECE-20</td>
<td>Infant &amp; Toddler Development</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-22</td>
<td>Infant/Toddler: Family Relations of Diverse Backgrounds</td>
<td>1.0</td>
</tr>
<tr>
<td>ECE-23</td>
<td>Infant/Toddler: Education: Cognitive and Language Learning</td>
<td>2.0</td>
</tr>
<tr>
<td>ECE-24</td>
<td>Infant/Toddler: Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-26</td>
<td>Children with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-27</td>
<td>Principles &amp; Practices in Guiding Children’s Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-54</td>
<td>Language and Early Literacy Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-70A</td>
<td>Administration of Child Development Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-70B</td>
<td>Advanced Administration of Child Development Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-71</td>
<td>Supervision of Adults in an ECE Setting</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

### GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS-14‡</td>
<td>Child Development</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ECE-53‡</td>
<td>Teaching in a Diverse Society</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>College Reading and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**General Education** 21.0

**Early Childhood Education Required Major Courses and Restricted Major Electives** 32.0

**ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0** 7.0

**TOTAL UNITS** 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better

†These courses also satisfy General Education Requirements.

**TRANSFER STUDENTS**: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.

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**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.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE-101</td>
<td>Orientation to ECE</td>
<td>1.0</td>
</tr>
<tr>
<td>ECE-1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-2</td>
<td>Home, School and Community Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-4</td>
<td>Introduction to Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-10</td>
<td>Observation and Assessment</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-12A</td>
<td>Preschool Theory &amp; Practicum</td>
<td>4.0</td>
</tr>
<tr>
<td>ECE-19</td>
<td>Safety, Health, and Nutrition in the Child Care Setting</td>
<td>3.0</td>
</tr>
<tr>
<td>ECE-53</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>FCS-14</td>
<td>Child Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (26.0)**

### 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>MAT-121**</td>
<td>Elementary Algebra</td>
<td>(6.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (26.0)**

*Eligibility for ENG-1A fulfills this requirement.

==ENG-101 satisfies the English requirement for the Child Development Teacher permit.

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

**REQUARED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>GEL-1‡</td>
<td>Dynamic Earth</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>GEL-6</td>
<td>History of the Earth</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>AST-1</td>
<td>Introduction to Astronomy</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>OCN-1</td>
<td>Oceanography</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MET-1</td>
<td>Meteorology—Weather and Climate</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-1A</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-2A/2B</td>
<td>or</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-4A/4B/4C</td>
<td>or</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PH-2A/2B</td>
<td>or</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PH-4A/4B/4C</td>
<td>or</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>Recommended Major Elective</td>
<td>GEL-25</td>
<td>Environmental Geology</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>GEL-36</td>
<td>California Geology</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>GEL-45</td>
<td>Special Projects</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>GEG-1</td>
<td>Introduction to Geography: Physical Elements</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>CHM-1B</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</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</td>
<td>GEL-1‡</td>
<td>Dynamic Earth</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td>Humanities</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>(Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td>Language and Rationality</td>
<td>(9 Units)</td>
<td></td>
</tr>
</tbody>
</table>

**A. Written Composition**

<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>
</tbody>
</table>

**B. Communication and Analytical Thinking**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT-25</td>
<td>Pre-Calculus</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**General Education**

21.0

**Earth Science Required Major Courses and Restricted Major Electives**

30.0-34.0

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

5.0-9.0

**TOTAL UNITS**

60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better.

These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.
ELEMENATY TEACHER PREPARATION—ASSOCIATE OF ARTS DEGREE (Formerly Liberal Studies)

PROGRAM DESCRIPTION
The A.A. Degree in Elementary Teacher Preparation is primarily designed as transfer preparation for future teachers pursuing a Multiple Subject Credential for the elementary school classroom. It is also designed for students who desire the broadest possible liberal education; as an alternative approach to careers in business; and as a preparation for entry into professional schools in the health sciences, law, and ministry. Students may also use the Elementary Teacher Preparation major to prepare for transfer to most California State Universities. The transfer preparation options lists articulated courses with San Jose, CSU Sacramento, Cal Poly SLO, and CSU Fresno. Students preparing to transfer to other institutions should consult with a Hartnell College counselor. Students should also complete any remaining General Education requirements before transferring. Students planning to teach in California should complete geometry in high school or college.

FOR MORE INFORMATION, CONTACT: Counseling Discipline at 831-755-6820, CALL Building

PROGRAM OUTCOMES
Upon successful completion of the Elementary Teacher Preparation 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.
- identify the cultural, economic, social, political, biological and interdependence of global life.

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 1-99 may apply toward the Associates Degree.

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Degree Course</td>
<td>POL-1</td>
<td>American Political Institutions</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Degree Course</td>
<td>SPA-1 or 1S or 1X or FRN 1 or ASL-1</td>
<td>Elementary Spanish or French 1 or American Sign Language</td>
<td>3.0-5.0</td>
</tr>
<tr>
<td>Required Degree Course</td>
<td>COM-1 or COM-3</td>
<td>Introduction to Public Speaking or Introduction to Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Degree Course</td>
<td>SPA-2 or 2X1 or 2S 1 or FRN-2 or ASL-2</td>
<td>Elementary Spanish or French 2, or American Sign Language II</td>
<td>3.0-5.0</td>
</tr>
<tr>
<td>Required Degree Course</td>
<td>FCS-14</td>
<td>Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Degree Course</td>
<td>COU-35 or COM-35</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Degree Course</td>
<td>HIS-17(A)</td>
<td>United States History A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Degree Course</td>
<td>MAT-25 or MAT-12</td>
<td>Pre-calculus or Number Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Degree Course</td>
<td>PHL-15 or ENG-2</td>
<td>Critical Thinking or Critical Thinking and Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (27.0-32.0)

<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>HIS-17(A)</td>
<td>Required Degree Course</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>SPA-2 or 2X1 or 2S 1 or FRN-2 or ASL-2</td>
<td>Required Degree Course</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>COU-35 or COM-35</td>
<td>Required Degree Course</td>
<td>(3.0)</td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ENG-1A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
<td>ENG-1A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A. Written Composition (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS) | ENG-1A | 3.0 |

B. Communication and Analytical Thinking (Select a minimum of 6 units from catalog GENERAL EDUCATION REQUIREMENTS) | MAT-25 or MAT-12 and PHL-15 or ENG-2 | 3.0 |

<table>
<thead>
<tr>
<th>DEGREE REQUIREMENTS</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>21.0</td>
<td></td>
</tr>
<tr>
<td>Elementary Teacher Preparation Required Major Courses and Restricted Major Electives</td>
<td>27.0-32.0</td>
<td></td>
</tr>
<tr>
<td>ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0</td>
<td>7.0-12.0</td>
<td></td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>60.0</td>
<td></td>
</tr>
</tbody>
</table>

These courses can be double-counted for both Required Degree Courses and Required General Education Courses.

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/2012-13
**TRANSFER PREPARATION**

The department recommends, but does not require, that students select one of the following options for transfer preparation after consulting with a Hartnell College counselor, ASSIST, and the college catalog for the schools indicated:

<table>
<thead>
<tr>
<th>School</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FRESNO</strong></td>
<td></td>
</tr>
<tr>
<td>Art 1A/B, 3, 6A/C, 10, 11A/C, Eng 31/33, Music 1 A/B, 2, or Tha 2A</td>
<td>Area C1 Arts/Humanities course 3.0</td>
</tr>
<tr>
<td>English 1B</td>
<td>College Reading and Composition 3.0</td>
</tr>
<tr>
<td>Math 12</td>
<td>Number Systems 3.0</td>
</tr>
<tr>
<td>CSS 43</td>
<td>Introduction to Computers 4.0</td>
</tr>
<tr>
<td><strong>CAL POLY SAN LUIS OBISPO</strong></td>
<td></td>
</tr>
<tr>
<td>Physical Science with lab (2 courses)</td>
<td></td>
</tr>
<tr>
<td>Life Science with lab (2 courses)</td>
<td></td>
</tr>
<tr>
<td>Family Studies/Health Ed/Nutrition/Physical Ed (1 course)</td>
<td></td>
</tr>
<tr>
<td>Math 25</td>
<td>Pre-Calculus 3.0</td>
</tr>
<tr>
<td>Math 13</td>
<td>Statistics 5.0</td>
</tr>
<tr>
<td>Psychology 2</td>
<td>General Psychology 3.0</td>
</tr>
<tr>
<td><strong>MONTEREY BAY</strong></td>
<td></td>
</tr>
<tr>
<td>Biology 1, 5, 10, 11, 42</td>
<td>Life Science with a lab 3.0-5.0</td>
</tr>
<tr>
<td>Chem 1A, 2A, 5A, Phy 2A, 4A, or 10</td>
<td>Physical Science Course 4.0</td>
</tr>
<tr>
<td>Ast 1, Geol 1, Geol 1, 2, 6, Met 1, Ocn 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Earth Science 4.0</td>
</tr>
<tr>
<td>One of the science classes must contain an underlined lab course</td>
<td></td>
</tr>
<tr>
<td>Math 12 or 25</td>
<td>Number Systems or Pre-Calculus 3.0</td>
</tr>
<tr>
<td>Art 1A/D, 2, 3, 6A, 8, 10, 11A, 12A, 14A, 15A, 20A, or 25</td>
<td>Integrated Art 3.0</td>
</tr>
<tr>
<td>Theater 1, 2A, 3, 5A, 6A, 7A, 10, 11, 12, 14, 30(A/B), 31 (A/B)</td>
<td>Integrated Theater 3.0</td>
</tr>
<tr>
<td>Music 1A, 1B, 1C, 2, 3, 5, 12, 13A, 16, 17A, 20, 22, 27, 50A+51A, 55A, or 55B</td>
<td>Integrated Music 3.0</td>
</tr>
<tr>
<td>Dance 1, 2, 20, 30, 31, 102, 110,132 or 133</td>
<td>Integrated Dance 3.0</td>
</tr>
<tr>
<td></td>
<td>Integrated Art, Theater, Music, and Dance must include one activity courses and one lecture course.</td>
</tr>
<tr>
<td>CSS 43, 90, or LBT 90</td>
<td>Intro to Comp or Internet Literacy 3.0</td>
</tr>
<tr>
<td>Edu 1</td>
<td>Multicultural perspectives in Ed 3.0</td>
</tr>
<tr>
<td><strong>SAN JOSE</strong></td>
<td></td>
</tr>
<tr>
<td>Biology 11</td>
<td>Intro Human Anatomy and Phys 4.0</td>
</tr>
<tr>
<td>Math 12</td>
<td>Number Systems 3.0</td>
</tr>
<tr>
<td>English 1B</td>
<td>College Reading and Comp 3.0</td>
</tr>
<tr>
<td><strong>SACRAMENTO</strong></td>
<td></td>
</tr>
<tr>
<td>English 1B or 2</td>
<td>Critical Thinking Course 3.0</td>
</tr>
<tr>
<td>FCS 14</td>
<td>Child Development 3.0</td>
</tr>
</tbody>
</table>
### 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.

### FOR MORE INFORMATION, CONTACT:
Melissa Hornstein at 831-755-6889, mhornstein@hartnell.edu, MER 21
Parviz Entekhabi at 831-755-6966, pentekhabi@hartnell.edu, Alisal Campus, A104

### PROGRAM OUTCOMES

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

- employ science and mathematical skills required for occupational needs.
- design a system, component, or process with supervision of a licensed engineer to meet desired needs.
- analyze engineering problems and make appropriate decisions with supervision of a licensed engineer.
- demonstrate appropriate technical communication skills (written, verbal and drawing).
- work effectively in a team, exercise initiative and function in a leadership role.

A minimum of 60.0 semester units with a grade of "C" or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>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>4.0</td>
</tr>
<tr>
<td>EGN-6</td>
<td>Introduction to Circuits Analysis</td>
<td>4.0</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-5</td>
<td>Differential Equations</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS-4</td>
<td>Introduction to Scientific Programming</td>
<td>4.0</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>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>

### 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>
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<tr>
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<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>

### 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>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-1</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>

### 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>4.0</td>
</tr>
<tr>
<td>EGN-6</td>
<td>Introduction to Circuits Analysis</td>
<td>4.0</td>
</tr>
<tr>
<td>EGN-8</td>
<td>Engineering Statics</td>
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<td>PHY-4A</td>
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</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>

### TOTAL UNITS

71.0

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Please consult with a Hartnell College counselor to review transfer requirements.

Hartnell College Catalog/2012-13
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, CAB 364
Janet Pessagno at 831-770-6133, jpessagno@hartnell.edu, CAB 353
Dan Peterson at 831-755-6953, dpeterson@hartnell.edu, CAB 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-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>Required Major Course</td>
<td>ENG-10</td>
<td>Introduction to Linguistics</td>
<td>3.0</td>
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SUBTOTAL UNITS (9.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-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>
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</table>

SUBTOTAL UNITS (3.0)

<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>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>
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</table>

SUBTOTAL UNITS (6.0)

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following:)</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-17</td>
<td>The Contemporary Shakespeare</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ENG-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>
</tbody>
</table>

SUBTOTAL UNITS (3.0)

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>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>ENG-128</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>MAT-129</td>
<td>Communication and Analytical Thinking</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, CALL Building

PROGRAM OUTCOMES

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

- read, write, speak and verbally comprehend at a college level.
- define information needs, access information efficiently and effectively, evaluate information critically, and use information ethically.
- use quantitative and logical reasoning to analyze information, evaluate ideas, and solve problems.
- understand and respect the cultural, economic, social, political, biological, and interdependence of global life.
- acquire an appreciation in and involvement in the creation or performance of the work of fine arts/music culture.

This degree provides an opportunity for students to earn an Associate of Arts (AA) degree in a comprehensive area of study and is intended for the student who may not be planning on transfer to a university in the near future.

A minimum of 60.0 semester units must be completed with a grade of “C” or better in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree.

CHOOSE A SINGLE AREA OF EMPHASIS: Complete 18 units in one of the areas of emphasis listed below. 18 units are required from one emphasis: Choose either Natural Science, Social and Behavioral Science, Humanities, Ethnic Groups in the US or Language and Rationality. For this degree, students cannot double count General Education courses.

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.

### REQUIRED DEGREE COURSES

#### Natural Science Emphasis

- Agriculture: ABT 90, 92
- Anthropology: ANT 1
- Astronomy: AST 1, 1L
- Biology: BIO 1, 2, 3, 5, 6, 6L, 7, 10, 11, 12, 13, 18, 20, 27, 30, 42, 47, 48, 48L
- Chemistry: CHM 1A, 1B, 12A, 12B, 22, 23, 60
- Geography: GEG 1
- Geology: GEL 1, 2, 6, 25, 36
- Meteorology: MET 1
- Oceanography: OCN 1
- Physics: PHY 2A, 2B, 4A, 4B, 4C, 10

**Natural Science Emphasis Units**: 18.0

#### Social and Behavioral Science Emphasis

- Administrative Justice: ADJ 1, 51
- Agriculture: ABT 53
- Alcohol and Other Drugs: AOD 1
- Anthropology: ANT 1, 2, 3, 10, 15, 20
- Business: BUS 32
- Communication Studies: COM 35
- Counseling: COU 38
- Economics: ECO 1, 5
- Ethnic Studies: ETH 1, 2, 3, 4, 5, 6, 12, 25
- Family Consumer Science: FCS 14
- Geography: GEG 1, 2, 10
- Health Education: HED 2
- Philosophy: PHL 2, 6, 8, 10, 15
- Political Science: POLT 1, 2, 3, 5, 6
- Psychology: PSY 2(1A), 6, 8, 10, 12, 14, 15, 22, 25, 33, 36, 41, 42
- Sociology: SOC 1, 5, 41, 42

**Social and Behavioral Science Emphasis Units**: 18.0
Area of Emphasis: Humanities
Courses in the humanities are those that study the cultural activities and artistic expressions of human beings. Students will develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creations and develop aesthetic understanding and an ability to make value judgments.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. Students 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>Dance: DAN 7</td>
</tr>
<tr>
<td>English: ENG 1B, 17, 22, 24, 26, 31, 32, 33, 41, 44A, 44B, 46A, 46B, 47A, 47S, 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, 23.1, 23.2, 23.3, 23.4, 23.5, 24, 25, 26, 29, 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, 3, 8, 10</td>
</tr>
<tr>
<td>Photography: PHO 1, 2, 4</td>
</tr>
<tr>
<td>Spanish: SPA 1, 1S, 1X, 2, 2X, 3, 3S, 4, 4S, 35</td>
</tr>
<tr>
<td>Theatre: THA 1, 18, 110A, 122, 123, 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, 36</td>
</tr>
<tr>
<td>Ethnic Studies: ETH 1, 2, 3, 4, 6, 12, 25</td>
</tr>
<tr>
<td>Health Education: HED 5</td>
</tr>
<tr>
<td>History: HIS 10, 40, 46A, 46B, 48, 49A, 40B</td>
</tr>
<tr>
<td>Japanese: JPN 10, 11</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 23, 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, 1X, 2, 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>
</tbody>
</table>

<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>
</tbody>
</table>

**General Education** 21.0

**Area of Emphasis** 18.0

**Electives (Courses numbered 1-199)** are required when degree units plus GE units total are fewer than 60.0 21.0

**DEGREE TOTAL UNITS** 60.0

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*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, CAB 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.

**REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS-17A or HIS-21</td>
<td>United States History A or Social and Political Histories of the US</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-17B</td>
<td>United States History B</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-5A</td>
<td>World History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-5B</td>
<td>World History B</td>
<td>3.0</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>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS-4A</td>
<td>Western Civilization A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-4B</td>
<td>Western Civilization B</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-6</td>
<td>History of Mexico</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-10</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-40</td>
<td>History of Women in the US</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-46A</td>
<td>Race and Ethnicity in American History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-46B</td>
<td>Race and Ethnicity in American History B</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-49A</td>
<td>Chicano History A</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS-49B</td>
<td>Chicano History B</td>
<td>3.0</td>
</tr>
</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>ANT-2</td>
<td>Introduction to Anthropology: Cultural</td>
<td>3.0</td>
</tr>
<tr>
<td>ETR-1</td>
<td>Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

**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.
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, CALL Building
(831) 755-6620
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, CALL Building

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

- read, write, speak and verbally comprehend at a college level.
- define information needs, access information efficiently and effectively, evaluate information critically, and use information ethically.
- use quantitative and logical reasoning to analyze information, evaluate ideas and solve problems.
- understand and respect the cultural, economic, social, political, biological and interdependence of global life.
- acquire an appreciation in and involvement in the creation or performance of the work of fine arts/music culture.

A minimum of 60.0 transferable semester units must be completed with a grade of “C” or better in all degree-applicable units.

1. Choose either A. CSU-GE or B. IGETC for the General Education pattern related to your educational goal:
   A. Minimum units to meet CSU-GE breadth certification requirements; or 39.0 units
   B. Minimum units to meet IGETC certification requirements 34.0-37.0 units

2. AREAS of EMPHASIS: Choose a single AREA OF EMPHASIS listed below. For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.
   18.0 units

3. Include a 3-unit Hartnell College Ethnic Groups in the United States course (Note: Bolded courses listed on the CSU-GE and IGETC sheets meet the requirement)

4. Complete any electives necessary to total 60 transferable units required by the Universities.

CHOOSE A SINGLE AREA OF EMPHASIS: Complete 18 units in one of the areas of emphasis listed below. For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses. 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 – PHI 15</td>
</tr>
<tr>
<td>Theater Arts – THA 18</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.*

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology – ANT 2, 3</td>
</tr>
<tr>
<td>Family and Consumer Studies – FCS 14</td>
</tr>
<tr>
<td>Child Development – ECE 2, 12A</td>
</tr>
<tr>
<td>Criminal Justice – ADJ 1, 2, 3, 4, 5, 8</td>
</tr>
<tr>
<td>Ethnic Studies – ETH 3, 4</td>
</tr>
<tr>
<td>Geography – GEG 2</td>
</tr>
<tr>
<td>Mathematics – MAT 13</td>
</tr>
<tr>
<td>Psychology – PSY 2 (1A)</td>
</tr>
<tr>
<td>Sociology – SOC 1, 5</td>
</tr>
</tbody>
</table>

Cultural and Society Emphasis Units (18.0)

## Area of Emphasis: HISTORY

The study of history is the interpretation of human affairs and institutions as they change in time, and provides a necessary perspective on the contemporary world.

*For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.*

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art – ART 1A, 1B</td>
</tr>
<tr>
<td>Geography – GEG 2</td>
</tr>
<tr>
<td>History – 4A, 4B, 5A, 5B, 6, 10, 17A, 17B, 40, 46A, 46B, 47A, 49B, 51</td>
</tr>
<tr>
<td>Philosophy – PHL 6, 8</td>
</tr>
</tbody>
</table>

History Emphasis Units (18.0)

## Area of Emphasis: HUMANITIES

The humanities include, but are not limited to, history; literature; philosophy and ethics; foreign languages and cultures; linguistics; jurisprudence or philosophy of law; archaeology; comparative religion; the history, theory, and criticism of the arts; and those aspects of the social sciences (anthropology, sociology, psychology, political science, government, and economics) that use historical and interpretive rather than quantitative methods. The humanities enable us to reflect upon our lives and ask fundamental questions of value, purpose, and meaning in a rigorous and systematic way.

*For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.*

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology – ANT 1A, 1B, 3, 12A</td>
</tr>
<tr>
<td>Art – ART 1A, 1B, 3, 12A</td>
</tr>
<tr>
<td>History – 4A, 4B</td>
</tr>
<tr>
<td>Geography – GEG 1, 2</td>
</tr>
<tr>
<td>Philosophy – PHL 2, 15</td>
</tr>
</tbody>
</table>

Humanities Emphasis Units (18.0)

## Area of Emphasis: LANGUAGES AND LITERATURE

The study of languages and literature includes the history of literature, the geographical and cultural regions of language and writing, the methods and theories of literary and cultural analysis, and training in creative and critical writing.

*For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.*

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Sign Language – ASL-80, 81, 83 (formerly COU 80, 81, 83)</td>
</tr>
<tr>
<td>French – FRN 1, 2, 3</td>
</tr>
<tr>
<td>Japanese – JPN 10, 11</td>
</tr>
<tr>
<td>Spanish – SPA 1, 1B, 2S, 2X, 3, 3S, 4, 4S, 35</td>
</tr>
<tr>
<td>Geography – GEG 2</td>
</tr>
</tbody>
</table>

Languages and Literature Emphasis Units (18.0)

## Area of Emphasis: PERFORMING ARTS

The performing arts offer opportunities in theatre, dance, music, interdisciplinary arts, musical theatre, and arts criticism.

*For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.*

<table>
<thead>
<tr>
<th>REQUIRED DEGREE COURSE OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance – DAN 7</td>
</tr>
<tr>
<td>Music – MUS 1A, 1B, 2, 5, 6, 7, 50A, 50B, 52A, 52B</td>
</tr>
<tr>
<td>Theater Arts – THA 1, 10, 11, 14, 18</td>
</tr>
</tbody>
</table>

Performing Arts Emphasis Units (18.0)
Area of Emphasis: POLITICAL SCIENCE
Political Science is a social science concerned with the description and analysis of political, and especially governmental, institutions and processes. Increasingly, the emphasis is being placed on how governments deal with specific policy problems, such as war and peace, poverty, crime, education, energy, pollution, or inter-group relations, and on the factors that affect these problems. The study of political science provides one with the concepts, theories and methods necessary to analyze these policy problems scientifically.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

✓ REQUIRED DEGREE COURSE OPTIONS
- Economics – ECO 1, 5
- Geography – GEG 2
- History – HIS 4A, 4B, 5A, 5B, 17A, 17B
- Mathematics – MAT 13
- Political Science – POL 1, 2, 3, 5, 6

Political Science Emphasis Units (18.0)

Area of Emphasis: PSYCHOLOGY
Psychology is the study of human behavior. Psychologists study the biological, physiological and genetic causes of behavior, as well as the emotional, social, and developmental factors involved.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

✓ REQUIRED DEGREE COURSE OPTIONS
- Anthropology – ANT 1, 2
- Biology – BIO 1, 5, 10, 11
- Mathematics – MAT 13
- Psychology – PSY 2(1A), 6, 8, 10, 12, 14, 15, 22, 25, 33
- Sociology – SOC 1, 5, 41, 42

Psychology Emphasis Units (18.0)

Area of Emphasis: SOCIOLOGY AND SOCIAL SCIENCES
Social Sciences refer to any discipline or branch of science that deals with the social and cultural aspects of human behavior. The Social Sciences generally include Economics, Political Science, Sociology, and History, and may include Cultural Anthropology, Geography, Psychology, and Social Psychology.

For the 18 units required, select courses from at least two disciplines; from one of the disciplines select at least two courses.

✓ REQUIRED DEGREE COURSE OPTIONS
- Administration of Justice – ADJ 1, 2, 3, 51
- Anthropology – ANT 1, 2, 3
- Economics – ECO 1, 5
- Geography – GEG 1, 2
- Mathematics – MAT 13
- Political Science – POL 1, 2, 3, 5, 6
- Psychology – PSY 2(1A), 6
- Sociology – SOC 1, 5, 41, 42
- Family and Consumer Studies – FCS 14

Sociology and Social Sciences Emphasis 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 (30.0 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>General Education</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34.0-39.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area of Emphasis</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18.0</td>
</tr>
</tbody>
</table>

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. 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
                   Greg Perkins at 831-755-6705, gperkins@hartnell.edu, CAB 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 application of derivatives and integrals, solving 2nd order differential equations, and 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 80 of the Hartnell College Catalog for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 98 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 with a minimum of 60 CSU-transferable semester units.

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, lcontreras@hartnell.edu, CAB 251
Gregory Perkins at 831-755-6705, gperkins@hartnell.edu, CAB 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>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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-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 (18.0)

RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from list)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT-12</td>
<td>Number Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-13</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT-16</td>
<td>Finite Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHY-2A</td>
<td>College Physics I</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY-4A</td>
<td>General Physics/Engineering</td>
<td>4.0</td>
</tr>
<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>4.0</td>
</tr>
<tr>
<td>PHL-15</td>
<td>Critical Thinking and Logic</td>
<td>3.0</td>
</tr>
<tr>
<td>CSS-4</td>
<td>Introduction to Scientific Programming</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (3.0)

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-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>

General Education 21.0

Mathematics 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

‡ 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.
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: Office of Academic Affairs and Accreditation at 831-770-7090, CAB 101

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.

### REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS-1A or MUS-1B</td>
<td>Music Appreciation—Historical or Genre Perspective</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS-50A</td>
<td>Harmony I</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS-50B</td>
<td>Harmony II</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS-51A</td>
<td>Musicanship I</td>
<td>2.0</td>
</tr>
<tr>
<td>MUS-51B</td>
<td>Musicanship II</td>
<td>2.0</td>
</tr>
<tr>
<td>MUS-52A</td>
<td>Harmony III</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS-52B</td>
<td>Harmony IV</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS-53A</td>
<td>Musicanship III</td>
<td>2.0</td>
</tr>
<tr>
<td>MUS-53B</td>
<td>Musicanship IV</td>
<td>2.0</td>
</tr>
<tr>
<td>MUS-13A or MUS-13B</td>
<td>Beginning Piano I</td>
<td>2.0</td>
</tr>
<tr>
<td>MUS-14 or MUS-15</td>
<td>Intermediate Piano</td>
<td></td>
</tr>
<tr>
<td>MUS-20</td>
<td>Hartnell College Choir</td>
<td></td>
</tr>
<tr>
<td>MUS-21</td>
<td>Hartnell Chamber Singers</td>
<td></td>
</tr>
<tr>
<td>MUS-23.1 - .5</td>
<td>Hartnell Chorale</td>
<td></td>
</tr>
<tr>
<td>MUS-25</td>
<td>Hartnell College Wind Ensemble</td>
<td>4.0</td>
</tr>
<tr>
<td>MUS-26</td>
<td>Jazz Ensemble</td>
<td></td>
</tr>
<tr>
<td>MUS-29.1 - .5</td>
<td>Symphonic Band</td>
<td></td>
</tr>
<tr>
<td>MUS-34.1 - .5</td>
<td>Symphony Orchestra</td>
<td></td>
</tr>
<tr>
<td>MUS-42</td>
<td>Digital Audio Recording</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (31.0)**

### 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>MUS-43</td>
<td>MIDI Sequencing</td>
<td>2.0</td>
</tr>
<tr>
<td>MUS-10</td>
<td>Applied Music-Voice</td>
<td>1.0</td>
</tr>
<tr>
<td>MUS-17A-17D</td>
<td>Guitar</td>
<td>1.0</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>MUS-1A or MUS-1B</td>
<td>Music Appreciation—Historical or Genre Perspective</td>
<td>(3.0)</td>
</tr>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**General Education** 21.0

**Music Required Major Courses** 9.0

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

**TOTAL UNITS** 60.0

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*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.
PROGRAM DESCRIPTION

The Hartnell College Registered Nursing (RN) Program is 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 Nursing program is fully approved by the California Board of Registered Nursing (BRN).

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.

FOR MORE INFORMATION, CONTACT: Hartnell College Nursing Program at 831-770-6146 Hartnell College Counselor at 831-755-6820

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 in 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 the 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 Bill of Rights 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.

**REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Prerequisite for RN Program</td>
<td>Biology 6 (BIO-6) Introductory Physiology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Prerequisite for RN Program</td>
<td>Bio-6L Physiology Laboratory</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Prerequisite for RN Program</td>
<td>Bio-7 General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Prerequisite for RN Program</td>
<td>Bio-27 Principles of Microbiology</td>
<td>4.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (24.0-24.5)

**REQUIRED GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected from catalog GENERAL EDUCATION REQUIREMENTS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (9.0-10.0)

Please note: Additional Required Prerequisites for Nursing Program admission are listed below under Required General Education Courses.

**REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Prerequisite for Nursing Program</td>
<td>Biology 6 (BIO-6) Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Prerequisite for Nursing Program</td>
<td>Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Prerequisite for Nursing Program</td>
<td>English 1A with Multicultural Perspective</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Prerequisite for Nursing Program</td>
<td>American Heart Association Health Care Provider Basic Life Support Certification</td>
<td>0.5</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (24.0-24.5)

Completion of ENG-1A Multicultural Perspective may be used to fulfill both the ENG-1A and Ethnic Groups in the United States requirements

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 REGISTERED NURSING—ASSOCIATE OF SCIENCE DEGREE

<table>
<thead>
<tr>
<th>Required Major Course</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 Nursing Students</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-42.1</td>
<td>Nursing Theory 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-43.1</td>
<td>Nursing Theory 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-44.1</td>
<td>Nursing Theory IV</td>
<td>4.0</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>

**SUBTOTAL UNITS: 44.5**

**TOTAL UNITS: 77.5-79.0**

### 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.

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 Director of Nursing (831) 770-6145. The Hartnell College Nursing Program Director and academic counselors will evaluate all transfer student records for course 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. Please contact the Nursing Program Office or a Hartnell College Counselor for more information. (Nursing Program Office 770-6146; Counseling 755-6820)

Application forms for the Registered Nursing Program and informational materials are available from the Office of Admissions and Records, Nursing Program Office, and online at the Hartnell College Nursing Program website ([http://www.hartnell.edu/academics/health.html](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 Registered Nursing Program are required to attend a mandatory orientation. At the orientation, policies and procedures and information on health/drug screening and background checks will be reviewed.

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% to qualify for admission and a comprehensive score of 62% on the ATI TEAS V, an approved pre-readiness for nursing assessment test. Multi-criteria screening factors may also be evaluated, including the ATI TEAS V score, healthcare experience, educational history, personal essay, letters of recommendation, 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 Director of Nursing.
CON’T REGISTERED NURSING—ASSOCIATE OF SCIENCE DEGREE

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. Meet the requirements of Essential Capabilities

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 Registered Nursing 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.

Baccalaureate Preparation

Students should consult with a Hartnell College counselor and the prospective college catalog for specific transfer requirements.

LICENSED VOCATIONAL NURSE TO REGISTERED NURSE

ASSOCIATE DEGREE IN NURSING LVN-to-RN

Licensed Vocational Nurses may apply for advanced placement into the Registered Nursing Program. Accepted applicants will be required to take standardized LVN-to-RN nursing content examinations which will determine placement in the first, second, or third semester. Decision for admission is based on space availability.

In addition to meeting the Registered Nursing Program minimum requirements of admission eligibility, LVN-to-RN applicants must have
1. a current and active California Vocational Nursing License.
2. completed all required prerequisites and required General Education courses for the Associate Degree in Nursing with a grade of “C” of better. (See above Registered Nursing required courses.) Students may be accepted with General Education courses in progress on the contingency that the General Education courses are completed prior to start of program.
3. six months of documented work experience (1040 hours) as a licensed vocational nurse.
4. a minimum score of 62% on the standardized pre-readiness for nursing assessment exam (ATI TEAS V)

FOR MORE INFORMATION, CONTACT:
Hartnell College Nursing Program: 831-770-6146
Hartnell College Counselor: 831-755-6820
NURSING—VOCATIONAL NURSING—CERTIFICATE OF ACHIEVEMENT

PROGRAM DESCRIPTION

The Hartnell College Vocational Nursing (VN) Program is designed to prepare qualified individuals to practice vocational nursing. Licensed Vocational Nurses perform essential nursing services under the supervision of a registered nurse or physician. They have work opportunities in correctional facilities, doctor’s offices, long-term care hospitals, public or private hospitals, clinics, or for private individuals. The college grants a certificate in vocational nursing after successful completion of the program. The student is then eligible to apply to take the NCLEX-PN examination for California licensure and, with a passing score, will become a Licensed Vocational Nurse (LVN).

Because the Vocational Nursing program is impacted, completion of program prerequisites does not guarantee admission into the Hartnell College Vocational Nursing Program. Please contact the Department of Nursing or a Hartnell College Counselor (for Nursing) for more information. (Nursing Program, 831-770-6146; Counseling, 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 Vocational Nursing program, a student should be able to:

- pass the NCLEX-PN exam on the first attempt at a rate of 85%; and 100% by the second attempt.
- provide safe, direct, nursing care to clients in a healthcare setting.

<table>
<thead>
<tr>
<th>✓ REQUIRED PREREQUISITE CERTIFICATE COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Prerequisite for Vocational Nursing Program</td>
<td>HES-120</td>
<td>CPR for Health Care Providers or current American Heart Association Health Care Provider Basic Life Support certification</td>
<td>(0.5)</td>
</tr>
<tr>
<td>Required Prerequisite for Vocational Nursing Program</td>
<td>NVN-131*</td>
<td>Growth and Development Across the Lifespan</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Prerequisite for Vocational Nursing Program</td>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Prerequisite for Vocational Nursing Program</td>
<td>MAT-121</td>
<td>Elementary Algebra or higher level math course</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Prerequisite for Vocational Nursing Program</td>
<td>FCS-22* or FCS-23*</td>
<td>Essentials of Nutrition or Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Prerequisite for Vocational Nursing Program</td>
<td>BIO-11* or BIO-5* and BIO-6* and BIO-6L*</td>
<td>Introductory Human Anatomy &amp; Physiology or Human Anatomy and Introductory Physiology and Physiology Lab</td>
<td>4.0 or 4.0 and 3.0</td>
</tr>
<tr>
<td>Required Prerequisite for Vocational Nursing Program</td>
<td>PSY-1A* or PSY-2*</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (21.0-26.5)

RECOMMENDED MAJOR ELECTIVE

Recommended Major Elective

<table>
<thead>
<tr>
<th>RECOMMENDED MAJOR ELECTIVE</th>
<th>Required Certificate Course</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY-22</td>
<td>Abnormal Psychology</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (21.0-26.5)

REQUIRED CERTIFICATE COURSES AFTER ACCEPTANCE INTO VOCATIONAL NURSING PROGRAM

To be completed first term

<table>
<thead>
<tr>
<th>Required Certificate Course</th>
<th>Required Certificate Course</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVN-119 B</td>
<td>NVN-130 A</td>
<td>Vocational Nursing: Theory I</td>
<td>3.0</td>
</tr>
<tr>
<td>NVN-130 B</td>
<td>NVN-130 C</td>
<td>Basic Pharmacology A</td>
<td>1.0</td>
</tr>
</tbody>
</table>

To be completed after NVN 119 Series

<table>
<thead>
<tr>
<th>Required Certificate Course</th>
<th>Required Certificate Course</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVN-120 A</td>
<td>NVN-120 B</td>
<td>Vocational Nursing: Theory II</td>
<td>3.0</td>
</tr>
<tr>
<td>NVN-120 C</td>
<td>NVN-130 B</td>
<td>Vocational Nursing: Clinical II</td>
<td>2.0</td>
</tr>
<tr>
<td>NVN-130 C</td>
<td>NVN-130 D</td>
<td>Basic Pharmacology B</td>
<td>1.0</td>
</tr>
</tbody>
</table>

To be completed after NVN 119 Series

<table>
<thead>
<tr>
<th>Required Certificate Course</th>
<th>Required Certificate Course</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVN-121 A</td>
<td>NVN-121 B</td>
<td>Vocational Nursing: Theory III</td>
<td>4.0</td>
</tr>
<tr>
<td>NVN-121 C</td>
<td>NVN-121 D</td>
<td>Vocational Nursing: Clinical III</td>
<td>2.0</td>
</tr>
</tbody>
</table>

To be completed after NVN 120 Series

<table>
<thead>
<tr>
<th>Required Certificate Course</th>
<th>Required Certificate Course</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVN-122 A</td>
<td>NVN-122 B</td>
<td>Vocational Nursing: Theory IV</td>
<td>4.0</td>
</tr>
<tr>
<td>NVN-122 C</td>
<td>NVN-122 D</td>
<td>Vocational Nursing: Clinical IV</td>
<td>3.0</td>
</tr>
</tbody>
</table>

To be completed in the final term of the program

<table>
<thead>
<tr>
<th>Required Certificate Course</th>
<th>Required Certificate Course</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVN-123 A</td>
<td>NVN-123 B</td>
<td>Vocational Nursing: Theory V</td>
<td>3.0</td>
</tr>
<tr>
<td>NVN-123 C</td>
<td>NVN-123 D</td>
<td>Vocational Nursing: Clinical V</td>
<td>4.0</td>
</tr>
<tr>
<td>NVN-130 C</td>
<td></td>
<td>Basic Pharmacology C</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Additional required certificate course. Students must be concurrently enrolled in NVN 150 during each semester of the program.

<table>
<thead>
<tr>
<th>Required Certificate Course</th>
<th>Required Certificate Course</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVN-150</td>
<td></td>
<td>Vocational Nursing: Laboratory Practicum</td>
<td>0.9**</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (40.9)

TOTAL CERTIFICATE UNITS (61.9-67.4)
**Prerequisite courses marked with an asterisk must be completed no more than five years prior to entering the vocational nursing program in order to receive credit for the hours required by the Board of Vocational Nursing and Psychiatric Technicians of the State of California (California Code of Regulations, Title 16: Professional Regulations, Division 25: Board of Vocational Nursing and Psychiatric Technicians of the State of California).

**Students will enroll in this course for a minimum of 0.3 units each semester, for a minimum of 0.9 or more units for the program.

** VOCATIONAL NURSING PROGRAM

The Hartnell College Vocational Nursing Program requires a separate application procedure in addition to the general college admission application. Entrance to the program is subject to an annual application process. Please contact the Department of Nursing office or a Hartnell College Counselor (for Nursing) for more information. Department of Nursing office at 831-770-6146 or Counseling at 831-755-6820.

Application to the Vocational Nursing Program and informational materials are available from the Department of Nursing office. Application materials and all official documents of verification must be submitted before the deadline date stated on the application. 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. At 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.
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.

The photography faculty are committed to empowering students with the ability to apply photo imaging to their lives for practical, professional and artistic purpose. Hartnell photo instruction prepares students for advancement to college and university study, to achieve personal enrichment and development, to acquire abilities needed to produce photographic art of high aesthetic value, and to develop or hone professional skills. Photography offers careers in the following areas: advertising; photographic art; fashion photography; commercial portrait; digital effects; photo journalism; editorial, wedding and special event photography; industrial photography; travel, adventure, and pet photography; scientific photography; forensic photography; and documentary photography.

As a result of ongoing changes in technology, the need to expand competencies, and changing transfer requirements, certificate and degree requirements may also change. If you note changes in degrees or certificate requirements, or if courses are not offered in a particular semester, please consult with a counselor or faculty on how best to complete the program in which you are enrolled.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT: Eric Bosler at 831-755-6702, ebosler@hartnell.edu, VAF 208B

PROGRAM OUTCOMES

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

- demonstrate effective technical proficiency with film and digital media.
- structure visual information to produce images of intermediate level aesthetic quality.
- interpret and produce photographs that communicate intellectually and emotionally.
- demonstrate an intermediate knowledge of the history of photography.
- demonstrate an awareness of the influence of photography on the lives of individuals, cultures, and societies.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-199 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

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

**REQUIRED MAJOR COURSES (Select a minimum of 3.0 units from the following):**

- ART-1A  Art History Survey I  3.0
- ART-1B  Art History Survey II  3.0
- ART-3F  Drawing and Composition  3.0
- ART-6A  Watercolor and Gouache  3.0
- ART-8B  Oils  3.0
- ART-6C  Acrylics  3.0
- ART-10A Art Appreciation  3.0
- ART-71  Introduction to 2D Digital Illustration  3.0
- ART-72  Introduction to Digital Arts | 3.0 |
- ART-77  Digital Video, Audio Editing, & Production | 3.0 |

**RESTRICTED MAJOR ELECTIVES (Select a minimum of 3.0 units from the following):**

- ENG-1A  College Composition and Reading  3.0
- MAT-123*  Intermediate Algebra | 5.0 |

**GENERAL EDUCATION COURSES (Select a minimum of 3 from catalog GENERAL EDUCATION REQUIREMENTS):**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAF 208B</td>
<td>Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION REQUIREMENTS:**

- Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)
- Social & Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)
- Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)
- Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)
- Written Composition | 3.0 |
- Communication and Analytical Thinking | 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.

† 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 assist.org. Please consult with a Hartnell College counselor to review transfer requirements.

Hartnell College Catalog/2012-13
PHOTOGRAPHY—CERTIFICATE OF ACHIEVEMENT

In all certificate programs, it is required that at least half of the required number of units be taken at Hartnell College. A grade of "C" or better must be maintained in all certificate-applicable units.

<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-80 Digital Photographic Imaging</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>ART-12A Design</td>
<td>3.0</td>
</tr>
<tr>
<td>SUBTOTAL UNITS (21.0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<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>
<tr>
<td>TOTAL UNITS (24.0)</td>
<td></td>
<td></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 also satisfies this requirement.
PROGRAM DESCRIPTION

The Physical Education, Kinesiology, Health and Athletics program provides formalized educational opportunities for the development and acquisition of motor skills, improved physical fitness and their application to sports and physical activities. This Associate of Science Degree covers a broad knowledge base that represents several disciplines that include traditional physical education, exercise science, athletic training, coaching, and health science. The Health Education Program provides the student with the knowledge and skills to develop a healthy lifestyle. The Adaptive Physical Education Program parallels the concepts and programs of the Physical Education and Kinesiology discipline includes a broad range of movement skills specifically designed for the special needs individual, with the objective of making a noticeable difference in their daily lives. These programs help prepare students to transfer as Physical Education and Kinesiology majors to four-year institutions.

Four-year graduates in Physical Education and Kinesiology are qualified for positions in coaching, education, industry wellness centers and allied medical fields.

For detailed requirements for individual four-year institutions, students should contact the transfer institution and/or meet with a counselor for specific transfer course requirements in their major.

FOR MORE INFORMATION, CONTACT:  
Daniel Teresa, Athletic Director at 831-755-6837, dteresa@hartnell.edu, PE 115  
Rich Givens, Student Athlete Counselor at 831-755-6840, rgivens@hartnell.edu, PE 107  
Dr. Melissa Stave at 831-755-6876, mstave@hartnell.edu, PE 144

PROGRAM OUTCOMES

Upon successful completion of the Kinesiology/Physical Education, Health and Athletics program, a student should be able to:

- demonstrate competence in performing a variety of skill-related behaviors.
- describe health and physical activity concepts that will enable him or her to make informed decisions concerning health.
- recognize health issues, understanding the similarities and contrasts among cultures.
- demonstrate sensitivity to cultural and physical diversity.
- explain the value and significance of physical activity for human development, human interaction and quality of life and its relationship to their particular disability.

A minimum of 60.0 semester units with a grade of “C” or better must be maintained in all degree-applicable units. Only courses numbered 1-189 may apply toward the Associate Degree. Courses listed below may have prerequisites that must be completed prior to enrolling. Consult a schedule of classes, college catalog, or a counselor for further information.

<table>
<thead>
<tr>
<th>REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>BIO-11*</td>
<td>Introductory Human Anatomy and Physiology</td>
<td>4.0 to 6.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PETH-2</td>
<td>Care and Prevention of Athletic Injuries</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-13*</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PETH-1</td>
<td>Introduction to Physical Education</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HED-6</td>
<td>Multicultural Health Beliefs</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>FCS-23</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>CHM-22 or PHY-10 or PHY-2A</td>
<td>The Science of Chemistry or Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-2*</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (28.0-33.0)**

<table>
<thead>
<tr>
<th>RESTRICTED MAJOR ELECTIVES (Select a minimum of 6.0 units from at least two of the following Activities:</th>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-33, 58, 59, 60</td>
<td>Racquet Activities (Tennis or Badminton)</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>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-73, 38, 40, 52, 53, 54, 55, 57, 64, 65, 70, 71, 72, 74, PETH-17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 30, 75, 81</td>
<td>Team Activities</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>PEAC-91, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 43, 45, 46, 47, 49, 50, 51, 56, 66, 67, 68, 69</td>
<td>Fitness Activities</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>
</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>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Major Elective</td>
<td>HED-55</td>
<td>Advanced First Aid</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PETH-4</td>
<td>Mental Skills for Sports Performance</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>LIB-90</td>
<td>Internet &amp; Information Literacy</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>ENG-2</td>
<td>Critical Thinking and Writing</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BIO-5</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BIO-6</td>
<td>Introductory Physiology</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>BIO-6L</td>
<td>Physiology Laboratory</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>COU-26</td>
<td>Learning Strategies</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PETH-3</td>
<td>Concept of Fitness and Wellness</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PE-42</td>
<td>Leadership in Physical Education and Sports</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>BIO-11‡, or (BIO-5, BIO-6 and BIO-6L‡)</td>
<td>Introductory Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>PSY-2‡</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>HED-6‡</td>
<td>Multicultural Health Beliefs</td>
<td></td>
</tr>
<tr>
<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>MAT-13‡</td>
<td>Elementary Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

## Language and Rationality (9 Units)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A or ENG-2</td>
<td>3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-13‡</td>
<td>5.0</td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>COM-1</td>
<td>3.0</td>
</tr>
</tbody>
</table>

## Physical Education—Kinesiology Required Major Courses and Restricted Major Electives

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-40.0</td>
<td></td>
</tr>
</tbody>
</table>

## Electives

ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0: 0-4.0

**Total Units**: 60.0-61.0

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‡These courses also satisfy General Education Requirements.

*NCAA athletes who wish to continue in their sport must have MAT-13 to transfer to CSU or UC.

**Transfer Students**: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at [www.assist.org](http://www.assist.org). Please consult with a Hartnell College counselor to review transfer requirements.
PHYSICS—ASSOCIATE 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, MER 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.

<table>
<thead>
<tr>
<th>✓ REQUIRED MAJOR COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Major Course</td>
<td>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-4B</td>
<td>General Physics/Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PHY-4C</td>
<td>General Physics/Waves, Heat, Light and Modern Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
<td>4.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-5</td>
<td>Differential Equations</td>
<td>3.0</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>CHM-1A</td>
<td>General Chemistry I</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>CHM-1B</td>
<td>General Chemistry II</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>CSS-4</td>
<td>Introduction to Scientific Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>AST-1</td>
<td>Introduction to Astronomy</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>AST-1L</td>
<td>Astronomy Laboratory</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>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>(4.0)</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (≥ 21.0)

<table>
<thead>
<tr>
<th>E. Written Composition</th>
<th>ENG-1A</th>
<th>College Composition and Reading</th>
<th>3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>(4.0)</td>
</tr>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>(4.0)</td>
</tr>
</tbody>
</table>

SUBTOTAL UNITS (≥ 21.0)

<table>
<thead>
<tr>
<th>GENERAL EDUCATION REQUIREMENTS</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>12.0</td>
</tr>
</tbody>
</table>

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.
PSYCHOLOGY—ASSOCIATE OF ARTS DEGREE

PROGRAM DESCRIPTION

Psychology is the scientific discipline concerned with the study of the mind. It is a natural and a social science concerned with the study of human behavior. As such, it is a broad discipline which involves both pure science and practical application of science to matters of everyday living.

The Psychology AA degree program provides students with a basic understanding of motivation and behavior that is valuable to many careers in business, government, education, and health care. Becoming a "psychologist," however, requires graduate level training. Psychologists with graduate degrees and professional certificates have a broad range of employment opportunities including clinical practice, research, and teaching. Hartnell College offers lower division transfer courses to meet the requirements for most baccalaureate majors offered by accredited colleges and universities. Psychology and counseling faculty are excellent resources for additional career information.

FOR MORE INFORMATION, CONTACT: Yoshiko Matsushita-Arao, PhD, at 831-755-6781, yarao@hartnell.edu, CAB 316
Carol Kimbrough, MA, MFT, at 831-755-6856, skimbrough@hartnell.edu, CAB 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.

✓ REQUIRED MAJOR COURSES

<table>
<thead>
<tr>
<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>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-8</td>
<td>Research Methods in Psychology</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-10</td>
<td>Introduction to Biological Psychology</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-14</td>
<td>Child Psychology</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-15</td>
<td>Human Behavior</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>PSY-22</td>
<td>Abnormal Psychology</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>BIO-11E</td>
<td>Intr. to Human Anatomy &amp; Physiology</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>MAT-13‡</td>
<td>Elementary Statistics</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>Recommended Major Elective</td>
<td>PSY-6</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-12</td>
<td>Theories of Personality</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-30</td>
<td>Forensic Psychology</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-33</td>
<td>Personal &amp; Social Adjustment</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-36</td>
<td>Psychology of &quot;La Mujer&quot;</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-41</td>
<td>Psychology of Human Relations</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>PSY-42</td>
<td>Psychology of Women</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>ANT-1</td>
<td>Physical Anthropology</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>ANT-2</td>
<td>Intro. to Anthropology, Cultural</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>SOC-1</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
</tr>
<tr>
<td>Recommended Major Elective</td>
<td>SOC-41</td>
<td>Marriage and the Family</td>
</tr>
<tr>
<td>GENERAL EDUCATION COURSES</td>
<td>Course No.</td>
<td>Course Title</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>BIO-11E</td>
<td>Introduction to Human Anatomy &amp; Physiology</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</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>
</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>
</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-13‡</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and Analytical Thinking (Select a minimum of 1 unit from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>1.0</td>
</tr>
</tbody>
</table>

General Education 21.8
Psychology Required Major Courses 27.0
ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0 12.5
TOTAL UNITS 60.0

1 These courses satisfy both Major and General Education requirements

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course equivalencies and major preparation requirements for the University of California (UC) and California State University (CSU) systems are available online at www.assist.org. Please consult with a Hartnell College counselor to review transfer requirements.

TRANSFER STUDENTS: Students intending to transfer should consult a counselor and complete the CSU-GE or IGETC general education pattern as advised. Students are required to complete the 27 required major units. When completing the general education requirements, they should include a minimum of 6 units from the list of restricted major electives which are included in the CSU-GE and IGETC patterns.

Total Program Units: 27
(IGETC or CSU/GE Units: 34-39
Electives (as needed) 60 units

Hartnell College Catalog/2012-13

INDEX
THIS PROGRAM IS CURRENTLY UNDER REVIEW, AND COURSE OFFERINGS WILL BE LIMITED FOR THE 2012-2013 ACADEMIC YEAR.

NEW STUDENTS WILL NOT BE ADMITTED INTO THE REAL ESTATE PROGRAM OR COURSES FOR THE 2012-13 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, CAB 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>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>RE-144</td>
<td>Principles of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-145</td>
<td>Real Estate Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-146</td>
<td>Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-147</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-148</td>
<td>Real Estate Appraisal I</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-149</td>
<td>Real Estate Economics</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 Elective</td>
<td>BUS-1A</td>
<td>Accounting Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-18</td>
<td>Legal Environment of Business</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>RE-150</td>
<td>Property Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>RE-153</td>
<td>Escrow Procedures</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Education Courses</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>ENG-1A</td>
<td>College Reading and Composition</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>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Ethnic Groups in the United States (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Language and 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 (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>

*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. |

<table>
<thead>
<tr>
<th>General Education</th>
<th>21.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate Required Major Courses and Restricted Major Electives</td>
<td>24.0</td>
</tr>
<tr>
<td>ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0</td>
<td>15.0</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>60.0</td>
</tr>
</tbody>
</table>

*These courses also satisfy General Education Requirements
REAL ESTATE—CERTIFICATE OF ACHIEVEMENT

**THIS PROGRAM IS CURRENTLY UNDER REVIEW, AND COURSE OFFERINGS WILL BE LIMITED FOR THE 2012-2013 ACADEMIC YEAR.**

NEW STUDENTS WILL NOT BE ADMITTED INTO THE REAL ESTATE PROGRAM OR COURSES FOR THE 2012-13 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>RE-144</td>
<td>Principles of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-145</td>
<td>Real Estate Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-146</td>
<td>Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-147</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-148</td>
<td>Real Estate Appraisal</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>RE-149</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (18.0)**

<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>BUS-1A</td>
<td>Accounting Principles</td>
<td>4.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>BUS-18</td>
<td>Legal Environment of Business</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>RE-150</td>
<td>Property Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>RE-153</td>
<td>Escrow Procedures</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SUBTOTAL UNITS (6.0)**

<table>
<thead>
<tr>
<th>✓ OTHER REQUIRED COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course</td>
<td>ENG-101*</td>
<td>Intermediate Composition and Reading or Academic Writing &amp; Reading II</td>
<td>(3.0)</td>
</tr>
<tr>
<td></td>
<td>ESL-101*</td>
<td></td>
<td>(5.0)</td>
</tr>
<tr>
<td>Required Course</td>
<td>BUS-151**</td>
<td>Business Mathematics</td>
<td>(3.0)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS (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.
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, CAB 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 or GEG-2</td>
<td>Introduction to Geography: Physical Elements or Introduction to Geography: Cultural Elements</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>HIS-17A</td>
<td>History of the United States A</td>
<td>3.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>POL-1</td>
<td>American Political Institutions</td>
<td>3.0</td>
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<tr>
<td>Required Major Course</td>
<td>SOC-1</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
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**SUBTOTAL UNITS (15.0)**

<table>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ADJ-2</td>
<td>Community Relations: Multicultural Diversity</td>
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<tr>
<td>Restricted Major Elective</td>
<td>ANT-1</td>
<td>Physical Anthropology</td>
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<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>
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<tr>
<td>Restricted Major Elective</td>
<td>BUS-32</td>
<td>Introduction to Business</td>
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<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>
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<tr>
<td>Restricted Major Elective</td>
<td>POL-2</td>
<td>Contemporary Governments Abroad</td>
<td>3.0</td>
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<tr>
<td>Restricted Major Elective</td>
<td>POL-3</td>
<td>International Relations</td>
<td>3.0</td>
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<tr>
<td>Restricted Major Elective</td>
<td>POL-6</td>
<td>Chicano Politics and the American Political System</td>
<td>3.0</td>
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**SUBTOTAL UNITS (18.0)**

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Natural Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
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<tr>
<td>Humanities (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
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<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>
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</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>
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</table>

General Education 21.0

Social Science Required Major Courses and Restricted Major Electives 33.0

ELECTIVES (Courses Numbered 1-199) required when GE units plus Degree units total are fewer than 60.0 6.0

TOTAL UNITS 60.0

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a "C" or better.

‡These courses also satisfy General Education Requirements.

TRANSFER STUDENTS: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course 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:
- Aurora Mendez at 831-755-6934, amendez@hartnell.edu, CAB373
- Aurelia Vacaflor at 831-755-6786, avacaflor@hartnell.edu, CAB371

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</td>
<td>Elementary Spanish or Elementary Spanish Speakers or Elementary Spanish for Chicano Students</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>SPA-1S or</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPA-1X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>SPA-2 or</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></td>
<td>SPA-2S or</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>SPA-2X</td>
<td></td>
<td></td>
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<tr>
<td>Required Major Course</td>
<td>SPA-3 or</td>
<td>Intermediate Spanish or Intermediate Spanish Speakers</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>SPA-3S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Major Course</td>
<td>SPA-4 or</td>
<td>Intermediate Spanish or Intermediate Spanish Speakers</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>SPA-4S</td>
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**SUBTOTAL UNITS (20.0)**

<table>
<thead>
<tr>
<th>✓ RESTRICTED MAJOR ELECTIVES (Select a minimum of 9.0 units from the following):</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-10</td>
<td>California Indians</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ANT-20</td>
<td>Cultures of Mexico</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-1</td>
<td>Intro to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-2</td>
<td>Chicano Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-3</td>
<td>Chicanos in American Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-4</td>
<td>Chicano Culture</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-5</td>
<td>Chicano Politics and the American Political System</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>ETH-6</td>
<td>La Chicana</td>
<td>3.0</td>
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<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>
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</tr>
<tr>
<td>Restricted Major Elective</td>
<td>HIS-49B</td>
<td>Chicano History B</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>MUS-5</td>
<td>Ethnic Music</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>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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**SUBTOTAL UNITS (9.0)**
**CON’T OF SPANISH—ASSOCIATE OF ARTS DEGREE**

<table>
<thead>
<tr>
<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>
</tr>
<tr>
<td><strong>Social &amp; Behavioral Sciences</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</td>
<td></td>
</tr>
<tr>
<td><strong>Humanities</strong> (Select a minimum of 3 units from catalog GENERAL EDUCATION REQUIREMENTS)</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>
</tr>
<tr>
<td><strong>Language and Rationale (9 Units)</strong></td>
<td></td>
</tr>
<tr>
<td>A. Written Composition</td>
<td>ENG-1A College Reading and Composition 3.0</td>
</tr>
<tr>
<td>B. Communication and Analytical Thinking</td>
<td>MAT-123* Intermediate Algebra 5.0</td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION REQUIREMENTS**

- **General Education** 21.0
- **Spanish Required Major Courses and Restricted Major Electives** 29.0
- **ELECTIVES (Courses Numbered 1–199) required when GE units plus Degree units total are fewer than 60.0** 10.0
- **TOTAL UNITS 60.0**

*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

Theatre 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, CAB 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>
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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>COM-1</td>
<td>Introduction to Public Speaking</td>
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SUBTOTAL UNITS (12.0)

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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Restricted Major Elective</td>
<td>THA-11</td>
<td>Intermediate Acting</td>
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<tr>
<td>Restricted Major Elective</td>
<td>THA-14</td>
<td>Characterization</td>
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<td>Restricted Major Elective</td>
<td>THA-17</td>
<td>Singing for Actors</td>
<td>2.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>THA-18</td>
<td>Voice and Diction</td>
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<td>Restricted Major Elective</td>
<td>THA-45</td>
<td>Special Projects</td>
<td>1.0-3.0</td>
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<tr>
<td>Restricted Major Elective</td>
<td>DAN-1</td>
<td>Beginning Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>Restricted Major Elective</td>
<td>DAN-30</td>
<td>Jazz Dance I</td>
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<tr>
<td>Restricted Major Elective</td>
<td>ENG-17</td>
<td>The Contemporary Shakespeare</td>
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SUBTOTAL UNITS (9.0)

<table>
<thead>
<tr>
<th>GENERAL EDUCATION COURSES</th>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Natural Sciences</td>
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<tr>
<td>Social &amp; Behavioral Sciences</td>
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<td>Humanities</td>
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<tr>
<td>Ethnic Groups in the United States</td>
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</tr>
<tr>
<td>Language and Rationality (9 Units)</td>
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<td></td>
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</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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and Analytical Thinking</td>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

General Education 21.0

Theatre Arts 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 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—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: All Americupan at 831-755-6964, aamercupan@hartnell.edu, Alisal Campus

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.

**REQUIRED MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS/COM-55</td>
<td>Introduction to Organizational Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>DRA-64</td>
<td>Industrial Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>AIT-169</td>
<td>Hazardous Materials and Industrial Safety</td>
<td>1.0</td>
</tr>
<tr>
<td>WLD-52</td>
<td>Sheet Metal Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>WLD-53</td>
<td>Welding Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>WLD-54</td>
<td>Advanced Arc Welding</td>
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</tr>
<tr>
<td>WLD-57</td>
<td>Pipe Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WLD-58</td>
<td>Hardfacing and Surfacing</td>
<td>2.0</td>
</tr>
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<td>WLD-145</td>
<td>Special Projects</td>
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</tr>
<tr>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
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<td>WLD-151</td>
<td>Gas and TIG Welding</td>
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<td>WLD-155</td>
<td>Ornamental Ironwork</td>
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<tr>
<td>WLD-156</td>
<td>Toolmaking</td>
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**RESTRICTED MAJOR ELECTIVES** (Select a minimum of 10.0 units from the following):

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<thead>
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<th>Course No.</th>
<th>Course Title</th>
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<tr>
<td>DRA-50</td>
<td>Introduction to Drafting and Design</td>
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<tr>
<td>EGN-4</td>
<td>Material Science</td>
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</tr>
<tr>
<td>WLD-99</td>
<td>Cooperative Work Experience</td>
<td>1.0-4.0</td>
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<tr>
<td>WLD-145</td>
<td>Special Projects</td>
<td>1.0-2.0</td>
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</table>

**GENERAL EDUCATION COURSES**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-1A</td>
<td>College Composition and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT-123*</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>BUS/COM-54</td>
<td>Introduction to Organizational Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*Completion of MAT-123 or completion of any math in which MAT-123 is a prerequisite with a “C” or better also satisfies this requirement.

These courses also satisfy General Education Requirements.

**TRANSFER STUDENTS**: Completing the AS degree does not meet all the requirements for transfer. Students planning to transfer to a university should follow the requirements of the four-year university. Information on course 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/2012-13

INDEX
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>
<tr>
<td>Required Major Course</td>
<td>WLD-53</td>
<td>Welding Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-54</td>
<td>Advanced Arc Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-57</td>
<td>Pipe Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-58</td>
<td>Hardfacing and Surfacing</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-145</td>
<td>Special Projects</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-150</td>
<td>Basic Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-151</td>
<td>Gas and TIG Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-155</td>
<td>Ornamental Ironwork</td>
<td>2.0</td>
</tr>
<tr>
<td>Required Major Course</td>
<td>WLD-156</td>
<td>Toolmaking</td>
<td>2.0</td>
</tr>
<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)

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>DRA-50</td>
<td>Introduction to Drafting and Design Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>DRA-52</td>
<td>Introduction to AutoCAD</td>
<td>2.0</td>
</tr>
<tr>
<td>EGN-4</td>
<td>Material Science</td>
<td>3.0</td>
</tr>
<tr>
<td>WLD-89</td>
<td>Cooperative Work Experience</td>
<td>1.0-4.0</td>
</tr>
<tr>
<td>WLD-145</td>
<td>Special Projects</td>
<td>1.0-2.0</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* 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>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.
# 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.

## C-ID Courses at Hartnell

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Course Identification (C-ID)</th>
<th>Units</th>
<th>Course Grading</th>
</tr>
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<tbody>
<tr>
<td>AIT-70</td>
<td>Intro to Mechanized Agriculture</td>
<td>C-ID AG MA 104L</td>
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<td></td>
</tr>
<tr>
<td>ABT-57</td>
<td>Agriculture Computer Applications</td>
<td>C-ID AG AB 108L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ-1</td>
<td>Introduction to Administration of Justice</td>
<td>C-ID AJ 110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ-3</td>
<td>Concepts of Criminal Law</td>
<td>C-ID AJ 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ-10</td>
<td>Juvenile Procedures</td>
<td>C-ID AJ 220</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ-51</td>
<td>Control and Supervision in Corrections</td>
<td>C-ID SOCI 160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART-15A</td>
<td>Ceramics A</td>
<td>C-ID ARTS 230</td>
<td></td>
<td></td>
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<tr>
<td>ART-72</td>
<td>Introduction to Digital Arts</td>
<td>C-ID ARTS 250</td>
<td></td>
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</tr>
<tr>
<td>ART-41A</td>
<td>Introduction to Jewelry and Metal smithing</td>
<td>C-ID ARTS 281</td>
<td></td>
<td></td>
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<tr>
<td>ART-33</td>
<td>Weaving as an Art Form</td>
<td>C-ID ARTS 282</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM-1</td>
<td>Introduction to Public Speaking</td>
<td>C-ID COMM 110</td>
<td></td>
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<tr>
<td>COM-8</td>
<td>Interpersonal Communication</td>
<td>C-ID COMM 130</td>
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<tr>
<td>FCS-14</td>
<td>Child Development</td>
<td>C-ID CDEV 100</td>
<td></td>
<td></td>
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<tr>
<td>GEL-2</td>
<td>Introduction to Geology</td>
<td>C-ID GEOL 100</td>
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<tr>
<td>GEL-36</td>
<td>California Geology</td>
<td>C-ID GEOL 200</td>
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</tr>
<tr>
<td>MAT-3A</td>
<td>Analytic Geometry and Calculus I</td>
<td>C-ID MATH 210</td>
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<tr>
<td>MAT-3B</td>
<td>Analytic Geometry and Calculus II</td>
<td>C-ID MATH 220</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT-3C</td>
<td>Analytic Geometry and Calculus III</td>
<td>C-ID MATH 230</td>
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<tr>
<td>MAT-4</td>
<td>Linear Algebra</td>
<td>C-ID MATH 250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT-5</td>
<td>Different Equations</td>
<td>C-ID MATH 240</td>
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</tr>
<tr>
<td>PHY-2A</td>
<td>College Physics I</td>
<td>C-ID PHYS 105</td>
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<tr>
<td>PHY-2B</td>
<td>College Physics II</td>
<td>C-ID PHYS 110</td>
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<td></td>
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<tr>
<td>PHY-4A</td>
<td>General Physics/Mechanics</td>
<td>C-ID PHYS 205</td>
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<tr>
<td>PSY-2</td>
<td>General Psychology</td>
<td>C-ID PSY 110</td>
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<tr>
<td>PSY-22</td>
<td>Abnormal Psychology</td>
<td>C-ID PSY 120</td>
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<tr>
<td>PSY-25</td>
<td>Developmental Psychology</td>
<td>C-ID PSY 180</td>
<td></td>
<td></td>
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<tr>
<td>SOC-1</td>
<td>Introduction to Sociology</td>
<td>C-ID SOCI 110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC-5</td>
<td>Introduction to Social Problems</td>
<td>C-ID SOCI 115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC-41</td>
<td>Marriage and Family</td>
<td>C-ID SOCI 130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC-42</td>
<td>The Sociology of Minority Relations</td>
<td>C-ID SOCI 150</td>
<td></td>
<td></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 role expectations of criminal justice agents in their interrelationships in society and emphasizes the concepts of crime causation, punishment and rehabilitation. Also discusses ethics, education and training for professionalism in the social system.  
[CSU; UC; CSU-GE; AREA D0, IGETC AREA 4]  
[C-ID AJ 110]

ADJ2. Community Relations: Multicultural Diversity/ Discrimination (3)  
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 minority groups in California including Black/African-American, Hispanic/ Latino and Asian American groups. The course also identifies problems related to our increasing diverse population; and examines strategies to overcome these problems, particularly in relation to the maintenance of social order and law enforcement.  
[CSU; UC]

ADJ3. Concepts of Criminal Law (3)  
Lec 3 Hrs  
An introduction to the legal system, the sources of law, the criminal court system and differences between civil and criminal law. The course focus will be classifying, defining and identifying crimes. Explores parties to crimes, defenses to crimes and the criminal aspects of the Constitution.  
[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, and the criminal court system. The course focuses in particular on the trial process and classifications of evidence. A complete overview is offered of legal issues in criminal evidence such as admissibility, constitutional protections 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]

ADJ5. Criminal Procedures (3)  
Pass/No Pass Option  
Lec 3 Hrs  
An introduction to the sources of law, the legal system, the criminal court system, 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]

ADJ6. 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; follow-up and case preparation.  
[CSU]

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 Assistant (3)  
Pass/No Pass Option  
Lec 3 Hrs  
Provides an overview of the paralegal/legal assistant profession, a general introduction to the legal environment and foundational skills necessary to succeed in legal specialty courses. Students will be given a perspective of the role of the paralegal/legal assistant in the modern law office, will learn basic 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  
Provides students with a fundamental understanding of preparing a civil case for trial. Topics include: California procedural statutes and rules governing civil litigation, the attorney-client relationship, court organization, purposes of the steps in case preparation, and post-litigation concerns. Students will practice client interviewing, drafting of pleadings and motions, deposition summaries, evidence gathering and discover 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. This course may be taken three times with different or advanced content for a maximum of nine units.
   [CSU]

ADJ50. Introduction to Correctional Science (3)
   Lec 3 Hrs
   Semesters Offered: Variable
An introduction to various aspects of the corrections system. Covers the historical development of corrections and modern trends. Also includes a discussion of the goals of criminal sentencing, jails, prisons, prisoners' rights, alternatives to incarceration, probation and parole.
   [CSU]

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; Lab 2.25
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)

Lec 2 Hrs; Lab 1 Hr

This course involves basic mechanical skills in woodworking, cold metal, electricity, plumbing, concrete, and project construction skills as related to farm maintenance and repair. Hand and power tool use skills will be developed. Safety practices for all mechanical areas will be covered. Formerly AGR 56. Not open to students who have completed AGR 56 with a grade of "C" or better.

[AIT172. Agricultural Equipment 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.

[AIT173. 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.

[AIT174. Agricultural Machinery Service & Safety (3)

Lec 1 Hr; Lab 3 Hrs

An applied study of equipment service and safety practices. Covers equipment service and basic troubleshooting, accident causation and prevention in the shop with a variety of tractors and machinery. Normal safety practices will be stressed. Supervised field operation and field trips will be required.

[AIT175. 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]
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]

ABT57. Agriculture Computer Applications (3)

Lec 2 Hrs; Lab 3 Hr
Computer use in the workplace with emphasis on agribusiness situations. Computer applications including word-processing, spreadsheets, databases, and presentation managers will be covered. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design and other software appropriate to agribusiness. Formerly AGR 57. Not open to students who have completed AGR 57 with a grade of "C" or better.

[CSU; UC] [C-ID AG AB108L]

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]

ABT59. Principles in Weed Science (3)

Lec 3 Hrs
An introduction to weed science including plant identification, biology, and weed management. Includes a weekly laboratory activity. Formerly AGR 92. Not open to students who have completed AGR 92 with a grade of "C" or better.

[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]

ABT61. 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]

ABT62. 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]

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 5]

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]
ABT93. Product Processing and Cooling (3)
Lec 2 Hrs; Lab 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 Hr
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.

ABT98. Fertilizers and Plant Nutrition (3)
Lec 2 Hrs; Lab 3 Hrs
Covers the identification, 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.

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.

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, crop 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 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 104. Not open to students who have completed AGR 104 with a grade of "C" or better.

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 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 105. Not open to students who have 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 majors as they relate to agriculture majors. Assists students in setting goals and developing interpersonal 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 have 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 crisis 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.

ABT136. 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.
ALCOHOL AND OTHER DRUGS

AOD1. Fundamentals of Chemical Dependency (3)

Lec 3 Hrs
An introduction and overview of basic concepts of chemical dependency including the history of alcohol and other mood-altering substances in the U.S. Myths and stereotypes of alcohol and drug use will be examined as well as sociocultural factors that contribute to the use of drugs. Theories of chemical dependency and an overview of the effects of various drug categories on human behavior, treatment and recovery approaches will be included. Designed for students interested in obtaining CAADAC certification.

[CSU]

AOD2. Pharmacology and Physiology of Alcohol and Other Drugs (3)

Lec 3 Hrs
An in-depth look at the physiologic action and effects of alcohol and other psychoactive drugs on the body and behavior. Emphasis is placed on the pharmacologic and neurobiological effects and medical consequences of abuse and addiction. Includes the pharmacologic basis of medications used for various psychiatric disorders as well as treatment considerations for substance abuse and dependency. Designed for students interested in obtaining CAADAC certification.

[CSU]

AOD3. Intervention, Treatment and Recovery (3)

Lec 3 Hrs
An introduction to the theory and practice of chemical dependency counseling with special emphasis on treatment planning, implementation and documentation. The core functions of the chemical dependency counselor in the early intervention, assessment and treatment planning phases of recovery counseling will be introduced and developed. The need to interface with others in the medical and mental health community in developing a multi-dimensional approach to treatment will be included. Designed for students interested in obtaining CAADAC certification.

[CSU]

AOD4. Counseling Diverse Populations (3)

Lec 3 Hrs
A counseling course that introduces the student to special population subgroups in alcohol and drug counseling and the unique helping skills used to support these populations. Particular focus is placed on gender, race, culture, age and sexual orientation as it relates to addiction and recovery.

[CSU]

AOD5. Legal/Ethical Considerations and Professional Growth (3)

Lec 3 Hrs
Explores the legal, ethical, professional and personal issues involved in the treatment of chemical dependency. Emphasis is placed on professional responsibility and patient rights as well as issues of the work place and professional growth.

[CSU]

AOD6. Prevention, Education and Relapse Prevention (3)

Lec 3 Hrs
Conceptual frameworks, major research, epidemiology, environmental risk factors and the effectiveness of various prevention strategies will be examined. In addition, client education strategies used in the treatment and relapse prevention phases of chemical dependency will be highlighted.

[CSU]

AOD7. Individual Counseling Skills in Chemical Dependency (3)

Lec 3 Hrs
An introduction to the basic skills and techniques of counseling for chemical dependency counselors. This course describes characteristics of an effective counselor, explores several theoretical models of counseling, and assists the individual to develop skills in active listening, building trust, reflecting feelings and content, and using motivational interviewing techniques. Stages of therapy and life span issues will receive special attention.

[CSU]

AOD8. Family and Group Counseling (3)

Lec 3 Hrs
A focus on family dynamics and group processes as they relate to chemical dependency. The dynamics of chemical dependency within family systems will be explored and interventions designed to assist family members to understand and cope with chemical dependency will be examined. In addition, group processes and dynamics will be examined with an emphasis on developing skills for group leadership.

[CSU]

AOD9. Co-Occurring Disorders (3)

Lec 3 Hrs
An introduction to the treatment needs of those who have one or more psychiatric disorders in combination with a chemical dependency disorder. Focus is placed on identification, assessment, current treatment approaches, medication, referral procedures, and interface with the professional mental health community.

[CSU]

AOD10. Chemical Dependency 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
Designed for students in their final semester of the AOD program, this course is designed to support students as they complete the practicum/work experience requirements of the program. Emphasis is placed on developing the skills and abilities needed to work as a chemical dependency counselor.

[CSU]

AOD99. Practicum in Chemical Dependency (4)

Pass/No Pass Only

Corequisite: AOD 10

Lab 14 Hrs
Designed for students in their last semester of the AOD program, this course provides students with a hands-on learning experience via a directed field study. Emphasis is placed on enabling the student to experience and perform the work of a chemical dependency counselor. Students must complete at least 255 hours of volunteer experience or 300 hours of paid work experience in an approved facility to meet unit requirements and CAADAC/CCBADC accreditation standards for practicum experience. College will facilitate internship/job placement.

[CSU]
AMERICAN SIGN LANGUAGE

ASL1. 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]

ASL2. American Sign Language II (3)
Pass/No Pass Option
Prerequisite: COU 80 or ASL1 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]

ASL3. 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]

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, ethnohistorical and historical data in order to understand the cultural experiences of modern-day indigenous communities.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]

ANT15. North American Indians (3)
Lec 3 Hrs
A survey of the native peoples and cultures of North America including the northern part of Mexico. Designed to provide an introduction through an ethnohistorical approach that considers aspects of traditional ethnography as well as the impact of historical events on American Indians extending to contemporary issues.
[CSU; UC; CSU-GE, AREA D1; IGETC, AREA 4]
APPRENTICESHIP

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 Castrovile, 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. In this semester, the students will learn the basics of analysis of simple electrical circuits and learn to be able to use Ohm’s law to solve for voltage, current, resistance and power values. They will also learn about three wire systems, electrical device configurations and the properties of electrical building wire.

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. I (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.
ART

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]

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
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]

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. May be taken four times for credit.
[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. May be taken up to four times for credit.
[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. Combinations of ART 6A, ART 6B, and ART 6C may be taken up to four times for credit.
[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. Combinations of ART 6A, ART 6B, and ART 6C may be taken up to four times for credit.
[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 4 Hrs
This introductory course will examine the fundamentals of basic visualization and conceptualization 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, brushes, illustration board and paper. May be taken up to four times for credit.
[CSU; UC]

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.) May be taken four times for credit.
[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 special materials. Emphasis on the creation of small sculpture and jewelry objects. Emphasis on the creation of small sculpture and jewelry objects.
[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 loom and loom woven structures as well as a variety of related dyeing and fiber processes. Weaving classes may be repeated at the appropriate level but weaving enrollments are limited to a total of four.
[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. Weaving classes may be repeated at the appropriate level but weaving enrollments are limited to a total of four.
[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. Jewelry classes may be repeated at the appropriate level, but total Jewelry enrollments are limited to four.
[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. Jewelry classes may be repeated at the appropriate level, but total Jewelry enrollments are limited to four.
[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]
ART 51. 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]

ARTS2. 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. Students may enroll up to three times provided the portfolio content is different each enrollment.  
[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 exploration of the digital art tools of typography, graphics, digital imaging, animation, full motion video, and digital media interface design. Students will analyze the essential topics of interactivity, media development process, and the applications and future directions of the digital arts.  
[CSU; UC] [3-D 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 framamental, 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]
ART85. Interactive Digital Media Interface Design (3)

Lec 2 Hrs; Lab 3 Hrs
Hands-on instruction in the design of an interface for an interactive multimedia product for web development or CD/DVD distribution. Students will integrate text, audio, video, graphics and animation to create productions for art media portfolios, corporate marketing, instructional presentations or business demonstrations. Students will choose a theme, determine a premise, structure a story board and create a multimedia production. Not open to students who have completed CIS 85 or CSS 85 with a grade of “C” or better. [CSU]

ART100. Ceramics: European Folk 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.

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.

ART110. Textiles: European Folk Traditions (3)

Lec 2 Hrs; Lab 4 Hrs
A study of textile design and skill building production methods with emphasis on European folk traditions.

ART111. Textiles: Chinese and Korean Folk Traditions (3)

Lec 2 Hrs; Lab 4 Hrs
A study of textile design and skill building production methods with emphasis on Chinese and Korean folk traditions.

ART112. Textiles: Japanese Folk Traditions (3)

Lec 2 Hrs; Lab 4 Hrs
A study of textile design and skill building production methods with emphasis on Japanese folk traditions.

ART113. Textiles: Pre-Columbian Traditions (3)

Lec 2 Hrs; Lab 4 Hrs
A study of textile design and skill building production methods with emphasis on Pre-Columbian art traditions.

ART150. Low-Fire Ceramics (1)

Lec 0.5 Hrs; 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.) Combinations of ART 15A, ART 15B, ART 150, ART 219, and ART 220 may be taken four times for credit.

ART219. Primitive Firing (1)

Pass/No Pass Option
Lec 0.5; Lab 1.5
Forming and firing clay emphasizing traditional and experimental primitive firing process. Students will provide clay, clay tools, and optional materials (aprons, sponges, towels, etc.) Combinations of ART 15A, ART 15B, ART 150, ART 219, and ART 220 may be taken four times for credit.

ART220. Raku Workshop (1)

Pass/No Pass Option
Lec 0.5 Hrs; Lab 1.5 Hrs
Forming and firing clay emphasizing traditional and experimental raku processes. Students will provide clay, clay tools, and optional materials (aprons, sponges, towels, etc.) Combinations of ART 15A, ART 15B, ART 150, ART 219, and ART 220 may be taken four times for credit.
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 5]

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 5]

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. This course may be taken three times with different content for a maximum of nine units.  
[CSU]
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 emission controls diagnosis and repair. Proper use of tools and literature to perform adjustments and troubleshooting to maintain proper engine performance.

[CSU]

AUT56. Auto Machining I (4)

Lec 2 Hrs; Lab 6 Hrs


[CSU]

AUT56. Auto Machining II (4)

Lec 2 Hrs; Lab 6 Hrs

Automotive technician skill development with emphasis on diagnosis, repair 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 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, wiring repair, automotive batteries, battery diagnosis and service, starting system, charging systems, lighting circuits repair and diagnosis, electrical 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.

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.

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.
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 mild 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. May be repeated for a maximum of 6 units.

AUT150. Introduction to Heavy Duty Diesel Technology (4)
Lec 2 Hrs; Lab 6 Hrs
Covers the principles of operation and system service procedures for all systems found on today's diesel/heavy-equipment. Includes introduction to shop and personal safety, proper use of hand tools, shop equipment, and research for information related to the repairs being performed and vehicle specifications using service manuals and computer software format.

AUT151. Heavy Duty Diesel Preventive Maintenance (3)
Lec 1 Hr; Lab 6 Hrs
Introduces basic maintenance, diagnosis, and servicing of all heavy duty diesel systems, from tool and shop safety through the steps necessary to maintain a modern heavy duty diesel vehicle. Examines basic systems such as electrical, lubrication, heating, cooling, exhaust, and transmission systems in depth.

AUT152. Heavy Duty Diesel Technology: Electricity and Electronics (4)
Lec 2 Hrs; Lab 6 Hrs
Provides strong background in basic electricity and electronic concepts. Covers diesel/heavy-duty technology electrical and electronic systems, basic theories, electrical components, wiring and circuit diagrams, diesel/ heavy-duty technology batteries, starting systems, and ignition systems. Covers the principles of operation and system service procedures for all systems found on today's diesel/heavy-duty equipment.

AUT153. Heavy Duty Diesel Brakes, Steering and Suspension (3)
Lec 1 Hr; Lab 6 Hrs
Introduces air brake components, hydraulic brakes and air-over-hydraulic brake systems, air brake servicing, steering and alignment, suspension systems, chassis systems/ safety/brakes inspection, and brakes operation fundamentals. Includes discussion and hands-on servicing of suspensions system fundamentals, suspension system service, steering system service, wheel alignment fundamentals, and front and rear wheel drive fundamentals.

AUT154. Heavy Duty Diesel Engine Performance and Diagnostics (4)
Lec 2 Hrs; Lab 6 Hrs
Introduces techniques of performing diagnosis and repair of heavy duty diesel engines, including diesel electronic engine control systems, valve adjustment of in diesel engine block and overhead camshafts, diesel fuel injection system testing and servicing. Covers servicing turbochargers, service, diagnostics and repair of exhaust and intake systems, and emission controls diagnosis and repair. Heavy emphasis on proper use of tools and literature to perform all needed testing.

AUT155. Heavy Duty Diesel Equipment Climate Control (3)
Lec 1 Hr; Lab 6 Hrs
Covers heavy duty diesel climate control and refrigerant systems; including pressure and temperature, refrigerants and lubricants, and special service tools. Involves detailed study of compressors and clutches, compressor service and system components and metering devices, and electricity and electronics review. Includes troubleshooting and repair, retrofit R-12 to R-134a, MACS certification training manual.

AUT156. Heavy Duty Diesel Engine Rebuild (3)
Lec 1 Hr; Lab 6 Hrs
Covers diesel engine construction, diagnosis, disassembly, inspection, operation, and shop safety. Includes engine balancing, evaluation of pistons and rings, engine repair and reassembly. Specific emphasis on repair and assembly using vehicle specifications from service manuals and technical publications.

AUT157. Heavy Duty Diesel Electronics Systems and Controls (4)
Lec 2 Hrs; Lab 6 Hrs
Covers all aspects of heavy duty diesel electronic systems and controls. Provides a study of diesel starting, charging, and accessory electrical systems and components. An emphasis is placed on electrical system diagnosis and electrical repair. Includes using various industry standard diagnostic electrical equipment and testing techniques.

AUT158. Heavy Duty Diesel Power Drive Train (3)
Lec 1 Hr; Lab 6 Hrs
Covers drive trains and axes, drive train theory, clutches, manual transmissions, drive shafts and universal joints, differentials and drive axes, drive train electrical and electronic systems. Provides theory, diagnosis, and service of clutches, driveline, synchro transmissions and final drives, torque converters, and automatic transmission. Includes proper repair and service of assemblies for standard and automatic transmissions.

AUT159. Heavy Duty Diesel Automatic Transmissions (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, reaction and friction units.

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, malfunction, diagnosis, repair, 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)
Prerequisite: 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 5]

BIO2. General Zoology (5)
Prerequisite: 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 5]

BIO3. General Botany (5)
Prerequisite: 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 5]

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 5]

BIO6. Introductory Physiology (3)
Prerequisite: 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 5]

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 5]

BIO7. General Microbiology (5)
Prerequisite: 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 microbiological, 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 5]

BIO8. General Microbiology Laboratory (2)
Corequisite: BIO 7
Lab 6 Hrs
This laboratory course will include experiments designed to illustrate the application of microbiology important in health, sanitation, food processing, and biotechnology. 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 5]

BIO10. General Biology (4)
Lec 3 Hrs; Lab 3 Hrs
An introduction to the facts and principles of general biology with emphasis on the diversity, morphology, heredity, evolution, and ecology of living organisms.
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]

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 5]

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 5]

BIO13. Introduction to Forensic DNA Analysis (3)
Pass/No Pass Option
Lec 3 Hrs
An introduction to forensic DNA analysis with an 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;
Prerequisite: 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 disorders.
[CSU; UC; CSU-GE, AREA B2; IGETC, AREA 5]

BIO20. Field Biology/Natural Science (4)
Lec 3 Hrs; Lab 3 Hrs
An introduction to the natural history of bacteria, fungi, protists, plants and animals. Identification, classification, life histories, and ecological relationships will be investigated. Recommended for students interested in outdoor biological studies.
[CSU; UC; CSU-GE, AREA B2, B3; IGETC, AREA 5]
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<th>Course Code</th>
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| 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.                                                                                                                                                                                      | 3            | 3         | 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 5]**                                                                                                                                                                                                                                                                  |
| BIO30      | Marine Biology (4)               |     | **Lec 3 Hrs; Lab 3 Hrs**                                                   | An introduction to the study of marine life. Emphasis on the fundamentals of biology, algae, invertebrates, vertebrates, and ecology. Recommended for non-science majors who desire a general knowledge and appreciation of life in the sea.                                                                                                                   | 3            | 3         | **[CSU, UC, CSU-GE, AREA B2, B3; IGETC, AREA 5]**                                                                                                                                                                                                                                                                                                                                                                             |
| 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.**                                                                                                                                             | 3            |           | **[CSU, UC, CSU-GE, AREA B2, E; IGETC, AREA 5]**                                                                                                                                                                                                                                                                                                                                                                               |
| BIO45      | Special Projects (1-3)           |     | **Lec 3 Hrs; Lab 3 Hrs**                                                   | 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. This course may be taken three times with different or advanced content for a maximum of nine units.                                                                                                                   | 3            | 3         | **[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.                                                                 | 3            | 3         | **[CSU, UC, CSU-GE, AREA B2, B3; IGETC, AREA 5]**                                                                                                                                                                                                                                                                                                                                                                               |
| 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**                                                                                                                                                                                                                                                          | 3            |           | An introductory and multidisciplinary study of the biology of our environment and its interrelationships. Emphasis is on the impact of human population and policies in regard to air, water, land use, resources and waste management.  
**[CSU, UC, CSU-GE, AREA B2; IGETC AREA 5]**                                                                                                                                                                                                                                                                                                                                                                                   |
| BIO48L     | Environmental Science Laboratory | 1   | **Pass/No Pass Option**                                                     | **Corequisite:** BIO 48  
**Lec 3 Hrs**                                                                                                                                                                                                                                                           | 3            | 3         | Introduction to the study of the environment through hands-on field and laboratory experiments. Emphasis on ecological principles, populations, natural resources, energy use, and lifestyle choices  
**[CSU, UC, CSU-GE AREA B3; IGETC AREA 5]**                                                                                                                                                                                                                                                                                                                                                       |
BUS1A. Financial Accounting (4)  
Pass/No Pass Option  
Advisory: Recommend successful completion of 30 units of Business Administration major and/or General Education courses.  
Lec 3.5 Hrs; Lab 1.5 Hrs  
Transfer class required for all business students. Principles and theories of financial accounting for business majors. Emphasizes analysis of periodic financial transactions, statements, and reports used and generated by profit-motivated businesses.  
[CSU; UC]  

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  
Continuation of BUS 1A. Emphasizes how internal accounting information is provided to management within the organization rather than users outside the organization. Includes cost accounting, cost-volume-profit analysis, budgeting, segment accounting, variance investigation, and information for decision alternatives.  
[CSU; UC]  

BUS5. Introduction to Organizational Communication (3)  
Advisory: ENG 101 or ESL 101 with a grade of “C” or better.  
Lec 3 Hrs  
Introduces 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. The Legal Environment of Business (3)  
Lec 3 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 and administrative agencies. Content includes business torts and crimes, contracts, agency, employment discrimination, business organization formats and the legal aspects of partnerships and corporations.  
[CSU; UC]  

BUS32. Introduction to Business (3)  
Pass/No Pass Option  
Lec 3 Hrs  
This course presents fundamentals of business. Provides a basic vocabulary of business terms and an understanding of the structure, organization and operating procedures of business enterprises.  
[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.  
Lec 3 Hrs  
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. This course may be taken three times with different or advanced content for a maximum of nine units.  
[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  
Lab 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. This course may be taken up to four times for credit in order to complete all four content areas.  

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 Hrs; 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 Hr; 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. The course may be repeated three times for credit.

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. The course may be repeated for a total of two units.

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 2 Hrs; Lab 3 Hrs

Semesters Offered: Variable

Use of spreadsheet features/commands to create and edit electronic spreadsheets using a computer. Not open to students who have completed CSS 150.25.[CSU]

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.

BUS153. Business Calculations (3)

Pass/No Pass Option

Prerequisite: BUS 140A and BUS 151. 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.

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

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. This course may be taken up to four times for credit in order to complete all four content areas.
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 5]

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 equilibria 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 5]

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 major requires a full year of organic chemistry (chemistry, chemistry engineer, pre-medical, pre-dental, pre-veterinary, pre-pharmacology, or biology majors). Contents include: a survey of the structures, nomenclature, properties, and reactivity of various functional groups; mechanistic pathways; stereochemistry; spectroscopy; synthesis; biologically important molecules.
[CSU; UC; CSU-GE, AREA B1, B3; IGETC, AREA 5]

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 5]

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 5]

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 ENG1A
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]
[C-ID COMM 110]

COM3. Introduction to Communication (3)
Prerequisite: Eligibility for ENG1A.
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]

COM5. Introduction to Organizational Communication (3)
Prerequisite: Eligibility for ENG1A
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. Topics also include: sexual harassment, meeting organization, problem solving and negotiations, interviewing, and cultural issues in the workplace. Not open to students who have completed BUS-5 or SPE-5 with a grade of "C" or better.
[CSU; CSU-GE, AREA A1]

COM8. Interpersonal Communication (3)
Lec 3 Hrs
Explores interpersonal communication elements including listening, perception, language usage, non-verbal communication, and conflict management. Students will learn new skills to overcome communication barriers and enhance their interpersonal relationships. Not open to students who have completed SPE-8 with a grade of "C" or better.
[CSU; UC; CSU-GE AREA D7; IGETC, AREA 4]
[C-ID COMM 130]

COM20. Argumentation and Debate (3)
Prerequisite: Eligibility for ENG1A
Lec 3 Hrs
Introduces skills in critical analysis and query to promote advocacy. Students will analyze, present, and evaluate oral and written arguments by identifying fallacies, testing evidence and evidence sources, advancing reasoned positions, and defending and refuting arguments.
[CSU]

COM35. 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 in 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 COU-35 or SPE-35 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA D7; IGETC AREA 4]
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]  

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]  

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]  

CSS4. Introduction to Scientific Programming (4)  
**Prerequisite:** MAT 2 or 3A with a grade of “C” or better.  
**Lec 3 Hrs; Lab 3 Hrs**  
Essentials of programming for science, engineering, and mathematical applications. Extensive programming experience in numerical programming, statistical programming, matrices, and numerical approximation. CSS-4 is designed as the fundamental programming course for transfer students in science, mathematics and engineering. [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, understanding e-commerce solution development, 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, and 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 skills 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  
**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, informatics, 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]
CSS60A. 2-D Game Development (4)
Pass/No Pass Option
Lec 3 Hrs; Lab 3 Hrs
An introduction to 2-dimensional computer game design. Topics include criticism, analysis and history of 2-D games, games and society, principles and methodologies behind the rules and play of games, visual and audio design, programming concepts, interactive storytelling and game production. Course contents follow the IDGA Curriculum Framework. [CSU]

CSS60B. 3-D Game Development (4)
Pass/No Pass Option
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.
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, impact of physical security on 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" and their roles within that company will also be incorporated in the class. Coverage of both CompTIA's Security+ Certification exam and the (ISC) 2 SSCP Certification, which focuses on best practices, roles, and responsibilities of security experts, is integral to the course. [CSU]

CSS123. Network Security Principles (4)  
**Lec 3 Hrs; Lab 3 Hrs**

Provides an in-depth exploration of the essentials of computer network security. Analyze security objectives and the role of policy deployment while defending against network attacks. Covers attacks and malware, E-mail, web components, software development, disaster recovery, risk, change and privilege management, forensics and legal issues. Scenario-based curriculum describing a start-up company in which the students are employed with specific roles will also be incorporated in the class. Coverage of both CompTIA's Security+ Certification exam and the (ISC) 2 SSCP Certification, is integral to this course. [CSU]

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.
CONSTRUCTION

CONS101. 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.

CONS104. 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.

CONS121. 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.

CONS123. 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.

CONS125. Green Building Materials and Methods (3)
Pass/No Pass Option
Advisory: CONS 101 or student should have adequate preparation for this advanced class through previous exposure to or experience in Green Building.
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 components are also discussed. The focus will be placed on topics that they have already studied in other classes. Not open to students who have completed CON 130 with a grade of "C" or better.

CONS126. 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.

CONS128. 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.

CONS129. 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.

CONS130. Heavy Equipment and Highway Construction (3)
Pass/No Pass Option
Advisory: CONS 101
Lec 3 Hrs
Provides a comprehensive overview of highway and other 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 NCERT (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.

CONS132. 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.

CONS134. 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.

CONS136. 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.

CONS140. 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.

CONS142. 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.

CONS144. 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.

CONS145. 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.
CON146. 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.

[CSU]

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 in a field project. Focus on building techniques, job organization, plans, and materials. Projects may include any or all phases of construction from excavation to final finish work, depending upon the specific stage of the project when students join the class. Class meetings are at a specified building site. Not open to students who have completed CON 51 with a grade of "C" or better.

[CSU]

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.

[CSU]

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.

[CSU]
COU1. Student Success Seminar (3.0)
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]

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]

COU26. Student Skills for Success: Learning Strategies (3)
Pass/No Pass Option
Lec 3 Hrs
This comprehensive course enables students to successfully navigate higher education through personal growth, problem solving, learning strategies, and study skills improvement. An in-depth exploration and application of study skill theories and topics to include: memory development, time management strategies, approaches to effective reading, note taking, test taking strategies, effective college study habits, successful use of campus resources and services, and healthy lifestyle maintenance. Designed to assist students in developing study skills and learning strategies necessary to improve their educational aptitudes and behaviors through personal growth.
[CSU, UC]

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]

COU45. Special Projects (1-3)
Pass/No Pass Option
Lec 1 Hr
Designed for students who are interested in investigating topics beyond the scope of a regular counseling course. Students will gain hands-on experience in advanced counseling topics. This course may be taken three times with different or advanced content for a maximum of nine units.
[CSU]

COU 80, 81, 83 have been changed to ASL 1, 2, 3. Please see the ASL course listings section for additional information.

COU105. Emotional Management Skills: (1.5)
Pass/No Pass Only
Lec 1.5 Hrs
Introduction to specific cognitive behavioral approaches designed to identify and manage personal negative feelings. Positive peer support and self-talk skills designed to help students manage life-disrupting problems, emotions, and events. Survey of local mental health resources. Designed for students with ongoing and identified behavioral and emotional challenges.

COU123. Student Skills for Success: Career/Internship Preparation (1)
Pass/No Pass Only
Lec .5 Hrs
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.

COU129. Student Skills for Success: Job Hunting Techniques (0.5)
Pass/No Pass Only
Lec .5 Hrs
Designed to assist students develop critical job finding competencies. Students will learn how to search for a job effectively by assessing and defining their marketable skills and communicating their skills to employers through applications, resumes and oral interviews. This course may be scheduled in a regular lecture format or a self-paced format.
LSK90. Memory Skills (1)
Pass/No Pass Only
Lec 1 Hr
Basic principles of memory improvement with an emphasis on brain functions in relation to memory and applied memory methods. Designed for students with identified memory and concentration deficits, learning disabilities, and other learning challenges. Application to college coursework, study skills, test taking as well personal and social situations. Not open to students who have taken COU 90 with a grade of "CR."

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 Hr
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.
DANCE

DAN1. Ballet I (1.5)
   **Lec 1 Hr; Lab 3 Hrs**
Class instruction in the art of classical ballet. Topics covered include basic alignment and physical placement for classical ballet, history of ballet, basic ballet barre, ballet center work and ballet combinations. Ballet classes may be repeated at the appropriate level, but total Ballet enrollments are limited to four.
[CSU; UC]

DAN2. Ballet II (1.5)
   **Prerequisite: DAN 1 with a grade of “C” or better.**
   **Lec 1 Hr; Lab 3 Hrs**
Instruction in intermediate level classical ballet technique. Topics covered include advanced physical placement for ballet, intermediate level ballet barre, center work and ballet combinations, point work, and dance production. Ballet variations with historical context will be studied and learned. Ballet classes may be repeated at the appropriate level, but total Ballet enrollments are limited to four.
[CSU; UC]

DAN6. Dance Production: Rehearsal and Performance (2)
   **Advisory:** Recommended that student be previously enrolled in a dance technique class. This is a course for dancers, regardless of skill level, who are interested in performing on stage.
   **Lec 1 Hr; Lab 3 Hrs**
An introduction to the basic techniques of dance performance and production with an emphasis on performance. Students will have the opportunity to perform in a dance concert. Students will learn, rehearse, and perform dances on stage and study the production and performance aspects of theatrical dance. May be taken in combination with other dance classes up to four times for credit.
[CSU; UC]

DAN7. Dance Appreciation (3)
   **Pass/No Pass Option**
   **Lec 3 Hrs**
An introduction to dance history and the different dance genres designed for anyone interested in learning how to look at and appreciate dance. Dance Appreciation offers an overview of the development of dance as an art form from primitive and ancient times to the 21st century. Through lectures, demonstrations, in-class discussions, videos and the viewing of public performances the students will explore dance principals and traditions, social and cultural contexts of dance genres, and important dance styles along with the artists who created them.
[CSU; UC; CSU-GE, AREA C1]

DAN20. Modern Dance I (1.5)
   **Lec 1 Hr; Lab 3 Hrs**
Class instruction on beginning techniques of modern dance. Topics covered include the history of American Modern Dance pioneers and major works, technique analysis, creative exploration of movement shapes, levels, special patterns, floor patterns, line, qualities and dynamics of movement, dance composition and production. Modern Dance classes may be repeated at the appropriate level, but total Modern Dance enrollments are limited to four.
[CSU; UC]

DAN30. Jazz Dance I (1.5)
   **Lec 1 Hr; Lab 3 Hrs**
Class instruction in the art of jazz dance. Topics covered include basic postural alignment for jazz dance, jazz warm-up, jazz locomotor movement, phrasing of jazz dance elements, and jazz dance production. Jazz Dance classes may be repeated at the appropriate level, but total Jazz Dance enrollments are limited to four.
[CSU; UC]

DAN31. Jazz Dance II (1.5)
   **Prerequisite: DAN 30**
   **Lec 1 Hr; Lab 3 Hrs**
Class instruction in the art of intermediate level jazz dance. Topics covered include a technique warm-up, intermediate level body positions and locomotor movement, intermediate level dance phrasing and composition, jazz dance production. Jazz Dance classes may be repeated at the appropriate level, but total Jazz Dance enrollments are limited to four.
[CSU; UC]

DAN102. Advanced Ballet (1)
   **Lab 3 Hrs**
Advanced ballet techniques and toe-shoes. Students should have knowledge of vocabulary, positions of feet and arms, barre work, and mechanics of added body movements as it relates to ballet.
[CSU; UC]

DAN110. Intro. to Choreography/Jazz Emphasis (1.5)
   **Pass/No Pass Option**
   **Lec 1 Hr; Lab 3 Hrs**
Introductory techniques of movements of the now world-wide folk dance of jazz which was developed in early America by the Blacks.
[CSU; UC]

DAN132. Advanced Jazz Dance (1)
   **Lab 3 Hrs**
Continued study of Jazz Dance techniques. Emphasis on developing performance technique and style. Course to provide jazz dance improvisation and choreography. Students should have knowledge of locomotor movement phrases, and have the ability to use jazz dance combinations.
[CSU; UC]

DAN133. Lyrical Jazz Dance (1.5)
   **Lec 0.5 Hrs; Lab 2.5 Hrs**
Introductory techniques of lyrical jazz combined with a strong emphasis of classical ballet.
[CSU; UC]
DRA50. Intro. to Drafting and Design (3)  
**Pass/No Pass Option**  
Lec 2 Hrs; Lab 3 Hrs  
Introduces graphics as a communication tool used in a variety of industries such as, architecture, engineering, interior design, and construction. Emphasis placed on design principles and processes involved in engineering and architectural fields. Topics include technical sketching, lettering, line types, applied geometry for graphic representation, problem solving, orthographic projection and pictorial projections including: perspective, axonometric and oblique. Basic dimensioning and sectioning with adherence to drafting standards will be covered.  
[CSU]

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 editing techniques as well, to obtain information about their drawings, and work with drawing files. This course also covers recommended drafting standards required for proper drawings with AutoCAD.  
[CSU]

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  
An advanced 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]

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]

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]

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]

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 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]

ECE12B. Advanced Theory and Practicum in ECE (4)

Prerequisite: ECE 12A with a grade of "C" or better.

Lec 2 Hrs; Lab 6Hrs
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 connections 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]

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]

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]

ECE21. Infant/Toddler: Small 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 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: Special Needs (3)
   **Lec 2 Hrs**
   Focuses on cognitive and language development of infants and toddlers in group 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]

ECE25. Infant/Toddler: Family Relations (1)
   **Lec 1 Hr**
   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]

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. Focus 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)
   **Advisory:** It is recommended that students complete ECE 22 and 24 before enrolling in this course.
   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. This course may be taken three times with different or advanced content for a maximum of nine units. [CSU]

ECE53. Teaching in a Diverse Society (3)
   **Lec 3 Hr**
   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]

ECE54. Language and Early Literacy Curriculum (3)
   **Lec 3 Hr**
   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. Administration of Child Development Programs (3)
   **Prerequisite:** ECE 1, ECE 2, ECE 4, ECE 101, and FCS 14 with a grade of “C” or better.
   **Lec 3 Hrs**
   The philosophy and principles of program planning, budgeting and personal administration used in the management of early childhood education programs. [CSU]

ECE70B. Advanced Administration of Child Development Programs (3)
   **Prerequisite:** ECE 70A with a grade of “C” or better.
   **Lec 3 Hrs**
   Advanced students of Early Childhood Education, supervisors and administrators of child development programs will expand skills and knowledge in program funding, organizational systems, program management and leadership skills. Focus on profit and non-profit programs, program funding, grant writing, program evaluation, program improvement, advocacy and professionalism in the Child Development field. [CSU]

ECE71. Supervision of Adults in an ECE Setting (2)
   **Advisory:** Eligibility for English 1A. Students must present copy of Child Development Teacher permit on the first day of class.
   Designed for supervisors and administrators coordinating early childhood programs. Emphasis on methods and principles of implementing a strong staff component in a licensed program or agency. Meets the licensing requirement for teachers, site supervisors and directors. [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. May be taken up to 4 times for credit.

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. May be taken up to 4 times for credit.
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 
J. Multicultural curriculum 
K. Activities to promote literacy 
L. 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, 
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. Students may enroll in ECE 
198 A-I for a maximum of 4 times. 

ECE199. Selected Topics in E.C.E. (.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. 
Students may enroll in ECE-199 for a 
maximum of 4 times provided the topic is 
different. 

ECE200. Parent Enrichment (.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. May be repeated for a total of 
3 units.
**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, 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 a service-learning component that involves 30 hours of active participation at a school site.
[CSU; UC; CSU-GE, AREA D3, D7]

EDU110. Foundations of Success (2.5)
*Pass/No Pass Only*
*Lec 1.5 Hrs; Lab 3.0*
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 phasors, 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. This course may be taken three times with different or advanced content for a maximum of nine units.  
[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 with write a minimum of 6,500 words in graded assignments.
[CSU; UC; CSU-GE AREA A2, IGETC, AREA 1]

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]

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 comprising of short essays, a research paper, and homework assignments.
[CSU; UC; CSU-GE AREA A3; IGETC, AREA 1]

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; IGETC, AREA 3; CSU-GE, AREA C2]

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 Soto.
[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]

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 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]
ENGLISH

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]

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]

ENG44A. 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]

ENG44B. 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, drama, and religious works chosen for their literary, historical, and culture significance.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

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]

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 its literary, historical, and cultural significance.
[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

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 cultural 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]

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: ENG253 or ESL265 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)
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. Emphasis 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. 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.

ESL235. Grammar and Writing 2 (5)
Prerequisite: ESL 225 with a grade of "C" or better or placement by Hartnell’s assessment.
Corequisite: ESL 235L
Lec 5 Hrs
Emphasizes grammar and writing for low-intermediate level ESL students. Verb tenses, question forms, nouns, modifiers, and sentence-level writing skills are stressed. Listening and speaking will also be practiced. Formerly ESL 135. Not open to students who have completed ESL 135 with a grade of "C" or better.

ESL235L. Grammar and Writing 2 - Lab (1)
Pass/No Pass Option
Corequisite: ESL-235
Lab 3 Hrs
Individualized lab instruction in support of the ESL 235 curriculum for low-intermediate level ESL students. Formerly ESL 135L. Not open to students who have completed ESL 135L with a grade of "Pass" or "CR".

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.

ESL238. Reading and Vocabulary 2 (4)
Pass/No Pass Option
Lec 4 Hrs
Designed to improve the basic reading skills of low-intermediate level ESL students. Working with the 3,000 most frequently used words, students will build English vocabulary and improve reading comprehension. Formerly ESL 138. Not open to students who have completed ESL-138 with a grade of "C" or better.

ESL245. Grammar and Writing 3 (5)
Pass/No Pass Option
Prerequisite: ESL 235 with a grade of "C" or better or placement by Hartnell’s assessment.
Corequisite: ESL 245L
Lec 5 Hrs
Emphasizes grammar and writing for intermediate level ESL students. Verb tenses and more complex sentence-level writing skills are stressed. Listening and speaking will also be practiced. Formerly ESL 145. Not open to students who have completed ESL 145 with a grade of "C" or better.

ESL245L. Advanced English-Lab (1)
Pass/No Pass Only
Corequisite: ESL-245
Lab 3 Hrs
Self-paced individualized lab instruction in support of the ESL 145 curriculum for intermediate ESL students. Formerly ESL 145L. Not open to students who have completed ESL 145L with a grade of "Pass" or "CR".

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.

ESL248. Reading and Vocabulary 3 (4)
Lec 3 Hrs
Designed to improve the vocabulary and reading comprehension skills of intermediate level ESL students using reading materials that explore the social, economic, and political forces that shape United States culture. Formerly ESL 148. Not open to students who have completed ESL 148 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
Emphasizes grammar and writing for high-intermediate level ESL students. Verb tenses, conditionals, complex sentences, and paragraph writing skills are stressed. Listening and speaking will also be practiced. Formerly ESL- 155. Not open to students who have completed ESL-155 with a "C" or better.

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.

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 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.
UTH1. 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. Chichano organizations, political models, ideology, political participation, and leadership will be studied. The role of race, class, immigration status, sex, gender, identity and the struggle for social justice, equality and political participation will be examined. The role of the media and polling will also be examined. Not open to students who have completed POL 5 with a grade of "C" or better.
[CSU; UC; CSU-GE, AREA D3, D8; IGETC, AREA 4]

ETH 12. 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]
FAMILY and CONSUMER STUDIES

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)
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)
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. Completion of CHM 60 (or CHM 22 or one year of high school chemistry), BIO 6, and Math 201 are recommended.

[CSU; UC; CSU-GE, AREA E]

FRENCH

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]

Hartnell College Catalog/2012-13
### 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 5]

**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 5]

[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 5]

**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 5]

**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 5]

[C-ID GEOL 200]

**GEL45.** Special Projects (1-3)

*Pass/No Pass Only*

Advanced laboratory or field work in earth science.

[CSU]
HEALTH EDUCATION

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 socio-economic status influence health and quality of life, particularly among Latinos(as), African-Americans, Asian-Americans, Native-Americans, and European-Americans in the United States.
[CSU; UC; CSU-GE, AREA E]

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 parallels First Aid Responding to Emergencies from the American Red Cross with certificates given to those students who qualify.
[CSU; UC]

HEALTH SERVICES

HES53. Emergency Medical Technician 1 (Ambulance) (5.5)

Prerequisite: HES-120 with a grade of "C" or better or American Health Care Provider CPR card and BIO-11 with a grade of "C" or better.

Lec 4.5 Hrs; Lab 3.0 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.
HIS4A. Western Civilization A (3)
Lec 3 Hrs
A survey of Western Civilization from prehistoric times through the Protestant Reformation of the 16th Century, with special emphasis placed on the global relationships which shaped the intellectual, political, economic and social institutions of the west.
[CSU; UC; CSU-GE, AREA D5, D6; IGETC AREA 3]

HIS4B. Western Civilization B (3)
Lec 3 Hrs
A survey of Western Civilization from the rise of secular and scientific institutions in the 16th Century to the present, with special emphasis placed on the global relationships which shaped the intellectual, political, economic and social institutions of the world.
[CSU; UC; CSU-GE, AREA D6; IGETC AREA 3]

HIS5A. World History A (3)
Lec 3 Hrs
An examination of world history from the ancient era to 1500 from a global perspective. Focuses on the unique character and progress of civilizations in different parts of the world including China, India, Europe, Africa and the Americas. Stresses the connections that exist between cultures in and across time periods including points of comparison between individual civilizations.
[CSU; UC; CSU-GE, AREA C2, D6; IGETC, AREA 3B, 4]

HIS5B. World History B (3)
Lec 3 Hrs
An examination of world history from the 1500s to the present from a global perspective focusing on the unique character and progress of civilizations in different parts of the world including China, India, Europe, Africa and the Americas stressing the connections that exist between cultures in and across time periods including points of comparison between individual civilizations.
[CSU; UC; CSU-GE, AREA C2, D6; IGETC, AREA 3B, 4]

HIS6. History of Mexico (3)
Lec 3 Hrs
A survey of the history of Mexico from the Indigenous period to the present with emphasis on the political, economic, cultural, and social institutions of Mexico.
[CSU; UC; CSU-GE, AREA C2, D6; IGETC, AREA 3B, 4]

HIS10. History of California (3)
Lec 3 Hrs
The history of California from the Indigenous period to the present focusing on the experiences of Peoples of Color including the Indigenous People of California, Chicanos/Latinos, African Americans, Asian Americans and Pacific Islanders. Local history considered in depth. This course may be offered on an outline platform such as ecollege.
[CSU; UC; CSU-GE, AREA D6; IGETC, AREA 3]

HIS17A. United States History A (3)
Lec 3 Hrs
A survey of United States history from the Indigenous period through Reconstruction, including the development of the major political, social, and economic institutions and ideals in the entire area which is now the United States, with a special emphasis on the roles of major ethnic and social groups.
[CSU; UC; CSU-GE, AREA D6; IGETC AREA 3]

HIS17B. United States History B (3)
Lec 3 Hrs
Historical survey of the United States from the end of the Civil War to the present.
[CSU; UC; CSU-GE, AREA D6; IGETC AREA 3]

HIS21. Social and Political Histories of the United States (4)
Lec 4 Hrs
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 3B, 4]

HIS40. History of Women in the U.S. (3)
Lec 3 Hrs
A survey of women in American history from the Indigenous period to the present in the entire area which is now the United States with special emphasis on the roles of women in the major ethnic and social groups.
[UC; CSU; CSU-GE, AREA C2; IGETC, AREA 3, 4]

HIS45. Special Projects (1-3)
Lec 3 Hrs
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]

HIS46A. Race and Ethnicity in American History A (3)
Lec 3 Hrs
A survey of the historical, social, political, economic, and cultural experiences of African Americans, Chicanos/Latinos, Asian Americans, Pacific Islanders, and Native Americans in the United States from the Indigenous period through the Civil War.
[CSU; UC; CSU-GE, AREA D3, D6; IGETC, AREA 4]

HIS46B. Race and Ethnicity in American History B (3)
Lec 3 Hrs
A survey of the historical, political, social economic and cultural experiences of African Americans, Chicanos/Latinos, Asian Americans, Pacific Islanders, and Native Americans in the United States from Reconstruction to the present.
[CSU; UC; CSU-GE, AREA D3, D6; IGETC, AREA 4]

HIS47. Religions of the World (3)
Lec 3 Hrs
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]

HIS48. African-American History and Culture (3)
Pass/No Pass Option
Lec 3 Hrs
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]

HIS49A. Chicano History A (3)
Lec 3 Hrs
A history of the Chicano experience and culture from the Indigenous cultures of Mexico, and the Spanish, Mexican and United States periods to 1848.
[CSU; UC; CSU-GE, AREA D6; IGETC AREA 3]

HIS49B. Chicano History B (3)
Lec 3 Hrs
A survey of Chicano history and culture from 1848 to the present emphasizing the social, cultural, political, and economic roles of Chicanos in the United States.
[CSU; UC; CSU-GE, AREA D6; IGETC AREA 3]

HIS51. Women in History (3)
Lec 3 Hrs
An exploration of the cultural, religious, political and economic role played by women in various civilizations since ancient times.
[CSU; UC; CSU-GE, AREA D6; IGETC, AREA 3]
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]**

### 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 6]**

**JPN11.** Japanese Language and Culture II (5)  
**Pass/No Pass Option**  
**Prerequisite:** Japanese 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, 6]**
**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](http://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 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]

**JAJ2. Basic Police Academy, Requalification (3)**

*Pass/No Pass Only 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. Proof of completion of POST basic course or modular level.

*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]

**JAJ3. 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 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: Lab 24*

Designed for public safety personnel attending annual updates, re-certification, or remediation mandated by the Commission on POST, this course. Covers the legal requirements for carrying and using a firearm within the scope of job-related duties. Participants are instructed in the safe handling of firearms and techniques of shooting. Necessary for students to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. [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*

Designed for public safety personnel attending annual updates, re-certification, or remediation mandated by the Commission on POST, this course. Covers the legal requirements for carrying and using a firearm within the scope of job-related duties. Participants are instructed in the safe handling of firearms and techniques of shooting. Necessary for students to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. [CSU]

**JAJ5. 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) 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]

**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) 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) 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 280-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]

JAJ10. 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]

JAJ11. 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]

JAJ12. 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]

JAJ13. 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]

JAJ14. 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]

JAJ15. Gang Training (0.5)
Pass/No Pass Only
Total Hrs: Lab 2
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]

JAJ16. 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]

JAJ17. 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]

JAJ18. Defensive Tactics Instructor (1-2)
Pass/No Pass Only
Total Hrs: Lec 48; 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]

JAJ19. Driving Instructor (1-2)
Pass/No Pass Only
Total Hrs: Lec 4; Lab 12
This course is designed to prepare law enforcement personnel for the instruction of defensive driving courses, such as Driver Training, Arrest and Control, Tactical Communication, and Firearms.

JAJ20. Child Victim Interviewing (0.5)
Pass/No Pass Only
Total Hrs: Lec 8; Lab 32
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.

JAJ21. 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.

JAJ22. RADAR Operations (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 4; Lab 12
Designed to provide skills in the operation of police electronic devices for traffic enforcement and crime control. This course may be repeated for new content.
[CSU]

JAJ23. Crime Prevention Through
Environmental Design (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 1-8; Lab 23-32
This 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.

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.

JAJ25. Crisis Prevention Through
Environmental Design (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 1-8; Lab 23-32
This 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 8; Lab 32
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: Lec 48; 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]

JAJ29. Developing a Personal Philosophy of Leadership (0.5-1)
Pass/No Pass Only
Total Hrs: Lec 4; 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 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.

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.

JAJ101. Juvenile Corrections Officer (4.5)
**Total Hrs**: Lec 20; Lab 156
During this 176-hour Juvenile Corrections Officer course, students meet the Corrections Standard Authority requirements for entry-level training of juvenile institutional staff. Designed for students wanting to become Juvenile Correction Officers.

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, Correctional Standards Authority (CSA).

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.

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.

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.

JAJ109. First Aid and CPR (0.5-1)
**Total Hrs**: Lec 7.8-8; 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.

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 students 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.
JAJ 203. Supervisor Update (0.5-1) 
**Pass/No Pass Only**
**Total Hrs: Lec 4-4; Lab 12-36**
Development and refinement of 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; Lab 2-64**
This 8-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 telecommunications, allocation of EMS resources, medico-legal 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 inspection, 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 California Commission on Peace Officer Standards and Training (POST), California Commission on Peace Officer Standards and Training (POST), or other regulatory agency. Related topics include state/legislatively mandated training, perishable skills, first aid/CPR, 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.**

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/CPR, 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 and others 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)

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

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

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]

JFS2. Fire Management 1 - Management/Supervisor for Company Officers (1)

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, Training Officers and other Fire Service Managers provides information about transitioning from supervisor to manager. Offers sound management principles in preparation for more intensified training in specific disciplines. Includes internal and external influences, personality traits of fire fighters, managing human relations, group dynamics, and conflict resolution.

[CSU]

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]

JFS4C. Fire Management 2C - Management/Supervisor for Chief Officers at a Wildland/Urban Interface Incident (1)

Total Hrs: Lec 8; Lab 32

Designed for Chief Officers at a wildland/urban interface incident. Introduces personnel to multi-casualty incidents, hazardous materials, and wildland fires. Skill improvement through handling initial operations at these types of incidents through simulation and class activities.

[CSU]

JFS4D. Fire Management 2D - Management/Supervisor for Company Officers at a Wildland/Urban Interface Incident (1)

Total Hrs: Lec 8; Lab 32

Designed for Company Officers at a wildland/urban interface incident. Introduces personnel to multi-casualty incidents, hazardous materials, and wildland fires. Skill improvement through handling initial operations at these types of incidents through simulation and class activities.

[CSU]

JFS4E. Fire Management 2E - Contemporary Issues and Concepts (1)

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]

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]

JFS6C. Fire Apparatus Driver/Operator 1C - Vehicle Safety & Operations (1)

Total Hrs: Lec 4; Lab 36

Provides students with information, theory, methods, and techniques for operating fire service vehicles. Includes types of vehicles, safe operating procedures, maintenance, unsafe driving conditions, pressure relief devices, cooling systems, water supplies, drafting, field hydraulics, and pumping operations.

[CSU]

JFS6D. Fire Apparatus Driver/Operator 1D - Ehancement of Driving Skills (1)

Total Hrs: Lec 4; Lab 36

Provides students with information, theory, methods, and techniques for operating fire service vehicles. Includes types of vehicles, safe operating procedures, maintenance, unsafe driving conditions, pressure relief devices, cooling systems, water supplies, drafting, field hydraulics, and pumping operations.

[CSU]

JFS7A. Fire Prevention 1A - Fire Prevention 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 1 Certification. Includes organization and function of fire prevention, fire and life safety inspections, codes and ordinances relating to the use and storage of flammable, combustible, toxic, reactive and radioactive materials; engineering and enforcing a solution of a fire hazard; and fire extinguisher and fixed systems requirements.

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 spaces, evaluate hazardous atmospheres, determine adequate levels of personal protection, indentify 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.  
[CSU]

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 1 a basic knowledge which is needed prior to emergency response.  
[CSU]

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.  
[CSU]

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.  
[CSU]

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.  
[CSU]

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.  
[CSU]

JFS150. Emergency Medical Technician-Refresher (0.5-1)  
**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.  
[CSU]

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.  
[CSU]

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.  
[CSU]

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.
HJS203. 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. Includes 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 release from a safe distance, keep it from spreading, and prevent exposures without trying to stop the release. Meets and exceeds the requirements of CFR 29 1910.120 and CCR Title 8.

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 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. This course may be taken three times with different or advanced content for a maximum of nine units.
[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.
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 life, management, 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, 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 122 & 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, number 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, graph presentation, sampling, frequency distributions, linear correlation and regression, probability distributions, sample variability, statistical inferences, confidence intervals, Chi-Square tests, analysis of variance, 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, probability, linear programming, finance and matrices with applications to business, social science, and computer sciences. This course is primarily for students in business, social science, and computer science.

MAT201 or BUS 151 with a grade of “C” or better or placement by Hartnell’s assessment.

MAT24. Trigonometry (3)
Prerequisite: MAT 123 with a grade of “C” or better or MAT 123L4 with a grade of “C” or better or placement 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.

MAT25. Pre-Calculus (4)
Prerequisite: MAT 123 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 MAT3A.

MAT24 or MAT 123 with a grade of “C” or better or placement by Hartnell’s assessment.

MAT25. Pre-Calculus (4)
Prerequisite: MAT 123 with a grade of “C” or better or placement by Hartnell’s assessment.
Lab 3 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 MAT3A.

MAT24 or MAT 123 with a grade of “C” or better or placement by Hartnell’s assessment.

MAT25. Pre-Calculus (4)
Prerequisite: MAT 123 with a grade of “C” or better or placement by Hartnell’s assessment.
Lab 3 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 MAT3A.

MAT24 or MAT 123 with a grade of “C” or better or placement by Hartnell’s assessment.

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. This course may be taken three times with different or advanced content for a maximum of nine units.

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, radical expressions, exponents, radicals, and applications. Not open to students who have completed, with a grade of “C” or better, Math 121L2.

MAT24 or MAT 123 with a grade of “C” or better or placement by Hartnell’s assessment.

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 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 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: MAT123L1 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: MAT123L2 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: MAT123L3 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 to optimize success in the nursing program.
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.

**Prerequisite:** MAT 151L2 with a grade of "C" or better.

MAT151L2. Technical Mathematics Level 2 (1)

**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.

**Prerequisite:** MAT 151L1 with a grade of "C" or better.

MAT151L3. Technical Mathematics Level 3 (1)

**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.

**Prerequisite:** MAT 151L2 with a grade of "C" or better.

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 200 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. Not open to students who have completed MAT 201L2 with a grade of "C" or better.

**Prerequisite:** MAT201L1 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.

**Prerequisite:** MAT 200L with a grade of "C" or better.

MAT201L2. Pre-Algebra Level 2 (1)

**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.

**Prerequisite:** Completion of MAT 201L1 with a grade of "C" or better.

MAT201L3. Pre-Algebra Level 3 (1)

**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.

**Prerequisite:** Completion of MAT 201L2 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]

MUSIC

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. [CSU; UC; CSU-GE, AREA C1; IGETC, AREA 3]

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]

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. May be repeated for credit to a maximum of 4 units. [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. Piano classes maybe repeatable at the appropriate level, but total piano enrollments are limited to four. [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. Piano classes may be repeated at the appropriate level, but total piano enrollments are limited to four. [CSU; UC]

MUS14. Intermediate Piano (1)
Prerequisite: MUS 13B with a grade of “C” or better.
Corequisite: 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. Piano classes may be repeated at the appropriate level, but total piano enrollments are limited to four. [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. Piano classes may be repeated at the appropriate level, but total piano enrollments are limited to four. [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. Guitar classes may be repeated at the appropriate level but guitar enrollments are limited to a total of four. [CSU; UC]
Prerequisite: MUS17D.

Guitar classes may be repeated at the appropriate level but guitar enrollments are limited to a total of four.

[CSU; UC]

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. Guitar classes may be repeated at the appropriate level but guitar enrollments are limited to a total of four.

[CSU; UC]

Intermediate Guitar II (1)

Prerequisite: MUS 17C with a grade of "C" or better.

Lec 1 Hr; Lab 2 Hrs

Continued instruction on guitar with emphasis on note reading and the performance of chords and arpeggios. Students must bring their own unamplified guitar. Guitar classes may be repeated at the appropriate level but guitar enrollments are limited to a total of four.

[CSU; UC]

Music Practicum (1)

Pass/No Pass Only

Supervised practice in instrumental or vocal music.

[CSU; UC]

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. Some instruments are available for student use. May be repeated for credit to a maximum of 4 units.

[CSU; UC]

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. May be repeated for credit to a maximum of 4 units.

[CSU; UC]

Hartnell Chorale – Renaissance/Baroque Emphasis (1)

Advisory: Intended for persons with previous choral experience.

Lec 1 Hr; Lab 2 Hrs

A chorale 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]

Hartnell Chorale - Classic/Romantic Emphasis (1)

Advisory: Intended for persons with previous choral experience.

Lec 1 Hr; Lab 2 Hrs

A chorale 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]

Hartnell Chorale - 20th Century Emphasis (1)

Advisory: Members selected from the Hartnell Choir by audition.

Lab 3 hrs

A chorale 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]

Hartnell Chorale - 20th Century “Pops” Emphasis (1)

Advisory: Intended for persons with previous choral experience.

Lec 1 Hr; Lab 2 Hrs

A chorale 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]

Hartnell Chorale - 21st Century Emphasis (1)

Advisory: Intended for persons with previous choral experience.

Lec 1 Hr; Lab 2 Hrs

A chorale 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]

Estudiantina Hartnell (1)

Lab 3 Hrs

A performance group in the manner of the Estudiantinas of Mexico and the Tunas of Spain. Open to all students. Instruction will be provided in singing and the playing of traditional Estudiantina instruments. Repertoire consists of traditional and 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]

Hartnell College Wind Ensemble (1)

Lab 3 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. May be repeated for credit a maximum of 4 units.

[CSU; UC]

Jazz Ensemble (1)

Lab 3 Hrs

A performance group studying literature for the jazz ensemble. Performances include concerts and playing at college and community events. Open to all students who play piano, bass, drums, guitar, saxophone, trumpet or trombone. May be repeated for credit to a maximum of 4 units.

[CSU; UC]

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. Students may enroll in this course a maximum of four (4) times. Some instruments are available for student use.

[CSU; UC]

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. Students may enroll in this course a maximum of four (4) times. Some instruments are available for student use.

[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. Students may enroll in this course a maximum of four (4) times. 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. Students may enroll in this course a maximum of four (4) times. 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. Students may enroll in this course a maximum of four (4) times. 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 Hr
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)
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)
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]

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]

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.
[CSU; UC]
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.

[CSU; UC]

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. Students may enroll in MUS-120A and THA-120A a maximum of four times.

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. Students may enroll in MUS-120B and THA-120B a maximum of four times.

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. Students may enroll in MUS-120C and THA-120C a maximum of four times.

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. Students may enroll in any combination of MUS-121 and THA-121 a maximum of four times.

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. Students may enroll in any combination of MUS-122 and THA-122 a maximum of four times.

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. Students may enroll in MUS-123 or THA-123 a maximum of four times.

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. Students may enroll in any combination of MUS-124 and THA-124 a maximum of four times.

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. Students may enroll in any combination of MUS-125 and THA-125 a maximum of four times.

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. Students may enroll in any combination of MUS-126 and THA-126 a maximum of four times.

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. Students may enroll in MUS-127 or THA-127 a maximum of four times.

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. Students may enroll in MUS-128 or THA-128 a maximum of four times.
NRSN30. Basics of Pharmacology for Nursing Practice (1)

Prerequisite: Admission to the Hartnell College Registered Nursing Program.

Corequisites: 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]

NRSN41. Nursing Theory I (4)

Prerequisite: Admission to the Hartnell College Registered Nursing Program.

Corequisites: NRN 110, NRN 41.1, NRN 41.2, NRN 41.3, and 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]

NRSN41.1. Nursing Clinical I (4)

Pass/No Pass Only

Prerequisite: Admission to the Hartnell College Registered Nursing Program.

Corequisites: 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]

NRSN41.2. Clinical Reasoning Seminar I (1)

Prerequisite: Admission to the Hartnell College Registered Nursing Program.

Corequisites: NRN 41, NRN 41.1, NRN 41.3, and 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]

NRSN41.3. Nursing Skills Lab I (1)

Prerequisite: Admission to the Hartnell College Registered Nursing Program.

Corequisites: 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]

NRSN42. Nursing Theory II (4)

Prerequisite: NRN 41 with a grade of "C" or better.

Corequisites: 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]

NRSN42.1. Nursing Clinical II (4)

Pass/No Pass Only

Prerequisite: NRN 41.1 with a grade of "C" or better.

Corequisites: 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]

NRSN42.2. Clinical Reasoning Seminar II (1)

Prerequisite: NRN 41.2 with a grade of "C" or better.

Corequisites: 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]

NRSN42.3. Nursing Skills Lab II (1)

Prerequisite: NRN 41.3 with a grade of "C" or better.

Corequisites: 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]

NRSN43. Nursing Theory III (4)

Prerequisite: NRN 42 with a grade of "C" or better.

Corequisites: 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]

NRSN43.1. Nursing Clinical III (4)

Pass/No Pass Only

Prerequisite: NRN 42.1 with a grade of "C" or better.

Corequisites: 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]

NRSN43.2. Clinical Reasoning Seminar III (1)

Prerequisite: NRN 20 or NRN 42.2 with a grade of "C" or better.

Corequisites: 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
Lab 3 Hrs
Application of the Nursing Process using Doenges and Moorhouse Diagnostic Divisions for the study of nursing skills necessary to restore health for adult, geriatric, and mental health clients in acute, long term, and community health care settings. The value of competency in nursing skills is demonstrated.
[CSU]

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
Corequisites: NRN 41.3
Lab 1.5
Supervised practice for the mastery of advanced nursing skills. Number of hours per week based on units enrolled.
[CSU]

NRN50.41. Supervised Nursing Skills Practice I (0.5)
Pass/No Pass Only
Corequisites: NRN 41.3
Lab 1.5
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.
Pass/No Pass Only
Corequisites: NRN 42.3
Lab 1.5
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.
Pass/No Pass Only
Corequisites: NRN 43.3
Lab 1.5
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.
Pass/No Pass Only
Corequisites: NRN 44.1
Lab 1.5
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]

NRN110. Foundations for Success for RN Nursing Students (1.5)
Pass/No Pass Only
Advisory: Admission to the Registered Nursing Program
Lec .75; Lab 2.25
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

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order to optimize success in the nursing program.

NRN225. 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.

NRN226. 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.

NRN227. 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.

NRN228. 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 course. The course is individualized for each student based on identified learning needs. The values or curiosity and competency in nursing practice are emphasized.

**NURSING – VOCATIONAL**

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: NVN119A and NVN130A 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.
NURSING – VOCATIONAL

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.

NVN123C. Vocational Nursing Clinical V (4)
Pass/No Pass Only
Prerequisite: NVN 119B, 120C, 121C and 122C with a grade of “C” or better.
Corequisite: NVN 130C, NVN 150, and NVN 123A
Lab 12 Hrs
Application of the nursing process when caring for adults with complex health conditions and when in the role of a vocational nurse leader.

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.

NVN150. Vocational Nursing Laboratory Practicum (0.3-2.0)
Pass/No Pass Only
This course facilitates the mastery of basic nursing skills. Supervised practice is provided. Student performance is evaluated and documented through competency testing using established standardized criteria.

NVN210. Intravenous Therapy Tech. (2)
Prerequisite: NVN 122 with a grade of “C” or better.
Lec 1.9 Hrs; Lab 4 Hrs
This course provides authorized allied health personnel with knowledge and skill to competently and safely perform a venipuncture. Emphasis will be placed on current concepts and measures of starting, monitoring, adapting, and maintaining the intravenous therapy and blood administration for patient care.

NVN225. Success Strategies for 1st Semester VN Students (1-3)
Pass/No Pass Only
This course is designed for first semester vocational nursing students who are interested in reinforcing content presented within the scope of a regular nursing course. The course is individualized for each student based on their identified learning needs. This course provides the nursing student the opportunity to discuss theoretical concepts and practice clinical skills to increase student success within the nursing program.

NVN226. Success Strategies for 2nd Semester VN Students (1-3)
Pass/No Pass Only
This course is designed for second semester vocational nursing students who are interested in reinforcing content presented within the scope of a regular nursing course. The course is individualized for each student based on their identified learning needs. This course provides the nursing student the opportunity to discuss theoretical concepts and practice clinical skills to increase student success within the nursing program.

NVN227. Success Strategies for 3rd Semester VN Students (1-3)
Pass/No Pass Only
This course is designed for third semester vocational nursing students who are interested in reinforcing content presented within the scope of a regular nursing course. The course is individualized for each student based on their identified learning needs. This course provides the nursing student the opportunity to discuss theoretical concepts and practice clinical skills to increase student success within the nursing program.
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 5]

PHL2. Introduction to Philosophy (3)

Lec 3 Hrs

An introduction to some questions and methods of philosophy. Topics include Principles of Right Conduct (Ethics), Sources and Extent of Our Knowledge (Epistemology), The Nature of Reality, and The Existence of God (Metaphysics), Criteria of A Just Society (Social-Political Philosophy), and Criteria of Sound Reasoning (Logic).

[CSU; UC; CSU-GE, AREA C2; IGETC AREA 3]

PHL6. Introduction to Philosophy: Greek to Medieval Period (3)

Lec 3 Hrs

An introduction to Western philosophy from an historical view-point, stressing in particular an analysis of the original text material of various philosophers from the Greek to the Medieval period.

[CSU; UC; CSU-GE, AREA C2; IGETC AREA 3]

PHL8. Introduction to Philosophy: Renaissance to the Twentieth Century (3)

Lec 3 Hrs

An introduction to Western philosophy from an historical viewpoint, stressing in particular an analysis of the original text material of various philosophers from the Renaissance to the twentieth century Existentialists.

[CSU; UC; CSU-GE, AREA C2; IGETC AREA 3]

PHL10. Ethics (3)

Lec 3 Hrs

Presents an in depth analysis of major ethical theories and their application to contemporary moral, social, and personal issues. Students will learn to analyze and differentiate the concepts, principles, and operational rules of major ethical theories. Analytically comparing and contrasting these theories, students will use this analytic framework to evaluate contemporary moral issues.

[CSU; UC; CSU-GE, AREA C2; IGETC, AREA 3]

PHL15. Critical Thinking and Logic (3)

Pass/No Pass Option

Lec 3 Hrs

An introduction to the principles of sound reasoning with emphasis on deductive logic. Students are introduced to the basic techniques of categorical and truth-functional logics, and to inductive reasoning, common fallacies and to varieties of language use.

[CSU; UC; CSU-GE AREA A3]

PHL45. 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]
PEAC27. Hiking and Backpacking (2)

Lec 1 Hr; Lab 3 Hrs

An introduction to the sport of hiking and backpacking. Emphasis on basics of minimum impact camping, wilderness safety navigation, shelter use and site 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

Fundamentals (1.5)

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 1.245. May be taken up to four times for credit.

[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. May be taken up to four times for credit.

[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. May be taken up to four times for credit.

[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. May be taken up to four times for credit.

[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 exercises and routines. Formerly PE 1.243. May be taken up to four times for credit.

[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 including the fundamentals skills of badminton, such as: serve, forehand, primary shots, court strategy, rules, and etiquette of the game. Formerly PE 1.239. May be taken up to four times for credit.

[CSU; UC]

PEAC34. Stability Ball Training (1-1.5)

Pass/No Pass Option

Lec .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. May be taken up to four times for credit.

[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. PEAC 35 (PE 1.236) may be taken up to four times for credit.

[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. Combinations of PE 1.235 and PEAC 36 may be taken up to four times for credit.

[CSU; UC]

PEAC37. Intermediate Baseball (1.5)

Lec .75 Hrs; Lab 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. Combinations of PEAC-37 (PE-1.234) and PEAC 38 (PE 1.189) may be taken up to four times for credit.

[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. Combinations of PEAC 37 (PE 1.234) and PEAC 38 (PE 1.189) may be taken up to four times for credit.

[CSU; UC]

PEAC40. Speed Training and Conditioning (1-1.5)

Pass/No Pass Option

Lec .75-.75 Hrs; Lab .75-.2.25 Hrs

The development of strategies and techniques to increase speed and improve agility utilizing the fitness components of cardiovascular/respiratory conditioning, muscular strength and endurance, and flexibility. Formerly PE 1.248. May be taken up to four times for credit.

[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. Combinations of PEAC 42 (PE 1.229) and PEAC 44 (PE 1.221) may be taken up to four times for credit.

[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 PEAC 43 (PE 1.128). Combinations of PEAC 43 (PE 1.228), PEAC 46 (PE 1.204), PEAC 47 (PE 1.200), PEAC 49 (PE 1.198), and PEAC 69 (PE 1.131) may be taken up to four times for credit.

[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. Combinations of PEAC 42 (PE-1.229) and PEAC 44 (PE 1.221) may be taken up to four times for credit.

[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. Combinations of PEAC 43 (PE 1.228), PEAC 46 (PE 1.204), PEAC 47 (PE 1.200), PEAC 49 (PE 1.198), and PEAC 69 (PE 1.131) may be taken up to four times for credit.

[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. Combinations of PEAC 43 (PE 1.228), PEAC 46 (PE 1.204), PEAC 47 (PE 1.200), PEAC 49 (PE 1.198), and PEAC 69 (PE 1.131) may be taken up to four times for credit.

[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 1.198. Combinations of PEAC 43 (PE 1.228), PEAC 46 (PE 1.204), PEAC 47 (PE 1.200), PEAC 49 (PE 1.198), and PEAC 69 (PE 1.131) may be taken up to four times for credit.

[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. May be taken up to four times for credit.

[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. May be taken up to four times for credit.

[CSU; UC]

### PEAC52. Volleyball (1.5)

**Lec.** .75 Hrs; **Lab** 2.25 Hrs

Develop 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. Combinations of PEAC 52 (PE 1.186) and PEAC 74 (PE 1.225) may be taken up to four times for credit.

[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. May be taken up to four times for credit.

[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. May be taken up to four times for credit.

[CSU; UC]

### PEAC57. Advanced Distance Running (1.5)

**Lec.** .75 Hrs; **Lab** 2.25 Hrs

Advanced 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. Tennis classes may be repeated at the appropriate level, but total tennis enrollments are limited to four. Formerly PE 1.170. Combinations of PEAC 58 (PE 1.170), PEAC 59 (PE 1.171), and PEAC 60 (PE 1.172) may be taken up to four times for credit.

[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. Tennis classes may be repeated at the appropriate level, but total tennis enrollments are limited to four. Formerly PE 1.171. Combinations of PEAC 58 (PE 1.170), PEAC 59 (PE 1.171), and PEAC 60 (PE 1.172) may be taken up to four times for credit.

[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. May be taken up to four times for credit.

[CSU; UC]
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. Tennis classes may be repeated at the appropriate level, but total tennis enrollments are limited to four. Formerly PE 1.170. Combinations of PEAC 58 (PE 1.170), PEAC 59 (PE 1.171), and PEAC 60 (PE 1.172) may be taken up to four times for credit.

[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. Combinations of PEAC 61 (PE 1.160), PEAC 62 (PE 1.161), PEAC 63 (PE 1.162) and PEAC 68 (PE 1.134) may be taken up to four times for credit.

[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. Combinations of PEAC 61 (PE 1.160), PEAC 62 (PE 1.161), PEAC 63 (PE 1.162) and PEAC 68 (PE 1.134) may be taken up to four times for credit.

[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. Combinations of PEAC 61 (PE 1.160), PEAC 62 (PE 1.161), PEAC 63 (PE 1.162) and PEAC 68 (PE 1.134) may be taken up to four times for credit.

[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. Combinations of PEAC 64 (PE-1.150) and PEAC 65 (PE 1.151) may be taken up to four times for credit.

[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. Combinations of PEAC 64 (PE-1.150) and PEAC 65 (PE 1.151) may be taken up to four times for credit.

[CSU; UC]

PEAC66. Zumba Aerobics 1 (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. Combinations of PEAC 66 (PE-1.137) and PEAC 67 (PE 1.138) may be taken up to four times for credit.

[CSU; UC]

PEAC67. Aerobics II (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. Combinations of PEAC 66 (PE-1.137) and PEAC 67 (PE 1.138) may be taken up to four times for credit.

[CSU; UC]

PEAC68. Swim Fitness (1-1.5)
Lec. 75-75 Hrs; Lab .75-.75 Hrs
Intermediate swimming techniques practiced while improving endurance and cardiovascular fitness. Formerly PE 1.134. Combinations of PEAC 60 (PE 1.131), PEAC 62 (PE 1.161), PEAC 63 (PE 1.162) and PEAC 68 (PE 1.134) may be taken up to four times for credit.

[CSU; UC]

PEAC69. Introduction to Weight Training (0.5-2)
Pass/No Pass Option
Lec. .25-.75 Hrs; Lab .75-.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. Combinations of PEAC 43 (PE 1.228), PEAC 46 (PE 1.204), PEAC 47 (PE 1.200), PEAC-49 (PE 1.198), and PEAC 69 (PE 1.131) may be taken up to four times for credit.

[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. Combinations of PEAC 70 (PE 1.110), PEAC 71 (PE 1.111), and PEAC 72 (PE 1.112) may be taken up to four times for credit.

[CSU; UC]

PEAC71. Fundamentals of Basketball (1-1.5)
Lec. 75-75 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. Combinations of PEAC 70 (PE 1.110), PEAC 71 (PE 1.111), and PEAC 72 (PE 1.112) may be taken up to four times for credit.

[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. Combinations of PEAC 70 (PE 1.110), PEAC 71 (PE 1.111), and PEAC 72 (PE 1.112) may be taken up to four times for credit.

[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. Combinations of PEAC 52 (PE 1.186) and PEAC 74 (PE 1.225) may be taken up to four times for credit.

[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. May be taken up to four times for credit. [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. May be taken up to four times for credit [CSU; UC]

PEAC82. Stress Reduction (1.5)  
**Pass/No Pass Option**
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. May be taken up to four times for credit. [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. Combinations of PEAC 223 (PE 223) may be taken up to four times for credit.

PEAC224. Fitness Education and Assessment (.5)  
**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, (PEAC 224) may be taken up to four times for credit.

PEAD84. Adaptive Circuit Endurance Training (1-1.5)  
**Lec.** 75-75 Hrs; **Lab.** 75-2.25 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 PETH-1 (PE-20) with a grade of “C” or better. [CSU; UC; CSU-GE, AREA E]

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; CSU-GE, AREA E]

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 sport and current roles of sport in society. Includes interaction of sport with societal values and ethics and outcomes affecting professional and collegiate sports. [CSU; CSU-GE, AREA D7]

PETH9A. Theory & Analysis of Cross Country (1)  
**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]

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**UC LIMITS PHYSICAL EDUCATION ACTIVITY COURSES:**

**A MAXIMUM OF 4-SEMESTER UNITS WILL EARN TRANSFER CREDIT.**

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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. May be taken up to two times for credit.
[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. May be taken up to two times for credit.
[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. May be taken up to two times for credit.
[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. Advanced skills, strategies and rules of the game are discussed and analyzed while engaging in supervised and repetitive play. Formerly PE 53B. May be taken up to two times for credit.
[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. May be taken up to two times for credit.
[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. Skills, strategies and rules of the game are discussed and analyzed while engaging in supervised and repetitive competition. Formerly PE 54A. May be taken up to two times for credit.
[CSU; UC]

PETH14A. Theory and Analysis of Volleyball I (2)

Lec 2 Hrs
Intermediate/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 56A. May be taken up to two times for credit.
[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. May be taken up to two times for credit.
[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. May be taken up to two times for credit.
[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. May be taken up to two times for credit.
[CSU; UC]
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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. May be taken up to two times for credit.
[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. May be taken up to two times for credit.

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 (2)

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. May be taken up to two 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. May be taken up to three times for credit.
[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]
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, biology, pharmacy and physical therapy majors.  
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]  
[C-ID PHYS 105]

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, biology, pharmacy and physical therapy majors.  
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]

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 5]  
[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 5]

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**  
[CSU; UC; CSU-GE, AREA B1, B3; IGETC AREA 5]

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 5]

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. This course may be taken three times with different or advanced content for a maximum of nine units.  
[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 D8; IGETC, AREA 4]

POL2. Contemporary Governments Abroad (3)
   **Lec 3 Hrs**
   This course is focused on comparative studies regarding contemporary governments abroad and their role in the on-going process of political and economic globalization. The forms of government studied in this course include parliamentary democracy, federal republic, direct democracy, authoritarian regime, and theocracy. Studies focus on a country's political economy and development, governance and policy-making, representation and participation, and politics in transition. Contemporary issues in comparative government will be presented from a variety of viewpoints.
   [CSU; UC; CSU-GE, AREA D8; IGETC, AREA 4]

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, intergovernmental 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 D8; IGETC, AREA 4]

POL5. 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 ETH-5 with a grade of "C" or better.
   [CSU; UC; CSU-GE, AREA D3, D8; IGETC, AREA 4]

POL6. Introduction to Contemporary Political Thought (3)
   **Lec 3 Hrs**
   An introduction to contemporary political thought from the eighteenth century to the present. Topics include early American political thought; communist theory as implemented in the Soviet Union and China, the political philosophy of fascist Italy and its counterpart Nazi Germany, elitism, and postmodernism. Contemporary issues in political thought will be presented from a variety of viewpoints.
   [CSU; UC; CSU-GE, AREA D8; IGETC, AREA 4]

POL45. Special Projects (1-3)
   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)  
**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 1A]

PSY6. Social Psychology (3)  
**Advisory:** PSY 2  
**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 relationships, groups, attitudes, persuasion, aggression, altruism, and prejudice.  
[CSU; UC; CSU-GE, AREA D0, D9; IGETC AREA 4]

PSY8. Research Methods in Psychology (3)  
**Prerequisite:** PSY 2 with a grade of "C" or better.  
**Advisory:** MAT 13, 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]

PSY10. Introduction to Biological Psychology (3)  
**Prerequisite:** PSY 2 with a grade of "C" or better.  
**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 D2; 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 perspective of psychology. Laboratory and survey research, findings from clinical experience, and historical sources will be considered. Topics to be discussed (but not limited to) include sexual anatomy, sexual beliefs and expressions, and concerns related to human sexuality. The medical aspects including the various methods of contraception and safer sex practices will be evaluated.  
[CSU; UC; CSU-GE, AREA D9; E; IGETC AREA 4]

PSY22. Abnormal Psychology (3)  
**Prerequisite:** PSY 2 with a grade of "C" or better.  
**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, evaluating civil matters including family court.  
[CSU]

PSY33. Personal and Social Adjustment (3)  
**Lec 3 Hrs**  
Theories of development and maintenance of a healthy personality. Common difficulties in personal and social adjustment will be explored, as well as the application of specific techniques and methods to overcome those challenges. Contemporary theories of personality structure and approaches to personal growth are examined over the lifespan. Other topics include stress management and improving one's interpersonal relationships in family, social and occupational contexts. Adjustment to health issues and psychological disorders will be explored.  
[CSU; CSU-GE AREA D9, E]

PSY36. Psychology of "La Mujer" (3)  
**Advisory:** Eligibility of 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 influence 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 D2, 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 lifespan. 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]

PSY45. Special Projects (1-3)  
A supervised program of independent research and study into a particular field of psychology.  
[CSU]
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]

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.
RCP50. Respiratory Care Practitioner Role and Responsibilities (1.5)
Corequisite: RCP53, RCP110
Lec .75 Hr; Lab 2.3
Introduces the language of healthcare as professional communication skills are developed. The history of respiratory care as a discipline, the professional organizations that support the discipline, and ethical considerations are reviewed. Evidence-based medicine, critical thinking, health care reimbursement, infection control, and patient education are emphasized.

[CSU]

RCP51. Pharmacology and Medication Administration (3)
Prerequisite: Admissions to the Respiratory Care Practitioner Program
Corequisite: RCP53
Lec 3 Hr
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]

RCP52. Cardiopulmonary Anatomy and Physiology (2)
Prerequisite: Admissions to the Respiratory Care Practitioner Program
Corequisite: RCP53
Lec 2 Hr
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]

RCP53. Foundation Skills (1)
Prerequisite: Admissions to the Respiratory Care Practitioner Program
Corequisite: RCP50, RCP51, RCP52, RCP54
Lab 3 Hr
Basic cardiopulmonary patient assessment and respiratory care procedures are introduced and practiced in the skills laboratory. Hand washing, universal precautions, oxygen, humidity and aerosol therapy, and basic bronchodilator medication delivery methods are practiced. Cardiac and respiratory sounds are identified as cardiac arrhythmias are visualized. Assessment of general appearance and level of consciousness are practiced. Trouble shooting of equipment and maintenance of patient safety are emphasized.

[CSU]

RCP54. Supervised Practice (.5)
Prerequisite: Admissions to the Respiratory Care Practitioner Program
Corequisite: RCP53
Pass/No Pass Only
Lab 1.5 Hr
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]

RCP110. Foundations for Success (1.5)
Lec .75 Hr; Lab 2.3
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.
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.

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]

[CSU-GE, AREA D0; IGETC, AREA 4]

SOC5. Introduction to Social Problems (3)

Lec 3 Hrs

Identification and examination of contemporary social problems in American society. The analysis of problems of social institutions (including the economy, government, and family), problems of social inequality (including poverty, race, ethnicity, and gender), deviance (including crime and substance abuse), and demographic problems (population and urbanization) will serve as focal points for the course.

[CSU; UC; CSU-GE, AREA D0, E; IGETC, AREA 4]

[CSU; UC; CSU-GE, AREA D0, E; IGETC, AREA 4]

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]

[CSU-GE, AREA D0, E; IGETC, AREA 4]

SOC42. The Sociology of Minority Relations (3)

Lec 3 Hrs

The principal objective of this course is to examine dominant-minority group relations in the United States (U.S.), 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]

[CSU-GE, AREA D0, D1; IGETC, AREA 4]

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]
### SPANISH

**SPA1. 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 1S or SPA 1X with a grade of “C” or better.  
  - **Prerequisite:** SPA 1 or SPA 1S or SPA 1X with a grade of “C” or better.  
  - **Advisory:** SPA 1X.

**SPA2. Elementary Spanish for Spanish Speakers (5)**
- **Pass/No Pass Option**
- 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 taken SPA 2S or SPA 2X with a grade of “C” or better.

**SPA2S. Elementary Spanish for Spanish Speakers (5)**
- **Pass/No Pass Option**
- 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.

**SPA3. Intermediate Spanish (5)**
- **Pass/No Pass Option**
- Lec 5 Hrs
  - Course conducted totally in Spanish with further emphasis on grammar, reading, and writing, including a strong cultural and literary component. Not open to students who have completed SPA 3S with a grade of “C” or better.

**SPA3S. Intermediate Spanish for Spanish Speakers (5)**
- **Pass/No Pass Option**
- 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.

**SPA4. Intermediate Spanish (5)**
- **Pass/No Pass Option**
- 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 Spanish 4S with a grade of “C” or better.

**SPA4S. Intermediate Spanish for Spanish Speakers (5)**
- **Pass/No Pass Option**
- 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.

**SPA45. Special Projects (1-3)**
- **Pass/No Pass Option**
- Lec 5 Hrs
  - Individual and group investigation of topics and problems beyond the scope of regular Spanish courses.
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 19th 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, AREA3]

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]

THA11. Intermediate Acting (3)  
**Lec 2 Hrs; Lab 3 Hrs**  
Designed to build on the basics of beginning actor training. Stanislavskian-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 form which that scene is taken.  
[CSU; UC]

THA14. Characterization (3)  
**Lec 2 Hrs; Lab 3 Hrs**  
The major styles of acting are discussed and practiced, emphasizing the tools necessary for bringing a character on stage. The acting process will be explored on a deeper level focusing on more complex characterization and character analysis. Theatrical styles and period acting will be explored with emphasis on monologues and scenes. Students will be performing a final scene and will need to acquire the entire script from which that scene is taken.  
[CSU; UC]

THA17. Singing for Actors (2)  
**Lec 1 Hr; Lab 3 Hrs**  
Principles of breathing, diction, tonal production, and musically for the Actor. Emphasis will be placed on the use of literature from the American Musical Theatre.  
[CSU; UC]

THA18. Voice and Diction (3)  
**Lec 3 Hrs**  
Introductory course studying speech production designed to improve vocal quality and accurate diction. Emphasis on specific areas of speech production such as proper breathing, vocal production, rate, vocal flexibility, energy, volume, tone, articulation and foreign accents. This is a transfer course for Theatre Arts and Speech/Communication students. This course is not open to students who have completed SPE 18 with a grade of "C" or better.  
[CSU; UC]

THA45. Special Projects (0.5-3)  
This course facilitates the study of theatre forms: genres, materials styles, periods, etc. that are not typically a major part of a specific course.  
[CSU]

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 Assessment. (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). Students may enroll in THA 92 A a maximum of four times.  
[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**  
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. This course may be repeated three times.

THA100C. Introduction to Ensemble Play Prod. Execution/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.

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. Students may enroll in THA 101 a maximum of four times.

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. Students may enroll in THA 102 a maximum of four times.

THA108. Musical Theatre: Modern Plays In Rehearsal (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.

THA109. Musical Theatre: Modern Plays In Performance (0.5-4)  
**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. Students may enroll in any combination of MUS 122 and THA 122 a maximum of four times.

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 modern 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. Students may enroll in any combination of MUS 120A and THA 120A a maximum of four times.

THA120B. Introduction to Musical Theatre Production: Implementation and Practice (0.5-4)  
**Pass/No Pass Only**  
An introduction to the production of the musical play with an emphasis on the implementation and practice of rehearsal and production techniques. Students may enroll in any combination of MUS 120B and THA 120B a maximum of four times.

THA120C. Introduction to Musical Theatre 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 concept and development of script, design elements, and performance techniques. Students may enroll in any combination of MUS 120C and THA 120C a maximum of four times.

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. Students may enroll in MUS 121 and THA 121 a maximum of four times.

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. Students may enroll in any combination of MUS 122 and THA 122 a maximum of four times.

THA123. Musical Theatre: The Ensemble Musical in Rehearsal (0.5-4)  
**Pass/No Pass Only**  
The rehearsal and development of the ensemble musical, in a performance setting with an emphasis on performance or stage management. Students may enroll in MUS 123 or THA 123 a maximum of four times.

THA124. Musical Theatre: The Ensemble Musical 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 musical play. Students may enroll in any combination of MUS 124 and THA 124 a maximum of four times.

THA125. Musical Theatre - World Theatre Musicals in Rehearsal (0.5-4)  
**Pass/No Pass Only**  
Extensive practice in the development of the world theatre musical, with an emphasis on performance and stage management. Students may enroll in any combination of MUS 125 and THA 125 a maximum of four times.

THA126. Musical Theatre - World Theatre Musicals in Performance (0.5-3)  
**Pass/No Pass Only**  
Presentation techniques for the performer, stage manager and theatre technician, with an emphasis on the literature of the world theatre musical. Students may enroll in any combination of MUS 26 and THA 126 a maximum of four times.

THA127. Musical Theatre: Revival Musicals in Rehearsal (0.5-4)  
**Pass/No Pass Only**  
The rehearsal and development of the revival musical, with an emphasis on performance and stage management. Students may enroll in MUS 127 or THA 127 a maximum of four times.

THA128. Musical Theatre: Revival 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 revival musical play. Students may enroll in MUS 128 or THA 128 a maximum of four times.
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. Students may enroll in THA 130A a maximum of four times.

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. Students may enroll in THA 130A a maximum of four times.

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. Students may enroll in THA 130C a maximum of four times.

THA131. World Theatre: Modern Plays in Rehearsal (0.5-4)
Pass/No Pass Only
The rehearsal and development of the modern world theatre play in a performance setting, with an emphasis on performance and stage management. Students may enroll in THA 131 a maximum of four times.

THA132. World 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 modern world theatre play. Students may enroll in THA 132 a maximum of four times.

THA133. World Theatre: The Ensemble Play in Rehearsal (0.5-4)
Pass/No Pass Only
The rehearsal and development of the world theatre ensemble play, in a performance setting with an emphasis on performance and stage management. Students may enroll in THA 133 a maximum of four times.

THA134. World Theatre: The Ensemble 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 ensemble-oriented world theatre play. Students may enroll in THA 134 a maximum of four times.

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. Students may enroll in THA 140A a maximum of four times.

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. Students may enroll in THA 140B a maximum of four times.

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. Students may enroll in THA 140C a maximum of four times.

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. This course may be repeated three times.

THA143. The Ensemble Revival Play in Rehearsal (0.5-4)
Pass/No Pass Only
Extensive practice in the development of an ensemble-oriented revival play with an emphasis on performance and stage management.

THA144. The Ensemble 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 ensemble-oriented 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. Since skills and proficiencies are enhanced by supervised repetition and practice, students may enroll in THA 170 a maximum of four times.

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. Since skills and proficiencies are enhanced by supervised repetition and practice, students may enroll in THA 172 a maximum of four times.

THA173. Advanced Scenic Construction Management for the Proscenium Thrust Stage (0.5-6)
Pass/No Pass Only
Designed to teach skills, concepts, and methods of advanced scenic construction execution for the proscenium stage and thrust stage. Covers the theater plant, theater personnel, scene construction, and scene painting, estimating material needs, build schedules, the design process and inventory assessment. Students will work on a series of projects which will culminate in finished scenery for a play, musical or a series of the two. Since skill and proficiencies are enhanced by supervised repetition and practice, students may enroll in THA 173 a maximum of four times.
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. This course may be repeated three times.

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. This course may be repeated three times.

THA177. Advanced Scenic Paint, Props and Crafts Management for the Proscenium and Thrust Stages (0.5-6)  
**Pass/No Pass Only**  
Designed to teach the basic skills, concepts, and methods of advanced costume construction for the proscenium stage and thrust stage. The course will cover the theater plant, theater personnel, costume construction, estimating material needs, build schedules, the design process and inventory assessment. Students will work on a series of projects which will culminate in a completed costume design for a play, musical or a series of the two. Students may enroll in THA 182 a maximum of four times.

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 execution for the thrust and/or 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 for a play, musical or a series of the two. Students may enroll in THA 182 a maximum of four times.

THA183. Advanced Costuming Techniques Management for the Proscenium and Thrust Stages (0.5-6)  
**Pass/No Pass Only**  
Designed to teach skills, concepts, and methods of advanced costume construction for the proscenium stage and thrust stage. The course will cover the theater plant, theater personnel, costume construction, estimating material needs, build schedules, the design process and inventory assessment. Students will work on a series of projects which will culminate in a completed costume design for a play, musical or a series of the two. Students may enroll in THA 183 a maximum of four times.

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. 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. Students may enroll in THA 184 a maximum of four times.

THA185. 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. The course will cover the theater plant, theater personnel, lighting and sound designers, master electrician, and lighting and sound crew and technical director will be emphasized. This course may be repeated three times.

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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/threequarter 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. This course may be repeated three times.

THA193. Advanced Lighting, Sound, and Rigging Management for Proscenium and Thrust Stages (0.5-6)

Pass/No Pass Only
Designed to teach the skills, concepts, and methods of lighting, sound, and rigging management techniques for the advanced electric student. Advanced 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. Skills and proficiencies are enhanced by supervised repetition and practice, this course may be repeated three times.
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: WLD150 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, blue print reading, layout techniques, material selection, weight and cost estimation. Students are assigned various fabrication projects on industrial and agricultural equipment that require the use of the oxy-fuel, plasma, GMAW and GTAW processes.
[CSU]

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]

WLD57. Pipe 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 in SMAW and GTAW with full emphasis on pipe welding techniques. Students practice welding in the 2G, 5G and 6G positions on pipe and tubing.
[CSU]

WLD58. Hardfacing and Surfacing (2)
Pass/No Pass Option
Prerequisite: WLD-150 with a grade of "C" or better.
Lec 1 Hr; Lab 3 Hrs
Advanced study in arc welding methods with full emphasis on the practice of hardfacing and surfacing techniques used in the agricultural and construction industries. Student will practice applying surfacing with a variety of hardfacing electrodes using SMAW, OFW, FCAW and spray surfacing methods.
[CSU]

WLD145. Special Projects (0.5-2)
Pass/No Pass Option
Prerequisite: Welding 50 with a grade of “C” or better or appropriate experience.
Special assigned projects for welding technology majors. May be repeated for a maximum of six units.

WLD150. Basic Welding (2)
Pass/No Pass Option
Lec 1 Hr; Lab 3 Hrs
Introductory level study and safe practice in shielded metal arc welding, gas metal arc welding and oxy-fuel cutting of steel materials. Introduction to metallurgy, metal identification, destructive and non-destructive weld testing, welding symbols and basic practices in metal repair and maintenance. A service course for other trades.

WLD151. Gas & TIG Welding (2)
Pass/No Pass Option
Lec 1 Hr; Lab 3 Hrs
Introductory level study and safe practice in oxy-acetylene and gas tungsten arc welding. Emphasis will be placed on the out of position welding of steel, aluminum and stainless steel joints and pipe fittings. Included will be study of ferrous and nonferrous metallurgy and common practices of metal repair and maintenance.

WLD155. Ornamental Ironwork (2)
Pass/No Pass Option
Advisory: WLD 150 (previously WLD 50) and or WLD 151 (or 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.

WLD156. 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

Administration and Faculty

DR. WILLARD LEWALLEN, SUPERINTENDENT/PRESIDENT

Assistant to the President ........................................................................................................ Vacant

Executive Vice President ........................................................................................................ Vacant

Executive Director, Institutional Advancement................................................................. Jaqueline Cruz
Director of Development..................................................................................................... Loyalene Flinn de Guaracha

Vice President Student Affairs (Interim) .......................................................................... Mary Dominguez
Dean, Student Affairs ......................................................................................................... Vacant
Director, Student Categorical Programs ........................................................................... Paul Casey
Grant Project Director (Student Services Support Grant) ................................................ Manuel Bersamin

Vice President of Academic Affairs and Accreditation ....................................................... Vacant
Dean, Advanced Technology .............................................................................................. Zahi Kanaan-Atallah
Director, Community Collaboratives and Articulation .................................................. Molly Lewis
Dean, South County Education Services ............................................................................ Paulette Bumbalough
Dean, Curriculum and Instructional Support ....................................................................... Stephanie Low
Dean, Languages, Fine Arts, and Student Support (Interim) .............................................. Kathy Mendelsohn
Director, The Western Stage ............................................................................................... Jon Selover
Education and Artistic Program Administrator ................................................................. Melissa Chin-Parker
Grant Project Director (High School Equivalency Program) ............................................ Carla Johnson
Dean, Social & Behavioral Sciences and Accreditation (Interim) ........................................ Brian Lofman
Dean, Child Development Center ..................................................................................... Linda Taylor
Dean, Math, Science, Engineering and Library ................................................................. Vacant
Director, Athletics (Interim) .............................................................................................. Daniel Teresa
Assistant Dean/Director Nursing and Health Sciences ....................................................... Vacant

Vice President for Support Operations ................................................................................. Al Muñoz
Associate Vice President, Human Resources/Equal Employment Opportunity .......... Terri Pyer
Manager, Food Services ..................................................................................................... Michael Cunnane
Facilities Director ............................................................................................................. Joseph Reyes
Controller ............................................................................................................................ Maria Dolores Javier
Grants Manager .................................................................................................................. Sharon Alheit

Vice President for Information and Technology Resources .............................................. Matthew Coombs

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ADAMS, LAWRENCE  
Political Science  
BA, CSU Chico  
MA, St. John’s University

ALEXANDER, MITZI  
Counselor  
BA, CSU Fresno  
M.Ed., Cal Poly San Luis Obispo

AMERCUPAN, ALI  
Welding Technology  
AWS Sr. Cert. Weld. Inspector  
BA, Wagner College  
MA, US International

ANDERSON, JOHN  
Construction Technology  
LA Pierce College

ANDERSON, TONY  
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BS, MA, San Jose State University

BARMINSKI, ROBERT  
Geology/Oceanography  
BS, Sul Ross State University  
MS, San Jose State University, Moss Landing Laboratories

BECK, JAMES C.  
English as a Second Language  
BA, Cal Poly San Luis Obispo  
MA, San Jose State University

BERSAMIN, MANUEL  
Grant Project Director, Student Services Support Grant  
BA, UC Irvine  
MA, Stanford University

BERTOMEN, LINDSEY  
Administration of Justice  
BS, Roger William University  
MS, CSU East Bay

BEYMER, DAVID  
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BS, Central Washington University  
MS, University of Arizona

BOSLER, ERIC  
Photography/ Art  
BFA, California College of Arts and Crafts  
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BUMBALOUGH, PAULETTE  
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M.Ed., Chapman University

BUTLER, JAMES  
Mathematics  
BS, San Diego State University  
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CALVERT, PETER  
Business  
BA, University of Massachusetts/ Boston State  
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BA, Chapman University

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BA, Spring Arbor University  
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MA, University of the Pacific
Ph.D., University of Tulsa

ZARATE, ANDREA
Early Childhood Education
BS, College of St. Theresa
M.Ed., College of Notre Dame
Hartnell College

Map Legend

AMPHTH  Amphitheater
ANX     Annex
CDC     Child Development Center
CAB     Classroom/Administration Building
CALL    Center for Assessment and Lifelong Learning
DSPS    Department of Supportive Programs and Services
EOPS    Extended Opportunity Program & Services
HCC     Hartnell College Center (Cafeteria/Dining Room)
HEP     High School Equivalency Program
HR      Human Resources
LRC     Learning Resource Center
Maint   Maintenance/Operations/Receiving
MER     T.R. Merrill Hall
PAF     Performing Arts Facility
PE      Physical Education
PLNTRM  Planetarium
Tennis  Tennis Courts (TNCT)
TRIO    Student Support Services/TRIO program
VAF     Visual Arts Facility (Gallery)

Bus Stops

Corners near the college
West Alisal Street at Homestead Avenue
Amherst Street at West Alisal Street
College Drive at West Alisal Street

Corners near Alisal Campus
East Alisal Street at Williams Road

Some Bus Passes sold at the Cashier’s office. Call MST at 831-424-7695 for more information on bus schedules.
Getting to HARTNELL COLLEGE Campuses

Hartnell College
Main Campus
411 Central Avenue
Salinas, California
755-6700

Alisal Campus
Center for Advanced Technology
1752 Alisal Street
Salinas, California
759-6093

King City Education Center
117 North Second Street
King City, California
386-7100
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Course Listings
Degree and Certificate Requirements
Academic Policies and Programs
Transfer Information