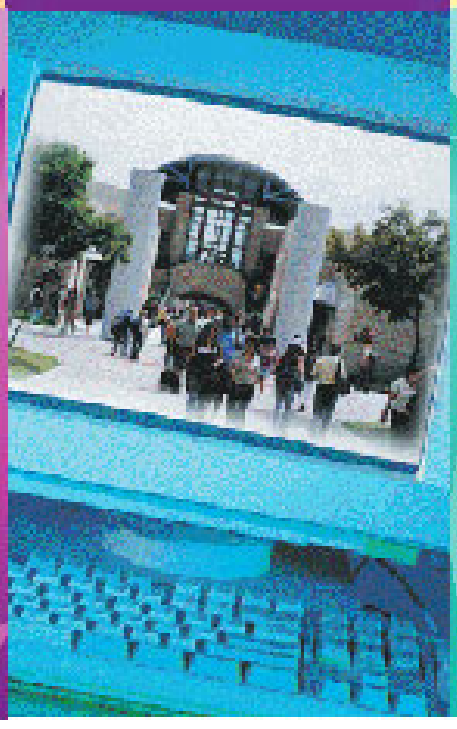
02-03 Palo Alto College Bulletin



Volume 17, No. 1, May 2002

2002-03
PALO ALTO COLLEGE
BULLETIN
CATALOG OF COURSES

Volume 17, No. 1, May 2002

The *Palo Alto College Bulletin* (USPS 018367) is published quarterly in March, May, July, and October by
Palo Alto College, 1400 W. Villaret Blvd., San Antonio, TX 78224-2499.
Periodicals Postage Paid at San Antonio, Texas
POSTMASTER: Send address changes to PALO ALTO COLLEGE
1400 W. Villaret Blvd., San Antonio, TX 78224-2499. Telephone 210/921-5000

Palo Alto College is a college of the Alamo Community College District
www.accd.edu/pac

Palo Alto College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404/679-4501) to award associate degrees and by the Committee on Animal Technician Activities and Training of the American Veterinary Medical Association. Its programs are approved by the Texas Higher Education Coordinating Board, the Federal Aviation Administration, and the American Society of Transportation and Logistics.

Palo Alto College is a member of the American Association of Community Colleges and the Southern Association of Colleges and Schools.

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OUR HISTORY & PURPOSE

PALO ALTO COLLEGE

Historical Sketch

Palo Alto College was established by the Alamo Community College District Board of Trustees on February 21, 1983, and chartered by the Texas Legislature on March 19, 1983, as an open admission, public, two-year college.

Classes began in September 1985 with 231 students enrolled. The opening of the college turned a community vision of establishing an institution of higher learning in the under-served Southside of Bexar County into reality. Historically, Hispanics comprise more than half of Palo Alto's enrollment, and females generally outnumber males.

For two years, the college's administrative offices were located at Billy Mitchell Village near Kelly Air Force Base. Initial classes were held at various locations including the Southwest Center of the Alamo Community College District, local high schools, and military bases until the campus opened in January 1987.

The College serves students who come from an immediate service area in the southern sector of San Antonio, other parts of Bexar County, and the outlying rural counties south of Bexar County.

Palo Alto was designed to accommodate 2,050 students on 111 acres at I-410 South and Hwy 16 in southern Bexar County. However, consistent increases in enrollment have prompted much physical growth, specifically through the construction of new facilities for added classroom space as well as sports and recreation. The college was cited by the Texas Higher Education Coordinating Board as the fastest growing community college in the State of Texas in Fall 1991.

The first 11 buildings of 145,409 square feet were joined by a two-story General Education classroom building in 1991, a Natatorium/Gymnasium Complex in 1992, the George Ozuna Jr. Learning Resources & Academic Computing Center in 1997, and the Ray Ellison Family Center in 2001. The college now encompasses 274,491 square feet on 126 acres.

Originally expected to peak at 2,500 and then projected to reach 6,000 by 1996, enrollment reached a height of 7,607 in Fall 1996. The college drew many students from the northwest quadrant of the city, prompting the ACCD to establish Northwest Vista College in 1995. Palo Alto's Fall 2001 headcount was 6,647.

Founded on the belief that education is the central element to improving lives, Palo Alto College remains an institution of high academic standards. It serves a growing student body with an increasingly diverse curriculum that features two-year course plans in the arts and sciences as well as many technical-oriented programs. Through Palo Alto, students can earn certificates or complete the first two years of a four-year degree plan for transfer to a university.

Because of its high transfer rate and the success of its students who do transfer and achieve a baccalaureate degree, Palo Alto was among eight community colleges studied as part of the Ford Foundation's national "Cultures of Success" study. The college is continually receiving accolades from four-year universities commenting on the high caliber of preparation the students who transfer have attained.

In 1996, the Frank M. Tejeda/Palo Alto College Scholarship Fund was initiated in honor of the U.S. Congressman, who died the next year from brain cancer. The fund provides prestigious scholarships to 10 students each year.

In response to an expressed need for a public, four-year university serving the southern sector of Bexar County, the Texas A&M University System opened a branch campus of Texas A&M University-Kingsville in Fall 2000, which offers junior- and senior-level classes on the community college campus. Using the "pathway model" endorsed by the Texas Higher Education Coordinating Board, the Texas A&M University-Kingsville System Center-Palo Alto can petition the Legislature to become a freestanding Texas A&M campus when it reaches a full-time enrollment equivalent to 2,500 students.

Palo Alto College is "the heart of community," and continues to evolve to meet the needs of its students.

ALAMO COMMUNITY COLLEGE DISTRICT

NORTHWEST VISTA COLLEGE
PALO ALTO COLLEGE
ST. PHILIP'S COLLEGE
SAN ANTONIO COLLEGE

Mission

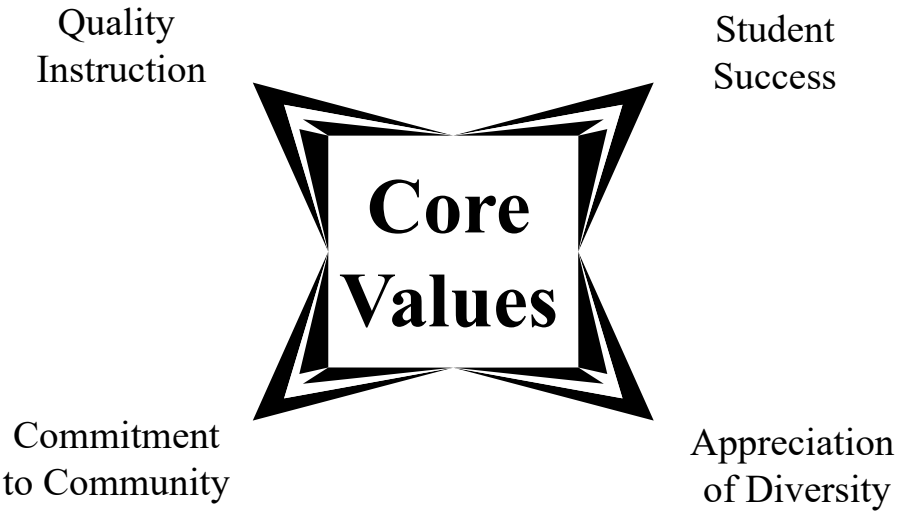
The Alamo Community College District provides educational opportunities for the citizenry of Bexar and surrounding counties, thus contributing to the economic, academic, social and cultural development of the region. The colleges, catalysts for changing lives, serve as centers of academic excellence and technological advancement.

PALO ALTO COLLEGE

PURPOSE STATEMENT

Mission Statement

As a public comprehensive community college, Palo Alto College provides exemplary, accessible education and training to a diverse and aspiring community. The College educates, nurtures, and inspires students through a dynamic and supportive learning environment, which promotes the intellectual, cultural, economic and social life of the community.

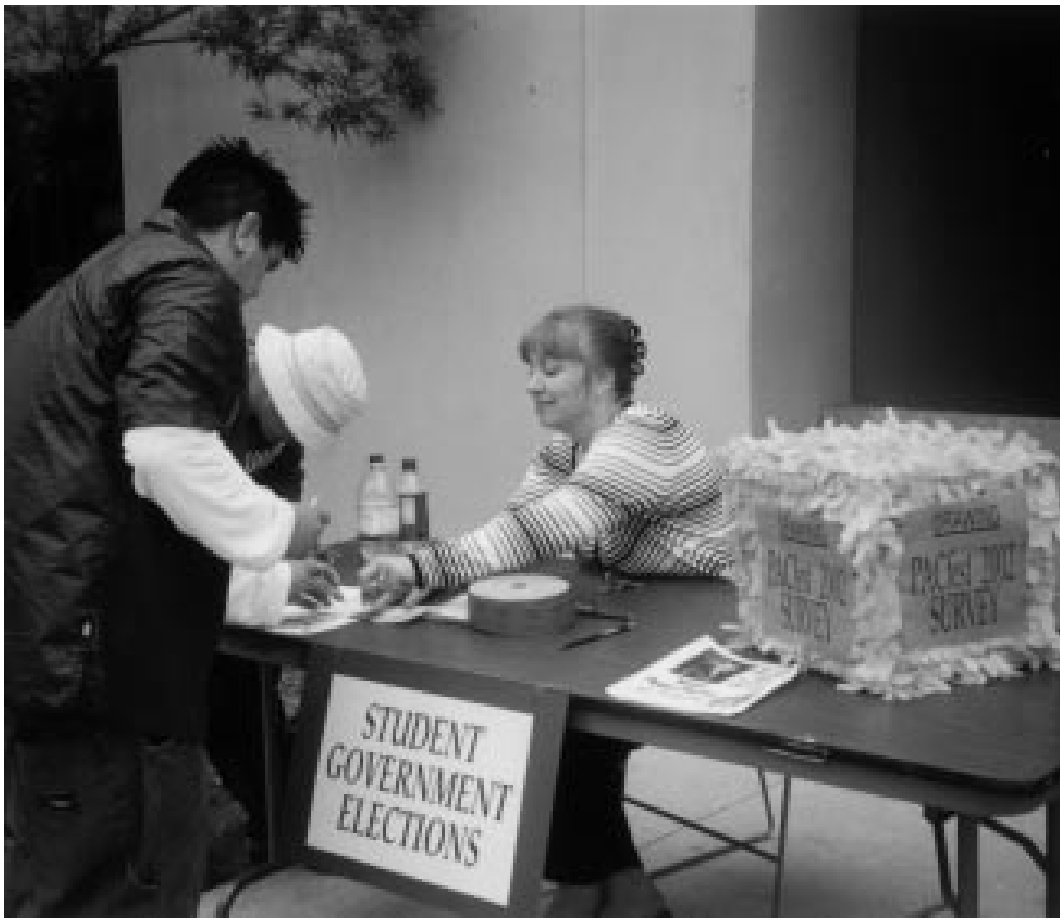


Major Functions

Palo Alto College fulfills its mission by offering the following:

- General, transfer, and technical education;
- Basic skills development and comprehensive literacy programs;
- Continuing education and community outreach;
- Student success and support programs;
- Instructional technologies and distance education;
- Library information resources; and
- Institutional research, planning, development and evaluation.

ACADEMIC CALENDAR



ACADEMIC CALENDAR 2002-2003

First Summer Session — Day 2002 (six weeks)

Consult class schedule for registration/advisement.

June 3	Monday. Classes begin.
June 6	Thursday. Census date.
June 21	Friday. Last day to withdraw.
July 4	Thursday. INDEPENDENCE DAY HOLIDAY. College closed.
July 5	Friday. Last day of classes.
July 8-9	Monday-Tuesday. FINAL EXAMINATIONS.
Nov. 6	Wednesday. Last day to complete First Summer Day incomplete (I) grades.

Second Summer Session — Day 2002 (six weeks)

Consult class schedule for registration/advisement.

July 12	Friday. Classes begin.
July 17	Wednesday. Census day.
July 31	Wednesday. Last day to withdraw.
Aug. 14	Wednesday. Last day of classes.
Aug. 15-16	Thursday-Friday. FINAL EXAMINATIONS.
Dec. 16	Monday. Last day to complete Second Summer Day incomplete (I) grades.

Summer Session — Evening 2002 (eight weeks)

Consult class schedule for registration/advisement.

June 3	Monday. Classes begin.
June 10	Thursday. Census date.
July 4	Thursday. INDEPENDENCE DAY. College closed.
July 5	Friday. Last day to withdraw.
July 23	Tuesday. Last evening of classes..
July 24	Wednesday. FINAL EXAMINATIONS for Monday-Wednesday classes.
July 25	Thursday. FINAL EXAMINATIONS for Tuesday-Thursday classes.
Nov. 25	Thursday. Last day to complete Evening Session Summer incomplete (I) grades.

Fall 2002 Regular Semester

Consult class schedule for registration/advisement.

Aug. 19	Monday. Faculty Convocations.
Aug. 26	Monday. Classes begin.
Aug. 31-Sept. 2	Saturday-Monday. LABOR DAY HOLIDAY. Weekend College closed.
Sept. 7	Saturday. Weekend classes begin.
Sept. 9	Monday. Census date.
Oct. 14	Monday. Employee Development Day. College closed 6 a.m. - 6 p.m. Evening classes meet.
Nov. 15	Friday. Last day to withdraw.
Nov. 28-Dec. 1	Thursday-Sunday. THANKSGIVING HOLIDAY. Weekend College closed.
Dec. 8	Sunday. Last day of classes
Dec. 9-15	Monday-Sunday. FINAL EXAMINATIONS.
Dec. 15	Sunday. End of Fall Semester.
Dec. 21-Jan. 5	Saturday-Sunday. CHRISTMAS/NEW YEAR. College closed.
April 14, 2003	Monday. Last day to complete Fall 2002 incomplete (I) grades.

Fall Flex Session I 2002 (first eight weeks)

Consult class schedule for registration/advisement.

Aug. 26	Monday. Classes begin.
Aug. 31-Sept. 2	Saturday-Monday. LABOR DAY HOLIDAY. College closed.
Sept. 3	Tuesday. Census date.
Sept. 7	Saturday. Weekend classes begin.
Oct. 4	Friday. Last day to withdraw.
Oct. 13	Sunday. Last day of classes.
Oct. 14	Monday. Employee Development Day. College closed. 6 a.m. - 6 p.m. Evening classes meet.
Oct. 15-16	Tuesday- Wednesday. FINAL EXAMINATIONS.
Oct. 16	Wednesday. End of Fall Flex Session I.
Feb. 13, 2003	Thursday. Last day to complete Fall Flex Session I incomplete (I) grades.

Fall Flex Session II 2002 (second eight weeks)

Consult class schedule for registration/advisement.

Oct. 21	Monday. Classes begin.
Oct. 26	Saturday. Census date.
Nov. 27	Wednesday. Last day to withdraw.
Nov. 28-Dec. 1	Thursday-Sunday. THANKSGIVING HOLIDAY. Weekend College closed.
Dec. 8	Sunday. Last day of classes.
Dec. 9-15	Monday-Sunday. FINAL EXAMINATIONS.
Dec. 15	Sunday. End of Fall Flex Session II.
Dec. 21-Jan. 5	Saturday-Sunday. CHRISTMAS/NEW YEAR. College closed.
April 14, 2003	Monday. Last day to complete Fall Flex II incomplete (I) grades.

Spring 2003 Regular Semester

Consult class schedule for registration/advisement.

Jan. 6	Monday. Semester begins.
Jan. 13	Monday. Classes begin.
Jan. 18	Saturday. Weekend Classes begin.
Jan. 20	Monday. MARTIN LUTHER KING DAY HOLIDAY. College closed.
Jan. 25	Saturday. Census date.
March 17-23	Monday-Sunday. SPRING BREAK. College closed. All administrative offices will be closed Thursday-Sunday.
April 11	Friday. Last day withdraw.
April 18-20	Friday-Sunday. EASTER HOLIDAY. College closed.
April 25	Friday. FIESTA HOLIDAY. College closed. Weekend classes will meet.
May 4	Sunday. Last day of classes.
May 5-11	Monday-Sunday. FINAL EXAMINATIONS.
May 10	Commencement.
May 11	Sunday. End of semester.
May 26	Monday. MEMORIAL DAY HOLIDAY. College closed.
Sept. 8	Monday. Last day to complete Spring 2003 incomplete (I) grades.

Spring Flex Session I 2003 (first eight weeks)

Consult class schedule for registration/advisement.

Jan. 13	Monday. Classes begin.
Jan. 18	Saturday. Census date.
Jan. 20	Monday. MARTIN LUTHER KING DAY HOLIDAY. College closed.
Feb. 21	Friday. Last day to withdraw.
March 2	Sunday. Last day of classes.
March 3-4	Monday-Tuesday. FINAL EXAMINATIONS.
March 4	Tuesday. End of Spring Flex Session I.
July 2	Wednesday. Last day to complete Spring Flex I incomplete (I) grades.

Spring Flex Session II 2003 (second eight weeks)

Consult class schedule for registration/advisement.

March 10	Monday. Classes begin.
March 15	Saturday. Census date.
March 17-23	Monday-Sunday. SPRING BREAK. College closed. All administrative offices will be closed Thursday-Sunday.
April 17	Thursday. Last day to withdraw.
April 18-20	Friday-Sunday. EASTER HOLIDAY. College closed.
April 25	Friday. FIESTA HOLIDAY. College closed.
May 4	Sunday. Last day of classes.
May 5-11	Monday-Sunday. FINAL EXAMINATIONS.
May 10	Commencement.
May 11	Sunday. End of Spring Flex Session II.
May 26	Monday. MEMORIAL DAY HOLIDAY. College closed.
Sept. 8	Monday. Last day to complete Spring Flex II incomplete (I) grades.

First Summer Session — Day 2003 (six weeks)

Consult class schedule for registration/advisement.

June 2	Monday. Classes begin.
June 5	Thursday. Census date.
June 27	Friday. Last day to withdraw.
July 3	Thursday. Last day of classes.
July 4	Friday. INDEPENDENCE DAY HOLIDAY. College closed.
July 7-8	Monday-Tuesday. FINAL EXAMINATIONS.
Nov. 5	Wednesday. Last day to complete First Summer Day incomplete (I) grades.

Second Summer Session — Day 2003 (six weeks)

Consult class schedule for registration/advisement.

July 11	Friday. Semester begins.
July 14	Monday. Classes begin.
July 16	Wednesday. Census date.
Aug. 6	Wednesday. Last day to withdraw.
Aug. 13	Wednesday. Last day of classes.
Aug. 13-14	Wednesday-Thursday. FINAL EXAMINATIONS.
Dec. 15	Monday. Last day to complete Second Summer Day Session incomplete (I) grades.

Summer Session — Evening 2003 (eight weeks)

Consult class schedule for registration/advisement.

June 2	Monday. Classes begin.
June 9	Monday. Census date.
July 4	Friday. INDEPENDENCE DAY. College closed.
July 11	Friday. Last day to withdraw.
July 22	Tuesday. Last evening of classes..
July 23	Wednesday. FINAL EXAMINATIONS for Monday-Wednesday classes.
July 24	Thursday. FINAL EXAMINATIONS for Tuesday-Thursday classes.
Nov. 21	Friday. Last day to complete Evening Session Summer incomplete (I) grades.

COLLEGE ORGANIZATION

In support of the mission of the Alamo Community College District, Palo Alto College offers instructional services, student services, learning resources, technology resources, and extended services and community outreach.

Instruction

Palo Alto College offers instructional programs in general education, occupational/technical education, developmental education, and continuing education. The general education program focuses on the development of competencies that are designed to assist individuals in leading productive and meaningful lives in a dynamic environment of social, technological, and cultural changes. Courses are designed to satisfy the requirements of the first two years of a bachelor's degree, as well as the general education core of an occupational/technical program.

Developmental education at Palo Alto College is designed to provide the opportunity for the academic success of every student by preparing the student for college level courses and for the successful completion of the Texas Academic Skills Program.

Occupational and technical programs provide a strong general education core with emphasis on entry level competencies for business and industry, or for transfer to senior institutions. Advisory committees in each program area provide the expertise for direction and the development of topical course content. Through the advisory committees, linkage is provided to the secondary schools, business, and industry.

Continuing education offers adult literacy education, workforce development courses, personal development courses, and courses for community service. Students gain or improve skills for employment and enhance their personal and professional lives. Continuing education courses support the College’s credit instructional programs to ensure quality and relevance of course content.

Student Services

Student Services at Palo Alto College provides assistance toward accomplishing each student's unique academic career goals and ultimate leadership potential. Because the institution encompasses a student population of diverse ages, economic and cultural backgrounds, and abilities, Palo Alto College provides services in:

- Admissions & Records
- Assessment and TASP
- Career Development
- Counseling and Student Success
- Intramurals
- Job Placement
- Limited English Assistance Program
- Ray Ellison Family Center
- Returning Adult Center
- Service-Learning
- Special Populations
- Student Activities
- Student Development Courses
- Student Financial Services
- Transfer Advisement Center
- Tutoring & Learning Assistance
- Veterans Affairs

These services are provided with respect and dignity while recognizing each student's unique strengths, abilities and individual potential. Continuous assessment by the college community ensures that programs and services meet student needs.

Learning Resources Center and Instructional Resources

The Learning Resources Center (LRC) at Palo Alto College – housed in the George Ozuna Jr. Learning Resources and Academic Computing Center – is structured to provide on-site library materials, instructional technology, and audio-visual production necessary to support and supplement the teaching-learning programs at all levels. The library's collection includes print volumes, current magazines and journals, electronic indexes with full text databases, computer software, audio visual materials, and domestic and foreign newspapers. Through cooperative agreements and computer database searching, the Learning Resources Center has access to the holdings of local, state, and national libraries. Memberships in the Council of Research and Academic Libraries (CORAL), AMIGOS, and on-line search capability through NOTIS and Internet also greatly enhance the faculty and students' ability to quickly access vast bibliographic resources at member institutions.

Within the LRC library, special purpose areas are designated for electronic research, bibliographic instruction, periodical reading, study areas, a children's library, and an integrated print and nonprint collection. Student seating and informal

study areas are spread throughout the library. Microform reading/printing and copy machines are available. All stacks are open for students and other library users.

The library faculty are responsible for the bibliographic instruction program and subject/course integrated instruction, which are coordinated with faculty in the disciplines. Individual assistance in the use of resources and formal bibliographic instruction are offered by the library faculty and professional information staff. The Library Information and Instructional Services librarians also help develop data-base searches and verify requests for interlibrary loans.

The audiovisual services include graphics, computer graphics, photography, audio, and videotaping in direct support of academic instruction. The AV staff is led by a media professional with expertise in instructional design and development who can design, develop, and produce audiovisual materials tailored and individualized to course content. An audiovisual equipment depository provides equipment distribution to classrooms throughout the campus.

The Learning Resources Center of Palo Alto College reinforces the concept of lifelong learning through electronic and conventional library services and through its Project COSMOS (Community Outreach Synergy: Marketing, Orienting, Serving) artistic, cultural and educational programs.

Academic Computing Center

The Academic Computing Center, located on the east end of the first floor of the George Ozuna Jr. Learning Resources & Academic Computing Center, features a megalab with more than 100 PC work stations and five computing classrooms.

In the megalab, work stations are equipped with Internet access and software. Most computers include PC/CD-ROM capability. Other resources include digital color scanners and high-speed laser printers. Open seating is available for students in the Academic Computing Center. In addition to serving Computer Information Systems and Computer Science courses, the five computing classrooms also serve other disciplines with computer-based assignments.

The Academic Computing Center offers a wide assortment of computing resources for students to complete course assignments and projects with the highest efficiency and professionalism. The center is open seven days a week during hours similar to the Learning Resources Center.

Distance and Extended Education

The Office of Distance and Extended Education provides support services to students enrolled in courses offered during the evening and weekend, on-campus and at all off-campus locations, and in telecourses, Internet courses, and interactive videoconferencing courses. Students are provided assistance with registration, course changes, and information about the College.

Acting as a liaison, Distance and Extended Education personnel also respond to the post-secondary educational needs of the community, secondary schools, business/industry, and military bases to facilitate the establishment of college credit through both traditional and non-traditional delivery methods. Unique instructional programming such as dual-credit, off-campus, telecourse, Internet, and two-way interactive distance education courses are coordinated with the College's instructional units and the community.

In addition, the unit promotes and facilitates community outreach activities such as mentorships, volunteerism, and service-learning.

Texas A&M University-Kingsville System Center-Palo Alto

Palo Alto College is the home of the Texas A&M University-Kingsville System Center-Palo Alto, which allows students to obtain a four-year degree on the Southside of Bexar County.

Opened in Fall 2000 to address an educational need in South San Antonio, the Center currently offers upper-division college classes in Palo Alto College facilities. Students with at least 45 semester hours of college with a 2.0 GPA or above may apply.

Effective Fall 2002, students can seek degrees by taking junior- and senior-level courses in the following areas:

Accounting
Agribusiness
Biology
Child & Family Studies
Computer Information Systems
Criminology
Interdisciplinary Studies (Elementary Education)
English
History

Kinesiology
Management
Mathematics
Psychology

Secondary teaching certification will be available in most of these areas.

The System Center also offers a Bachelor of Applied Arts & Sciences (BAAS) degree, which gives college credit for technical and vocational courses taken and for previous work experience.

Classes are offered throughout the day and evening.

Degrees will be awarded by Texas A&M University-Kingsville until the System Center becomes its own free-standing university within the Texas A&M University System.

Through joint admission agreements, first-time freshman who enter any of the four campuses within the Alamo Community College District and meet eligibility conditions will be automatically accepted for admission to the System Center when they complete their two-year degrees at either Northwest Vista College, Palo Alto College, San Antonio College or St. Philip's College.

To contact the System Center, located in Palo Alto's Student Center, call 210-921-5488 or visit them on the web at www.tamuk.edu/sanantonio.

ADMISSIONS & REGISTRATION

It is the policy of Palo Alto College to admit students without regard to race, color, age, gender, religion, national origin, or disability. Students are personally responsible for meeting all admission requirements.

All students must provide the Office of Admissions and Records the transcripts from the previous schools of attendance before admission. If the transcripts are not received, registration will not be permitted. To ensure timely credential evaluation, correct placement, and admission into certain degree programs, the required transcripts should be submitted one month prior to registration.

Admission of Beginning Students

A. Graduates of accredited high schools must submit the following credentials to the Office of Admissions and Records:
   1. Official high school transcripts with official seals and signatures affixed. (Transcripts received become the permanent property of the College and no reproduction of these credentials will be made.) Transcripts may be forwarded from the high school to Palo Alto College. **The College will accept official transcripts directly from the student.**
   2. College Preparatory Program for High School Students
      In preparation for a college education and career requirements of the 21st Century, the Texas Higher Education Coordinating Board recommends all high school graduates have the following core proficiencies:
      English Language Arts (4)
      Mathematics (2-4)
      Sciences (2-3)
      Social Studies (4)
      Foreign Language (3)
      Physical Education (1-1/2)
      Health (1/2)
      Computer Sciences (1)
      Fine Arts or Speech (1/2-1)
      Additional specialty or elective courses also will be required for college preparatory or tech-prep programs.
   3. Official TASP or Alternative TASP Test scores.
      Students who are not TASP-exempt or TASP-waived and who do not provide TASP or Alternative TASP Test scores must take the TASP or Alternative TASP prior to enrolling in college-level courses.
   4. Official SAT/ACT/or TAAS scores if requesting a TASP exemption based on the following scores:
      ACT: Composite score of 23 or higher with individual math and English scores no less than 19. Scores can be no more than 5 years old.
      SAT: Total score of 1070 with a minimum of 500 on both the verbal and

math tests. Scores can be no more than 5 years old.
TAAS: TAAS scores can be no more than 3 years old. For TAAS scores taken in Spring 1994 and thereafter, a Reading TLI of 89 and a Math TLI score of 86 and writing scaled score of 1770 will be required.

5. Placement test scores no more than 3 years old and/or a transcript showing previous college course work.
   ASSET-Writing and Numerical Skills
   Nelson Denny Reading Comprehension Test
   Pre-TASP
   ACCUPLACER
   SAT-A verbal score below 450 or total score below 470 require an additional reading test.
   ACT-composite score below 20 requires additional reading test.
   TASP or alternative TASP-only passing scores may be used for placement; additional testing may be required for placement in college level courses.

B. Students can submit the General Educational Development (GED) transcripts (high school equivalency) in lieu of high school transcripts. A minimum score of 40 on each test, or an average of 45 if any single test score is below 40, is required. Students will be admitted on the same basis as graduates of accredited high schools.

C. Students graduating from unaccredited high schools or completing non-traditional high school programs may be considered for Special Conditional Admission. Approval authority is the Director of Enrollment Management for students 18 years old or older.

Students MUST take remedial courses in disciplines where performance scores indicate a deficiency. Failure to enroll in required remediation will result in withdrawal from all college-level courses. See Assessment and TASP Office for further information concerning TASP.

Admission of Transfer Students

A. Transfer students must only submit official, complete transcripts to the Office of Admissions and Records from **all previous colleges or universities attended.** The transcripts must contain the official seals and the appropriate college officials' signatures. **The College does accept official copies of transcripts directly from students.** (Transcripts received become the permanent property of the College. No reproduction of these credentials will be made.) Palo Alto College will accept any passing grade from any accredited institution. Passing is a grade of "D" or better.

B. Transfer students must:

1. Meet the minimum scholastic standards of Palo Alto College as published in this catalog;
2. Continue on scholastic probation if that was the status at the last college or university attended;
3. Be subject to disciplinary action and dismissal if previous registration information is falsified or knowingly suppressed;
4. Provide official TASP or Alternative TASP scores if not TASP exempt; and
5. Provide placement test scores if passing TASP or Alternative TASP were not obtained and previous course work in the failed areas has not been attempted. Additional placement testing may also be required for placement into some college level courses.

C. Transfer students on Enforced Scholastic Withdrawal (or Academic Suspension) in the immediate past fall, spring, or summer semester **will be denied admission.** These students will be required to remain out of the College for the "specified suspension of time" (as defined by Palo Alto College academic standards) before being considered for admission.

Students having been placed on Enforced Scholastic Withdrawal for a third time or more will not be permitted to enroll in the College for one calendar year. After that year, the students may petition a review committee for readmittance. These petitions must be submitted to the Director of Enrollment Management at least three weeks prior to the start of the semester.

Admission of International Students

All persons seeking admission holding non-permanent visas will be processed as International Students.

All students must demonstrate English proficiency before being allowed to enroll in university/college-level courses. If the student's first language is English, or the student completed studies from a school where English was the primary language, English proficiency testing will not be required.

Students entering Palo Alto College from countries where English is not the primary language will need to provide TOEFL test scores AND/OR be tested at Palo Alto College before enrolling in college level courses. For students who have taken the TOEFL Examination, a score of 450 or higher is considered English proficient. If either the TOEFL Examination or the Palo Alto College examination determines that the student does not possess the English skills necessary to successfully perform at the college level, the student will be required to enroll in English as a Second Language (ESL) courses.

In addition, all students who demonstrate English proficiency must take a placement examination for placement into skill-appropriate courses. Palo Alto College placement exams are administered on campus and must be taken upon arrival to the campus and before enrollment.

Since Fall 1989, students enrolling for the first time in a Texas public institution of higher education must take the Texas Academic Skills Program test (TASP). All International Students must follow the guidelines for TASP as determined by law and enforced by the College. For more information on TASP, please contact the Assessment Center.

A. To be considered for admission, the following requirements must be submitted prior to deadline dates: May 15 for Fall; October 15 for Spring; March 15 for Summer. International student applications can be obtained in the Counseling and Support Services Center and the Transfer Advisement Center. Requirements:
   1. Application for admission;
   2. Letter of Academic Standing (transfer student only);
   3. Financial Affidavit of Support (Form provided by the International Students Counselor). This form must be signed by the student and by the student's sponsor who accepts responsibility for the student's financial needs. Financial statements must be received on bank letterhead and signed by a bank official;
   4. Original copy English language translation of secondary school or college/ university transcript which includes official school seal, signature of principal and date. Some transcripts must be evaluated by consultancy;
   5. $15.00 processing fee (non-refundable) check to Palo Alto College;
   6. Current photograph attached to application (optional).

B. After the above requirements are fulfilled, the applicant's file will be evaluated for official admission. If admission is granted, an I-20 AB Form will be issued to the student. In order to be a bonafide student, the applicant must complete the following upon arrival in the US:
   1. Participate in college placement testing (ACT, SAT, or other official district assessments) as recommended by counselor;
   2. Enroll in a minimum of 12 semester hours;
   3. Pay for hospital insurance each semester;
   4. Submit to International Student Counselor a copy of paid tuition receipt; and
   5. At the end of each semester, submit to the International Student Counselor a copy of grades earned.

C. Transfer Students: International students transferring to PAC must comply with the same policies and requirements as International Students who are applying

from their home country. Transferring students are required to submit a letter of standing from their current Advisor and return it to PAC. When the student is determined to be in Status (or good standing), the applicant must complete and submit all documents as outlined in "A" above.

Evaluation of Foreign Credentials

All foreign credentials submitted to the College must be the original of the certified English translation. An official evaluation of foreign credentials must be completed before transfer credits or TASP exemption can be granted. Students are responsible for arranging for credential evaluation. A list of acceptable professional evaluation services is available in the Office of Admissions and Records. Students must pay all costs of translations and/or evaluation of credentials.

Conditional Admission

Students unable to obtain official copies of their college or high school transcripts or GED test scores may be admitted by the approval of the Director of Enrollment Management.

Admission to the Dual-Credit Program

The Dual-Credit Program allows eligible high school students to earn college credit for certain high school courses in which the students are currently enrolled. Dual-credit courses are offered in participating high schools during the regular scheduling of classes. In order for students to participate in the program, the high schools must first be an approved site for the offering of dual-credit courses. In addition, the students must meet the following requirements:

1. Submit the Dual Credit Student Data Form and an official copy of the high school transcript to the Office of Admissions and Records.
2. Submit passing scores on the exit-level TAAS or tenth-grade end-of-year exams.
3. Submit official TASP/Alternative TASP scores showing passing levels in the content area required for the dual-credit course or be exempt from TASP based on ACT, SAT, or TAAS scores.
4. Tuition and fee charges are waived for eligible Dual Credit students for 6-8 credit hours per semester.

Early Admissions

High School juniors and seniors may enroll in Palo Alto College courses for full college credit by fulfilling the following requirements:

1. Submit the Early Admissions Application Form, which includes recommendation forms to be completed by high school counselors, teachers, or principals, to the Office of Admissions and Records;
2. Demonstrate average or above-average proficiency on the college placement examination;
3. Pass the exit TAAS test or tenth-grade end-of-year exams. High school students enrolled in four consecutive high school courses may enroll in no more than two Palo Alto College courses. High school students enrolled in five consecutive high school courses may enroll in only one Palo Alto College course. Credit for college hours will not be granted until all high school graduation requirements have been met and the students' official high school transcripts indicating graduation dates are received by the Office of Admissions and Records.

As mandated by the Texas Academic Skills Program (TASP), students in high school intending to enroll at Palo Alto College must take the TASP/Alternative TASP and must pass the areas in which college enrollment is sought.

Non-credit or Audit Admission

A. Students registering for audit or non-credit status only are not required to provide admission credentials. A grade of "NC" (non-credit) is assigned to auditing students.

B. An audit fee of $10 per course is charged in addition to the regular tuition and fees.

C. Students requesting a change to audit status must pay the $10 audit fee by the census date of the semester or session.

Admission to Summer School

Students attending other colleges or universities and enrolling only for the Palo Alto College summer sessions must provide all appropriate transcripts and documents.. The maximum student load is eight semester hours for one term or nine semester hours for concurrent day and evening students, and is not to exceed 14 semester hours for Summer Sessions I and II.

New and Transfer Student Orientation Policy

In an effort to maximize the student's college experience, and help each student achieve his or her goals, Palo Alto College has developed Orientation 0100 (ORIE 0100). This course provides students with the knowledge of campus resources and personnel, the skills to set appropriate and realistic educational and career goals, and the tools needed to achieve goals set.

To assure that each student is able to meet his or her fullest educational potential at Palo Alto College, the school policy recommends that any New or Transfer student with less than 12 completed credits take and complete ORIE 0100.

Texas Academic Skills Program (TASP)

The Texas Academic Skills Program (TASP) is a state-mandated program of testing, advisement, and remediation approved by the Texas Legislature (House Bill 2182). Section 51.306 of the Texas Education Code requires all undergraduate students to comply with the TASP regulations. The program is designed to ensure that students attending public institutions in Texas have the prerequisite skills of writing, reading, and mathematics to perform at the college level.

All students in Texas public colleges and universities must take the TASP or Alternative TASP exam prior to enrollment in college-level courses. With approval from an Assessment-TASP official, students who have not taken one of these exams may be permitted to enroll. Performance on the test will not be used as a condition of admission. All TASP-Failed students are required to meet with an advisor prior to enrollment.

Students are exempt from taking the TASP if they satisfy one of the following conditions:

- Earned 3 or more college level semester hours prior to the Fall 1989 Semester from an accredited institution.
- Possess a Bachelor's or higher degree from an accredited institution.
- Meet qualifying standards for an exemption based on ACT, SAT, or TAAS scores (scores must be attained in one "sitting"):
  - ACT: Composite score of 23 or higher with individual math and English scores of 19 or higher. Scores can be no more than five years old.
  - SAT: Total score of 1070 with a minimum of 500 on both the verbal and math tests. Scores can be no more than 5 years old.
  - TAAS: A Reading TLI score of 89 and a math TLI of 86 and a writing scaled score of 1770 is required. Scores can be no more than 3 years old.

- Meet the legal definition of "blind" and "deaf" and have obtained credit for 3 or more college-level semester hours from an accredited institution prior to September 1, 1995.
- Obtained credit through examination or military training equivalent to 3 college-level semester hours prior to the Fall 1989 semester. The credit must have been awarded by an accredited college or university or must apply to the Palo Alto College degree plan.

Students requiring exemption must provide as applicable official transcripts, official test scores, or official documentation of the "blind" or "deaf" disability.

Palo Alto College also offers several TASP-waived certificate programs. The TASP test is not required for those students enrolled in and taking only the courses within these programs.

Developmental studies courses and activities are required for students whose scores on any of the TASP or Alternative TASP subtests are below passing. The appropriate developmental program is determined by placement test scores and previous course work and must be in at least one of the areas in which the failure occurred. Developmental courses and non-course-based developmental programs are designed to strengthen academic skills and prepare students to pass the TASP Test. These courses do not apply toward degree requirements at any Texas public college. **TASP- failed students not complying with state remediation requirements may be withdrawn from all their college-level courses.**

Students who initially failed any portion of the TASP or Alternative TASP exam can meet TASP requirements by either retaking and passing the TASP exam or earning a grade of B or better in a course approved by the Coordinating Board (following successful completion of the prescribed developmental program and an unsuccessful retake of the TASP test - in that order) related to the skill area in which a deficit was assessed:

Writing:	ENGL 1301 or 1302
Reading:	HIST 1301, 1302
	ENGL 2322, 2323, 2332, 2333, 2327, 2328
	PSYC 2301
	GOVT 2301, 2302, 2305, 2306
Math:	MATH 1314 or higher

Placement Policy

Palo Alto College requires each student to be assessed in writing, reading, and mathematics to determine the level of academic skills and the course placement. All students must be assessed or provide placement test scores. To fulfill this requirement, students may take the TASP or Alternative TASP Test and/or the placement test accepted at Palo Alto College. Official test scores from ACT, SAT, ASSET, Nelson-Denny, ACCUPLACER, San Antonio College, St. Philip's College, or Northwest Vista College also will be accepted. Placement scores must be less than three years old. Students scoring at the developmental level on entry tests must complete specified developmental courses before enrollment in college-level courses.

Registration and the Enrollment Process

Palo Alto College is committed to providing its students an easy-access, flexible, and somewhat continuous registration/enrollment process. Students will be assessed, advised, and registered in a flexible, personalized process, provided students are in possession of all necessary admissions documents. For specific registration information, contact the Office of Admissions and Records.

Course Delivery Options

Palo Alto College provides courses in a variety of different time lengths and delivery formats to meet the busy lifestyles which make scheduling traditional college courses difficult. Presently courses are offered in sixteen-week, twelve-week, eight-week, six-week, and three-week formats during the Fall, Spring, or Summer semesters.

In addition, the College provides intersession (between semester) courses such as the Maymester session. Courses are delivered face-to-face in a classroom situation on campus or off-campus at various businesses, high schools, or military installations in Bexar County and the Colleges' service area. Most of the core curriculum courses and some technical courses are also delivered via telecommunications such as Internet, telecourses, and interactive videoconferencing courses. Course content, college credit, and transferability of a distance education course is equivalent to the same course offered on campus. Students have the same rights, privileges and obligations as an on-campus student. However, distance education courses may not be appropriate for everyone. Maturity and self-discipline are necessary because students must maintain steady progress throughout the semester. For more specific information about distance education courses, refer to the web site: **www.accd.edu/pac** and click on Distance Education.

The three telecommunication options are described below:

1) Internet courses require the student to access the course with a minimum 486 computer, and an Internet Service Provider (ISP) and other specific software. Basic requirements for taking an Internet course are found on the PAC website, **www.accd.edu/pac/distedu/Internet.htm.**
2) Telecourses, which are prerecorded video programs broadcast on both cable television and on the local PBS network, allow students to independently complete all or most of the course away from the college.
3) Interactive videoconferencing courses utilize real time audio and video between instructor and students. These courses are offered either to or from a distant site or sites. Students may attend classes on-campus or at a prearranged distant site.

Academic Fresh Start

Texas law entitles residents to seek admission to public institutions of higher education without consideration of courses taken 10 or more years prior to enrollment. This legislation has been called the "right to an academic fresh start, " and it gives students the option of having course work taken 10 or more years prior to the starting date of the semester in which the applicant seeks to enroll either included or ignored for admission purposes. To apply for admission under this program, a student must notify the Office of Admissions and Records and complete the appropriate documents. A student admitted under this provision may not receive any course credit for courses undertaken 10 or more years prior to enrollment.

Student Class Load

Fall and Spring Semesters: A Full-Time Student is enrolled in 12 or more semester hours . A Part-Time Student is enrolled in fewer than 12 semester hours. No student may enroll for more than 18 semester hours except by written authorization of the Dean of Student Services or a designee.

Summer Session: A Full-Time Student is enrolled 6 or more credit hours. A Part-Time Student is enrolled in fewer than 6 semester credit hours. Hours in excess of full-time must be approved by the Vice President of Student Affairs.

Classification of Students

FRESHMAN:

Must have graduated from a high school with a minimum of 15 credits, or must have been admitted on the basis of acceptable GED scores, or must have earned fewer than 30 hours at Palo Alto College or another accredited college.

SOPHOMORE:

Must have completed more than 30 semester hours in collegiate level subjects at Palo Alto College or some other accredited college, but not more than 66 credit hours.

Concurrent Enrollment at ACCD Institutions

Students enrolling concurrently at Palo Alto College, St. Philip's College, San Antonio College, or Northwest Vista College do not pay duplicate fees and tuition.

FINANCIAL SERVICES AND ASSISTANCE

Tuition and Fees

Palo Alto College reserves the right to change its tuition and fees in keeping with the decisions of the Board of Trustees of the Alamo Community College District, acts of the Texas Legislature, and official interpretations thereof.

All students are required to substantiate to the satisfaction of the College administration their entitlement to Texas residence classification in order for minimum tuition rates to apply (particularly Chapter 54, Texas Education Code). An Oath of Residency and acceptable documentation supporting the Texas residence declaration, such as Texas Driver's license and Texas Vehicle registration indicating at least one year's residence in Texas prior to registration, are required of all registrants. See semester class schedule for specifics or contact the Office of Admissions and Records.

Students qualifying as state residents for educational purposes pay the resident tuition rate. **All other students are classified as non-residents and pay the appropriate tuition rates. It is the obligation of students whose residence status changes while enrolled at Palo Alto College to notify the Office of Admissions and Records of such changes immediately. Students failing to report residence data changes may be subject to disciplinary action.**

Non-resident classifications remain in effect throughout the students' attendance at this college until written petitions for change have been approved. Written petitions or Palo Alto College Residence Questionnaires must be submitted to the Office of Admissions and Records ten calendar days prior to a semester's registration if residence classification changes are to be effected.

In-district students are those residing in Bexar County. All others are classified as out-of-district residents.

Tuition Reimbursement

Under Section 54.0065 of the Texas Education Code, students graduating from a Texas public baccalaureate-granting university may be entitled to a partial tuition rebate if all of the following conditions are met:

a. They must have enrolled for the first time in an institution of higher education in the Fall 1997 semester or later;
b. They must have received a baccalaureate degree from a Texas public university;
c. They must have been a resident of Texas and entitled to pay resident tuition at all times while pursuing the degree; and
d. They must have attempted no more than three hours in excess of the

minimum number of semester credit hours required to complete the degree under the catalog under which they were graduated. Hours attempted include transfer credits, course credit earned exclusively by examination, courses that are dropped after the official census date, and for-credit developmental courses.

Students desiring to qualify for tuition rebates are responsible for enrolling only in courses that will qualify them for the rebates. Contact the Director of Enrollment Management for additional information.

	RESIDENT OF TEXAS				**NON-TEXAS**	
	In-District		Out-of-District		Residents & International Students	
Semester hrs. taken	Tuition	General Fee	Tuition	General Fee	Tuition	General Fee
1	$150.00	$80	$277.50	$80	$542.50	$80
2	$150.00	$80	$277.50	$80	$542.50	$80
3	$150.00	$80	$277.50	$80	$542.50	$80
4	$150.00	$80	$277.50	$80	$542.50	$80
5	$150.00	$80	$277.50	$80	$542.50	$80
6	$150.00	$80	$277.50	$80	$542.50	$80
7	$210.00	$85	$388.50	$85	$759.50	$85
8	$240.00	$85	$444.00	$85	$868.00	$85
9	$270.00	$85	$499.50	$85	$976.50	$85
10	$300.00	$85	$555.00	$85	$1,085.00	$85
11	$330.00	$85	$610.50	$85	$1,193.50	$85
12	$360.00	$85	$666.00	$85	$1,302.00	$85
13	$390.00	$85	$721.50	$85	$1,410.50	$85
14	$420.00	$85	$777.00	$85	$1,519.00	$85
15	$450.00	$85	$832.50	$85	$1,627.50	$85
16	$480.00	$85	$888.00	$85	$1,736.00	$85
17	$510.00	$85	$943.50	$85	$1,844.50	$85
18	$540.00	$85	$999.00	$85	$1,953.00	$85
19	$570.00	$85	$1,054.50	$85	$2,061.50	$85
20	$600.00	$85	$1,110.00	$85	$2,170.00	$85
21	$630.00	$85	$1,165.50	$85	$2,278.50	$85

The General Fee will be $80 for each summer term.

Minimum tuition for each summer term will be $90.00 for In-District Texas residents, $166.50 for Out-of-District Texas residents, and $325.50 for Non-Texas residents and international students.

The registration fee will be $10 for fall and spring semesters and $6 for each summer session. The library fee is $10 for fall and spring semesters and each summer session. Students must pay a $4 insurance fee at registration for fall and spring semesters and $1 for summer session.

There is a separate lab fee schedule for laboratory courses.

Permanent resident aliens or aliens having filed a declaration of intention to become a citizen with the proper federal immigration authorities have the same privilege of qualifying for resident tuition and fee status as have citizens of the United States.

Refund of Tuition

Students officially withdrawing from all credit courses at the institution will have their tuition and refundable fees returned according to the following schedule: (Please refer to page 67 for the College withdrawal process.)

Fall and Spring Semesters

Prior to the semester's First Class Day	100%
During Class Days 1 through 15	70%
During Class Days 16 Through 20	25%
After the 20th Class Day	None

Six-Week Summer Sessions

Prior to the First Class Day	100%
During Class Days 1 through 5	70%
During Class Days 6 through 7	25%
After the 7th Class Day	None

Eight-Week Summer Sessions and Flex Terms

Prior to the First Class Day	100%
During Class Days 1 through 8	70%
During Class Days 9 through 10	25%
After the 10th Class Day	None

Refunds for other non-standard-length courses shall be made based on the Refund of Tuition and Fees table provided by the Texas Higher Education Coordinating Board. Refunds are dependent on students having paid more than the minimum required tuition. All academic calendar days are considered for refund purposes, not only the days the student attends class.

Refund checks will be prepared soon after the end of the refund period.

Non-credit Continuing Education Courses

All tuition refunds for non-credit continuing education classes that are cancelled due to low enrollment will be processed by the Continuing Education Department at 100%. For other drops, a full refund will be returned if a written or faxed request is received from the student prior to the first day of class. 80% of the tuition is refundable if a written request is received from the student prior to the second class period. After that time no exceptions will be made. Refund requests require approximately four to six weeks for processing.

Refundable Fees

Audit Fee $10

Applied Music Fee:
Private lessons,
one hour or two half-hour lessons per week, per semester $60
Private lessons,
one hour or two half-hour lessons per week, per summer term $20
Class lessons, two lessons per week, per semester $20

Computer Use Fee
Laboratory Fee ..... $2 to $24
Special Fee ..... $8 to $65

General Fee
1-6 hours $80
7 or more hours $85
Summer or Flex term, per term $80

Laboratory Fees ..... $2 to $24

Library Upgrade Fee, per term $10

Professional Liability Insurance Fee

Veterinary Technology students are charged a fee to provide for the personal protection of each student involved in clinical practices and training.

Per semester $10
Per summer session $4

Radiology Badge Fee

Veterinary Technology students are charged a film badge fee for radiation detection service when taking courses including clinical training in veterinary radiology and ultrasonography.

Per semester $6
Per summer session $3

Registration Fees

Fall and Spring Semester, per semester $10
Summer Sessions, per term $6

The Registration Fee is NOT refundable if ALL courses are dropped by the student prior to the official first class day of the semester or session.

Special Fees

Fees for defrayal of unusual supply or participation costs of certain courses (e.g., golf, photography, etc.) ..... Varies

Student Insurance Fees

Per Semester and Summer Term for credit courses $4
Per Summer Term and Continuing Education Class $1
(Continuing Education courses up to $4.00 per semester).

International Student Insurance Fees

Per Semester $61
Summer and Mini-Term $20

Refund checks will be prepared as soon as possible after the end of the refund period.

Special Fees

Fees for the use of special supplies or for participation in certain courses vary. (e.g., piano, professional liability insurance, radiology badge, flying lab, etc.).

Continuing Education Fees

Community Service Courses	$1.50 to $3.50 per instructional hour
Apprenticeship Programs	$2.00 per instructional hour
Adult Vocational	$2.10 to $3.50 per instructional hour
Contract Courses	Current Policy (Instructor cost plus all direct costs and indirect costs divided by minimum number of students needed.)
Technology-Based Courses	$5.00 to $20.00 per instructional hour

For all types of programs, other direct and/or indirect costs of a particular course may be prorated and added to the basic fee.

Biology, Chemistry, and Veterinary Technology Breakage Fee

Biology, chemistry, and veterinary technology students will pay a $2 breakage fee. The fee is not refundable. In the event breakage of equipment exceeds $2, the student will be required to pay the additional amount prior to receiving credit in the course.

Non-Refundable Fees

Examination Fees (subject to change)
- Advanced Standing Examination Fee ..... $30 per credit hour with $90 minimum
- CLEP (per test) $58
- Career Tests
  - Interpretive or Kuder $5
  - Profile $3
  - Full Battery for Non-enrolled Person $50
- Correspondence Exam $10

Fines for Falsification of Information on Motor Vehicle Registration $10

Foreign Student Registration Processing Fee $15

Installment Payment Plan
- Administrative Fee, per semester $25
- Late Fee, per each late payment $10

Late Registration Fee: $25

No tuition and fee reductions are made for any part of a term lost due to late registration. Students expecting to receive full credit for the semester's work must pay the full tuition charges from the beginning of the semester.

Library Fines:

Each Book ..... $0.10 per day
Each Reserved Item ..... $0.50 per hour/day
Each Video ..... $0.25 per day

Parking Permits

Full Year $10
After January 1 ..... $5
Summer Term $2
Replacement $3

Parking Fines $4

Parking Fines if not paid within 10 days $10

Registration Receipt Copy Fee $2
Returned Check Fee $10
Schedule Change Fee $4

A schedule change fee will be charged for all class and course changes not initiated by the College.

Transcript

All transcripts will be issued without charge.

Workshop Fees

A fee is charged for workshops organized for special groups which may or may not carry semester credit hours. The amount of the fee, which is in addition to required tuition, is announced at the time of the workshop.

Returned Checks

Immediate restitution of funds must be made when a check is returned by a bank for insufficient funds. In addition, a $10 fee will be charged by the Alamo Community College District. The District will not accept another check from a person from whom a bad check has been received previously. *NOTE: Stopping payment on tuition checks does not constitute an official withdrawal from the college. Official withdrawal must be processed at the Office of Admissions and Records.*

Student Financial Services (Financial Aid)

Scholarships, grants, loans, and federal work-study are available under certain conditions for students at Palo Alto College. It is the student's responsibility to inform the college that he/she needs financial assistance, to provide the necessary information, and to establish his/her qualifications for assistance.

Students applying for financial aid are requested to complete and mail a Free Application for Federal Student Aid (FAFSA) to the Processor. After receiving the Student Aid Report (SAR) from the Processor, the student must submit the documents to the Financial Services Office. Students selected for verification as indicated by the SAR must submit their most current Federal Income Tax Report (IRS) and that of their parents, if applicable. Aid is awarded when financial need has been established and upon evidence of satisfactory academic progress. The financial aid package is determined by standard formulas and determined need.

Transfer students applying for financial aid must inform the Student Financial Services Office if they have attended previous colleges within the academic year.

Current students may be considered for summer assistance provided that they submit a Student Aid Report and a Summer Application for Financial Aid to the Student Financial Services Office. Funding for summer is contingent on availability of funds.

Student Financial Services for Continuing Education Courses

Tuition assistance is available for eligible individuals who wish to enroll in Continuing Education courses. The Texas Public Education Grant (TPEG) may be used for course tuition only and there is no reimbursement for pre-paid tuition bills. Financial aid will be awarded for up to 75-100% of course tuition, but not to exceed a total amount of $500. The standard Free Application for Federal Student Aid (FAFSA) must be completed eight (8) weeks prior to registering for the class. When the Student Aid Report (SAR) is received, you must complete an application for the TPEG upon registering for the class. Awards will be based on determined eligibility and available state funding. Forms are available in the Student Financial Services office in the Administration Building. Training programs that exceed a total of 260 clock hours will not be eligible.

Grants

Federal Pell Grant. Students enrolling in three hours or more may apply. The Federal Pell Grant federal legislation requires the use of cost of attendance in determining a student's grant award. The following criteria are used to determine the amount of the grant: (l) student eligibility index, (2) actual cost of tuition, and

(3) number of hours enrolled. This means that the actual tuition and fees charged by the institution are added to room and board. The federal government has established a standard figure for room and board which is not applicable to dormitories or campus living quarters for students at Palo Alto College.

Federal Supplemental Education Opportunity Grant (FSEOG). The purpose of the program is to provide Educational Opportunity Grants to students of exceptional financial need who would be unable to enter or remain in an institution of higher education. Students must apply through the Financial Aid Application process.

Texas Public Educational Grant (TPEG). Provides assistance to students who have documented financial need. The program is funded from tuition payments to the College. Apply through the Financial Aid Application process.

State Student Incentive Grant (SSIG). Provides assistance to students who have shown documented financial need. It is a grant jointly funded by the state and college. Apply through the Financial Aid Application process.

Texas Grant Program. Available to entering high school students who are Texas residents, completed an advanced high school curriculum defined by TEA, and will enroll at least on a 3/4 time basis in an undergraduate degree or certificate program. Students must apply through the Financial Aid Application, complete a Texas Grant Application, and submit a High School Transcript.

Workstudy Program

Federal workstudy positions are posted and referred by the Career Resource Center. FWS allocations, student eligibility, and awarding is determined by the Student Financial Services department.

Scholarships

Institutional and private scholarship information is available in the SFS office or through www.accd.edu/pac. Students can apply according to defined criteria and application deadlines. Applications for students not awarded are kept on file only for the current academic year.

ACCD Endowed Scholarship (E): ACCD Scholarship Application is required. Major: all majors. Criteria & Description: 3.0 GPA; enroll for 6 or more hours; official high school or college transcript(s); financial need or academic merit. Deadline: April 1 and November 1. Amount: $300-$1,000 per year.

ACCD Foundation Scholarship (F): ACCD Scholarship Application is required. Major: all majors. Criteria & Description: 3.0 GPA; enroll for 12 hours per term; official transcript(s); 2 letters of recommendation; financial need; applications available at the College Student Financial Services Office. Deadline: April 1. Award: $750 per term, maximum $1,500 per year for two years.

San Antonio Livestock Exposition: SALE Application is required. Majors: Agriculture, Agribusiness, Veterinary Technology, Hospitality, Allied Health, Nursing, or Pre-Medicine. Criteria & Description: U.S. citizen or permanent resident of the United States; high school graduate from Bexar, Atascosa, Bandera, Comal, Gillespie, Guadalupe, Kendall, Medina, Wilson, Frio, Karnes or Kerr counties; 2.0 GPA; enroll for 12 or 6 credit hours; 3 letters of recommendation, official high school or college transcripts. Deadline: March 15. Award: $1,000.

Charlie Parker Jazz Scholarship: Department: Fine and Performing Arts/Speech Communication. Major: Jazz Music. Criteria & Description: Full-time student, at least 12 hours that include Jazz Band, Theory, Piano I, Improvisation or Music America. Must demonstrate a commitment to the Jazz Art Form and display proficiency on his or her primary instrument. Must maintain a 2.5 GPA. Must complete two full terms. Deadline: Open. Amount: Varies.

Frank M. Tejeda Memorial Scholarship (E): ACCD Scholarship Application is required. Department: Committee. Major: All majors. Criteria & Description: Academic merit. Deadline: May 1. Amount: $600 to $1,000 per academic year.

Honors Mentorship Scholarship: Department: Behavioral Science & Humanities. Major: Any major. Criteria: 3.0 GPA, Full-time enrollment. Application with letter of recommendation and essay. Deadline: Semester. Amount: $200 per semester.

Mariachi Scholarship: Mariachi Music Scholarship Application is required. Major: Music. Criteria & Description: 2.5 GPA, Full -time enrollment must include Mariachi class (MUEN 1152). Audition and good academic standing required. Deadline: May 10. Award: $500 per semester.

San Antonio Education Partnership (P): SAEP Eligibility Form is required. Major: All majors. Criteria & Description: Eligibility is determined at the high school level, based on attendance and grade point average (GPA), and must enroll for 12 hours per term in the next year after graduation from high school. Deadline: During or terms only. Amount: $175 per semester, up to four semesters.

Loans

There are several long- and short-term loan programs available at Palo Alto College. The amount students can borrow depends on individual needs. Repayment of the long-term loans begins six months after graduation or from the date of withdrawal. Short-term loans are reserved for the time of registration and must be repaid within 30 days. In order to receive this loan the student must complete the necessary application before the deadline dates.

The Federal Family Educational Student Loans, Federal subsidized and unsubsidized Stafford Loans and Parent Loans are made by a lender such as a bank, credit union, savings and loan association, or the state of Texas through the Coordinating Board. Additional information regarding other federal loans is available in the Student Financial Services Office.

Financial Aid Eligibility

In general, a student is eligible for Federal, State, and Institutional aid if he or she meets the following requirements:

1. The student must have a high school diploma or a GED certificate. (Any exceptions must be approved by the Director of Student Financial Services)
2. The student is enrolled at least half-time as a regular student in an eligible program of study. (Less than half-time applies to Pell Grant only)
3. The student is a U.S. citizen or an eligible non-citizen.
4. Financial need is demonstrated by the supporting documents required, and Federally approved budgets.
5. A transfer student must submit a Financial Aid Transcript from previous coursework completed at another institution of higher learning.
6. The student must demonstrate satisfactory progress in the course of study.
7. The student must be working toward a degree or certificate.
8. The student is not in default on the Perkins Student Loan (formerly NDSL), Stafford Student Loan (formerly GSL), PLUS or SLS Loan at any institution the student has attended.
9. The student does not owe a refund on a Federal Pell Grant or a Federal Supplemental Educational Opportunity Grant at any school attended.
10. The student must sign a statement of registration status with the Selective Service.
11. The student must sign a statement of educational purpose indicating that he or she will use the money only for expenses related to attending that institution. For complete details on any item mentioned above, refer to the latest edition of "The Federal Student Financial Aid Handbook."

Satisfactory Progress

A student must maintain a satisfactory academic record in the course of study he or she is pursuing in order to be eligible for financial assistance. A satisfactory academic record is measured in three ways: quality, progress, and quantity. Quality refers to maintaining a cumulative 2.0 grade point average for students on financial aid. Progress means completing at least sixty five percent (65%) of all attempted hours while enrolled at Palo Alto College. The quantity measurement allows a maximum number of semester hours within the Alamo Community College District for an associate degree.

Deadlines for Filing Financial Aid Applications

TERM	PRIORITY DATE
Fall Term	May 1
Spring Term	November 1
Summer Term	March 1

Completed applications received **by priority date** will receive priority consideration of all available funds, subject to student's eligibility.

Completed applications received **after priority date** will be processed according to eligibility and remaining funds.

Applications received **after the final date** will be processed for future semesters only but not beyond that academic year. Separate summer application is required for consideration of summer awarding.

Financial Aid Policies

Federal, State, and Institutional Financial Aid Programs must adhere to various regulations and guidelines. The ACCD Student Financial Aid Council has developed certain policies that must be enforced by the Financial Services offices within the ACCD. These policies may be found in the ACCD Student Financial Aid Policies and Procedures Manual.

Veterans Under Federal Programs

A student planning to attend Palo Alto College under one of the public laws for veterans and their dependents must complete the required applications and documents and submit them to the Office of Veterans Affairs.

It is the student’s responsibility to inform the VA office of any change in enrollment status.

A student enrolling under any of the various provisions for VA Educational Benefits should be prepared to pay the initial cost of tuition and fees. There is usually a period of four to six weeks before the student receives the first payment from the Department of Veterans Affairs.

To be considered a full-time student under one of these programs, a student must be enrolled for a minimum of 12 semester hours (for a degree program) during the fall or spring semester or the equivalent for a summer term. Consult a counselor for

details as to what constitutes a full load for day and/or evening summer sessions.

A Palo Alto College student receiving VA educational benefits must maintain a 2.0 G.P.A. in all courses to satisfy VA Satisfactory Progress Standards.

The Office of Veterans Affairs can certify enrollment only if:

1. Transcripts from all colleges and universities are on file.
2. Courses fulfill degree requirements.
3. Courses were not previously completed.
4. Students are in good academic standing with a 2.0 minimum grade point average (G.P.A.).
5. Students are not on Enforced Scholastic Withdrawal status.
6. A degree plan is on file.
7. A Palo Alto College Course Selection Form signed by a counselor or a department advisor is on file at the Admissions Office for each enrollment period.

To confirm enrollment, students must provide Veterans Affairs with the green tuition receipt (marked Veterans Affairs) for each semester in order to request payment for that semester.

In order to ensure some timeliness in assistance, the above items (except for green receipt) should be submitted as early as possible. Please note that veterans are certified each semester. Therefore, participation in early registration is encouraged.

The Hazlewood Act

The Hazlewood Act (Article 2654 B-l) aids ex-veterans who have exhausted all of their VA education benefits. A legal resident of Texas is exempt from payment of tuition and certain required fees when the applicant meets ALL of the following conditions:

1. The applicant must have served during a national emergency.
2. The applicant must have resided in Texas one year prior to entering the service, and must have entered the service from Texas. Upon discharge from the service, the applicant must continue to reside in Texas.
3. The applicant must have served on active military duty (other than for training) for more than 180 days.
4. The applicant must apply for federal educational benefits such as the Pell Grant and the SEOG.

If the conditions listed above are met, the applicant must submit the following to the Veterans Affairs Office:

a. A letter from the Department of Veterans Affairs that the applicant has no further educational entitlement under the G.I. Bill.
b. A copy of the applicant's DD214.
c. A Student Aid Report for the academic year.
d. A certified copy of the Texas residency statement.

The applicant may enroll in non-credit courses if these conditions are met.

Senior Citizens Tuition Waiver

Colleges of the Alamo Community College District are authorized to allow persons 65 years of age or older to enroll for credit or to audit up to six hours of credit courses or various continuing education courses each semester or summer term without payment of tuition if space is available. In credit courses eligible persons will be admitted under this program after regular registration has closed on a space-available basis. In continuing education courses, space available is determined as of 12:00 noon the day the class is scheduled to begin. They will be required to pay all applicable fees other than tuition.

STUDENT SUPPORT SERVICES AND ACTIVITIES

Assessment and TASP Center

The Palo Alto Assessment and TASP Center offers a variety of testing programs to assist students with academic placement and career exploration. Students are encouraged to take advantage of the resources and services provided by the Center.

Testing programs available to students and the community:

1. Placement Testing
   All Palo Alto students except those enrolling in Continuing Education or pursuing a technical certificate are required to have placement test scores for academic advisement. Scores must be less than three years old. Tests accepted at Palo Alto include:
   ACCUPLACER
   ASSET
   SAT - Recentered verbal score below 450 requires additional reading test or original verbal score below 370.
   ACT - Composite score below 20 requires additional reading test
   TASP/Alternative TASP - only passing scores may be used for placement; additional placement testing may be required for placement into some college-level courses
   SLEP - Secondary Level Proficiency Exam - English Proficiency Exam.
2. College-Level Examination Program (CLEP)
   Only CLEP Subject Examinations are administered and accepted.
3. Departmental Exams
   With faculty approval, students may challenge some courses by taking an examination.
4. Texas Academic Skills Program (TASP)
   The TASP or Alternative TASP is offered on the Palo Alto campus several times per year; consult the TASP Registration Bulletin for dates and registration procedures. The Assessment & TASP Center is the campus resource for the TASP test administration materials and information.
5. Correspondence Course and Contracted Test Administration
   The Assessment & TASP Center will administer correspondence, certification, and various other examinations only by appointment. Test administration and building usage fees may be charged.

Standardized tests are administered on scheduled dates and require advance registration and payment if applicable. The placement tests or Alternative TASP are offered on a scheduled basis and during registration periods. Contact the Assessment and TASP Center for more information.

Counseling and Support Services

Counseling services are considered an integral and important component of the College support services program. Students are encouraged to speak with a counselor to address issues related to the pursuit of their educational goals. The Counseling and Support Services area provides comprehensive services designed to assist students with:

1. Academic information/advisement
2. Personal problems
3. Career exploration
4. Goal setting

When enrolling in College for the first time, the student meets with a counselor for academic advisement and registration. Thereafter, counseling services are available to assist students in various phases of academic and personal development.

Professional counseling is available for day and evening students. All counseling is confidential. Individual counseling, small group discussions, seminars, and workshops provide students with information and strategies in the following areas:

Academic	—	transferring Palo Alto credits to other schools; joint admissions; overcoming academic difficulties such as poor study skills; scholastic probation and ESW.
Career	—	selecting a major or long-term career goal, exploring personal attributes for careers.
Personal	—	adjusting to college; time management; stress management; decision-making; effective communication; crisis intervention; individual counseling.

Referrals can be made to campus or community agencies to provide in-depth assistance for long-term counseling, legal concerns, financial aid, tutoring, job placement, assessment, career exploration, medical services, and short-term personal counseling. Personal/problem counseling sessions are limited to five (5) one (1) hour sessions. Should the student need additional counseling, referrals will be made to the appropriate community agencies.

One of the chief goals of Palo Alto College is helping students successfully complete their college goals. The Counselors in the **Counseling and Student Success Center** assist students in staying in school and successfully completing their educational goals through individual and group counseling, advisement, skills training, referrals, and other appropriate types of support. Counselors teach ORIE

0100 (College Orientation: Strategies for Success) and HUMD 0300 (Human Development), two classes which help students gain the knowledge, skills and attitudes necessary for success in college. All students should take one of these classes in the first semester of attendance.

In addition, students wanting to be proactive (to plan ahead) are encouraged to come in early in the semester and see a counselor to create a personalized **Academic Success Plan**, a plan for success based on the individual's needs, schedule and life situation.

Counselors can also help students who find themselves in danger of failing or dropping out of school for academic or personal reasons. Through discussion, the counselor will help the student consider all important factors and decide how best to deal with the situation. Students who do this are often able to identify ways to solve the problem and successfully complete the class or semester.

All counseling, which is confidential and free, is provided by professional counselors. For assistance come by the Counseling and Support Services Center or call 921-5280 and ask for a counselor.

Academic Advisement

Initial academic advisement is provided by the Counseling Center for first-time Palo Alto College students, both new and transfer students. At the conclusion of their first semester, students will see faculty advisors for subsequent advisement.

Academic advising is available to all currently enrolled and former Palo Alto students by assigned faculty advisors according to the students' declared majors. Students must check with the appropriate department office to obtain a schedule of advisement periods.

Currently enrolled and former students not having declared majors can be advised by selected faculty. These students are encouraged to participate in scheduled career exploration seminars and vocational interest inventories offered through the Career Resource Center. The expectation is that advising will be completed during regularly scheduled office hours and during selected hours in the evenings.

It is important that students schedule advisement appointments early so that they receive information about college services, discuss their educational goals and timelines, and develop degree plans. Students have the ultimate responsibility to select and register for courses meeting graduation requirements.

Transient students from other colleges who have no intention of completing a degree at Palo Alto will be advised by the Counseling Center.

Note: Once students accumulate fifteen hours, the transient status will no longer apply.

Students are encouraged to see faculty advisors any time they encounter academic problems or contemplate a change in educational goals. They are especially encouraged to consult with their advisors early in the year in which they expect to graduate in order to determine their graduation eligibility.

Note: Each student is responsible for verifying the transferability of credit with the receiving institution.

Palo Alto Special Services (Disability Support Services)

Federal law defines a disability as "any mental or physical condition that substantially limits an individual's ability to perform one or more major life activities" including:

- physical disabilities
- visual or hearing impairments
- neurological impairments
- psychological disabilities
- learning disabilities
- chronic or temporary health problems
- communication disorders

Federal law guarantees all students with disabilities a learning environment that provides reasonable accommodation of their disability. Section 504 of the Rehabilitation Act of 1973 states:

No otherwise qualified individual . . . shall solely by reason of . . . handicap, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

Section 504, as well as the Americans with Disabilities Act (ADA) of 1990, prohibits discrimination in the recruitment, admission or treatment of students. Students with documented disabilities may request accommodations that will enable them to benefit from all educational programs and activities. The ADA requires each academic accommodation to be made on an individual or case-by-case basis. Under ADA, Palo Alto College must ensure that its programs and facilities are accessible to students with disabilities including assistance during the admissions and enrollment process.

The Palo Alto Special Services (PASS) Office coordinates accommodation services for Palo Alto students with temporary or permanent disabilities, as defined by ADA.

The PASS Center strives to:

- Coordinate services and reasonable accommodations that enable individuals with disabilities to participate in and benefit from all Palo Alto College programs and activities.
- Promote a barrier free environment at Palo Alto College: Free from both physical barriers and barriers of attitude.
- Encourage students to become as independent and self-reliant as possible.
- Provide information and consultation about specific disabilities and accommodations to the entire Palo Alto community.

Eligibility For Services:

To qualify for assistance from Palo Alto Special Services, a student must:

- Provide current documentation of a temporary or permanent disability, and
- Schedule an intake with the PASS Center to discuss needs and to request support services.
- Attend an orientation session offered through the PASS Center outlining the policies and procedures concerning accommodations and support services.

Description of Services:

Students must register for accommodations with the PASS office EVERY SEMESTER so that services can be coordinated. Accommodations are provided on an individual basis. Students are encouraged to register with the PASS Center several weeks prior to each semester so that support services are available at the start of the semester. Accommodations to students may include:

- Confidential Letter to Instructors
- Note-taking Services
- Special Testing Accommodations
- Readers, Scribes
- Sign Language Interpreter Services
- Classroom Furniture
- Adaptive Technological Equipment
- Tape Recorders for classroom use
- Referrals to Resources for Books on Tape, Disk or CD
- Referral to PASS*Key* for Tutoring or other services

Disabled Parking

Students of the Alamo Community College District are required to display their County Tax Assessor Collector issued disabled parking placard behind the ACCD vehicle registration or have disabled parking license plates in order to park in spaces designated for persons with disabilities. With appropriate documentation, emergency disabled parking permits are provided through the PASS Center.

VIA Trans

Palo Alto College provides several convenient VIA Trans drop off and pick up locations. For a map or information, contact the PASS Center at 921-5287, TTY 921-5227 or stop by the office.

PASS*key*

PASS*key* is a federally funded TRIO/Student Support Services program designed to:

- increase college retention and graduation rates of eligible students.
- increase the transfer rates of eligible students from two-year to four-year institutions.
- foster an institutional climate supportive of the success of low-income and first-generation college students and individuals with disabilities.

PASS*key* participants must meet the established federal criteria of academic underpreparation, first-generation college, low-income and/or a disability as defined by the ADA. Students enrolled in the Student Support Services program have particular academic, personal, and social needs that can become a deterrent to their academic success. One of the key components is the Individual Plan for Success (IPS) designed to develop a holistic personalized plan of action that will assist each student with transition to college and to the university and/or work. PASSkey's retention initiatives incorporate a broad, flexible system of supportive services including:

- Academic, career, and personal counseling.
- Financial aid preparation and securing of educational funds.
- Academic advisement and registration assistance.
- Seminars and workshops on topics such as study skills, test anxiety, stress management, time management, self-esteem, and budget management.
- Referral and assistance with campus services and resources.
- Assistance in securing community resources to resolve issues relating to health, relationships, and financial needs.
- Participation in social and cultural activities.

- Linkages with colleges and universities, professionals, and other students nationwide in order to facilitate career decisions, goal setting, and transition to other schools or to the workforce.
- Computer and Internet access.
- Tutoring services on a one-on-one basis and on a group basis at no cost to PASS*key* students.
- Tutorial textbook library.

Limited English Assistance Program (LEAP)

The Limited English Assistance Program (LEAP) at Palo Alto College assists limited English students in developing the skills to access and be successful in higher education. LEAP students may take advantage of all higher educational opportunities available on campus. The program's comprehensive support services for qualified students include:

- individualized bilingual assistance (English/Spanish) with admissions, registration, academic advisement, and financial aid processing and advisement;
- individual/group tutoring and/or English language instruction in ESOL (English for Speakers of Other Languages) courses and developmental courses in English, Reading and Mathematics;
- assistance with a Textbook/Resource Lending Library;
- specialized instructional curriculum materials/aids;
- transportation assistance with bus tickets;
- limited assistance with child care expenses;
- community referrals as needed.

Returning Adult Center

The Returning Adult Center assists non-traditional returning adult students who may encounter barriers different from recent high school graduates. The focus of the center is the "re-entry" student who has experienced an interruption in education and may benefit from the transitional support services and assistance available through the Center. Students returning to school after an extended break will find a welcoming and encouraging atmosphere where their special needs are addressed.

The Returning Adult Center offers a range of services that address the needs of adult learners and helps them realize their potential and capabilities. The Center assists students and the community in defining and achieving their academic, career and personal goals through education. Services and programs include:

Access Child Care: The Returning Adult Center administers several childcare financial assistance programs funded through the institution, the Department of Education, and the United Way Eligibility and program requirements vary for each program. Students needing assistance with paying for childcare while they attend school are encouraged to apply.

Community Resources: Partnerships with numerous public and private agencies expand the resources available to Palo Alto College students in meeting their personal and educational needs. Through a referral process, the Returning Adult Center assists students in securing utility payment assistance, housing , counseling, health services and other issues affecting a student's ability to succeed in college. Social Workers from the City of San Antonio's Community Initiatives meet with students on campus to assist them in accessing city social services. In partnership with the San Antonio Police Department Victim's Advocacy Unit, a domestic violence support group meets each week.

Workforce Development: The Returning Adult Center serves as the point of contact for students referred to PAC by Workforce Center case managers and other community programs. Documentation of enrollment costs, degree plans and other educational needs is provided.

Child Care

The Ray Ellison Family Center provides high quality child care and early childhood education for the children of the Palo Alto College community while supporting family development and parents' pursuit of a college education.

The Ellison Center contains four classrooms for children ages 18-months through 5 years old . The program features low child-teacher ratios, innovative programming, family activities, and a highly qualified staff. Full-time and part-time care is available.

It is located conveniently between the Ozuna Learning Resources and Academic Computing Center and the Student Center. To apply, please call the Center at 921-5490.

Orientation and Human Development Programs

The Orientation and Human Development programs are a series of courses designed to assist students with entry into college life. The courses focus on college policies and regulations, academic programs, student services, use of campus resources, study skills for college success, and career exploration activities. The three-credit-hour Human Development class adds additional emphasis on personal growth and development.

Career Resource Center

The Career Resource Center provides a spectrum of services to assist PAC students in the areas of career planning and the job search process. Students are encouraged to use the services as early as their first semester in college. The Career Resource Center offers all services FREE of charge:

1. **Confidential Career Counseling,** including career assessment, to assist students select an academic major or career field.
2. **Career Resources,** including books, magazines, videos, and internet access, are available for students to research occupations, salaries, job outlook, employer information, job search processes, and college information.
3. **Current Job Vacancies** for work-study positions and full-time & part -time jobs are advertised in Job-Binders in the Career Resource Center.
4. **Internship & Co-Op Education Positions,** as well as volunteer positions, are advertised in the Career Resource Center. Positions include local and national opportunities.
5. **On-Campus Recruiting** provides students an opportunity to speak with local employers who hire PAC students.
6. **Career and Job Fairs,** both on and off-campus, are coordinated annually to allow students the opportunity to gain first-hand knowledge on careers and interview for jobs. Annual fairs include PAC's Career Fair, San Antonio Colleges and Universities Placement Association Job Fair in November, and the National Minority Job Expo in April.
7. **Occupational & Technical Education Information and Degree Plans** are available from the Applied Science Counselor/Recruiter in the Career Resource Center.
8. **FREE** *Planning Job Choices Magazines* **and other printed materials,** such as "Guide to a Good Resume," "Starting the Job Search," "Interview Questions," and "Job Fair & Career Fair Tips" are available to interested students.

The EDGE Program
(Enhanced Development Generating Employment)

The EDGE Program was designed to provide students with limited or no career goals an opportunity to gain insight into their interests and motivation. Using this insight, the counselor and student together will develop appropriate career goals.

During the initial session, the EDGE counselor and student discuss the student's experiences, motivation for school participation, and other indicators pointing to career options. After the initial counseling session, if the student has been unable to ascertain what career paths might be best suited for his or her needs, the counselor may recommend participation in one or more of the following: 1) further counseling; 2) vocational assessment; 3) information seeking (books, videos, Discover System, job networking, etc.); and/or 4) seminars on various careers.

After the student has explored the options he or she, along with the EDGE counselor, will develop a "Career Goal" and a plan to pursue these goals.

Transfer Advisement Center

The Transfer Advisement Center provides students with transfer admissions and scholarship information to assist them in their transition to a four-year university. Mutual agreements between Palo Alto College and four-year institutions have been established to allow students access to upper-division educational programs. Joint Admissions Agreements (JAA) and 2+2 Degree Plans allow students to follow established course outlines whereby a student can monitor, semester-by-semester, what transfer courses can be taken at PAC and the courses required for a degree by the selected university. Transfer Articulation Agreements or University course equivalency guides are designed to match courses at PAC with equivalent university courses. Various University admissions applications , college catalogs, and scholarship information also are available in the Transfer Advisement Center.

Other services provided through the Transfer Advisement Center include:

1) A Transfer Fair held every Fall Semester with 50+ universities and colleges from throughout Texas and the United States, which provides students an opportunity to visit with representatives and recruiters;

2) Education Express Tours, which provide students the opportunity to visit several in-state universities and occasionally an out-of-state school to see first hand the potential transfer institution;

3) Visits to the college by local college/university/military recruiters who share information on their institution's academic programs, transfer admissions requirements, transfer scholarship opportunities, housing options, college costs, and on a specific campus basis offer pre-admissions coursework evaluation;

4) Computers with internet access for students to use during PAC registration periods;

5) Worldwide university homepage searches, and scholarship access;

6) A full time UTSA Admissions Counselor is housed in the center to facilitate the transfer and admissions process and;

7) Sponsored workshops held throughout the academic year which highlight the transfer and admissions process and educational funding resources available for PAC students.

The Transfer Advisement Center is located in Room 126 of the Palomino Center.

Tutoring Services

English Learning Center (ELC)

The English Learning Center (ELC), located in Social Science Building (SS), Room 105, provides all students enrolled at Palo Alto College with tutoring at no charge. In addition to composition, subjects tutored may include: foreign languages, the arts and humanities, interdisciplinary studies, the social sciences, and basic literacy. Peer tutors are available by appointment or on a walk-in basis, and appointments may be arranged with the English Instructional Skills Specialist as well. In addition to face-to-face tutoring, the ELC offers tutoring to distance learners via email, fax, and Internet chat. The Online Writing Lab (OWL) is a resource for writers at PAC and in the community at large. <http://www.accd.edu/pac/slac/engl/owl.htm>

Other learning assistance, such as computer-aided instructional software is available in the Developmental Writing Lab, AS 110. Writing videotapes may be viewed in the ELC or checked out from the Learning Resources Center. TASP preparation materials are also available in the ELC.

Math Learning Center (MLC)

The Math Learning Center (MLC) provides all students enrolled at Palo Alto College with tutoring at no charge in all levels of Mathematics as well as Accounting. Peer tutors are available on a "drop in" basis in the large tutoring facility, Educational Laboratories Building (EL) Room 113. In addition, individual appointments may be made with a professional math skills specialist.

Other learning assistance, such as computer-aided instructional software and advanced mathematics software (DERIVE), is available in the Math Computer Lab, EL 105. Math videotapes may be viewed in the Math Computer Lab, EL 105, or checked out from the Ozuna Library.

Reading Learning Center (RLC)

The Reading Learning Center (RLC), provides all students enrolled at Palo Alto College with tutoring at no charge in all levels of reading courses (0300, 0301, 0302, 0303). Tutors are available on a "drop in" basis in the tutoring facility, Applied Science Building (AS) Room 103. Other learning assistance (such as Plato, EDL, Weaver, PassKey, EDL, and other computer-aided instructional software) is available in the Reading Computer Lab, AS 105.

Support Program for Improving College Education (SPICE)

This program assists students to prepare to take the TASP exam. Students who have completed all of their developmental courses in the TASP-failed areas, but who still have not passed the TASP, are referred to this program by the Assessment and TASP Center. To enroll in the program, the student must sign a SPICE Referral form agreeing to abide by the regulations of the program. The program requires students to complete self-paced assignments (software, video, or text) in a lab and/ or receive tutoring. Students who fail to meet the program's requirement, as per TASP law, may be dropped from all of their college-level classes for the enrolled semester.

For more information about this program, contact the Assessment & TASP Office or the Math SPICE at 921-5149, Reading SPICE at 921-5111, or English SPICE at 921-5143.

Health Center

The College maintains a Student Health Center that provides limited health related services. Services such as first aid, referrals to community health agencies, over the counter medications and health counseling are provided by the college nurse.

The staff is concerned with the total health needs of the college community. They work to promote wellness and prevention through a variety of health awareness activities.

Illnesses or accidents incurred, whether on campus or while in route to school, should be immediately reported to the Health Center staff. Students with chronic health problems of a serious nature should contact the Health Center early in the semester and provide the staff with a brief medical history so that the best possible help can be rendered.

The Health Center can provide information on the following: immunizations, medical and dental treatment referrals, and student insurance. The Health Center also maintains resource materials such as brochures, pamphlets, and other health information that are available to the campus community at no cost.

It is the policy of the Health Center to keep information confidential.

Student Activities

Palo Alto College offers a variety of social, intellectual, and cultural opportunities. A combination of both extracurricular and co-curricular activities includes lectures, films, forums, and numerous social activities. In addition, on-campus art exhibits, musical presentations, and theatrical productions are presented by representative departments and community groups.

In addition, Intramural sports activities are coordinated through the Student Activities Office in collaboration with the Physical Education Department. These co-recreational events are open to all current students, faculty, and staff. Additionally, the Physical Education Department maintains open hours for recreation facilities, including the swimming pool, gymnasium, weight room, and tennis courts.

Service-Learning

The Service-Learning Program serves several purposes: 1) To increase the abilities of students to articulate issues within the context of their course materials and community service experiences; 2) To promote critical awareness of community concerns such as : environment, education, public safety, and unmet human needs; 3) To promote student leadership, civic responsibility, and student success.

Student Organizations

Palo Alto College students have the opportunity for membership in social, service, religious, special interest, political, professional, and honorary organizations. Guidance and direction are provided to these organizations by faculty and staff advisors. An official list of registered organizations is available in the Student Activities Office. Recruitment activities are held at the beginning of each term to help new students get acquainted with the organizations.

ACCD Student Leadership Institute

"Empowering Today's Students to be Tomorrow's Leaders"

The ACCD Student Leadership Institute (SLI) is a district-wide program that provides free, intensive instruction and overviews of issues that are important to effective leadership in any environment. Beginning each fall, SLI scholars selected via an application process from all ACCD campuses will be given the opportunity to reach levels of personal and public accomplishments and leadership within a climate that recognizes and respects diversity. This yearlong commitment provides training in skills that enables the ACCD representatives to lead a group or work in collaboration with other leaders to accomplish organizational objectives. The students will be able to meet various successful community leaders, use lab models, case studies, and participate in field studies, while drawing upon the expertise of those who have held leadership roles in all sectors of the economy. Students selected to participate in the ACCD SLI will become SLI Scholars, receive a scholarship and have opportunities to travel to Washington DC, thus utilizing the skills and knowledge acquired throughout the year in meetings and presentations with officials from private, non-profit, and government sector headquarters. For applications or further information, please contact your Student Activities Office or call the SLI office directly at (210) 220-1656.

Natatorium

The Palo Alto Natatorium was designed as a world-class aquatic facility. The connected swimming, warm-up, and diving pools, the competition-height spring boards, and the diving platforms meet national championship qualifications. But you don't have to be a world-class competitive swimmer to enjoy the Natatorium's water facilities. It is open to the community for open swimming sessions several times a week and is used for college credit and continuing education classes as well as special lessons for children and adults. Activities such as water basketball, adult lap swimming and a water slide are available. The Natatorium is fully accessible for physically challenged persons. Contact the Natatorium for details and a current schedule.

Intercollegiate Athletics

The Palo Alto College Intercollegiate athletic program began in 1995. The college joined the National Junior College Athletic Association and participates in Women's and Men's Cross Country and in Women's and Men's Swimming and Diving.

The intercollegiate athletics program at Palo Alto College is a non-scholarship program.

In order to compete, students must have a current physical examination and be a full time student (minimum of 12 semester hours). Students must also maintain a 2.0 or better grade point average and pass at least 12 credit hours per semester. Please contact the Athletic Office for any additional information.

Since beginning its intercollegiate athletic program, Palo Alto College has consistently been a top ten team in the nation in both cross country and swimming.

The college hosted the national swimming championships in the Spring of 2000 and 2001, and the national cross country championships in the Fall of 2001.

GENERAL INFORMATION

Bookstore

The College bookstore operates as a service to students, faculty, and staff. Textbooks, school and office supplies, and course-related materials are provided along with gift items, greeting cards, paperbacks, and other items. Operating hours are posted each semester.

Cafeteria

The cafeteria is located in the Student Center. Breakfast, lunch, and snacks are available to the campus community. Hours of operation are posted at the beginning of each semester. Special hours are followed during registration and holiday periods.

Children on Campus Policy

Students are **urged not** to bring children to either a class or a lab. Minors under the age of 12 **must not** be left unattended on campus. Individual instructors may include additional restrictions or waivers for their particular classrooms or labs, which will be included in instructors' syllabi.

Concealed Weapons

Penal Code 46.03 prohibits the carrying of firearms "... on the physical premises of a school or educational institution, any grounds or building on which an activity sponsored by a school or educational institution is being conducted or a passenger transportation vehicle of a school or educational institution, whether the school or educational institution is public or private, unless pursuant to written regulations or written authorization of the institution."

It is not a defense to prosecution under 46.03 that the actor possessed a handgun and was licensed to carry a concealed handgun under Article 4413 (29ee) revised statutes.

Continuing Education/Workforce Development

The Continuing Education Department at Palo Alto College is committed to the concept of lifelong learning for residents within the College's service area.

Continuing Education/Workforce Development consists of four major goals.

- To help prepare students for college matriculation.
- To assist the community with specific skills to improve its citizens' everyday quality of life.
- To provide wholesome recreation alternatives for the young people in the community.
- To improve employee skills to facilitate better jobs and/or promotions.

A variety of non-credit and short-term courses, workshops, and seminars in adult literacy education; business development, career development, health care development, physical education and personal development are offered. While offering something for everyone, Palo Alto Continuing Education has exemplary programs in computer software, child care, workforce literacy, English as a Second Language, food service, housekeeping certification, substitute teacher/teacher aide, and web/multimedia designer training. Palo Alto also offers a summer children's program renowned for its varied activities and educational content.

Certificates of completion are issued for all classes and Continuing Education Units (CEU's) are awarded where appropriate.

The CEU is a nationally recognized standard of measurement defined as one (l) CEU for ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

Please call (210) 921-5330 for a current schedule.

Drug-Free Schools and Communities Act Amendments of 1989

In accordance with the Drug-Free Schools and Communities Act Amendments of 1989, the ACCD has adopted and implemented a program to prevent the unlawful possession, use, or distribution of illicit drugs or as part of any of its activities. The ACCD recognizes the importance of awareness about alcohol and other drug abuse. Therefore, for the benefit of each student and employee, the following are the standards of conduct and legal and disciplinary sanctions for unlawful possession or distribution of illicit drugs and alcohol abuse. Area resources for alcohol and other drug abuse counseling, rehabilitation and re-entry are available at the locations listed in this section.

Legal Sanctions

Students or employees found violating any local, state, or federal law regarding the use, possession, or distribution of alcohol or other drugs (as defined by the Texas Health and Safety Code, Subtitle C. Substance Abuse Regulations and crimes) will receive the full legal penalty in addition to any appropriate ACCD disciplinary action. Information about the District disciplinary process is available in the ACCD Administrative Policy Manual. The most common legal violations and their consequences are as follows:

Alcohol		Penalty
Minor in Possession (Sec.106.05.)	Class C Misdemeanor Class B Misdemeanor	Up to $200 fine Up to $1,000 fine and 6 months in jail
Contributing to the Delinquency of a Minor (Sec. 106.06.)	same as above	same as above
Public Intoxication (Sec. 42.08)	Class C Misdemeanor	Up to $200 fine
Other Drugs		
Drug Possession	Varies according to placement of the drug on schedules and amount in possession	Up to $50,000 fine and 5-99 years in jail

Penalties for drug possession are governed by the Texas Health and Safety Code, Subtitle C. Specific penalties may vary depending on the type of drug and amount.

Disciplinary Sanctions

All students and employees are expected and required to obey the law, to comply with the institutional rules and with directives issued by an administrative official. Students are expected also to observe standards of conduct appropriate for an academic institution.

Any student who engages in conduct prohibited by the ACCD rules or by federal, state, or local law is subject to discipline whether such conduct takes place on or off campus or whether civil or criminal penalties are also imposed for such conduct.

After due process, any student or employee guilty of illegal use, possession and/or sale of a drug or narcotic on the campus of a component institution is subject to discipline, up to and including termination for employees. If, after due process, a student or employee is guilty of illegal use, possession, and/or sale of a drug or narcotic on campus, the minimum penalty shall be suspension from the institution for a specified period and/or suspension of rights and privileges.

A student is subject to discipline for prohibited conduct that occurs while participating in off-campus activities sponsored by a component institution including field trips, internships, rotations or clinical assignments.

A student who receives suspension as a disciplinary measure is subject to further disciplinary action for prohibited conduct that takes place on campus during the period of suspension.

Health Risks

Drug and alcohol use, misuse, and abuse are complex behaviors with many determinants at both the cultural and the individual levels. Awareness of the deleterious effects of any drug/alcohol is imperative for an individual's well-being or survival.

NEGATIVE CONSEQUENCES may be exhibited through:

Physical dependence (the body's learned requirement of a drug for functioning.)

Abuse of alcohol or any other drug, whether licit or illicit, may result in marginal to marked and temporary to permanent physical and/or psychological damage, even death. Since many illicit drugs are manufactured and sold illegally, their content varies and may contain especially harmful ingredients or amounts.

Psychological dependence (the experiencing of persistent craving for the drug and/or a feeling that alcohol or other drugs is a requirement for functioning).

Despite the type of drug or alcohol used, a perceived need for the continued use is likely to follow, resulting in dependence.

Dependence on alcohol and/or other drugs alters the user's psychological functioning. The acquisition of these substances becomes the primary focus of the drug dependent individual and often results in reduced job performance, and jeopardizes family and other interpersonal relationships. Criminal behavior is frequently the means for financing a drug habit. Behavior patterns often include violence and assault as the individual becomes increasingly drug/alcohol depen-

dent. Social and psychological alienation and medical problems increase as the abuser becomes entrapped in drug/alcohol dependence.

Drug and alcohol abuse counseling and referral are available to employees, students and their families. Additional information both on the effects of specific drugs and alcohol and drug counseling resources in San Antonio and surrounding areas are available at the listed locations.

A biennial review of this program will be conducted by ACCD, and Student/ Employee Assistance Program (SEAP) committee members to determine its effectiveness, to implement changes to the program if they are needed and to ensure that its disciplinary sanctions are consistently enforced.

Grievance Policy: Academic

At academic institutions, conflicts may develop within the educational process. If this process is to function smoothly, a serious effort must be made to resolve such conflicts expeditiously. In the educational process, faculty members are responsible for classroom management, teaching strategies, testing, and evaluation of student performance. Students are encouraged to use the academic grievance procedure **only where there is clear and convincing evidence that a faculty member has treated the student unfairly, arbitrarily, or capriciously**. The student may ask his or her instructor to review the grievance, and may appeal the instructor's finding to the chairperson. If necessary, a final appeal may be made to the appropriate instructional Dean. A copy of this policy may be obtained from a Department Chairperson, a Dean, or Office of the Vice President of Academic Affairs.

Grievance Policy: Non-Academic

Students at Palo Alto College have the right to grieve any form of abusive treatment by college personnel. If such conflicts arise between a student and a staff member, a serious effort must be made to resolve such issues. College officials will not condone or support any form of student abuse at Palo Alto College. Therefore, students are encouraged to use the non-academic grievance procedure only where there is clear and convincing evidence that an employee, outside the classroom, has treated the student unfairly through forms of discrimination, abuse and/or harassment. A copy of this policy is available at the Vice President of Academic Affairs' Office.

Housing

Palo Alto College is a commuter college, and no College dormitories are available. The College does not maintain lists of available housing. Housing is available within the area. Students assume sole responsibility for locating appropriate housing.

Parking

Parking is not guaranteed, however, parking is available. Students parking automobiles on campus will be required to purchase and display vehicle permits to park in student parking areas. Students are encouraged to observe safe driving habits. Permits are available at the Bursar's Office.

Continuing Education students enrolling in non-credit courses of less than 40 clock hours of instruction are allowed to park in designated "student parking" free-of charge, by properly displaying a temporary parking permit obtained from the ACCD Department of Public Safety located in the Student Center. The student must show receipt information indicating payment of tuition to the Department of Public Safety.

Continuing Education students enrolling in non-credit courses of more than 40 clock hours of instruction must purchase the ACCD parking permit from the Bursar's Office located in the Student Center, Room 130.

Citizens desiring to appeal a parking or traffic citation must contact the Department of Public Safety at the College and complete the Parking/Traffic Citation Appeals Form within 10 school or working days of the issue date. Further procedures are available in the Student Handbook.

Smoking

Smoking is prohibited in all classrooms, laboratories, offices, conference rooms, and all other rooms in all buildings of Palo Alto College. Smoking is permitted in designated areas at each College and ACCD buildings. All smoking areas are marked with appropriate signage.

Student Center

The Palo Alto College Student Center offers students opportunities for socializing and relaxation. A T.V. area is available for student viewing. The bookstore, cafeteria, health center, bursar's office, campus security, automatic teller machine, and vending machines are located in the Student Center and are accessible for student use.

Student Code of Conduct

A Student Code of Conduct, published in the Student Handbook, sets forth the rights of students with corresponding responsibilities. This document includes information regarding protection in academic pursuit, sets forth all the conditions for responsible behavior on the campus, lists the various appeal processes, and outlines the grievance procedures that exist for students. A copy of this code is available at the Vice President of Student Affairs, Counseling, or Student Activities Office.

Student Government

The student body is represented by the Executive Committee of the Student Senate. By enrolling in the College, all students automatically become members of the Student Senate. Student Senate representatives participate in committees which make recommendations for appropriate policies.

Student Health Insurance

The College sponsors a blanket insurance plan of benefits that insures all registered students. Students attending Palo Alto College are automatically insured for expenses incurred as a result of accidental injury. Coverage is provided 24 hours a day in that students are insured both on and off Palo Alto classroom sites.

Additional information may be obtained at the Health Center.

Student Information Release Policy

Under provisions of state and federal laws, educational institutions receiving state and/or federal funds are obligated to release or restrict access to students' records in a manner established by those laws. Palo Alto College proposes to fulfill its responsibility regarding release of student information.

Students are protected by the Family Educational Rights and Privacy Act which permits students to withhold student directory information. To withhold information from being released, students must notify the Office of Admissions and Records in writing. Failure to make such a written request will indicate approval for disclosure by the College for any purpose at its discretion.

The kind of information which may be released includes the student's name, address, telephone number, major, attendance record, degrees received, semester credit hours, and student parking information.

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1) The right to inspect and review the student's education records within 45 days of the day the college receives a request for access.
2) The right to request the amendment of the student's education record that the student believes is inaccurate.
3) The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.
4) The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA. The name and address of the Office that administers FERPA are:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Avenue, SW
   Washington, DC 20202-4605

Contact the Office of Admissions and Records for more details.

Student Obligations

As a community college, Palo Alto offers services which encourage and enable students to pursue new career goals, upgrade present skills and enrich their personal lives. The college, in turn, expects the students to recognize and accept their responsibilities as citizens and members of a scholarly community. Among these responsibilities are respect for the rights of others; academic and personal integrity; and adherence to federal, state, and local laws. Please refer to the Student Handbook for reference on the Student Code of Conduct.

Student Right-to-Know and Campus Security Act

The Student Right-to-Know and Campus Security Act, as amended, requires that an institution collect information regarding crime awareness and campus security. The Alamo Community College District's Department of Public Safety is responsible for campus security. Under the provisions of the federal law, colleges of the Alamo Community College District must publish statistics about criminal acts occurring on campus property.

Following are the number of occurrences by year for each of the reportable offenses, as supplied by the ACCD Office of Public Safety:

PALO ALTO COLLEGE

OFFENSE	1999	2000	2001
KIDNAPPING	0	0	0
MURDER	0	0	0
SEXUAL ASSAULT	0	0	0
HATE CRIME	0	0	0
ROBBERY	0	1	1
ALL BURGLARIES	0	0	3
AUTO THEFT	4	2	0
WEAPON POSSESSION	0	0	0
DRUG POSSESSION	0	0	0
LIQUOR LAWS	0	0	0

ACADEMIC REGULATIONS & POLICIES

Grading System and Reports

Permanent grades are recorded at the end of the semester/session. Students may obtain grades through the College's automated voice response system at (210) 301-2520 or through the Internet at www.accd.edu. Grades are not mailed. The grades regularly used are: “A” (excellent/exceptional performance beyond mastery), “B” (above average/beyond basic mastery), “C” (average/mastery), “D” (below average), “F” (failure), “I” (incomplete), “W” (withdrew), “IP” (in progress), “NC” (non-credit), and “CR” (non-traditional credit only). A grade of "P" (Pass) may be assigned by the instructors for students in the English, reading, and mathematics developmental laboratories.

The conditional grade of “I” may be issued to a student having a passing average on all completed work, but for a justified reason (such as illness or death in the family), has failed to take the final examination or to complete other required work. The “I” becomes an “F” in 120 calendar days unless the student either completes the work with a grade of “D” or higher or re-registers for the course within those 120 calendar days after the end of the term.

In certain courses, the grade of “D” will not be assigned. In these courses, it is deemed essential to have completed the course with at least a basic mastery. To have learned less indicates an unpreparedness on the part of the student to progress to the next level. Course syllabi will indicate the courses in which this policy is to be adhered.

A grade of “W” will be assigned students being withdrawn for excessive absences.

The “IP” grade may be assigned to a student not adequately mastering the course content during a given semester or term. In the instructor’s judgment, however, the student has the potential to successfully complete the course. A student receiving an “IP” must re-register for the course and earn a passing grade to receive credit for the course. “IP” grades are assigned only in developmental and certain skills-building courses.

A student has a maximum of two years from the end of the semester to request a review of the grade or petition for a change of grade.

Grade Point Average

Grade point averages are computed by assigning values to each grade as follows:

A ..... 4 points per semester hour.
B ..... 3 points per semester hour.
C ..... 2 points per semester hour.
D ..... l point per semester hour.
F ..... 0 points.
I ..... 0 points.
IP, NC, P, W, CR ..... Not used in grade point average calculation.

The average is found by dividing the total number of points by the total number of semester hours for which grades have been received. The average is based on all semester and term coursework.

Calculating the G.P.A.:

1. Multiply the number of semester hours each course is worth by the quality points earned.

2. Add these values.

3 Divide this sum by the number of semester hours attempted.

Course	Semester Hours		Quality Points		Grade Points
BIOL 1401	4	x	3(B)	=	12
ENGL 1301	3	x	2(C)	=	6
CHEM 1401	4	x	4(A)	=	16
ORIE 0100	1	x	4(A)	=	4
PSYC 1301	3	x	2(C)	=	6
Total =	**15**				**44**

G.P.A. = 44 (grade points) divided by 15 (semester hours) = 2.93

Grade Changes

The responsibility for determining all grades and for judging the quality of academic performance in a course rests with the instructor assigned to the course.

A student who believes that the grade received is incorrect should schedule a conference with the instructor to resolve the problem. Grade appeals can be made up to a maximum of two years from the semester when the final grade was issued. When the instructor cannot be located in a timely manner by the student and chairperson, the student grade appeal can be initiated with the chairperson.

If the instructor concurs that an error in calculating the final grade occurred, the error is corrected by completing a "Change of Grade" form.

If the instructor is not willing to change the grade, then the student must initiate an Academic Grievance within five (5) days of the instructor's decision. Copies of the Academic Grievance are to be provided by the appropriate dean to the student and instructor.

Minimum Academic Standards

A student is expected to maintain a level of scholastic achievement which will allow him/her to meet the minimum graduation grade point requirements. A student must have earned a 2.0 ("C") cumulative grade point average to remain in good academic standing.

A student's record will be evaluated for academic standing only after enrollment in, or accumulation of, **twelve** or more semester hours.

Scholastic Dishonesty

For various reasons, the number of incidents of scholastic dishonesty in the classroom has increased throughout the nation in recent years. It is in the best interest of our students and of Palo Alto College that such scholastic dishonestly not be tolerated and that college policies and procedures be followed so as to provide consistent college-wide enforcement.

Scholastic Dishonesty includes, but is not limited to, cheating on a test, plagiarism and collusion.

Cheating on a test includes, but is not limited to:

1. Copying from another student's test paper;
2. Using materials during a test which are not authorized by the person giving the test;
3. Collaborating with another student during a test without authority;
4. Knowingly using, buying, selling, stealing, transporting or soliciting, in whole or in part, the contents of a test, without the consent of the instructor;
5. Substituting for another student, or permitting another student to substitute for one's self, to take a test;
6. Bribing or otherwise influencing another person to obtain a test not authorized for distribution by the instructor;
7. Reporting fraudulent research results.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own coursework/assignment.

Collusion means the unauthorized collaboration with another person in preparing any coursework/assignment.

Please refer to the current Student Handbook for the procedures for if a student is accused of scholastic dishonesty.

Scholastic Probation

Scholastic Probation indicates the student's grade point average has fallen below a 2.0 and that the quality of the student's overall academic work is unacceptable. A student beginning any semester or term in good academic standing but failing to maintain the College's minimum academic standards will be placed on Scholastic Probation. Scholastic Probation status is removed by attaining minimum academic standards the next semester or session. (See Minimum Academic Standards.)

Continued Scholastic Probation

After the first semester following a probation status, a student may re-enroll at Palo Alto College on a Continued Scholastic Probation status provided a 2.0 or higher semester grade point average is earned each semester or summer session. The student's status is evaluated after each 12 semester hour segment of work attempted or accumulated. The Scholastic Probation status is removed when a student has earned a 2.0 grade point average.

Enforced Scholastic Withdrawal

If a student on Scholastic Probation fails to earn a 2.0 grade point average in any semester or summer session when twelve semester hours credit is attempted or accumulated, the student will be placed on Enforced Scholastic Withdrawal, and will not be allowed to enroll in any classes during the next semester or session.

A student on Enforced Scholastic Withdrawal for the first or second time and wanting to continue in the next semester/session may:

l. Enroll in the next summer session and attempt at least six semester hours. If the student earns a 2.5 grade point average, he or she will be allowed to register in the next fall semester.

2. Petition **at least two weeks prior to the start of the semester** to the Director of Enrollment Management for special permission to register. The petitioning process begins in the Counseling and Support Services Center. A student allowed to re-enter the College by petitioning must agree to follow the recommended academic prescription for achieving academic success as specified by a counselor.

A student having been placed on Enforced Scholastic Withdrawal for a third time or more will not be permitted to enroll in the College for one calendar year. After that year, the student may petition a review committee for readmittance. The petition must be submitted to the Director of Enrollment Management at least three weeks prior to the beginning of a semester.

Attendance

Regular and punctual attendance in classes and laboratories is required. A student absent for any reason may be allowed to make up work at the discretion of the instructor. In all cases, the student will be held responsible for completion of requirements. Excused absences are given only to students representing the school in an official capacity. The appropriate instructional division chair and dean must approve such absences.

While many Continuing Education courses have special attendance requirements, 80 percent attendance is the general requirement for Continuing Education if the individual is to receive a Certificate of Completion from the College. Students should take note of attendance requirements upon beginning a course of instruction since requirements are announced at the beginning of every course.

Excessive Absence Policy

Student absences are recorded from the official date of enrollment. A student absent the equivalent of two weeks of instruction may be dropped by the instructor. Instructors are encouraged to drop students who are excessively absent, are not doing well in class, and do not attempt to contact the instructor about the absences and/or academic problems. Absences do not have to be consecutive. A student dropped from a class for excessive absences may be given a grade of "W". See the section on Adding and Dropping Courses below for the proper procedure for dropping a course. A student required to be in a remedial class due to TASP will be subject to being withdrawn from all college-level courses if the student is dropped from the required remedial class.

Readmission to Class

A student dropped for excessive absences may be readmitted to class only if circumstances justify reinstatement. The decision to reinstate the student is left to the discretion of the instructor.

Examinations

A final examination is administered at the end of each semester or term for each course. Make-up examinations are administered at the discretion of the instructor.

Adding and Dropping Courses

An add and drop period is provided each semester following the close of regular registration. All schedule adjustments during this period must be approved by the Office of Admissions and Records, the TASP Center, and the College's academic divisions.

If for whatever reason a student decides to drop a course, it is the student's responsibility to inform the TASP Center and the Office of Admissions and Records in a timely manner of that decision. The student must either complete the proper forms in person at the above offices or submit the request in writing. To simply stop attending a class may result in the student being assigned the grade "F."

Withdrawals

A student wishing to withdraw from the College must follow the procedure listed below:

1. Resolve all financial obligations.
2. Obtain an official "Notice of Change" form from the Office of Admissions and Records for each class.
3. Complete and leave the form and student I.D. Card with the Office of Admissions and Records.

A student may also withdraw from the College by writing to the Office of Admissions and Records. However, no drops or withdrawals will be accepted by phone.

Withdrawal for Military Service

If a student withdraws because he or she is called to active military service, the College, at the student's option, shall:

1. Grant a student, who is eligible under the District's guidelines, an incomplete grade in all courses by designating "withdrawn-military" on the student's transcript, or

2. As determined by the instructor, assign an appropriate final grade or credit to a student who has satisfactorily completed a substantial amount of coursework and demonstrated sufficient mastery of the course material.

Withdrawal Grades

A student dropping classes or withdrawing from the College prior to the census date will not have grades recorded for those classes. Following the census date, grades will be recorded for any classes dropped or for withdrawal from the College. The grade that will be assigned is a "W." If a "W" grade is assigned to a TASP-required course, the student may be dropped from college-level courses for non-compliance to TASP regulations.

During the fall and spring semesters “W’s” are assigned within a period following the census date that extends from the 13th day of the semester to the end of the 14th week of classes. An instructor may also assign a “W” during this period if the student is dropped for excessive absences. Following the 14th week, performance grades ("A," "B," "C," "D," "F," "I," "IP," or "P") are assigned by the instructors.

Summer terms and Flex Sessions of eight weeks have differing census dates. The census dates and last days during which a student may drop or withdraw and receive a “W” are listed in the academic calendars appearing in the College catalog or in the academic schedule of classes.

Official Census Date

The Official Census Date of each semester or session is the date as of which all student enrollment is certified or considered “official.” It corresponds to the actual twelfth (12) class day for long (Fall or Spring) semesters, the sixth (6) class day for Flex or Mid semesters, and the fourth (4) class day for summer sessions. For all Continuing Education courses the official census date is the third class day. No grade is recorded or maintained for courses dropped or withdrawn prior to the Official Census Date.

Repetition of Courses

If a student repeats a course, only the higher grade earned is considered in assigning grade points. CAUTION: Other colleges and universities may not follow this practice. A student planning to transfer to other institutions should check with the Registrar or Office of Admissions at those institutions.

Student's Permanent Record

The Student's Permanent Record contains personal data, test scores, transfer and admissions information, Palo Alto courses attempted, grades and academic status. This information becomes part of the College's permanent files.

The name appearing on the official record is the name under which the student initially registered, unless a "Change of Name" form has been processed through the Office of Admissions and Records. Except upon marriage, name changes are made only when appropriate legal documentation accompanies the request. Public or Directory Information inquiries should be addressed to the Office of Admissions and Records.

Honors Lists

Outstanding academic achievement is recognized as follows:

President's Honors List — Must be enrolled in 12 or more semester hours and earn a 4.0 grade point average.

President's Part-Time Honors List — Must be enrolled in 6-11 semester hours and earn a 4.0 grade point average.

Dean's Honors List — Must be enrolled in 12 or more semester hours and earn a 3.5 or higher grade point average.

Dean's Part-Time Honors List — Must be enrolled in 6-11 semester hours and earn a 3.5 or higher grade point average.

The appropriate notation appears on the mailed grade report and permanent record.

An Honors Convocation is held each Fall and each Spring to recognize achievements from the previous semester. Letters are sent to students to notify them of the ceremony with instructions on how to receive a certificate.

Electives Seminars (PACES)

Palo Alto College offers a 12-hour interdisciplinary, team-taught **Honors Seminar.** The program consists of a block of three courses in three separate disciplines from the general curriculum with a library research course and critical thinking components. An in-depth, thematic/issues approach assures a broad educational perspective, encourages discussion and exchange of ideas, and actively involves students and faculty in vigorous intellectual activities. Courses, instructors, and topics may vary each time the seminar is offered.

Prerequisites: Students must have a 3.0 GPA or better, have completed 12 semester hours at Palo Alto College, and be recommended by a Palo Alto College faculty member in order to participate in the PACES Seminars.

Prerequisites

A number of courses have prerequisites. The prerequisite may be a score on a placement test or a lower-level course. Before a student can register for these courses with prerequisites, the student must show proof that he or she has fulfilled the requirement or is in the process of fulfilling the required course. Prerequisites may be waived upon the approval of the appropriate academic departments.

Corequisites

When a course for which a student registers indicates a corequisite course is needed, all courses listed must be attempted simultaneously.

Developmental Courses

Palo Alto College offers underprepared students the opportunity to develop college-level skills in reading, mathematics, writing, speech, and personal development. Based upon the results of college entry tests and/or previous academic record, students are placed in appropriate developmental courses if required. Students, not passing the state-required Texas Academic Skills Program (TASP)/Alternative TASP test, MUST enroll in the developmental courses where deficiencies have been identified until they pass the TASP test or complete TASP requirements. **Failure to remain in a developmental course may result in the students' compulsory withdrawal from <u>all</u> college-level courses.** Passing the TASP enables the students to bypass further remediation in reading and writing, but NOT in mathematics.

Palo Alto College offers developmental lab classes which help enable students to succeed in the college's developmental reading, English, and math programs. Lab classes are taken on a pass/fail basis and meet for one or two hours a week. Lab services include computer programs, video tapes, various written materials, and a college instructor who is available to provide tutoring.

Credit by Non-traditional Methods

Palo Alto College recognizes that students may have achieved the objectives of certain courses through means other than traditional classroom methods. Palo Alto may award college credit for military training, standardized examinations, and departmental exams. Credit by non-traditional methods must be applicable to a Palo Alto degree program.

Students may satisfy a maximum of 32 semester hours of an associate degree through the following programs:

United States Armed Forces Institute: the American Council on Education (ACE) Guide is used to evaluate course equivalency for military training.

College-Level Examination Program (CLEP): Up to 32 hours credit may be awarded for specific subject exams. Course equivalency is determined by the respective departments.

Departmental Challenge Exams: 16 semester hours may be earned through departmental exams.

The College's Assessment & TASP Center schedules and administers the CLEP Subject Examinations. The Assessment & TASP Center can provide a list of the CLEP Subject Examinations and departmental exams which the College accepts in fulfillment of curricular requirements. Test Fee information can be obtained at the Assessment & TASP Center. Students should contact the academic departments for approval to take the challenge exams. **Students registering for a course and then deciding to challenge the course must take the exam before the 12th class day of the semester.**

Students requesting credit by examination must have official score reports sent directly to the Assessment Center. Credits earned through these non-traditional methods are not posted on the Palo Alto transcripts until the students have satisfied a six semester hour residency requirement. Transfer students with college credit through non-traditional methods must submit official transcripts to the Office of Admissions and Records for evaluation.

Telecommunications Courses

Palo Alto College is pleased to offer distance education courses which help meet the unique needs of students whose busy lifestyles make scheduling college courses difficult. Instead of attending regular classes, students use a variety of instructional modes to take college courses. These instructional delivery systems include Internet courses, telecourses, and interactive video conference courses.

The course content, college credit, and transferability of the distance education courses are equivalent to the same courses offered on campus. Students have the same rights, privileges, and obligations as an on-campus student. Telecommunications courses may not be appropriate for everyone. Maturity and self-discipline are required because students must maintain steady progress throughout the semester. Students who are able may also be allowed to finish early. Veterans must contact the VA office before enrolling in any of these courses.

Registration for telecommunications courses is the same as for all college credit courses. Like all Palo Alto College courses, class enrollments are limited.

GRADUATION

Application for Graduation

A student must apply for graduation to be awarded a degree or certificate. An application for graduation must be submitted to the Office of Admissions and Records by October 31 for fall candidates, February 28 for spring candidates, and July 1 for summer candidates.

A student may make application for graduation under provisions of the current catalog or meet graduation requirements of the catalog under which he/she was admitted to Palo Alto College. The catalog selected must not be dated more than five (5) years prior to the expected graduation date. **Prior to a graduation review, all applicants must provide transcripts reflecting their complete college record.** Candidates need not be enrolled during the semester that application for graduation is made.

All candidates for degrees and certificates are encouraged to be present at the May commencement exercises. No formal commencements are held in December and August.

There is no graduation fee. The diploma, cap, and gown are provided by the College.

Graduation Requirements

Palo Alto College provides five forms of recognition for satisfactory completion of work:

Associate of Arts Degree
Associate of Science Degree
Associate of Arts or Science College/University Transfer Degree
Associate of Applied Science Degree
Certificate of Completion

To qualify for a degree, a student must have a cumulative grade point average of 2.0 (“C”) in all courses taken from other colleges, universities, and Palo Alto College. In addition, a student must satisfy the minimum requirements of the College and the degree program. Two associate degrees may be earned concurrently with the stipulation that the requirements for each degree be met.

Non TASP exempt students must pass all sections of the TASP Test prior to graduation or complete TASP requirements by obtaining a B or better in a course approved by the Coordinating Board (see Texas Academic Skills Program in the Admissions and Registration section of this publication).

Other than applied science majors, persons having been awarded baccalaureate level or higher degrees are not usually accepted as associate degree candidates.

It is the student's responsibility to ensure that all substitutions, by-pass exams, waivers, and/or a list of any electives which have been approved by the academic deans are on file in the Office of Admissions and Records no later than:

Fall graduates	November 1
Spring graduates	April 1
Summer graduates	July 1

Students not having satisfied all requirements by deadline dates will not be eligible for that semester's graduation. Students must reapply for graduation to be eligible for the next graduation date.

Participation in the graduation ceremony does not ensure automatic fulfillment of requirements and that a degree will be awarded. Diplomas will be mailed approximately 8-10 weeks after the graduation date.

Graduation evaluation questions or concerns should be directed to the Office of Admissions and Records before the deadline date.

Honor Graduates

A candidate maintaining an overall grade point average from 3.5 to 3.799 will graduate cum laude; from 3.8 to 3.999 will graduate magna cum laude; and a 4.0 will graduate summa cum laude. Students with these overall grade point averages for all courses attempted at Palo Alto College and other transfer institutions are considered honor graduates.

Graduate Guarantee Policy

Guarantee for Job Competency for Occupational-Technical Students.

Palo Alto College makes certain guarantees to its Associate of Applied Science graduates or Certificate completers, whose course work began in the Fall 1993 semester or after. If the graduate or completer is judged by an employer to be lacking in technical job skills identified as exit competencies for their specific degree or certificate program, the graduate/completer will receive up to nine (9) tuition-free hours of additional skill training by the college.

The guarantee does not imply that the graduate or completer will pass any licensing or qualifying examination for a particular career.

Conditions which apply to the guarantee are as follows:

1. The graduate/completer must have earned the A.A.S. degree or certificate in a technical program published in the college's catalog (or its addenda); and
2. The graduate/completer must have completed the A.A.S. degree or certificate with a majority (75%) of the credits being earned at Palo Alto College within a four-year time span from initial enrollment. The last fifteen (15) semester hours of credit **must** be completed at Palo Alto College; and
3. Graduates must be employed full-time in an area directly related to the area of program concentration as certified by the President of the college or designee; and
4. The graduate/completer must begin employment within six (6) months of graduation/completion; and
5. The employer must certify in writing that the employee is lacking entry-level skills which were identified by Palo Alto College as the program exit competencies as approved by the program advisory committee. The employer must specify the areas of deficiency within ninety (90) days of the graduate/completer's initial employment.

RETRAINING PROCEDURES

6. The employer, graduate/completer, and representatives of the college will develop a written educational plan for retraining.
7. Retraining will be limited to nine (9) credit hours related to the identified skill indicated by the retraining plan.
8. All retraining must be completed within a calendar year from the time agreed upon for the educational plan.
9. The graduate/completer and/or employer is responsible for the cost of books, insurance, uniforms, fees, and/or other course-related expenses.
10. The student's sole remedy against the college and its employees for skill deficiencies shall be limited to nine credit hours of tuition-free education under conditions described above.
11. The program can be initiated through a written contract with the Office of the College President.

Palo Alto's pledge for students in Arts and Sciences who plan to transfer to a four-year college or university.

Palo Alto College pledges to its Associate of Arts and Associate of Science graduates and other students who have met the requirements of a 60-credit-hour transfer plan the transferability of course credits to those programs or majors at other four-year institutions which have articulation agreements or joint admission agreements with Palo Alto College.

This pledge is designed specifically for those Palo Alto College students whose course work began in the Fall of 1993 or after and who have made firm decisions about their major and the institution to which they plan to transfer.

Conditions which apply to the pledge are as follows:

1. Transferability is the acceptance of credits toward a specific major and degree. Courses must be identified by the receiving university as transferable and applicable according to the articulation or joint admission agreement;
2. Limitations of total number of credits accepted in transfer, grades required, relevant grade point average and duration of transferability apply as determined and stated by the receiving institution; and
3. The student must take the responsibility to meet with a Palo Alto College counselor and a receiving institution counselor to ascertain the requirements of the specific articulation or joint admission agreement and follow the agreement course plan while attending Palo Alto College.

Then, you have our pledge that courses will transfer to the cooperating four-year institution. If they do not, you may take the additional required courses at Palo Alto College — up to nine (9) hours tuition free.

Core Curriculum
Associate of Arts Degree
Associate of Science Degree

The core curriculum for the Associate of Arts and the Associate of Science degrees at Palo Alto College reflects a common experience in academic foundations and provides a basis for transferability not only within the Alamo Community College District, but also among other Texas colleges. The competency based core aids in the development of academically capable and knowledgeable students whose basic intellectual skills include reading, writing, speaking, and critical thinking.

The 47 or 48 hour options of core courses for the Associate of Arts and Associate of Science degrees represent the eight core elements recommended by the Texas Higher Education Coordinating Board.

Palo Alto College Core Curriculum

Chart I: State-wide Requirements

Composition	ENGL 1301 & 1302	**6**
Mathematics	Any one of the following: MATH 1314, 1316, 1324, 1325, 1332, 1348, 1442, 2318, 2320, 2412, 2413, 2414, 2415	**3**
Natural Sciences	BIOL 1308 or 2306	**3**
Visual & Performing Arts	ARTS 1301,1303, 1304 DRAMA 1310 MUSI 1306 [Choose one from these departments: ARTS, DRAMA, MUSI. May include a combination of activity, performance, or private instruction courses.]	**3**
Humanities	ENGL 2322, 2323, 2327, 2328, 2332,2333 FREN 2311, 2312 SPAN 2311, 2312 GERM 2311, 2312 HUMA 1301 & 1302 PHIL 1301, 1304, 2303, 2306, 2371	**6**
U.S. History	HIST 1301, 1302	**6**
Political Science	GOVT 2305, 2306	**6**
Social/Behavioral Science	Choose one from: ANTH 2346, CRIJ 1301, 1306, 1307, 1310, ECON 2301, 2302, GEOG 1301,1303, HIST 2301, 2311, 2312 IDST 2371, 2372, PSYC 2301, 2306, 2308, 2314, 2316, 2317, 2370 SOCI 1301, 1306, 2301, SOCW 2361, 2362	**3**

Chart II: PAC-Defined Requirements

Speech	SPCH 1311, 1318, 1321	**3**
Natural Sciences	Choose one from the following: BIOL 1408, 1409 BIOL 1411, 1413 BIOL 2401, 2402 CHEM 1311/1111, 1312, 1112 ENVR 1401, 1402 GEOL 1401, 1402, 1403, 1404 PHYS 1401, 1402	**4**
Computer Literacy	COSC 1300*	**3**
Physical Education	PHED**	1
TOTAL HOURS		**47**

**3 hours of Computer Science or Logic required for all AA and AS Degrees*
***2 hours of Physical Education required for all AA and AS Degrees*

Associate of Arts Degree
Associate of Science Degree
Associate of Arts or Science College/University Transfer Degree

To be awarded the Associate of Arts, Associate of Science, or Associate of Arts or Science College/University Transfer Degree, the student must satisfy the following requirements:

1. Complete at least 60 semester hours with a cumulative grade point average of "C" (2.0) in all courses. Developmental courses are excluded.

2. Complete at least 15 semester hours of work at Palo Alto College.

3. Fulfill the curricular requirements.

Associate of Arts Degree

Students interested in the disciplines listed below are urged to follow the Associate of Arts Degree Plan:

Anthropology	History
Art	Humanities
Business Administration	Interdisciplinary Studies
Communications	Liberal Studies
Criminal Justice	Mexican-American Studies
Drama	Music
Economics	Philosophy
Education	Physical Education
English	Pre-Law
French	Psychology
Geography	Social Work
German	Sociology
Government	Spanish
	Speech

Associate of Arts Degree Curricular Requirements

1. The student should be able to:
   A. Express ideas clearly, both in speaking and in writing.
   B. Think and write critically and creatively in a literary setting.

   Twelve semester hours required: English 1301, English 1302, three semester hours of literature, and three semester hours of speech.

2. The student should understand mathematical concepts and be able to perform mathematical functions. Three semester hours required: MATH 1332 or MATH 1314 or any Math for which MATH 1314 is a prerequisite (except MATH 1350 or MATH 1351).

3. The student should develop an understanding of human beings as they relate to their social environment. Eighteen semester hours required. History 1301 and 1302 and Government 2305 and 2306 are required, plus six semester hours from the following: (See "a." below)*

Anthropology	Government	Philosophy
Criminal Justice	History	Psychology
Economics	Humanities	Sociology
Foreign Language	Interdisciplinary Studies	
Geography	Literature	

4. The student should have a basic knowledge of computer terminology and technology. Three semester hours are required in computer literacy or computer programming. (See "b." below)*

5. The student should be aware of the aesthetics of his/her environment. Three semester hours are required from the following: (See "c." below)*
   Art Music Drama

6. The student should have an understanding of structure and function of the life and physical sciences. Six to eight semester hours are required from the following:
   Biology Geology
   Chemistry Physics

7. The student should develop an understanding of a foreign language and culture. A minimum of six semester hours is required.

8. The student should develop skills/knowledge that enable him or her to attain physical fitness/wellness and to maintain it through adult life. A minimum of two semester hours of physical activity courses or one lecture course in wellness or health is required.

9. Electives: Six to eight semester hours with one elective from an area outside the student's major. (See "d" below.)

*In those competencies with course options, the student should choose carefully. The major and the senior college in which the student is interested are important considerations in the selection of courses. In most cases, students have options that will fulfill both the senior college requirements and those of Palo Alto College. The following clarifications are important:

a. In curricular requirement number “3,” foreign languages can be used, but these foreign language courses must be at the sophomore level.

b. In curricular requirement number “4,” students who can demonstrate proficiency by passing a departmental examination may be granted approval to substitute another course.

c. In curricular requirement number “5,” there is wide latitude, but the student must check with the faculty advisor on which Art, Music, and Drama courses will fulfill the requirement.

d. In curricular requirement number “9,” course selections will depend upon the choice of major a student chooses to pursue at a senior college.

Associate of Science Degree

Students interested in the following disciplines are urged to follow the Associate of Science Degree Plan:

Agriculture	Physical Education
Biology	Physics
Business Administration	Pre-Dentistry
Chemistry	Pre-Medicine
Computer Science	Pre-Nursing
Criminal Justice	Pre-Pharmacy
Engineering	Pre-Physical Therapy
Geology	Pre-Veterinary Science
Mathematics	

Associate of Science Degree Curricular Requirements

1. The student should be able to:
   A. Express ideas clearly, both in speaking and in writing.
   B. Think and write critically and creatively in a literary setting.

   Twelve semester hours required: English 1301, English 1302, three semester hours of literature, and three semester hours of speech.

2. The student should understand mathematical concepts and be able to perform mathematical functions. Six semester hours required of MATH 1314 and/or higher (except MATH 1332, MATH 1350 or MATH 1351).

3. The student should develop an understanding of human beings as they relate to their social environment. Eighteen semester hours required. History 1301 and 1302 and Government 2305 and 2306 are required, plus six semester hours from the following: (See "a." below)*

Anthropology	Government	Philosophy
Criminal Justice	History	Psychology
Economics	Humanities	Sociology
Foreign Language	Interdisciplinary Studies	
Geography	Literature	

4. The student should have a basic knowledge of computer terminology and technology. Three semester hours are required of computer literacy or computer programming. (See "b." below)*

5. The student should have an understanding of the structure and function of the life and physical sciences. Eight sequential semester hours are required from the following: (See "c." below) *

Biology	Geology
Chemistry	Physics

6. The student should develop skills/knowledge that enable him or her to attain and maintain physical fitness/wellness through adult life. A minimum of two semester hours of physical activity courses or one lecture course in wellness or health is required.

7. Electives: Twelve semester hours with one elective from an area outside the student's major. (See "d." below) *

*In those competencies with course options, the student should choose carefully. The major and the senior college in which the student is interested are considerations in the selection of courses. In most cases, students have options that will fulfill both the senior college requirements and those of Palo Alto College. The following clarifications are important:

a. In curricular requirement number "3," foreign languages can be used, but these foreign language courses must be at the sophomore level.

b. In curricular requirement number "4," students who can demonstrate proficiency by passing a departmental examination may be granted approval to substitute another course.

c. In curricular requirement number "5," the courses taken must be sequential laboratory courses. The student should work closely with the faculty advisor in choosing the science courses, because there is a distinction in courses specifically designed for science, allied health, and medical majors.

d. In curricular requirement number "7," the semester hours will depend on which courses the student takes in support of the major chosen for senior college.

Associate of Arts or Science College/University Transfer Degree Curricular Requirements

To receive the Associate of Arts or Science College/University Transfer Degree, the student must:

1. Complete the Associate of Arts or Science College/University Transfer Degree application (available at the College's Transfer Advisement Center),

2. Complete the first two years (Freshman and Sophomore) of a regionally-accredited college's or university's four-year baccalaureate degree program,
3. Submit a copy of applicable degree program prior to the College's published degree application deadlines, and

4. Meet all general degree requirements as outlined in this catalog.

Transfer Curricula and Resolution of Transfer Disputes

In cases where a public institution of higher education does not accept a course or courses for transfer,* the following procedure shall be followed in the resolution of transfer disputes.

(l) If an institution of higher education does not accept course credit earned by a student at another institution of higher education, that institution shall give written notice to the student and the other institution that the transfer of the course credit is denied.

(2) The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with the Coordinating Board rules and/or guidelines.

(3) If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution whose credit is denied for transfer shall notify the Commissioner of the denial.

(4) The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

*Developmental courses excluded.

Both the A.A. and A.S. degrees have been developed to accommodate transfer to senior colleges. All of the required curricular courses are equivalent to courses found in the current edition of the "Community College General Academic Course Guide" manual, and are approved by the Texas Higher Education Coordinating Board.

Articulation Agreements and 2 + 2 Programs

Palo Alto College and the senior colleges work closely to ensure a smooth transition from Palo Alto College to the senior colleges. Some of the institutions with which Palo Alto College has articulation agreements are:

Angelo State University
Embry-Riddle Aeronautical University
Our Lady of the Lake University
St. Mary's University
Sam Houston State University
Southwest Texas State University
Texas A & M University at College Station
Texas A&M University at Corpus Christi
Texas A&M University at Kingsville
Texas Lutheran University
University of Houston
University of Northern Iowa
University of Texas at Austin
University of Texas at Dallas
University of Texas at San Antonio
University of Texas Health Science Center - San Antonio
University of the Incarnate Word
University of Wisconsin at Madison

Articulation agreements and 2+2 Programs guarantee that students can transfer their first two years of college work at Palo Alto College to the senior colleges. Articulation agreements do not exist for all majors. In these cases, Palo Alto College students need to check with the Transfer Advisement Center for copies of the existing agreements or course transfer equivalency tables.

To achieve their educational objectives quickly, students must work closely

with their faculty advisors.

Biomedical Science & Texas A&M University College of Veterinary Medicine

Palo Alto College is the only community college in Texas with an agreement allowing Palo Alto College students to complete a prescribed degree plan and automatically be admitted to the Biomedical Science program in the Texas A&M University College of Veterinary Medicine at College Station. Students must meet general admission requirements for Texas A&M University, must maintain no less than a 3.6 GPA in courses taken at Palo Alto and be eligible for graduation from Palo Alto, and must not have made any grade below a "B" in all of the Common Body of Knowledge science and math course work. The transfer agreement took effect with the Fall 2001 semester. For a detailed degree plan, contact the Transfer Advisement Center.

The Biomedical Science program, the largest undergraduate major at Texas A&M University, is a pathway to careers such as medicine, veterinary medicine, dentistry, nursing, education, and many other related fields.

Mexican American Studies

Palo Alto College offers an Associate of Arts degree with a concentration in Mexican American Studies. Students must complete nine hours to receive the special designation on their degree.

Classes include Texas History, Beginning Mariachi, Elementary Mariachi, Ensemble, American Multi-Cultural Literature, and Chicano Art.

Palo Alto's curriculum has been designed to transfer into UTSA's Bachelor of Arts degree program in Mexican American Studies.

Associate of Applied Science Degree

Palo Alto College offers the Associate of Applied Science Degree in the following areas:

Administrative Computer Technology
Agribusiness Management
Aviation Management
Computer Information Systems
Electro-Mechanical Technology
Landscape & Horticultural Science
Logistics Management
Management
Professional Pilot
Turfgrass & Golf Course Mgt.

Occupational-Technical Course Designation Changes

As a result of state-mandated changes, several occupational-technical courses and programs have new alphanumeric designators in this publication. Below is a list of these changes:

Agribusiness Management (AGOP) courses are listed under the **AGMG** designation.

Distribution Logistics Technology (DSLT) has been changed to **Logistics Management** with courses listed under the **BMGT or LMGT** designation.

Environmental Technology (ENVT) courses are listed under the **EPCT** designation.

Management (MGT) courses are listed under the **BMGT** designation except **MGT 2310**, Personnel Management, is listed as **HRPO 2301**, Human Resource Management.

Refer to the Occupational Technical Programs Curricular Requirements section of this publication for a complete listing of required courses for these programs.

Associate of Applied Science Degree Curricular Requirements

To be awarded the Associate of Applied Science Degree, the student must:

1. Fulfill the following core competencies in a minimum of 15 semester hours of general education courses. Each occupational technical education program specifies the courses to fulfill this requirement.

   A. The student should be able to express ideas clearly, both in speaking and in writing; think and write critically in a literary setting. Competencies are fulfilled by successful completion of three-credit hours in English or speech disciplines.

   B. The student should understand and be able to perform mathematical functions and/or understand scientific concepts. Competencies are ful-

filled by successful completion of three-credit hours in math or a science.

C. The student should be able to demonstrate computer skills. Competencies are fulfilled by successful completion of a three credit hour course in computer science or computer information systems.

D. The student should be able to demonstrate a knowledge of humanities or fine arts by successful completion of three-credit hours in either of these disciplines.

E. The student should be able to demonstrate knowledge in the social or behavioral sciences by successful completion of three-credit hours in either of these subject areas.

2. Complete the prescribed courses in the technology curriculum.

3. Maintain a minimum average of "C" in all courses taken at Palo Alto College as well as the cumulative average, including any courses transferred to the College.

4. Complete at least 15 semester hours at Palo Alto College.

5. Complete at least 60 semester hours. Developmental courses are excluded.

6. Complete a capstone experience. For additional information on the capstone experience, contact the program faculty advisor.

Certificate of Completion

Palo Alto College offers Certificates of Completion in the following areas:

Administrative Assistant - Certificate Level III
Administrative Computer Technology - Tech-Prep Enhanced Skills
Agribusiness Management - Enhanced Skills Certificate
Animal Health Specialist
Basic Nursery & Landscape Operations
Basic Electro-Mechanical Technology
Business Communications
Customer Service Representative
Data Entry Technician
Electro-Mechanical Assistant
Electro-Mechanical Technician
Entry Level Supervision

Environmental Compliance Management
Environmental Regulations Management
Environmental Project Management
General Office - Certificate Level I
General Office - Certificate Level II
Horticultural Business Management
International Logistics Management
Leadership
Logistics Management
Manufacturing Management
Microsoft Certified Network Systems Technician Preparation
Microsoft Certified Systems Engineer Preparation
Microsoft Certified Systems Technician Preparation
Personal Computer Skills
Private Pilot
Product Marketing Specialist
Skills Upgrade
Transportation Management
Warehouse Management
Water Resources Management
Web Publishing Skills

Certificate programs of 15-42 semester hours are TASP-waived although all certificate programs must provide for local assessment and remediation of the students. Students who accumulate 6 semester credit hours outside of a declared waived certificate curriculum must meet all TASP requirements including taking the TASP/Alternative TASP and entering developmental education if required.

Certificate programs of 43-59 semester credit hours are TASP-eligible regardless of the number of general education courses.

Completion of a capstone experience is required before the award of a Certificate of Completion. For additional information on the capstone experience, contact the program faculty advisor.

Tech Prep

Palo Alto College is engaged in major technical and professional career preparation by providing continuity of learning and quality educational opportunities for all students. The Tech Prep Associate of Applied Science degree program is a significant component of this concept providing educational and career preparation in technical fields to high school students who will be the workforce of the future.

The concept of Tech Prep involves a sequence of knowledge and skills acquisition beginning in elementary school, linked with a guided, integrated high school plan of academic and technical subjects, which connects the student to the community college. This provides a jointly-developed competency-based, industry-validated curriculum without duplication or repetition. The Tech Prep curriculum in high schools and colleges represents a rigorous body of knowledge and skills which will prepare a better-educated worker with advanced skills and the ability to apply these skills as the world of technology changes.

Palo Alto College has developed with area ISDs and received approval by the Texas Higher Education Coordinating Board for the Tech Prep Associate of Applied Science degree in:

Administrative Computer Technology
Agribusiness Management
Logistics Management
Veterinary Technology

Administrative Computer Technology
(formerly Office Systems Technology)

The Administrative Computer Technology Program prepares students to enter the dynamic world of the modern automated office. The program provides a solid foundation in general education and the depth in technical skills needed in the changing office environment. In consultation with the student's faculty advisor, a student can use directed electives to strengthen or broaden their own preparation for employment.

The overall focus of the computer classes in ACT is to provide students with quality instruction and many hours of "hands on" experience at the computer. Students will be taught software packages that are currently used in the workplace.

For certificate level and transfer students, ACT offers two classes to prepare them to properly keystroke and format their college papers, reports, simple tables and letters, POFT 1329 and ITSW 1301. These courses are a must for all college students.

The Tech-Prep four-year degree plan and the Enhanced Skills Certificate also provide educational and career paths for the Tech Prep student, promote economic and competitive advantages for graduates, provide an avenue for workforce development, and support students in the areas of retention and completion of career goals.

Advisory Committee

Gloria Baladez, QVC
Albert & Alma Bocanegra, Stat-X
Art Castro, Frost Bank
Tino Duran, La Prensa
Annette C. Guajardo, Phi Beta Lambda
Ramona Harnish, District Attorney's Office
Gloria Medellin, ACCD Human Resources
Leo Pacheco, Bexar County
Olga Samaniego, Lackland AFB
Cynthia Silva, City of San Antonio
Abel Vela, McDonald's

Curricular Requirements: Administrative Computer Technology

First Year
First Semester

POFT	1319	Records and Information Management I
HRPO	1311	Human Relations
POFT	1302*	Business Communications I
POFT	2301*	Document Formatting and Skillbuilding
ENGL	1301	Freshman Composition I

15 Hours

Second Semester

POFI	2301	Word Processing
POFT	1313	Professional Development for Office Personnel
PHED		Physical Education (any one-credit course)
SPCH	1311	Fundamentals of Speech
Directed Elective		(see list following Certificates)

13 Hours

Summer Session I & II

Elective	Social/Behavioral Science Elective

3 Hours

*A Tech-Prep Articulated Course

Second Year
First Semester

POFT	2312	Business Communications II
POFT	2321	Machine Transcription

Directed Elective (see list following Certificates)
Humanities/Fine Arts Elective (see list following Certificates)
Free Elective (see list following Certificates)

15 Hours

Second Semester

ACCT	2301	Principles of Accounting I
POFT	2333	Advanced Document Formatting and Skillbuilding
POFT	2380**	Cooperative Education – Administrative Assistant/

Secretarial Science, General

or

POFT 1349** Administrative Office Procedures II
Directed Elective (see list following Certificates)
Natural Science/Math Elective (see list following Certificates)

15 Hours

TOTAL 61 HOURS

**Capstone course for AAS degree

CERTIFICATE PROGRAMS

Administrative Computer Technology offers a three-level certificate program designed to meet the needs of students who primarily seek employment skills. After completing one of the 15-, 30-, or 45-hour certificate plans, students will have sufficient skills to obtain employment in certain entry-level jobs or to advance in their current position. Courses at each level dovetail with the next level and all lead toward the Associate in Applied Science degree. With the assistance of a faculty advisor, a student can design a program of study to meet his or her individual needs. Proficiency in basic English, reading, and math must be demonstrated prior to entry and/or advancement in the program.

Administrative Computer Technology also offers a Customer Services Representative Certificate program. This certificate, developed in cooperation with local business and industry, is designed to provide skills in communication, human relations, and computers. The Customer Services Representative meets the needs of employers in telemarketing and related businesses.

GENERAL OFFICE CERTIFICATE-LEVEL I

First Semester

HUMD 0300 Human Development
POFT 1319 Records and Information Management I
HRPO 1311 Human Relations
POFT 1302 Business Communications I
Directed Elective (see list following Certificates)

15 Hours

* Capstone for Certificate I: Keyboarding proficiency of 40 words per minute

GENERAL OFFICE CERTIFICATE-LEVEL II

First Semester

HUMD	0300	Human Development
POFT	1319	Records and Information Management I
HRPO	1311	Human Relations
POFT	1302	Business Communications I

Directed Elective (see list following Certificates)

15 Hours

Second Semester

COSC	1300	Computer Literacy
POFT	2301	Document Formatting and Skillbuilding
POFT	1313	Professional Development for Office Personnel

ACT Directed Elective (see list following Certificates)

General Education Elective (see list following Certificates)

15 Hours

TOTAL 30 HOURS

*Capstone for Certificate II: Keyboarding Proficiency of 45 words per minute

ADMINISTRATIVE ASSISTANT CERTIFICATE LEVEL III

First Year*

First Semester

HUMD	0300	Human Development
POFT	1319	Records and Information Management I
HRPO	1311	Human Relations
POFT	1302	Business Communications I

Directed Elective (see list following Certificates)

15 Hours

Second Semester

COSC	1300	Computer Literacy
POFT	2301	Document Formatting and Skillbuilding
POFT	1313	Professional Development for Office Personnel

Directed Elective (see lists following Certificates)
General Education Elective (see lists following Certificates)

15 Hours

Second Year

First Semester

ACNT	1303	Introduction to Accounting I
POFT	2312	Business Communications II
POFI	2301*	Word Processing

Directed Elective (see list following Certificates)
General Education (see lists following Certificates)

15 Hours

TOTAL 45 HOURS

*Capstone for Certificate III: Keyboarding Proficiency of 50 words per minute with 5 or less errors.

Keyboarding speed & accuracy as well as technical proficiency may be achieved through any combination of POFT 2203, 1329, 1429, 2301, or 2333, or credit by exam.

BUSINESS COMMUNICATIONS CERTIFICATE

First Semester

POFT	1302	Business Communications
POFT	1329**	Keyboarding and Document Formatting (Non-Majors)
HRPO	1311	Human Relations
or		
POFT	1313	Professional Development for Office Personnel
POFT	2312	Business Communications II

Directed Elective (see list below)

TOTAL 15 HOURS

**Capstone for Business Communications Certificate: Keyboarding Proficiency of 30 words per minute with 5 or less errors

Directed Electives

POFI	1301	Computer Applications I
POFT	1319	Records and Information Management I
POFT	2301*	Document Formatting and Skillbuilding

CUSTOMER SERVICES REPRESENTATIVE CERTIFICATE

First Semester

COSC	1300	Computer Literacy
SPCH	1342	Voice and Articulation
POFT	1329*	Keyboarding and Document Formatting (Non-majors)
POFT	1302	Business Communications I
HRPO	1311	Human Relations
POFT	1331	Business Machine Applications

18 Hours

*Keyboarding Skill: Demonstrated proficiency at 30 wpm may be achieved through any of the following:

A.	Proficiency Test	30 wpm
B.	Keyboarding and Document Formatting (Non-majors)	POFT 1329
C.	Speed and Accuracy Building – Level I	POFT 2203
D.	Speed and Accuracy Building – Level II	POFT 2204
E.	Speed and Accuracy Building – Level III	POFT 2205
F.	Keyboarding and Document Formatting (Majors)	POFT 1429

Second Semester

ACNT	1303	Introduction to Accounting I
POFT	1313	Professional Development for Office Personnel
POFT	2312	Business Communications II
SPCH	1318	Interpersonal Communication
POFT	2380**	Cooperative Education – Administrative Assistant/Secretarial Science, General

15 Hours

TOTAL 33 HOURS

**Capstone course for Certificate

DATA ENTRY TECHNICIAN CERTIFICATE

First Semester

ITSC	1301	Introduction to Computers
POFI	1301	Computer Applications I
or		
ITSC	1309	Integrated Software Applications I
POFT	1329**	Keyboarding and Document Formatting (Non-Majors)
HRPO	1311	Human Relations
POFT	1331	Business Machine Applications
HUMD	0300	Human Development

TOTAL 18 HOURS

**Capstone for Data Entry Technician Certificate: Keyboarding Proficiency of 30 words per minute with 5 or less errors

SKILLS UPGRADE CERTIFICATE

(Designed for the night student seeking job promotions)

First Semester

POFT	2301	Document Formatting and Skillbuilding
POFT	2321	Machine Transcription
HRPO	1311	Human Relations
or		
POFT	1313	Professional Development for Office Personnel
POFT	1302	Business Communications I
or		
POFT	2312	Business Communications II
		Directed Elective (see list below)

TOTAL 15 HOURS

**Capstone Proficiency: 2.0 GPA within certificate courses and keyboard proficiency of 45 words per minute with 5 or less errors.

Directed Electives

ACNT	1303	Introduction to Accounting I
POFI	1301	Computer Applications I
POFT	1329	Keyboarding and Document Formatting (Non-Majors)
POFT	1429	Keyboarding and Document Formatting (Majors)
POFT	2321	Machine Transcription

TECH-PREP ENHANCED SKILLS CERTIFICATE

Tech-Prep students may receive up to 9 hours articulated credit for the following courses: Business Communications I (POFT 1302), Document Formatting and Skillbuilding (POFT 2301) and Computer Applications I (POFI 1301). In addition to courses listed in the Associate of Applied Science Degree plan, Tech Prep students may take 9 hours from the following list of advanced courses to receive the Advanced Skills Certificate:

POFI	1341	Computer Applications II
POFI	2331	Desktop Publishing for the Office

Choose one three-credit hour course from the following list:

POFT	2343	Shorthand/Notetaking II
ITSW	2337	Advanced Database
SPAN	2311	Intermediate Spanish I
ACCT	2302	Principles of Accounting II
ITSW	2334	Advanced Spreadsheets
SPAN	2312	Intermediate Spanish II

GENERAL EDUCATION ELECTIVES

HUMANITIES/FINE ARTS:

HUMA	1301	Intro to Humanities
HUMA	1302	World Cultures and Global Issues
ARTS	1301	Art Appreciation
DRAM	1310	Theater Appreciation
MUSI	1306	Music Appreciation

MATH/NATURAL SCIENCE:

MATH	1314	College Algebra
BIOL	2306	Environmental Biology

ORAL AND WRITTEN COMMUNICATIONS:

ENGL	1301	Freshman Composition I
ENGL	1302	Freshman Composition II
SPCH	1311	Fundamentals of Speech
SPCH	1321	Business & Professional Speech

SOCIAL/BEHAVIORAL SCIENCES:

ECON	2301	Macroeconomics
ECON	2302	Microeconomics
GOVT	2305	American Government I (National)
GOVT	2306	American Government II (State)
HIST	1301	History of U.S. I
HIST	1302	History of U.S. II
PSYC	2301	Intro to Psychology
SOCI	1301	Intro to Sociology

DIRECTED ELECTIVES:

ACNT	1303	Introduction to Accounting I
POFI	1301	Computer Applications I
POFI	1341	Computer Applications II
POFI	2331	Desktop Publishing for the Office
POFT	1309	Administrative Office Procedures I
POFT	1331	Business Machine Applications
POFT	1345	Shorthand/Notetaking I
POFT	1392	Special Topics in Administrative Assistant/ Secretarial Science
POFT	2203	Speed and Accuracy Building Level I
POFT	2204	Speed and Accuracy Building Level II
POFT	2205	Speed and Accuracy Building Level III
POFT	2343	Shorthand/Notetaking II
ACCT	2302	Principles of Accounting II
BMGT	1303	Principles of Management
BUSI	1301	Introduction to Business
COSC	1300	Computer Literacy
COSC	1301	Introduction to Computers & Info Systems
ITSC	1309	Integrated Software Applications
ITSE	1331	Introduction to Visual Basic Programming
ITSW	1301	Introduction to Word Processing
ITSW	2334	Advanced Spreadsheets
ITSW	2337	Advanced Database.
SPAN	1411	Elementary Spanish I
SPAN	1412	Elementary Spanish II
SPAN	2311	Intermediate Spanish I
SPAN	2312	Intermediate Spanish II

Agribusiness Management

The Agribusiness Management Associate of Applied Science degree program is designed to prepare students to apply modern business and economic principles relating to the production and marketing of agricultural products and services. Students will be taught technical skills and competencies required/ necessary to assume occupational positions in: operations management and marketing including food and fiber manufacturing, environmental technologies, office systems management, agricultural products sales, animal products and nutrition sales, and horticulture/florist products sales. A Product Marketing Specialist Certificate and a Horticultural Business Management Certificate are available.

Advisory Committee

Shane Brysch, L&H Packing
Gene Dunbar, Bank of America
J.A. "Tony" Hinojosa, Texas A&M University System
Robert Maggiani, Texas Department of Agriculture
Mike Petter, Resource and Land Management Inc.
Tomas Garcia, National Food Products

Curricular Requirements: Agribusiness Management

First Year

First Semester

MATH	1314	College Algebra
or		
CHEM	1406	Introductory Chemistry I
ENGL	1301	Freshman Composition I
BMGT	1303	Principles of Management
ITSC	1309	Integrated Software Applications (a)
AGMG	1311	Introduction to Agribusiness (a)

15/16 Hours

Second Semester

AGRI	2317	Introduction to Agricultural Economics
BMGT	1301	Principles of Supervision
EPCT	1311	Introduction to Environmental Science
or		

BIOL	2306	Environmental Biology
HRPO	1311	Human Relations
or		
ENGL	1302	Freshman Composition II
SPCH	1311	Fundamentals of Speech
or		
SPCH	1321	Business and Professional Speech

15 Hours

Second Year

First Semester

SOCI	1301	Introduction to Sociology
or		
PSYC	2301	Introduction to Psychology
MRKG	1311	Principles of Marketing
POFT	1313	Professional Development for Office Personnel
or		
GOVT	2306	American Government II (State)
AGMG	1307	Safety, Laws, and Regulations
Elective		Directed Elective (b)

15 Hours

Second Semester

ACNT	1303	Introduction to Accounting I
or		
ACCT	2301	Principles of Accounting I
AGMG	1192	Special Topics in Agricultural Business/ Agribusiness Operations
AGRI	1325	Marketing of Agricultural Products
AGMG	1350	International Agriculture
Directed Elective		CIS or Foreign Language Elective (c)
Elective		Humanities/Fine Arts Elective (d)

16/17 Hours

Summer Session

AGMG	2588*	Internship – Agricultural Business

5 Hours

TOTAL 66/68 HOURS

* Capstone Course for AAS degree

BASIC NURSERY & LANDSCAPE OPERATIONS CERTIFICATE

HALT	1301	Principles of Horticulture
AGMG	1392	Special Topics in Agribusiness
AGMG	1392**	Special Topics in Agribusiness

**Capstone Course for Basic Nursery & Landscape Operations Certificate

HORTICULTURAL BUSINESS MANAGEMENT CERTIFICATE

First Semester

ITSC	1309	Integrated Software Applications (a)
AGMG	1311	Introduction to Agribusiness (a)
BMGT	1303	Principles of Management
AGRI	1315	Horticulture
or		
HALT	1301	Principles of Horticulture
or		
AGMG	1392	Special Topics in Agribusiness
BMGT	1301	Principles of Supervision
or		
AGMG	1392	Special Topics in Agribusiness

15 Hours

Second Semester

AGMG	2588**	Cooperative Education: Agricultural Business Management (e)

TOTAL 20 HOURS

** Capstone Course for Horticulture Business Management Certificate

PRODUCT MARKETING SPECIALIST CERTIFICATE

First Semester

ENGL	1301	Freshman Composition I
AGMG	1311	Introduction to Agribusiness (a)

AGRI	2317	Introduction to Agricultural Economics
ITSC	1309	Integrated Software Applications (a)
HRPO	1311	Human Relations

15 Hours

Second Semester

AGMG	1307	Agribusiness Safety, Laws and Regulations
AGRI	1325*	Marketing of Agricultural Products
ACNT	1303	Introduction to Accounting I
POFT	1302	Business Communications I
MRKG	1311	Principles of Marketing

15 Hours

TOTAL 30 HOURS

* Capstone Course for Product Marketing Specialist Certificate

Notes:

(a) This is a Tech Prep articulated course. Tech Prep students may receive up to six hours of college credit when they enroll at PAC.

(b) Directed Electives (3 hours minimum): AGRI 1307, 1311, 1315, 1327, 2317, 2330, 2377, or AGMG 1392, or EPCT 1307.

(c) Directed CIS or Foreign Language Electives (3 hours minimum): ITSW 1334 or 2337, or SPAN 1411, 1412, 2311, 2312.

(d) Humanities/Fine Arts Electives: HUMA 1301, ARTS 1301, MUSI 1306, DRAM 1310.

Aviation Technology

The Aviation Technology degree program has two options:

- Aviation Management
- Professional Pilot

Aviation Management

The **Aviation Management** program prepares an individual at the mid-management level for various areas of the aviation industry including support positions in airport management; air carrier operations; corporate aviation departments; and national, state, and local aviation agencies, authorities or boards. Potential positions also may be available with aviation service organizations and manufacturers.

Advisory Committee

Captain Calvin Allen, Delta Airlines
Hugh Crull Jr., Fairchild Aerospace
First Officer Victoria Giordana, Southwest Airlines
Jose Mulet, Mexicana Airlines
Captain Byron Reed, H.B. Zachry Company
Captain Vicki Ross, Southwest Airlines
Captain Ernest Seiffert, US Airways

Curricular Requirements: Aviation Management

First Year

First Semester

ENGL	1301	Freshman Composition I
PSYC	2301	Introduction to Psychology
GOVT	2305	American Government I (National)
AIRP	1313	Introduction to Aviation
AIRP	1317	Private Pilot Ground School

15 Hours

Second Semester

ENGL	1302	Freshman Composition II
SPCH	1311	Fundamentals of Speech

ITSC	1309	Integrated Software Applications	
MATH	1314	College Algebra	
AIRP	1345	Aviation Safety	
			15 Hours

Summer Session

ECON	2301	Principles of Macroeconomics	
			3 Hours

Second Year

First Semester

ECON	2302	Principles of Microeconomics	
ACCT	2301	Principles of Accounting I	
AVIM	2337	Introduction to Aviation Law	
AVIM	1301*	Intro. to Aviation Management	
Elective		Humanities/Fine Arts Elective	
			15 Hours

Second Semester

ACCT	2302	Principles of Accounting II	
MATH	1442	Elements of Statistics	
AVIM	2331	Airline Principles	
AVIM	2335*	Airport Management	
Elective		Directed Elective (3 hours)	
			16 Hours

TOTAL 64 HOURS

*Capstone Course

HUMANITIES/FINE ARTS ELECTIVES:

ARTS	1301	Art Appreciation
MUSI	1306	Music Appreciation
DRAM	1310	Theater Appreciation
HUMA	1301	Introduction to the Humanities
PHIL	1301	Introduction to Philosophy
PHIL	2303	Logic
SPAN	1411	Elementary Spanish I
PHIL	2306	Ethics

DIRECTED ELECTIVES:

AIRP	2380	Cooperative Work Experience
ENGL	2311	Technical Writing

Professional Pilot

The Professional Pilot program prepares students who look forward to careers as air carrier pilots, general aviation pilots, and military pilots. Each student successfully completing the degree program will have obtained a minimum of a commercial pilot certificate with an instrument rating.

A prerequisite to enter the degree program is possession of a current second class aviation medical certificate.

Curricular Requirements: Professional Pilot

First Year

First Semester

ENGL	1301	Freshman Composition I	
PSYC	2301	Introduction to Psychology	
AIRP	1313	Introduction to Aviation	
AIRP	1317	Private Pilot Ground School	
AIRP	1315	Private Pilot Flight	
			15 Hours

Second Semester

ENG	1302	Freshman Composition II	
SPCH	1311	Fundamentals of Speech	
ITSC	1309	Integrated Software Applications I	
MATH	1314	College Algebra	
AIRP	1345	Aviation Safety	
PHED		PE Activity Elective	
			16 Hours

Summer Session

AIRP	1351	Instrument Ground School	
AIRP	1355	Intermediate Flight	
			6 Hours

Second Year

First Semester

AIRP	2337	Commercial Ground School	
AIRP	2350	Instrument Flight	
AVIM	2337	Introduction to Aviation Law	
AVIM	1301	Introduction to Aviation Management	
Elective		Humanities/Fine Arts Elective (3 hours)	
PHED		PE Activity Elective	
			16 Hours

Second Semester

AIRP	1307	Meteorology	
AVIM	2331	Airline Management	
AIRP	2333	Aircraft Systems	
AIRP	2339	Commercial Flight	
AIRP	1191	Special Topics in Aircraft Pilot & Navigator (Professional)	
AIRP	2251*	Multi-engine Flight Training	
			15 Hours

TOTAL 68 HOURS

*Capstone Course

PRIVATE PILOT CERTIFICATE

AIRP	1313	Introduction to Aviation	
AIRP	1315**	Private Pilot Flight (LAB)	
AIRP	1317	Private Pilot Ground School	
			9 Hours

**Capstone Course

Special Conditions:

All flight courses **must be completed** through the college approved flight contractor for college credit, with the following exceptions:

A. Students having obtained a private, commercial and/or instrument rating **prior to their first admission** to the Palo Alto College Professional Pilot program may apply for advanced placement testing, according to the following guidelines:

1. Credit hours may be awarded by advanced placement testing. Consult with the Aviation Technology chairperson.
2. All flight course requirements must be verified by a departmental examination of pilot logbooks and records.
3. An in-flight evaluation conducted by the Palo Alto College flight contractor must verify that the student meets FAR Part 141 curriculum requirements. The cost of this in-flight evaluation must be paid by the student.

B. Students providing documentation of flight hours and ground training accumulated ***prior to their first admission*** to the Palo Alto College Professional Pilot program, and who have obtained this training:

1. At a FAR Part 141 certified school, may apply for transfer of one-half of those hours* into the Palo Alto College Professional Pilot program toward course requirements.
2. Under FAT Part 61, may apply for transfer of one-quarter of those hours* into the Palo Alto College Professional Pilot program toward course requirements.

All students should seek advisement from the Aviation Technology and Professional Pilot Department before enrolling in the program.

*As required by FAA regulation CFR 14, FAR 141.77 Paragraph C1 and C2.

Computer Information Systems

The Computer Information Systems degree program prepares students for entry-level positions in the increasingly important personal computer support field. Students will progress from fundamentals of the computer to advanced exercises simulating the skills required on the job. A Cooperative Internship with a participating local employer also may be part of the program.

Advisory Committee

Ricardo Bartra, VLSI Corporation
William Burke, Texas Department of Human Services
Dr. Charles W. Burmeister, Alamo Community College District
Richard Cavin, Southwestern Bell
Ivan Chestnut, MITRE Corporation
Cinda Rodriguez, Air Force Intelligence Agency

Curricular Requirements: Computer Information Systems Personal Computer Support

First Year

First Semester

ITSC	1301	Introduction to Computers
ITSC	1309	Integrated Software Applications I
ENGL	1301	Freshman Composition I
BUSI	1301	Introduction to Business
SPCH	1311	Fundamentals of Speech

15 Hours

Second Semester

ITSW	2334	Advanced Spreadsheets
ITSW	1310	Presentation Media Software
ITSC	1313`	Internet/Web Page Development
ECON	2302	Principles of Microeconomics
PSYC	2301	Introduction to Psychology
or		
SOCI	1301	Introduction to Sociology

15 Hours

Summer Session

ITSW	2337	Advanced Database

3 Hours

Second Year

First Semester

ITSC	1305	Introduction to PC Operating Systems
ITSE	1350	Integrated Software Applications I
MATH	1314	College Algebra
Elective		Any other computer course (beyond the introductory level) 3 Hours
ARTS	1301	Arts Appreciation
or		
ARTS	2331	Graphics I
or		
HUMA	1301	Introduction to Humanities

15 Hours

Second Semester

ITNW	1321	Introduction to Networking
ITSC	1325	Personal Computer Hardware
ITSC	2586*	Internship
ACCT	2301	Principles of Accounting

14 Hours

TOTAL 62 HOURS

*Capstone Course

PERSONAL COMPUTER SKILLS CERTIFICATE PROGRAM

The objective of the Personal Computer Skills Certificate is to increase job performance and productivity of white-collar workers. Businesses are increasingly expecting employees to be computer-literate and to provide enhanced performance and productivity through their computer skills. Graduates of the certificate program would satisfy this criterion thus retaining their competitiveness in the current market. Assuming that the majority of students attracted to the program are already employed, this would assist them in retaining employment and/or advancing in the company with "skills upgrade."

Students will gain specific proficiency in operating spreadsheet, presentation graphics, and database management software, as well as exposure to word processing and general computer theory. The focus is on microcomputer-based software tools, sometimes called "productivity software."

First Year
First Semester

ITSC	1301	Introduction to Computers	
ITSC	1309	Integrated Software Applications I	
			6 Hours

Second Semester

ITSW	2334	Advanced Spreadsheets	
ITSW	1310	Presentation Media Software	
ITSW	2337*	Advanced Database	
			9 Hours

* Capstone Course

WEB PUBLISHING SKILLS CERTIFICATE

The objective of the Web Authoring Certificate is to provide students and businesses with the knowledge to compete in the digital market place. Businesses are growing and needing personnel that understand the tools of the Internet and are able to provide the company a presence on the World Wide Web. Graduates of the certificate program would satisfy this criterion with knowledge of HTML, Graphics Design, Communications and Electronic Media, and web site maintenance to include e-commerce. This program will also assist students in retaining employment and/or advancing in the company with "skills upgrade."

First Year
First Semester

ITSC	1301	Introduction to Computers	
ITSC	1309	Integrated Software Applications I	
ITSC	1313	Internet/Web Page Development	
			9 Hours

Second Semester

ARTS	2331	Graphics I
COMM	2324	Practicum in Electronic Media
ITSE	2313*	Web Authoring

9 Hours

* Capstone Course

CERTIFICATE IN CERTIFIED SYSTEMS TECHNICIAN PREPARATION*

The objective of the Certificate in Certified Systems Technician Preparation is to increase job performance and productivity of current employees and job seeking students who wish to work in the lucrative computer repair field. These courses are taught at the Texas Engineering Extension Service (TEEX) facility at 9350 South Presa, San Antonio, and must all be taken at the same time. At TEEX the student takes the Computer Service Technician program which leads to the Computing Technology Industry Association's A+ Certification (COMPTIA) and the Computer Service Technician Certification (ETA). This program provides students with the skills necessary to troubleshoot and repair PC hardware and peripheral equipment. The A+ or CST certification is required for all other technician-training programs.

ITSC	1301	Intro to Computers
ITSC	1317	PC Operating Systems - DOS
ITSC	1325**	Personal Computer Hardware

*Special Fees
**Capstone Course

CERTIFICATE IN CERTIFIED NETWORK SYSTEMS TECHNICIAN PREPARATION*

The objective of the Certificate in Certified Network Systems Technician Preparation is to increase job performance and productivity of current employees and job seeking students who wish to work in the lucrative computer networking field. These courses are taught at the Texas Engineering Extension Service (TEEX) facility at 9350 South Presa, San Antonio, and must all be taken at the same time. At TEEX the student takes the CNST program which is designed to prepare students for the emerging networking systems field. Upon completing this program, students are prepared to take the Electronics Technicians Association's CNST examination

and the Microsoft Network Essentials Exam. The curriculum includes the technical knowledge and skills required to install and configure the various types of local area (LAN) and wide area (WAN) computer networks. This program is normally preceded by the Computer Service Technician Program to ensure A+ or CST certification, which is a prerequisite for the CNST certification exam. This program is a prerequisite for other advanced programs.

ITNW	1325	Fundamentals of Networking
ITNW	1333	Microsoft Networking Essentials
ITNW	1354**	Implementation and Support of Windows NT Server 4.0

* Special Fees Apply
**Capstone Course

CERTIFICATE IN MCSE PREPARATION*

The objective of the Certificate in Microsoft Certified Systems Engineer Preparation is to increase job performance and productivity of current employees and job seeking students who wish to work in the lucrative computer networking field with a MCSE certification. These courses are taught at the Texas Engineering Extension Service (TEEX) facility at their 9350 South Presa, San Antonio, facilities and normally should all be taken at the same time (see advisor). At TEEX the student takes the Microsoft Networking Systems program. This program is designed to prepare students for the Microsoft Certified Systems Engineer designation. Students must pass at least six separate certification exams given by Microsoft to receive the MCSE designation.

ITMC	1401	MS Windows 2000 Network & OS Essentials
ITMC	1419	Installing and Administering Windows 2000
ITMC	1341	Implementing MS Windows 2000 Professional and Server
ITMC	1342	Implementing a MS Windows 2000 Network Infrastructure
ITNW	1392**	Special Topics in Business Systems and Telecommunications

* Special Fees Apply
**Capstone Course

Electro-Mechanical Technology

This degree program is designed to prepare the student to perform technical skills necessary for employment in positions including Mechanical Lab Technician, Industrial Locksmith, Assembler, Inspector, and Electro/Mechanical Technician. Employment for graduating students of this program may be available at any business or company that contains automation equipment. This includes industrial manufacturing, car wash facilities, agriculture, warehouses and traffic management.

Advisory Committee

Todd Campbell, Sopatkco Texas
Skip Mills, Texas Engineering Experiment Station
Jim Luther, H-E-B Facility Services
Mike Mashal, Tyson Foods
John Swift, SMI Steel Mill

Curricular Requirements: Electro-Mechanical Technology

First Year

First Semester

PHYS	1305	Introductory Physics I
ITSC	1309	Integrated Software Applications
CETT	1208	DC-AC Circuits
HYDR	1305	Basic Hydraulics
CETT	1325	Digital Fundamentals

14 Hours

Second Semester

PHYS	1307	Introductory Physics II
WLDG	1421	Introduction to Welding Fundamentals
IEIR	1306	Electric Motors
INTC	1357	AC/DC Motor Control
HART	2431	Advanced Electricity

17 Hours

Summer Session

Humanities Elective

3 Hours

Second Year

First Semester

INTC	1305	Introduction to Electronic Instrumentation
SPCH	1318	Interpersonal Communication
DFTG	1329	Electro-Mechanical Drafting
HYDR	1345	Hydraulics and Pneumatics
INTC	1312	Introduction to Instrumentation Technology

15 Hours

Second Semester

ELMT	1301	Basic Programmable Logic Controllers
EPCT	1307	Introduction to Environmental Safety & Health
ELPT	1351	Electrical Machines
ENGL	1301	Freshman Composition
SOCI	1301	Introduction to Sociology
or		
PSYC	2301	Introduction to Psychology

15 Hours

Summer Session

ELMT	1380	Cooperative Education— Electromechanical Technology/Technician

3 Hours

TOTAL 67 HOURS

BASIC ELECTRO-MECHANICAL TECHNOLOGY CERTIFICATE

PHYS	1305	Introductory Physics I
ITSC	1309	Integrated Software Applications
CETT	1208	DC-AC Circuits
HYDR	1305	Basic Hydraulics

WLDG	1421	Introduction to Welding Fundamentals

15 Hours

ELECTRO-MECHANICAL ASSISTANT CERTIFICATE

First Year

First Semester

PHYS	1305	Introductory Physics I
ITSC	1309	Integrated Software Applications
CETT	1208	DC-AC Circuits
HYDR	1305	Basic Hydraulics
CETT	1325	Digital Fundamentals

14 Hours

Second Semester

PHYS	1307	Introductory Physics II
WLDG	1421	Introduction to Welding Fundamentals
IEIR	1306	Electric Motors
INTC	1357	AC/DC Motor Control
HART	2431	Advanced Electricity

17 Hours

TOTAL 31 HOURS

ELECTRO-MECHANICAL TECHNICIAN CERTIFICATE

First Year

First Semester

PHYS	1305	Introductory Physics I
ITSC	1309	Integrated Software Applications
CETT	1208	DC-AC Circuits
HYDR	1305	Basic Hydraulics
CETT	1325	Digital Fundamentals

14 Hours

Second Semester

PHYS	1307	Introductory Physics II
WLDG	1421	Introduction to Welding Fundamentals
IEIR	1306	Electric Motors
INTC	1357	AC DC Motor Control
HART	2431	Advanced Electricity

17 Hours

Summer Semester

Humanities Elective 3 Hours

Second Year

First Semester

INTC	1305	Introduction to Electronic Instrumentation
SPCH	1318	Interpersonal Communication
DFTG	1329	Electro-Mechanical Drafting
HYDR	1345	Hydraulics and Pneumatics
INTC	1312	Introduction to Instrumentation Technology

15 Hours

TOTAL 49 HOURS

Environmental Technologies

The Environmental Technologies program will provide graduates with technical skills for career opportunities in the environmental sciences. Options in the program include completion of an Associate of Applied Science degree in Environmental Technologies, a Certificate in Environmental Compliance Management, or a Certificate in Water Resources Management, a Certificate in Environmental Project Management, and a Certificate in International Environmental Management.

Advisory Committee

Michael Albach, Bexar Metropolitan Water District
Catherine Rainwater, Our Lady of the Lake University
Gerard Sikkema, Synergistic Environmental Systems
James Montgomery, Air Force Center for Environmental Excellence
Doug Wright, Southwest Research Institute
Glen Turney, Versar, Inc.
Richard Atiyeh, Southwest Research Institute
Debi Hurrell-Zitelman, PSI
Charysse Knotts, Geo-Marine, Inc.
Lynn Kitchen, Adams Environmental, Inc.

Curricular Requirements: Environmental Technologies

First Year

First Semester

EPCT	1343	Treatment, Remediation, and Disposal Techniques
ENGL	1301	Freshman Composition I
MATH	1314	College Algebra
EPCT	1349	Environmental Regulation Interpretation and Applications
ENVR	1401*	Environmental Science
or		
EPCT	1311	Introduction to Environmental Science

15/16* Hours

Second Semester

GEOL	1401	Earth Sciences I
BMGT	1303	Principles of Management
EPCT	1344	Environmental Sampling and Analysis
EPCT	2333	Environmental Toxicology
ENGL	1302	Freshman Composition II

16 Hours

Second Year

First Semester

ITSC	1309	Integrated Software Applications I
SPCH	1321	Business and Professional Speech
EPCT	1401	Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics
ENGL	2311	Technical Writing
MATH	1442	Elements of Statistics

17 Hours

Second Semester

ENGR	1304	Engineering Graphics
Elective		Humanities/Fine Arts Elective
Elective		Social/Behavioral Science Elective
EPCT	1328	Basic Wastewater Operations
	or	
EPCT	2403	Surface and Groundwater Collection
BMGT	2331	Total Quality Management

15 Hours

Summer Session

EPCT	1392	Special Topics in Water Quality and Wastewater Treatment Technology/Technician—Water Resources Management in South Central Texas
	or	
EPCT	1392	Special Topics in Water Quality and Wastewater Treatment Technology/Technician—International Environmental Management

3 Hours

TOTAL 67 HOURS

ENVIRONMENTAL REGULATIONS MANAGEMENT CERTIFICATE

ENVR	1401	Environmental Science
EPCT	1349	Environmental Regulation Interpretation and Applications
EPCT	1343	Treatment, Remediation, and Disposal Techniques
EPCT	1401	Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics
EPCT	2333	Environmental Toxicology

17 Hours

INTERNATIONAL ENVIRONMENTAL MANAGEMENT CERTIFICATE

ENVR	1401	Environmental Science
EPCT	1349	Environmental Regulation Interpretation and Applications
BMGT	1303	Principles of Management
EPCT	1344	Environmental Sampling and Analysis
EPCT	1401	Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics
EPCT	1392	Special Topics in Water Quality and Wastewater Treatment Technology/Technician—International Environmental Management

20 Hours

ENVIRONMENTAL COMPLIANCE MANAGEMENT CERTIFICATE

ENVR	1401	Environmental Science
EPCT	1349	Environmental Regulation Interpretation and Applications
EPCT	1343	Treatment, Remediation, and Disposal Techniques
EPCT	1344	Environmental Sampling and Analysis
EPCT	2333	Environmental Toxicology
EPCT	1401	Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics

20 Hours

WATER RESOURCES MANAGEMENT CERTIFICATE

First Year

First Semester

ENVR	1401	Environmental Science
EPCT	1349	Environmental Regulation Interpretation and Applications
EPCT	1344	Environmental Sampling and Analysis
EPCT	2333	Environmental Toxicology

13 Hours

Second Semester

EPCT	1328	Basic Wastewater Operations
EPCT	2403	Surface and Groundwater Collection
EPCT	1392	Special Topics in Water Quality and Wastewater Treatment Technology/Technician—Water Resources Management in South Central Texas

10 Hours

TOTAL 23 HOURS

ENVIRONMENTAL PROJECT MANAGEMENT CERTIFICATE

ENVR	1401	Environmental Science
EPCT	1349	Environmental Regulation Interpretation and Applications
BMGT	1303	Principles of Management
EPCT	1344	Environmental Sampling and Analysis
EPCT	1401	Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics
BMGT	2331	Total Quality Management

20 Hours

Landscape and Horticultural Science

The degree and certificate programs are designed for the student entering the field of landscaping and for the professional who wants to expand his or her knowledge in the field. Emphasis is placed on the commercial application of skills learned in the program. Three certificates in specialized areas are also available to students who already possess skills in the area. These certificates are Basic Nursery and Landscape Operations, Turf and Landscape Irrigation, and Landscape and Horticultural Science Certificate. Employment for graduating students of this program may be available in landscaping businesses (independent and corporate), residential complexes (apartment and residential organizations), parks and recreational facilities. Positions include but are not limited to superintendents, management and sales.

Advisory Committee

Richard Thompson, Thompson Landscaping
Mark Wanke, Hall Irrigation Systems
Jeff Wisenbaker, Wisenbaker Horticultural Services
Lynn Rawe, Bexar County Cooperative Extension Service
Olivier Bourguin, Progressive Landscape
Mike Wilkinson, Sprinkler King of Texas, Inc.
Don Weiss, Longhorn, Inc.
Jose Perez, Fairway Landscape and Nursery
Roxanne Rosales, San Antonio ISD
M. Scott Kelley, Peerless Farms, Inc.

Curricular Requirements: Landscape & Horticultural Science

First Year

First Semester

HALT	1301	Principles of Horticulture
BMGT	1303	Principles of Management
ITSC	1309	Integrated Software Applications
HALT	1303	Herbaceous Plants
ENGL	1301	Freshman Composition I

15 Hours

Second Semester

HALT	1398	Special Topics in Horticulture
BIOL	1411	General Botany
HALT	1331	Woody Plant Materials
HALT	1333	Landscape Irrigation
MATH	1314	College Algebra
or		
MATH	1332	Math for Liberal Arts
or		
CHEM	1406*	Introduction to Chemistry I

15/16* Hours

Summer Session

Humanities Elective

3 Hours

Second Year

First Semester

HALT	2318	Soil Fertility and Fertilizers
HALT	2323	Horticultural Pest Control
HALT	1324	Turfgrass Science & Management
HALT	1319	Landscape Construction
SOCI	1301	Introduction to Sociology
or		
PSYC	2301	Introduction to Psychology

15 Hours

Second Semester

SPCH	1311	Fundamentals of Speech
or		
SPCH	1321	Business and Professional Speech
HALT	1351	Landscape Business Operations
HALT	1398	Special Topics in Horticulture
HALT	1322	Landscape Design
HALT	2314	Plant Propagation

15 Hours

Summer Semester

HALT	2386**	Internship—Horticultural Service Operations & Management, General

3 Hours

TOTAL 66/67* HOURS

** Capstone Course

LANDSCAPE AND HORTICULTURAL SCIENCE CERTIFICATE

First Year

First Semester

HALT	1301	Principles of Horticulture
ITSC	1309	Integrated Software Applications
HALT	1324	Turfgrass Science & Management
HALT	1303	Herbaceous Plants

12 Hours

Second Semester

BMGT	1303	Principles of Management
HALT	1333	Landscape Irrigation
HALT	1331	Woody Plant Materials
HALT	1322	Landscape Design OR
HALT	1319	Landscape Construction
or		
HALT	2314*	Plant Propagation

12 Hours

* Capstone Course

Second Year

First Semester

HALT	2318	Soil Fertility and Fertilizers
HALT	2323	Horticultural Pest Control
HALT	1351	Landscape Business Operations
HALT	1398	Special Topics in Horticulture
HALT	1398	Special Topics in Horticulture

15 Hours

TOTAL 39 HOURS

TURF AND LANDSCAPE IRRIGATION CERTIFICATE

First Year
First Semester

HALT	1301	Principles of Horticulture	
INTC	1357	AC/DC Motor Control	
HALT	1324	Turfgrass Science & Management	
HALT	1303	Herbaceous Plants	
			12 Hours

Second Semester

HALT	1319	Landscape Construction	
HALT	1333	Landscape Irrigation	
HALT	1331*	Woody Plant Materials	
HALT	1398	Special Topics in Horticulture	
			12 Hours

TOTAL 24 HOURS

* Capstone Course

BASIC NURSERY & LANDSCAPE OPERATIONS CERTIFICATE

First Year
First Semester

HALT	1301	Principles of Horticulture	
HALT	1324	Turfgrass Science & Management	
HALT	2318	Soil Fertility and Fertilizers	
HALT	1303	Herbaceous Plants	
			12 Hours

Second Semester

HALT	1331	Woody Plant Materials	
HALT	1333	Landscape Irrigation	
HALT	1322*	Landscape Design	
or			
HALT	1319*	Landscape Construction	
or			
HALT	2314 *	Plant Propagation (capstone)	
			9 Hours

*Capstone course

TOTAL 21 HOURS

Logistics Management

The Logistics Management Program is designed to prepare students for management careers in transportation, warehousing, distribution, inventory control, purchasing, and international logistics. Students will study logistics principles and practices involved in procurement, transportation, storage, and third party provision as they apply to solving management problems in movement, storage, control, and information flow. The program includes an internship at an approved logistics management worksite. The Logistics Management Program will graduate students with the managerial skills and competencies required for jobs in logistics, materials management, distribution, and transportation. The program is certified by the American Society of Transportation and Logistics.

Advisory Committee

Tom Delgado, President, Fiesta Warehousing & Distribution
Alejandra Calvillo, Cross Border Manager, Auto Zone Inc.
Carlos Cruz, Logistics Coordinator, Menlo Logistics
Bob Vetters, Director, Texas Warehouse Association
John Thompson, Logistics Manager, SOPAKO Texas
Rick Staller, President, Bee Trucking Inc.
K. Blake Hastings, Executive Director, Free Trade Alliance San Antonio
Joel Garza, Import Development Specialist, H-E-B Int'l Procurement

Curricular Requirements: Logistics Management

First Year

First Semester

MATH	1314	College Algebra
ENGL	1301	Freshman Composition I
ITSC	1309	Integrated Software Apps. I
BMGT	1301	Principles of Supervision
LMGT	1319	Intro to Business Logistics Management

15 Hours

Second Semester

Elective		Social/Behavioral Science
BMGT	1301	Principles of Management
LMGT	1325	Warehouse & Distribution Center Management
SPCH	1321	Business & Professional Speech
Elective		Directed – Selected Certificate Program

15 Hours

Second Year

First Semester

Elective		Humanities/Fine Arts
SPAN	1411/2311	Elementary or Intermediate Spanish I
Elective		Directed – Selected Certificate Program
MRKG	1311	Principles of Marketing
LMGT	1323	Domestic & Int'l Trans. Management
BMGT	1331	Production & Operations Management

15 Hours

Second Semester

SPAN	1412/2312	Elementary or Intermediate Span II
BUSI	2301	Business Law I
ACCT	2301	Principles of Accounting I
ECON	2302	Principles of Microeconomics
BMGT	1313	Principles of Purchasing Management

18 Hours

Third Semester

BMGT	2488*	Internship – Business Administration and Management General

4 Hours

TOTAL 67 HOURS

*Capstone course for AAS degree.

LOGISTICS MANAGEMENT CERTIFICATE

First Year

First Semester

MATH	1314	College Algebra
ENGL	1301	Freshman Composition I
ITSC	1309	Integrated Software Applications
BMGT	1303	Principles of Supervision
LMGT	1319	Introduction to Business Logistics Management

15 Hours

Second Semester

BMGT	1301	Principles of Management
LMGT	1325	Warehouse & Distribution Center Management
ECON	2302	Principles of Microeconomics
LMGT	1323*	Domestic & International Transportation Mgt.

15 Hours

Total 30 Hours

* Capstone course for Logistics Management Certificate

WAREHOUSE MANAGEMENT CERTIFICATE

First Year

First Semester

LMGT	1319	Introduction to Business Logistics Management
LMGT	1325*	Warehouse & Distribution Center Management
ITSC	1309	Integrated Software Applications
BMGT	1303	Principles of Supervision
LMGT	1393	Special Topics in Logistics Management I

TOTAL 15 HOURS

* Capstone course for Warehouse Management Certificate

MANUFACTURING MANAGEMENT CERTIFICATE*

LMGT	1319	Introduction to Logistics
ITSC	1309	Integrated Software Applications
BMGT	1301	Principles of Supervision
MATH	1314	College Algebra
BMGT	2331	Total Quality Management
BMGT	1313	Purchasing Management
BMGT	1331**	Production/Operations Management

Total 21 Hours

*Pending Texas Higher Education Coordinating Board approval
**Capstone course for Manufacturing Management Certificate

TRANSPORTATION MANAGEMENT CERTIFICATE*

LMGT	1319	Introduction to Logistics
ITSC	1309	Integrated Software Applications
BMGT	1301	Principles of Supervision
LMGT	1323	Domestic & International Transportation Mgt.
LMGT	1393	Special Topics: Transportation Issues
LMGT	2334**	Principles of Traffic Management

TOTAL 18 HOURS

*Pending Texas Higher Education Coordinating Board approval
**Capstone course for Transportation Management Certificate

INTERNATIONAL LOGISTICS MANAGEMENT CERTIFICATE*

LMGT	1319	Introduction to Logistics
ITSC	1309	Integrated Software Applications
BMGT	1301	Principles of Supervision
LMGT	1323	Domestic & International Transportation Mgt
SPNL	1342	Business Spanish
or		
SPAN	2312	Intermediate Spanish II
LMGT	2330**	International Logistics Management
IBUS	2345	Import Customs Regulations

TOTAL 21 HOURS

*Pending Texas Higher Education Coordinating Board approval
**Capstone course for International Logistics Management Certificate

LOGISTICS MANAGEMENT DIRECTED ELECTIVES

Students should pick two electives from the following list based on which certificates they choose to achieve as part of the AAS.

LMGT	1393	Special Topics – Warehouse Issues
LMGT	1393	Special Topics – Transportation Issues
LMGT	1393	Special Topics – Logistics Issues
SPNL	1342	Business Spanish (Logistics)
LMGT	2330	International Logistics Management
LMGT	2334	Principles of Traffic Management

IBUS	2345	Import Customs Regulations
BMGT	2331	Total Quality Management

SOCIAL/BEHAVIORAL SCIENCE

ANTH	2346
GOVT	2305, 2306
HIST	1301-2380
IDST	1301-2377
PSYC	2301-2371
SOCI	1301-2301

HUMANITIES/FINE ARTS

ARTS	1301-2372
DRAMA	1310-2336
HUMA	1301, 1302
MUSIC	1306-1312, 2311-2312
PHIL	1301-2306

Management

The primary focus of the Management Program is to prepare students currently employed for entry-level and mid-level supervisory/management positions. The program, with its AAS degree, has been designed to provide students with skills, knowledge and abilities required in the current management environment. This program places heavy emphasis on interpersonal, communication, and decision-making skills. Cooperative work experience course work is a requirement for completion of this program.

Advisory Committee

Keith Barrom, H.B. Zachry Company
Warren Camarano, Adjunct Instructor
Tom Crespin, General Growth Management, Inc.
Frances Garza, Poteet Independent School District
Richard H. Garza, Bexar Metropolitan Housing Corporation
Barbara James, Southwest Research Institute
Stephen W. Mokry, City Public Service
Robert Norman, South San Antonio Independent School District

Curricular Requirements: Management

First Year

First Semester

BMGT	1303	Principles of Management	
ENGL	1301	Freshman Composition I	
COSC	1300	Computer Literacy	
SPCH	1311	Fundamentals of Speech	
		Humanities or Fine Arts Elective	
			15 Hours

Second Semester

MATH	1314	College Algebra	
		Social or Behavioral Science Elective	
GOVT	2305	American Government I (National)	
ECON	2302	Principles of Microeconomics	
BMGT	1301	Principles of Supervision	
			15 Hours

Second Year

First Semester

BUSI	1301	Introduction to Business
ACCT	2301	Principles of Accounting I
ECON	2301	Principles of Macroeconomics
MRKG	1311	Principles of Marketing
		Directed Elective*

15 Hours

Second Semester

PHIL	2305	Ethics
		Natural Science Elective
ACCT	2302	Principles of Accounting II
HRPO	2301	Human Resource Management
BMGT	2382***	CO-OP in Education - Business Administration & Management, General**

15-16 Hours

TOTAL 60 HOURS

*A directed elective course will require the approval of advisor. The course taken must be one that is consistent with the student's career objective. See following list.

**A suitable course may be substituted for BMGT 2382 based on the approval of the Dean of Occupational and Technical Education.

***Capstone course for AAS Degree

AAS DEGREE MANAGEMENT DIRECTED ELECTIVES

AIRP	1313	Introduction to Aviation
AVIM	1301	Introduction of AVT Management
BUSI	1307	Personal Finance
BUSI	2307	Business Law I
ITSW	2334	Advanced Spreadsheets
ITSE	1350	Systems Analysis and Design
LMGT	1319	Introduction to Business Logistics
MATH	1325	Calculus for Business
BUSI	1311	Principles of Salesmanship

ENTRY-LEVEL SUPERVISION CERTIFICATE

The Entry-Level Supervision Certificate curriculum is for students to be entry-level supervisors with the necessary knowledge and skills. This certificate program is designed to provide a student with an exit point in the AAS Management Program and with the marketable skills, knowledge, and abilities that will make them more attractive and marketable for entry level management (supervisory) positions.

First Year

First Semester

COSC	1300	Computer Literacy
ENGL	1301	Freshman Composition I
BMGT	1303	Principles of Management
SPCH	1311	Fundamentals of Speech

12 Hours

Second Semester

PSYC	2301	Introduction to Psychology
BMGT	1301	Supervision
BMGT	2382*	Cooperative Education, Business Administration & Management, General

9 Hours

*Capstone course for Entry Level Supervision Certificate

TOTAL 21 HOURS

LEADERSHIP CERTIFICATE

This certificate program focuses on the skills expressly desired in management and supervision. This program is designed for the student wanting to enter a position of leadership and for the professional who wants to expand his or her knowledge. Courses will prepare the student to identify and utilize specific leadership styles and skills in motivating and communicating with fellow workers. It will prepare students for employment and volunteer services in both profit and not-for-profit organizations.

Advisory Committee

Priest Cantu, Office of Carlos I. Uresti
Rene Ruiz, Office of John A. Longoria
Beverly Zech, VIA Metropolitan Transit
Jonathan Lane, The Enterprise Foundation
J. R. Molleda, City Public Service
Jim Johnson, San Antonio River Authority
Dave (Randy) Bruett, Alamo Workforce Development Inc.
Pam Garcia, Goodwill Industries
Roger Gonzalez, SER Jobs for Progress, Inc.
Sameera Hashmi, American Red Cross-San Antonio Chapter
Katrina Ornelas, Heartland Home Care & Hospice
Richard Rocha, Edgewood ISD
Cesar Rocha, South San Antonio Chamber of Commerce
Ed Shannon, Brooks AFB
Joanne Valdez, Southwest General Hospital

Curriculum: Leadership Certificate

First Year

First Semester

BMGT	1301	Supervision
QCTC	1305	Teaming
HRPO	1301	Customer Relations
PSYT	1303	Dynamics of Human Relations

12 Hours

Second Semester

BMGT	2309	Leadership
BMGT	2347	Critical Thinking and Problem Solving
or		
IBUS	2341	International Comparative Management
or		
POFT	1328	Business and Professional Presentations
BMGT	2303	Problem Solving and Decision Making
HRPO	2307	Organizational Behavior
BMGT	2341*	Strategic Management

15 Hours

* Capstone Course

TOTAL 27 HOURS

TELECOMM TECHNOLOGY CERTIFICATE

This certificate program is designed to prepare students for employment as Help Desk Techs, Service Technicians, Telecomm Specialists, and Account Managers within the wireless industry. Communication, Human Relation, and technical skills and knowledge are the focus of this course of study.

Advisory Committee

Dave (Randy) Bruett, Alamo Workforce Development
Mary Buckley, Voicestream Wireless
Don Crites, Radio Shack
Iris Seals, Brooks AFB
Peter Farrow, Security Service FCU

Curricular Requirements: Telecomm Technology Certificate

First Year

First Semester

HRPO	1311	Human Relations
SPCH	1318	Interpersonal Communications
EECT	1303	Introduction to Telecommunications
POFT	1329	Keyboarding and Document Formatting
BUSI	1301	Introduction to Business

15 Hours

Second Semester

HRPO	1301	Customer Relations
BUSI	1311	Principles of Salesmanship
RTVB	1341	Communication Technologies
EECT	1391*	Special Topics in Electrical, Electronic and Communication Engineering Technology
RTVB	1317	Survey of Electronic Media
or		
EECT	2337	Wireless Telephony Systems

15 Hours

* Capstone Course

TOTAL 30 HOURS

Turfgrass and Golf Course Management

The degree and certificate program qualifies the graduate as a turfgrass manager or turfgrass specialist. Employment for graduating students of this program may be available at golf courses, turf farms, parks or recreational facilities. Positions include but are not limited to superintendents of golf courses, or sales representatives of seed or agricultural supply companies.

Advisory Committee

Roxanne Rosales, San Antonio ISD
Stephen Hutchinson, Lesco Inc.
Jimmy Thomas, Hyatt Regency Hill Country Resort
Bruce Burger, The Quarry Golf Club
Brad Hines, La Cantera Golf Course
Don Hardin, Northside Independent School District
James Holcomb, Oak Hills Country Club
John Titzman, AMC Industries
David Doguet, Bladerunner Farms
Gregory Nelson, Estes, Inc.
Don Thompson, Turfgrass America
Barry Carter, Oak Hills Golf Course

Curricular Requirements: Turfgrass & Golf Course Management

First Year

First Semester

HALT	1301	Principles of Horticulture	
HALT	1324	Turfgrass Science & Management	
ITSC	1309	Integrated Software Applications	
HALT	1303	Herbaceous Plants	
ENGL	1301	Freshman Composition I	
			15 Hours

Second Semester

BMGT	1303	Principles of Management	

HALT	2312	Turfgrass Maintenance
HALT	1331	Woody Plant Materials
HALT	1333	Landscape Irrigation
BIOL	1411	General Botany

16 Hours

Second Year

First Semester

HALT	2318	Soil Fertility and Fertilizers
HALT	2323	Horticultural Pest Control
HALT	1345	Golf/Sport Field/Park Management
HALT	1346	Specialized Turfgrass Management
MATH	1314	College Algebra
or		
MATH	1332	Math for Liberal Arts
or		
CHEM	1406*	Introduction to Chemistry I

15/16* Hours

Second Semester

SPCH	1311	Fundamentals of Speech
or		
SPCH	1321	Business and Professional Speech
HALT	1397	Special Topics in Turf Management
HALT	1322	Landscape Design
		Humanities/Fine Arts Elective
SOCI	1301	Introduction to Sociology
or		
PSYC	2301	Introduction to Psychology

15 Hours

Summer Semester

HALT	2383**	Cooperative Education—Turf Management

3 hours

TOTAL 64/65* HOURS

** Capstone Course

TURFGRASS AND GOLF COURSE MANAGEMENT CERTIFICATE

First Year

First Semester

HALT	1301	Principles of Horticulture	
HALT	1324	Turfgrass Science & Management	
ITSC	1309	Integrated Software Applications	
HALT	1303	Herbaceous Plants	
			12 hours

Second Semester

BMGT	1303	Principles of Management	
HALT	2312	Turfgrass Maintenance	
HALT	1331	Woody Plant Materials	
HALT	1333	Landscape Irrigation	
			12 hours

Second Year

First Semester

HALT	2318	Soil Fertility and Fertilizers	
HALT	2323	Horticulture Pest Control	
HALT	1345	Golf/Sport Field/Park Management	
HALT	1346*	Specialized Turfgrass Management	
			12 hours

TOTAL 36 HOURS

* Capstone Course

HUMANITIES/FINE ARTS ELECTIVES

ARTS	1301	Art Appreciation
MUSI	1306	Music Appreciation
DRAM	1310	Theater Appreciation
HUMA	1301	Introduction to Humanities

Veterinary Technology

The Veterinary Technology Associate of Applied Science degree program is designed to prepare students to work as registered veterinary technicians. Students completing the program will have technical skills and competencies to assist veterinarians in industrial, commercial, and research settings as well as in pharmaceutical companies and animal handling retail businesses.

The Veterinary Technology program was accredited in 1998 by the Committee on Animal Technician Activities and Training of the American Veterinary Medical Association (AVMA). Accreditation allows graduates to be eligible to take the Texas Veterinary Medical Association's examination to become a Registered Veterinary Technician.

Admission to the Veterinary Technology program is limited to 36 qualified students every fall semester. Prospective students are encouraged to have a previous clinical experience. After submitting an application, an appointment for an orientation session with a program staff member can be made. Application deadline is June 1 and will be reviewed by June 15. All applicants will be notified following the review date of their status. Accepted students must have the following before entrance into the first semester: Physical exam, Tetanus and Rabies prophylaxis.

Advisory Committee

Noberto Espitia, Texas A & M University
Dr. Scott Gearhart, San Antonio Zoo
Dr. Roque Gonzales, Highland Animal Hospital
John Graham, South Texas Serum
Dr. John Herbold, UT-Houston School of Public Health
Linda Larson, Mission Animal Hospital
Dr. Dennis McIntosh, El Dorado Animal Hospital
Dr. Jake Wells, Cibolo Valley Animal Hospital
Dr. Robert Wolf, UT Health Science Center

Curricular Requirements: Veterinary Technology

First Year

Summer I Session

CHEM	1406	Introductory Chemistry I
ITSC ***		Computer Course
SPCH**		Speech Course

10 Hours

Summer II Session

BIOL	1408	General Biology I	
or			
BIOL	1413	General Zoology	
ENGL	1301	Freshman Composition I	
			7 Hours

Fall Semester

VTHT	1291	Special Topics	
VTHT	1301	Introduction to Veterinary Technology	
VTHT	1205	Veterinary Medical Terminology	
VTHT	1209	Veterinary Nutrition	
VTHT	1413	Veterinary Anatomy and Physiology	
			13 Hours

Spring Semester

VTHT	1291	Special Topics	
VTHT	1349	Veterinary Pharmacology	
VTHT	2313	Laboratory Animal Clinical Management	
VTHT	2301	Canine & Feline Clinical Management	
VTHT	2323	Veterinary Clinical Pathology I	
			14 Hours

Summer Session

VTHT	2366*	Practicum	3 Hours

Second Year

Fall Semester

PSYC	2301	Introduction to Psychology	
VTHT	2325	Large Animal Assisting Techniques	
VTHT	2331	Veterinary Clinical Pathology II	
VTHT	1341	Anesthesia and Surgical Assistance	
VTHT	1125	Pharmacological Calculations	
			13 Hours

Spring Semester

VTHT	1317	Veterinary Office Management
VTHT	1345	Veterinary Radiology
VTHT	2260	Veterinary Technology Clinicals
VTHT	1191	Special Topics
Elective		Humanities / Fine Arts Elective

12 Hours

*Capstone Course
**SPCH 1311, 1318 or 1321
*** ITSC 1309, 1301 or COSC 1301

TOTAL 72 HOURS

The student **must** select one course from the following Humanities/Fine Arts Electives:

ARTS 1301	MUSI 1306	DRAM 1310	HUMA 1301
PHIL 1301	PHIL 2303	PHIL 2306	SPAN 1411

ANIMAL HEALTH ASSISTANT CERTIFICATE

First Year

Summer I Session

CHEM	1406	Introductory Chemistry I
ITSC	1309	Integrated Software Applications I
SPCH	1318	Interpersonal Communication

10 Hours

Summer II Session

BIOL	1413	General Zoology
ENGL	1301	Freshman Composition I

7 Hours

Fall Semester

VTHT	1301	Introduction to Veterinary Technology
VTHT	1205	Medical Terminology
VTHT	1413	Animal Anatomy and Physiology
VTHT	1291	Special Topics in Veterinary Technology

11 Hours

Spring Semester

VTHT	2313	Laboratory Animal Clinical Management	
VTHT	1349	Veterinary Pharmacology	
VTHT	2301	Canine and Feline Clinical Management	
VTHT	1291	Special Topics in Veterinary Technology	
			11 Hours

SECOND YEAR

Fall Semester

VTHT	2325	Large Animal Assisting Techniques	
VTHT	1317*	Veterinary Office Management	
VTHT	1191	Special Topics in Veterinary Technology	
			7 Hours

*Capstone course for Animal Health Assistant Certificate

TOTAL 46 HOURS

Internships and Cooperative Education

Internships and Cooperative Education are a purposeful blending of on-campus classroom instruction and employment or credit assignment within the community to assist students in developing competencies in their field of concentration. Students enrolled in Occupational and Technical programs follow a program of studies which requires the student to complete the development of competencies needed to enter and succeed in their career field. Arts and Sciences students benefit from cooperative work experience through meeting identified competencies in the professional field which they plan to enter. The student, the school, and the community benefit from the programs as they interact to develop individuals having a broader range of competencies, as the students complete their education at Palo Alto College.

CURRICULAR OFFERINGS

Explanation of Course Numbers

COURSE NUMBERING: The first numeral indicates the level of the course. A freshman level course begins with a "1," and a sophomore level course begins with a "2." Developmental courses begin with a "0." The second numeral indicates the semester hour value of the course. The last two numerals are used for departmental sequence. Example: History 1301 is a freshman level course of three semester hours credit.

Course Descriptions

COURSE DESCRIPTIONS: As part of each course description, there are three numbers within parentheses. The first number indicates the semester hour value of the course, the second number indicates the number of lecture hours per week the class meets, and the third number indicates the number of laboratory hours per week the class meets. Example: (3-3-3) indicates the course has three semester hours credit value, meets for three hours of lecture per week and three laboratory hours per week. Hours met per week are based on semester-length classes.

Common Course Numbering

Beginning with the Fall 1993 Semester, Palo Alto College adopted the common course numbering system being used by many of the colleges in Texas. This system allows students to compare courses between colleges and know that those with the same designations are the same course. This affects academic courses only.

Occupational-Technical Course Designation Changes

As a result of state-mandated changes, several occupational-technical courses and programs have new alphanumeric designators in this publication. For a full explanation, please refer to the Graduation section. For changes appearing the first time in this catalog, cross-reference charts to previous course numbers are included at the end of this section, Curricular Offerings.

ACCOUNTING

ACCT 2301 Principles of Accounting I
(3-3-1)

An introduction to business external financial reporting; designed to create an awareness of the accounting concepts and principles used in preparing the three basic financial statements: the income statement, balance sheet, and statement of cash flows. The course is designed for all business students. **Lab Fee.**

ACCT 2302 Principles of Accounting II
(3-3-1)

Prerequisite: ACCT 2301

An introduction to the determination, development and uses of internal accounting information needed by business management to satisfy customers while continuously controlling and containing costs. The course is designed for all business students. **Lab Fee.**

ACCT 2370 Introduction to Accounting Topics
(3-3-0)

Prerequisite: ACCT 2302

This course covers advanced managerial accounting topics including: cost accounting, cost behavior, cost/volume/profit analysis, variable costing, profit planning/budgeting, standard costs, segmented income statements, relevant cost for business decision-making, and individual federal income taxes. Emphasis is on use of accounting data within an organization by its managers to carry out their responsibilities for planning operations, controlling activities and making decisions.

ACNT 1303 Introduction to Accounting I
(Formerly OST 1317 Elementary Accounting)

Prerequisite: None. Recommend MATH 0300 be taken before or concurrently.

A study of analyzing, classifying and recording business transactions in a manual and computerized environment. Emphasis of this course is on understanding the complete accounting cycle and preparing financial statements, banks reconciliation, and payroll. **Lab Fee.**

ADMINISTRATIVE COMPUTER TECHNOLOGY

[Formerly OFFICE SYSTEMS TECHNOLOGY (OST) – A cross reference to previous course numbers is included at the end of Curricular Offerings.]

ACNT 1303 Introduction to Accounting I

(Formerly OST 1317)

(3-3-1)

See ACCOUNTING section.

HRPO 1311 Human Relations

(Formerly OST 1310)

(3-3-0)

See HUMAN RESOURCE MANAGEMENT section.

ITSW 1301 Introduction to Word Processing

(Formerly OST 1320)

(3-3-0)

Recommended: Introduction to Computers and keyboarding proficiency.

An overview of the production of documents, tables, and graphics. **Lab Fee.**

POFI 1301 Computer Applications I

(Formerly OST 1340)

(3-3-0)

Recommended: Keyboarding proficiency

Overview of computer applications including current terminology and technology. Introduction to computer hardware, software applications and procedures. **Lab Fee.**

POFI 1341 Computer Applications II

(Formerly OST 2345)

(3-2-3)

Prerequisites: POFI 1301 or equivalent.

Continued study of current computer terminology and technology. Advanced skill development in computer hardware, software applications, and procedures. **Lab Fee.**

POFI 2301 Word Processing

(Formerly OST 2330)

(3-2-3)

Prerequisites: POFT 2301 with a grade of "C" or better.

Instruction in the various aspects of a word processing software package. Emphasis on the use of text editing features to produce business documents. **Lab Fee.**

POFI 2331 Desktop Publishing for the Office

(Formerly OST 2360)

(3-3-0)

Recommended: Typing speed of 40 wpm and some word processing skills.

In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, and multiple page displays. **Lab Fee.**

POFT 1302 Business Communications I

(Formerly OST 1311)

(3-3-0)

Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business.

POFT 1309 Administrative Office Procedures I

(Formerly OST 1306)

(3-3-0)

Recommended: Basic keyboarding skills

Study of current office procedures including telephone skills, time management, travel and meeting arrangements, mail processing, and other duties and responsibilities in an office environment.

POFT 1313 Professional Development for Office Personnel

(Formerly OST 2310)

(3-3-0)

Preparation for the work force including business ethics, team work, professional attire, and promotability.

POFT 1319 Records and Information Management I

(Formerly OST 1305)

(3-3-0)

Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic record management, and basic filing procedures and rules.

POFT 1329 Keyboarding and Document Formatting (Non-Majors)

(Formerly OST 1301)

(3-3-0)

Skill development in the operation of the keyboard by touch, applying proper keyboarding techniques. Emphasis on development of acceptable speed (25 wpm) and accuracy (5 or less errors) levels and formatting basic documents. **Lab Fee.**

POFT 1331 Business Machine Applications

(Formerly OST 1109)

(3-3-0)

Skill development in the operation of machines used in a business environment. Emphasis on the development of skills in using electronic calculators and other office machines such as fax, telephone equipment, and reprographics. **Lab Fee.**

POFT 1345 Shorthand/Notetaking I

(Formerly OST 1304)

(3-2-3)

Prerequisite: Basic document production proficiency

An introduction to shorthand/notetaking principles. Mastery of accurate reading and writing of notes to produce mailable documents from dictation. **Lab Fee.**

POFT 1349 Administrative Office Procedures II

(Formerly OST 2326)

(3-2-3)

Prerequisites: POFT 1309 or equivalent competencies.

Advanced office application with special emphasis on decision making, goal setting, management theories, and critical thinking. **Lab Fee.**

POFT 1392 Special Topics in Administrative Assistant/ Secretarial Science, General

(3-2-3)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Topics that may be included in this course are:

Advanced Shorthand – Intensive practice in the dictation and transcription of shorthand notes is used to produce mailable letters. Shortcut methods are stressed to facilitate rapid dictation. A minimum dictation speed of 100 wpm for 3 minutes with 97% accuracy is required at the completion of the course.

Advanced Machine Transcription – Transcription from dictation equipment is done on word processing equipment. Emphasis is placed on language arts skills, proofreading skills, and the development of machine dictation skills including the composition of business communications.

POFT 1429 Keyboarding and Document Formatting (Majors)

(Formerly OST 1302)

(3-2-3)

Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed (35 wpm) and accuracy (5 or less errors) levels and formatting basic documents. **Lab Fee.**

POFT 2203 Speed and Accuracy Building-Level 1

(Formerly OST 1101)

(2-1-2)

Prerequisite: Keyboarding by touch

Review, correct, improve and/or perfect touch-keyboarding techniques for the purpose of increasing speed and improving accuracy. **Lab Fee.**

POFT 2204 Speed and Accuracy Building-Level 2

(Formerly OST 1102)

(2-1-2)

Prerequisites: Keyboarding by touch

Review, correct, improve and/or perfect touch-keyboarding techniques for the purpose of increasing speed and improving accuracy. **Lab Fee.**

POFT 2205 Speed and Accuracy Building-Level 3

(Formerly OST 1103)

(2-1-2)

Prerequisite: Keyboarding by touch

Review, correct, improve and/or perfect touch-keyboarding techniques for the purpose of increasing speed and improving accuracy. **Lab Fee.**

POFT 2301 Document Formatting and Skillbuilding

(Formerly OST 1330)

(3-2-3)

Prerequisites: POFT 1329 or POFT 1429 or equivalent

A continuation of keyboarding skills in document formatting, speed, and accuracy. Emphasis on proofreading, editing, and following instructions, and keying documents from various copy. A minimum speed of 45 wpm with five or less errors is required on 5-minute timed writings. **Lab Fee.**

POFT 2312 Business Communications II

(Formerly OST 2321)

(3-3-0)

Prerequisites: POFT 1302 or equivalent.

Skill development in practical applications which emphasize the improvement of writing skills necessary for effective business communications. **Lab Fee.**

POFT 2321 Machine Transcription

(Formerly OST 2323)

(3-2-3)

Prerequisite: POFT 2301 and POFT 1302 or equivalent

Skill development in mailable business document production using computers and dictation equipment. Skill refinement in grammar and punctuation with emphasis on proofreading and formatting. **Lab Fee.**

POFT 2333 Advanced Document Formatting and Skillbuilding

(Formerly OST 2332)

(3-2-3)

Prerequisite: POFI 2301 or equivalent

Study of advanced concepts in a variety of office-simulated correspondence activities with emphasis on organization prioritizing, decision making, composition, placement, accuracy, and speed development. A minimum exit speed of 50 wpm with five or less errors is required on 5-minute time writings. **Lab Fee.**

POFT 2343 Shorthand/Notetaking II

(Formerly OST 1314)

(3-2-3)

Prerequisite: POFT 1345

A continuation of shorthand/notetaking principles with advanced mastery of accurate reading and writing of notes to produce mailable documents from dictation. Minimum dictation speed at completion of course is 8-wpm for 3 minutes with 97% accuracy. **Lab Fee.**

POFT 2380 Cooperative Education-Administrative Assistant/ Secretarial Science, General

(Formerly OST 2325)

(3-1-20)

Prerequisite: Approval of workstation by instructor/coordinator

Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience.

AGRIBUSINESS MANAGEMENT

AGMG 1192 Special Topics in Agricultural Business/ Agribusiness Operations

(1-1-0)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

AGMG 1307 Agribusiness Safety, Laws and Regulations

(3-2-2)

Introduction to the various government agencies involved in regulation, monitoring, compliance, policies, and standards affecting agribusiness. Emphasis on research, interpretation, and implementation of laws and regulations. **Lab Fee.**

AGMG 1311 Introduction to Agribusiness

(3-3-0)

This course is designed to introduce agribusiness management, marketing, and sales in the free enterprise system. Topics include a study of economic principles, finance, risk management, record keeping, budgeting, employee/employer responsibilities, communications, human relations skills, and agricultural career opportunities.

AGMG 1350 International Agriculture

(3-2-2)

Examination of world production of and demand for agricultural commodities and world trade in agricultural products. Emphasis on national and international policies. **Lab Fee.**

AGMG 1392 Special Topics in Agricultural Business/ Agribusiness Operations

(3-3-0)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

AGMG 2588 Internship – Agricultural Business (5-1-20)

Prerequisites: Completion of all course work and departmental approval.

Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

HALT 1301 Principles of Horticulture (3-2-2)

An overview of the horticulture industry, plant science, terminology, classification, propagation, environmental responses, and careers and opportunities in the field of horticulture. **Lab Fee.**

AGRICULTURE

AGRI 1131 Introduction to Agriculture
(1-1-0)

An introduction to modern agriculture and the resources upon which it depends. Emphasis on the areas of agriculture, job opportunities, and training needed. Prepares agriculture student to select an agricultural major and provides an option for concentration.

AGRI 1307 Agronomy
(3-2-2)

The classification and distribution of farm crops; plant improvement production, harvesting and storage; seeds, selection, growth, and crop rotation. **Lab Fee.**

AGRI 1311 Dairy Science
(3-2-2)

Dairying in relation to agriculture and community development; branches of dairy industry, dairy breeds; composition of milk and milk products and sanitary methods of handling clean milk. **Lab Fee.**

AGRI 1315 Horticulture
(3-2-2)

The growth and fruiting habits of horticulture plants; principles and practices of propagation; and the planting, care, culture, harvesting, and utilization of fruits and vegetable plants. **Lab Fee.**

AGRI 1319 Animal Science
(3-2-2)

The types, breeds, pedigrees, importance of judging, marketing, management, feeding, and sanitation. The role of livestock production within the agricultural industry. Topics include the role of the livestock and meat industries in agriculture and the U.S. economy. The evaluation of livestock along with reproduction, nutrition, management, and marketing of livestock will be discussed. **Lab Fee.**

AGRI 1325 Marketing of Agricultural Products
(3-3-0)

A general introductory course of which course content includes operations in the movement of agricultural commodities from producer to consumer, including the essential marketing functions of buying, selling, transporting, storing, financing, standardizing, pricing, and risk bearing.

AGRI 1327 Poultry Science
(3-2-2)

The anatomy, physiology, incubation, breeding, types, breeds, housing, feeding, and diseases of poultry. **Lab Fee.**

AGRI 2317 Introduction to Agricultural Economics
(3-3-0)

Fundamental economic principles and their applications to the problems of the industry of agriculture.

AGRI 2330 Wildlife Conservation and Management
(3-3-0)

Conservation and management of fish and wildlife resources of the United States, especially Texas. Conservation concepts and management practices.

AGRI 2377 Feeds and Feeding
(3-3-0)

Characteristics of feedstuffs used in livestock enterprises. Manual and computer ration formulation procedures and life cycle nutritional management of beef, swine, sheep, dairy, horses, and poultry. Methods of grain, protein supplement and forage processing and evaluation. Commercial and on-the-farm feed mixing methods and feed control laws.

ANTHROPOLOGY

ANTH 2346 Introduction to Anthropology
(3-3-0)

This course is a survey of humankind — of peoples both ancient and modern. It will examine the unity and diversity of cultural patterns including consideration of their political, intellectual, technical, aesthetic, and other social institutions from a cross-cultural and multi-cultural perspective.

ART

Art studio courses requiring skills development include outside work. The time required varies with each student, and students should be prepared to adjust out-of-class schedules to meet the demands of these courses.

ARTS 1301 Art Appreciation
(3-3-0)

A lecture course exploring the elements of visual language, their nature, functions and relationships in painting, sculpture, architecture, and industrial design. Focus is on the development and application of critical thinking skills.

ARTS 1303 Art History Survey I
(3-3-0)

A lecture course in the history of painting, sculpture, architecture, and other art forms from prehistoric times to the 14th Century.

ARTS 1304 Art History Survey II
(3-3-0)

A lecture course in the history of painting, sculpture, architecture, and other art forms from the 14th Century to the present.

ARTS 1311 Design I
(3-3-3)

An art studio course in the theory and practice of design. The fundamental principles and elements of design as related to visual structure. Focus is on the development and application of critical thinking skills. **Special Fee.**

ARTS 1312 Design II
(3-3-3)

Prerequisite: ARTS 1311.

An art studio course in the formal elements of design in three dimensions with an emphasis on personal expression. **Special Fee.**

ARTS 1316 Drawing I
(3-3-3)

An art studio course investigating a variety of media, techniques, and subjects exploring perceptual and descriptive possibilities with consideration of drawing and figure construction as a developmental process as well as an end in itself. Focus is on the development and application of critical thinking skills. **Special Fee.**

ARTS 1317 Drawing II
(3-3-3)

Prerequisite: ARTS 1316.

An art studio course offering further investigation of drawing, stressing the expressive and conceptual aspects of drawing and figure construction within a spatial environment. **Special Fee.**

ARTS 1325 Drawing and Painting
(3-3-3)

Prerequisite: None

An art studio course in the basic problems encountered in the process of drawing and painting. Recommended for non-art majors. **Special Fee.**

ARTS 2316 Painting I
(3-3-3)

Prerequisite: ARTS 1311 and ARTS 1316.

An art studio course which explores the potential of painting media with emphasis on color, composition, dynamics of vision. **Special Fee.**

ARTS 2317 Painting II
(3-3-3)

Prerequisite: ARTS 2316.

An art studio course which offers a continuation of ARTS 2316 with emphasis on individual expression. With the instructor's approval, this course may be repeated once for an additional 3 hours credit as a study in advanced problems and techniques. **Special Fee.**

ARTS 2323 Drawing III
(3-3-3)

Prerequisite: ARTS 1317.

An art studio course focusing on problems of structure and action of the human figure and conceptual aspects of drawing. **Special Fee.**

ARTS 2324 Drawing IV
(3-3-3)

Prerequisite: ARTS 2323.

An art studio course which investigates drawing with emphasis on individual expression. With the instructor's approval, this course may be repeated once for an additional 3 hours credit as a study in advanced problems and techniques. **Special Fee.**

ARTS 2326 Sculpture I

(3-3-3)

An art studio course which explores three-dimensional concepts of form through a variety of materials and techniques. **Special Fee.**

ARTS 2327 Sculpture II

(3-3-3)

Prerequisite: ARTS 2326.

An art studio course which offers a continuation of ARTS 2326 with emphasis on individual expression. With the instructor's approval, this course may be repeated once for an additional 3 hours credit as a study in advanced problems and techniques. **Special Fee.**

ARTS 2331 Graphics I

(3-3-3)

An art studio course investigating the use of the computer as a graphic arts tool with an overview on computer graphics technology. Students will work with a variety of software in common use, a survey of input/output devices, and hardware. Focus is on the development of critical thinking skills with hands-on training of basic drawing, painting, animation and photographic applications. **Special Fee.**

ARTS 2332 Graphics II

(3-3-3)

An art studio course offering further investigation of the computer as a graphics arts tool and introduction of paint and image manipulation software. **Special Fee.**

ARTS 2346 Ceramics I

(3-3-3)

An art studio course exploring various processes of making pottery and ceramic sculpture with an emphasis on handbuilding techniques. Students will be introduced to different methods of glazing and firing. **Special Fee.**

ARTS 2347 Ceramics II

(3-3-3)

Prerequisite: ARTS 2346.

An art studio course with continued exploration of various handbuilding techniques as well as an introduction to the potter's wheel. Emphasis is on increased student proficiency, continued aesthetic development, and self-expression. With the instructor's approval, this course may be repeated once for an additional 3 hours credit as a study in advanced problems and techniques. **Special Fee.**

ARTS 2356 Photography I
(3-3-3)

An art studio course introducing the possibilities of photography as an art medium. Technical information will include camera operation, black and white film developing and printing techniques, knowledge of chemistry, and presentation skills. Emphasis will be placed upon study of design aesthetics, history, and contemporary trends as a means of developing an understanding of photographic aesthetics. Students will provide their own cameras. **Special Fee.**

ARTS 2357 Photography II
(3-3-3)

Prerequisite: ARTS 2356.

An art studio course offering further investigation into photographic processes and techniques with emphasis on individual expression with regard to specific application of the photographic process. Students will provide their own cameras. With the instructor's approval, this course may be repeated once for an additional 3 hours credit as a study in advanced problems and techniques. **Special Fee.**

ARTS 2372 Studies in Contemporary Art: Chicano Art
(3-3-0)

A lecture course with a focus on a specific period or art movement within the study of contemporary art: Chicano art. This course traces the historical development of Mexican and Chicano art, from early Pre-Colombian art in Mexico to contemporary Chicano art, and cites the influence of Mexican and Southwest art on Chicano art. Therefore, Studies in Contemporary Art may be repeated for credit when topics vary.

ARTS 2389 Academic Cooperative in Fine Arts
(3-3-0)

An instructional program designed to integrate on-campus study with practical hands-on work experience in Fine Arts. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of visual arts.

AVIATION

Classes leading to Federal Aviation Administration (FAA) certification must adhere to FAA guidelines. These guidelines require students to attend a minimum number of classroom hours. Students not meeting these attendance requirements will not be certified.

AIRP 1191 Special Topics Multi-Engine Ground (1-1-0)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to a comprehensive course designed for private or commercial pilots who wish to add the multi-engine rating to their pilot certificates. The course examines the light twin-engine airplane operations, systems, performance, engine-out operations, weight and balance, and aerodynamics.

AIRP 1307 Aviation Meteorology (3-3-0)

In-depth coverage of meteorological phenomena affecting aircraft flight. Topics include basic concepts of aviation meteorology in the study of temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing, and fog. Also includes analysis and use of weather data for flight planning. The course provides students with a comprehensive background in basic meteorology; covers topics directly related to everyday experience, and stresses the understanding and application of principles.

AIRP 1313 Introduction to Aviation (3-3-0)

A study of the historical development of the aviation industry, including key events in civil, military, and space exploration and an overview of legislation relating to aviation. Introduction to Aviation traces significant developments in the field. The highlights and key events of aviation and space history are explored. The course examines the general aviation industry, the world airline industry, air cargo, as well as airport and airspace development. Career development and career opportunities that exist within aviation are integral parts of the course.

AIRP 1315 Private Pilot Flight (3-3-0)

Prerequisite: PLT 1301 or concurrent enrollment.

This course is designed to meet the flight training requirements for a Private Pilot Certificate. A current Second Class FAA Medical Certificate and Student Pilot Certificate are required. **Special Fees apply.**

AIRP 1317 Private Pilot Ground School
(3-3-0)

Basic ground school for the Private Pilot Certificate, providing the student with the necessary aeronautical knowledge that can be used for private pilot certification. Topics include principles of flight, radio procedures, weather, navigation, aerodynamics, and Federal Aviation Administration regulations. This ground school is a foundation course for all students of aviation and is required for subsequent flight training. Fulfills the ground training for the private pilot certificate.

AIRP 1345 Aviation Safety
(3-3-0)

A study of the fundamentals essential to the safety of flight. A survey of the aviation industry including decision-making factors, accident reporting, accident investigation, air traffic systems, and aircraft technologies. This course is an introduction to significant elements involved with the safe operation of aircraft, the airport environment, and associated equipment both in flight and on the ground. Consideration is given to examining safety philosophies, programs, research, and the role of various agencies.

AIRP 1351 Instrument Rating Ground School
(3-3-0)

A study of basic instrument radio and navigation fundamentals used in instrument flight. Topics include a description and practical use of aerial navigation systems and instruments, charts used for instrument flight, and Federal Aviation Administration certification. This course covers regulations that apply to flight under instrument conditions, the air traffic system and procedures, navigation and approach procedures, and elements of forecasting weather trends.

AIRP 1355 Intermediate Flight
(3-1-16)

Prerequisite: AIRP 1317 and AIRP 1415, and a current and unrestricted second-class medical certificate.

Provides students with flight hours and skills necessary to fulfill solo cross-country hours required for the Federal Aviation Administration Commercial Pilot, single engine land, airplane rating. **Special Fees Apply**

AIRP 1391 Special Topics in Aircraft Pilot and Navigator (Professional)
(3-1-3)

Prerequisite: AIRP 1317 and AIRP 1415, and a current and unrestricted second-class medical certificate.

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Dual instruction designed to enhance judgment, coordination and overall flying skills. Instruction includes review of basic airmanship and introduces loops, rolls, precision spins and recovery, wingovers, and snap rolls. **Special Fees Apply**

AIRP 2251 Multi-Engine Flight Training (Lab)
(2-1-1)

Prerequisite: AIRP 1317 and AIRP 1415 and AIRP 1191 or concurrent enrollment, and a current and unrestricted second-class medical certificate.

Preparation for the multi-engine class rating, which will be added to a current pilot certificate. Includes explanation and demonstration of all required Federal Aviation Administration normal and emergency operations and procedures. Dual flight instruction in twin-engine airplane operations, systems, emergencies, single-engine flight and performance. **Special Fees Apply**

AIRP 2236 Certified Flight Instructor – Airplane (Lab)
(2-1-3)

Prerequisites: AIRP 1317, AIRP 1415, AIRP 1351, AIRP 1355, AIRP 2337, AIRP 2339, and AIRP 2349 or concurrent enrollment, AIRP 2350, and a current and unrestricted second class medical certificate.

Flight instruction necessary to qualify for the Federal Aviation Administration Certified flight Instructor-Airplane Certificate. Topics include ground and flight instruction. **Special Fees Apply**

AIRP 2333 Aircraft Systems
(3-3-0)

Study of the general principles, operations, and application of pneumatic, hydraulic, electrical, fuel environmental, protection, and warning systems. Emphasis on types of aircraft structures and their control systems. The modern aircraft is rapidly changing as technology advances. This course will introduce the student to the important systems of medium twin and turbine aircraft. Areas of study will include theory and operation of such systems as propulsion, environmental, fuel, and avionics.

AIRP 2339 Commercial Flight
(3-1-6)

Prerequisite: AIRP 1317, AIRP 1351, AIRP 1355, AIRP 1315, AIRP 2337 or concurrent enrollment, AIRP 2350, and a current and unrestricted second-class medical certificate.

Flight instruction necessary to qualify for the Federal Aviation Administration Commercial Pilot Certificate. Instruction includes both dual and solo flight training to prepare the student for mastery of all commercial pilot maneuvers. The course is the final phase of flight training in preparation for the Commercial Pilot Certificate with Instrument Rating. **Special Fees apply**

AIRP 2337 Commercial Ground School
(3-3-0)

A study of advanced aviation topics that can be used for Federal Aviation Administration certification at the commercial pilot level. Includes preparation for the Commercial Airplane written test. Review of aerodynamics, theory of flight, and Federal Aviation Regulations.

AIRP 2349 Instructor Ground School
(3-3-0)

Skill development in the fundamentals of teaching and learning in an aviation-oriented environment. Introduction to the techniques of instruction and analysis of flight maneuvers. Topics include flight instructor responsibilities and federal aviation regulations relating to the instructor rating. Instructional techniques, analysis of maneuvers, and Federal Aviation Regulations are included. This course prepares the student for the flight instructor written examinations: Fundamentals of Instruction and Flight Instructor-Airplane.

AIRP 2350 Instrument Flight (Lab)
(3-1-6)

Prerequisite: AIRP 1317, AIRP 1351 or concurrent enrollment, AIRP 1355, AIRP 1415, and a current and unrestricted second class medical certificate.

Preparation for completion of the Federal Aviation Administration Instrument Pilot Rating with mastery of all instrument procedures. **Special Fees Apply**

AIRP 2380 Cooperative Education – Aircraft Pilot and Navi gator (Professional)

(3-1-20)

Prerequisite: Consent of department chairperson.

Career related activities encountered in the student's area of -specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific teaching objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

AVIM 1301 Introduction to Aviation Management

(3-3-0)

An introduction to small aviation business management. Emphasis on financial marketing, human resources, and administrative and information systems essential for successful business operations. The course covers the financial marketing, personnel, and administrative functions that are key to any business. The course focuses on aviation specific serves and issues such as flight line operations, flight services, airport physical requirements, and liability issues.

AVIM 1380 Cooperative Education- Aviation Management

(3-1-20)

Prerequisite: consent of department chairperson

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific teaching objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

AVIM 2331 Airline Management

(3-3-0)

An examination of the organization, operation, and management of airlines. Topics include financing, aircraft selection, route feasibility studies, load factors, and marketing. Airline Management Principles provides a broad understanding of the air transportation industry and an appreciation of the major management functions within an airline. The course examines the historical perspectives, regulators and associations, the economic characteristics of the airlines, airline organization, aircraft selection criteria, market and passenger trends, load factors, marketing, and labor relations.

AVIM 2335 Airport Management
(3-3-0)

A study of the major functions of airport management including facilities and services, organization, human resources, maintenance, planning and zoning, operations, revenues and expenses, public relations, ecology, and safety. The course examines the historical perspective, funding, capacity and delay issues, airport operations, tenants, and the public.

AVIM 2337 Aviation Law
(3-3-0)

A study of the historical development of aviation law including in-depth coverage of constitutional, criminal, civil, common, and international law as it relates to aviation activities. The student will become acquainted with some of the practices and pitfalls in aviation activities. Additionally, the individual will gain insight pertinent to federal governing bodies and to local and international laws forming the present structure of aviation law.

BIOLOGICAL SCIENCES

Students should check with their advisors, the biology department, or counselors before registering for any of the biology courses. Certain majors require certain courses, and enrollment in the proper course(s) is the responsibility of each student.

BIOL 1308 Principles of Biology
(3-3-0)

Prerequisite: None

The course includes a study of fundamental principles of living organisms including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of physiology, genetics, ecology, and the scientific method are also included. This course may fulfill a science requirement for the Associate of Arts degree.

BIOL 1322 Nutrition
(3-3-0)

Prerequisite: One semester of biology and one semester of chemistry.

Recommended for allied health majors. The study of food components and their function in the life process including functions, food sources digestion, and metabolism with application to normal and therapeutic human nutritional needs.

BIOL 1406 General Biology I
(4-3-3)

FOR SCIENCE MAJORS. BIOL 1406 is an introductory course that includes the following topics: history and philosophy of the science of biology, basic chemistry, energy transformation, physical phenomena, genetics, evolution, and taxonomy. Laboratory exercises will complement lecture topics. Must be followed by BIOL 1407 to fulfill the science requirement. **Lab Fee.**

BIOL 1407 General Biology II
(4-3-3)

FOR SCIENCE MAJORS. A continuation of a two-semester course in biological concepts. This course will emphasize the structure and function of living organisms, comparative animal physiology, evolutionary adaptation, and ecology. The laboratory exercises will complement the lecture topics. **Lab Fee**.

BIOL 1408 General Biology I
(4-3-3)

For non-science majors. Introductory course, history and philosophy of the science of biology, basic chemistry, energetic, physical phenomena, genetics, evolution, taxonomy and survey of the kingdoms. Laboratory exercises will complement lecture topics. Must be followed by 1409 to fulfill the science requirement. **Lab Fee.**

BIOL 1409 General Biology II
(4-3-3)

Prerequisite: BIOL 1408.

For non-science majors. This is a continuation of BIOL 1408. Emphasis is on the structure, function, and physiology of animals and flowering plants. Ecology is also discussed. Laboratory exercises will complement the lecture topics. **Lab Fee.**

BIOL 1411 General Botany
(4-3-3)

Recommended for science majors. The study of the structure, function and physiology of plant cells, tissues and structures. Included is an evolutionary survey and the life histories of the following groups of organisms: viruses, bacteria, algae, fungi, true mosses, ferns, gymnosperms, angiosperms, and their close relatives. Evolution, genetics, reproduction, and ecology are also discussed. Laboratory exercises will complement the lecture. Both BIOL 1411 and 1413 must be taken in order to satisfy the science requirement. **Lab Fee.**

BIOL 1413 General Zoology
(4-3-3)

Recommended for science majors. A survey course of the animal kingdom with emphasis on taxonomy, morphology, physiology, and ecology. Laboratory exercises will complement the lecture topics. Both 1413 and 1411 must be taken to satisfy the science requirement. **Lab Fee.**

BIOL 2106 Environmental Biology Laboratory
(1-0-3)

Biology 2106 is a laboratory course designed to complement the BIOL 2306 lecture (Formerly titled as Man and His Environment). Selected laboratory studies will relate to topics in the BIOL 2306 lecture. **Lab Fee.**

BIOL 2306 Environmental Biology

(Formerly Man and His Environment)

(3-3-0)

This course is a study of human interrelationships and their interdependence with the environment. Studies will include the impact of human activities on the environment and their effect on natural and human resources. This course includes an evaluation of present and future strategies to preserve a healthy environment. This course may fulfill a science requirement for the Associate of Arts Degree.

BIOL 2313 General Entomology

(3-3-2)

The study of common insects and their relationship to crops and farm animals. Emphasis is placed on their anatomy, physiological characteristics, life histories, damage, and measures of control. Laboratory activities include the collection and mounting of insects. **Lab Fee.**

BIOL 2389 Academic Cooperative in the Biological Sciences

(3-1-40)

Prerequisite: Instructor Approval

Experience working with biologists through a cooperative agreement between the college, employer, and the student. Under the supervision of the college and employer, the student will combine classroom learning and work experience. Academic learning objectives and job-related goals will be assessed.

BIOL 2401 Human Anatomy and Physiology I

(4-3-3)

Recommendation: Students with little or no Biology background should take Biology 1408 prior to enrollment in this class.

The study of the structure and function of the cells, tissues, organs, special senses and the skeletal, muscular, and nervous systems. Must be followed by 2402 to complete a science requirement. **Lab Fee.**

BIOL 2402 Human Anatomy and Physiology II

(4-3-3)

Prerequisite: BIOL 2401.

The study of the structure and function of the endocrine, digestive, respiratory, cardiovascular, lymphatic, urinary, and reproductive systems. Human growth, development and genetics are also included. **Lab Fee.** NOTE: Some sections are web-enhanced. Consult course schedule.

BIOL 2416 Genetics

(4-3-3)

Prerequisites: One semester chemistry and one semester zoology or anatomy.

A study of the principles of molecular and classical genetics and the function and transmission of hereditary material. May include population genetics and genetic engineering. **Lab Fee.**

BIOL 2420 Microbiology

(4-3-4)

Prerequisites: BIOL 2401 and one semester of chemistry.

The morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms are studied. Pure cultures of microorganisms grown on selected media are used in learning laboratory techniques. Preview of food microbes, public health and immunology are included. **Lab Fee.**

BIOL 2426 Comparative Vertebrate Anatomy

(4-3-4)

Prerequisites: BIOL 1408 & 1409 or 1413 & 1411.

A comparative study of the anatomy and physiology of vertebrate organ systems. **Lab Fee.**

BUSINESS ADMINISTRATION

BUSI 1301 Introduction to Business

(3-3-0)

A general business course emphasizing basic industries, forms of organization, capitalism, alternative economic systems, marketing, finance, management, human resources, pricing, business risks, and the relation of government to business.

BUSI 1307 Personal Finance

(3-3-0)

A study of the major elements of effective money management that individuals and families encounter. These include the various aspects of financial planning such as budgeting, managing taxes, making major financial acquisition decisions, adopting effective debt management techniques, insurance alternative considerations and choices, retirement planning through wise investment decisions, and estate preservation.

BUSI 1311 Principles of Salesmanship

(3-3-0)

Analysis of the various styles of sales management and advertising techniques used in wholesale and retail selling, preparation of sales canvasses and advertising layouts and distribution media are presented in this course.

BUSI 2301 Business Law I

(3-3-0)

Prerequisite: Sophomore Standing

The study of the origin and development of law. Topics included will be torts, criminal law, government regulations, consumerism and environmental law as applied to business. The application of law to contracts, personal property, bailments and sales will be presented.

BUSI 2302 Business Law II

(3-3-0)

Prerequisite: BUSI 2301

The application of the law to the business subjects of commercial paper, creditors rights, secured transactions, agency, partnerships, special ventures, corporations, real property and estates will be presented.

BUSINESS ADMINISTRATION AND MANAGEMENT, GENERAL

BMGT 1301 Principles of Supervision

(Formerly MGT 1303 Principles of Supervision)

(3-3-0)

A study of the role of the supervisor. Managerial functions as applied to leadership, counseling, communication, motivation, and current behavioral human skills are examined.

BMGT 1303 Principles of Management

(Formerly MGT 1301 Principles of Management)

(3-3-0)

An introduction to fundamental principles of management in business organizations designed to prepare students for concepts, terminology, theory, and issues that are the substance of the practice of management.

BMGT 1395 Special Topics in Operations Management and Supervision

(3-3-0)

Topics address recently identified current event, skill, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

BMGT 2303 Problem Solving and Decision Making

(3-3-0)

Decision-making and problem-solving processes in organizations, utilizing logical and creative problem-solving techniques. Application of theory is provided by experiential activities such as small group discussions, case studies, and the use of other managerial decision aids.

BMGT 2309 Leadership

(3-3-0)

Concepts of leadership and its relationship to management. Prepares the student with leadership and communication skills needed to inspire and influence.

BMGT 2331 Total Quality Management

(Formerly MGT 2314 Quality Control)

(3-3-0)

Prerequisites: BMGT 1303 and MATH 1314

Quality of productivity in organizations which includes planning for quality throughout the organization, analysis of costs of quality, and employee empowerment. The development and application of statistical methods in product and process capability evaluation and prediction are also analyzed.

BMGT 2341 Strategic Management

(3-3-0)

Strategic management process involving analysis of how organizations develop and implement a strategy for achieving organizational objectives in a changing environment.

BMGT 2347 Critical Thinking and Problem Solving

(3-3-0)

Instruction in interpreting data for effective problem-solving and recommending corrective action with emphasis on a structured approach to critical thinking and problem solving in a term environment.

BMGT 2382 Co-op Education - Business Administration & Management, General

(Formerly MGT 2327 Co-op in Management)

(3-1-20)

Prerequisites: Departmental approval and completion of BMGT 1303.

Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

EECT 1303 Introduction to Telecommunications

(3-3-0)

An overview of the telecommunications industry. Topics include the history of the telecommunications industry, terminology, rules and regulations, and industry standards and protocols.

EECT 1391 Special Topics in Electrical, Electronic and Communication Engineering Technology —Telecomm Product Orientation

(3-3-0)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Specific training in the industry is addressed concerning products to be sold, serviced, or troubleshot. (Credit may be awarded for Vendor Training).

EECT 2337 Wireless Telephony Systems

(3-3-0)

Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment and access protocol.

HRPO 1301 Customer Relations

(3-3-0)

See HUMAN RESOURCE MANAGEMENT section.

HRPO 2301 Human Resource Management

(Formerly MGT 2310 Personnel Management)

(3-3-0)

Prerequisites: BMGT 1301 and BMGT 1303

See HUMAN RESOURCE MANAGEMENT section.

HRPO 2307 Organizational Behavior

(3-3-0)

See HUMAN RESOURCE MANAGEMENT section.

IBUS 2341 International Comparative Management

(3-3-0

A study of cross-cultural comparisons of management and communications processes. Emphasis on cultural geographic distinctions and antecedents that affect individual, group, and organizational behavior. Topics include sociocultural demographic, economic, technological, and political-legal environment cluster countries and their relationship to organizational communication and decision-making.

POFT 1328 Business & Professional Presentations
(3-3-0)

Skill development in planning and conducting business presentations on an individual and/or group basis including communication and media skills. Topics include leadership, effective participation, and group behavior.

PSYT 1303 Dynamics of Human Relations
(3-3-0)

Discussion of the dynamics necessary for developing and maintaining positive/ productive interpersonal and work relationships.

QCTC 1305 Teaming
(3-3-1)

A study in group dynamics, synergy, team building, consensus decision-making, active listening skills, win/win resolution, confrontation skills, creativity, and brainstorming. Examination of team presentation skills, overall team communication, and resolving personality conflicts.

RTVB 1317 Survey of Electronic Media
(3-3-0)

A survey of the broadcast and cable industry. Topics include the history of the broadcast and cable industries, operation of radio and TV stations, cable facilities, programming practice of radio, and Federal Communication Commission (FCC) organization and regulatory activity. Also includes career opportunities in broadcasting and cable and the impact of the new media.

RTVB 1341 Communication Technologies
(3-3-0)

Exploration and discussion of new and emerging information and entertainment technologies, their relationship to communication, and their effect on societies.

BUSINESS MARKETING

MRKG 1311 Principles of Marketing

(Formerly MGT 2303 Principles of Marketing)

(3-3-0)

Prerequisites: BMGT 1303

Introduction to basic marketing functions; identification of consumer and organizational needs; identification of economic, psychological, sociological, and global issues; and description and analysis of the marketing research.

CHEMISTRY

Students should check with their advisors, the chemistry department, or counselors before registering for any of the chemistry courses. Certain majors require certain courses, and enrollment in the proper course(s) is the responsibility of each student.

CHEM 1111 General Chemistry Laboratory I
(1-0-4)

Prerequisite: MATH 1314 or permission of the department.

Corequisite: Concurrent enrollment in CHEM 1311 or permission of the department.

Chemistry 1111 is a laboratory course involving principles and practices of identification of basic molecules and selected laboratory studies related to topics in Chemistry 1311. **Lab Fee.**

CHEM 1112 General Chemistry Laboratory II
(1-0-4)

Prerequisite: CHEM 1111.

Corequisite: Concurrent enrollment in CHEM 1312 or permission of department.

Chemistry 1112 is a laboratory course involving principles and practice of separation and identification of ions and selected laboratory studies related to topics in Chemistry 1312. **Lab Fee.**

CHEM 1207 Biological and Chemical Calculations
(2-2-0)

Chemistry 1207 is a study of the mathematical applications used in chemistry and biology. Topics such as scientific notation, molarity, molality, dosage usage and reconstituting powder media. This course will not fulfill any science or math requirements.

CHEM 1311 General Chemistry I
(3-3-0)

Prerequisite: MATH 1314 or permission of the department.

Corequisite: Concurrent enrollment in CHEM 1111 or permission of the department.

A course in the fundamental principles of inorganic chemistry, modern atomic theory, chemical bonding, states of matter, solutions, stoichiometry and other selected topics. Must be followed by Chemistry 1312 to fulfill a science requirement.

CHEM 1312 General Chemistry II

(3-3-0)

Prerequisite: CHEM 1311.

Corequisite: Concurrent enrollment in CHEM 1112 or permission of the department.

This course is a continuation of Chemistry 1311. It covers molecular and ionic equilibria, elementary thermodynamics, electrochemistry, nuclear chemistry and an introduction to organic chemistry.

CHEM 1406 Introductory Chemistry I

(4-3-3)

Prerequisite: MATH 0302 or its equivalent, or permission of the department.

A course for non-science majors and those pursuing a B.S. degree in Nursing. It is an introduction to elementary inorganic chemistry; contains laboratory experiences. Must be followed by Chemistry 1407 to satisfy a science requirement. **Lab Fee.**

CHEM 1407 Introductory Chemistry II

(4-3-3)

Prerequisite: CHEM 1406 or its equivalent or permission of the department.

A course for non-science majors and those pursuing a B.S. degree in Nursing. It covers aspects of organic, nuclear, and biochemistry, and physiological chemistry; contains laboratory experiences. **Lab Fee**.

CHEM 2223 Organic Chemistry Laboratory I

(2-0-4)

Prerequisite: CHEM 1312 and 1112 or permission of the department.

Corequisite: CHEM 2323 or permission of the department.

This course is an introduction to organic laboratory techniques such as distillation, crystallization, chromatography, and basic organic reactions. **Lab Fee.**

CHEM 2225 Organic Chemistry Laboratory II

(2-0-4)

Prerequisite: CHEM 2223.

Corequisite: CHEM 2325 or permission of the department.

This course is a continuation of Chemistry 2223 with emphasis on spectroscopy, organic analysis, and major organic reactions. **Lab Fee.**

CHEM 2323 Organic Chemistry I

(3-3-0)

Prerequisite: CHEM 1312 and 1112 or permission of the department.

An introductory course in organic chemistry. This course includes a study of the structure and properties of carbon compounds. The semester covers primarily stereochemistry and the structure and properties of aliphatic and aromatic hydrocarbons.

CHEM 2325 Organic Chemistry II

(3-3-0)

Prerequisite: CHEM 2323

A continuation of Chemistry 2323. This course studies the chemistry of carboxylic acids, carbonyl compounds, and amines. Also included is a study of the physical means, spectroscopy, used to determine the structure of organic molecules.

COMMUNICATIONS

COMM 1307 Introduction to Mass Communications
(3-3-0)

A survey of mass communication. The course provides an overview of the traditional mass media: print, broadcast, film, as well as the related institutions of advertising, public relations, and journalism — their function, structure, support and influence.

COMM 2305 Editing, Layout and Headline Writing
(3-3-2)

Prerequisite: COMM 2311.

This course develops an understanding of the editing process. Instruction in copy reading, proofreading, headline writing, typography and newspaper makeup. **Lab Fee.**

COMM 2311 News Gathering and Writing I
(3-3-2)

Recommended: Keyboarding proficiency.

A course in fundamentals to acquaint students with the newspaper traditions of a free and responsible press. The course includes instruction in proper techniques of information gathering as well as writing the basic news story. **Lab Fee.**

COMM 2315 News Gathering and Writing II
(3-3-2)

Prerequisite: COMM 2311 and ENGL 1302 with a grade of "C" or better

This course continues the aims and objectives of News Gathering and Writing I, with an emphasis on advanced and in-depth reporting techniques in gathering facts and writing interpretative, investigative and specialized news stories. **Lab Fee.**

COMM 2324 Practicum in Electronic Media
(3-3-1)

A studio course for understanding and using electronic media techniques through the conceptualizing, gathering, writing, editing, and creating processes. Classes may stress one or more genres, formats, or themes. May be repeated for different topics with departmental approval. **Lab Fee.**

COMM 2327 Principles of Advertising
(3-3-0)

A study in the fundamentals of advertising, including advertising appeal, copy writing, layout, selection of media and budgeting.

COMPUTER INFORMATION SYSTEMS

Most Computer Information Systems and Computer Science courses at Palo Alto College involve substantial hands-on interaction with the computer and 16 hours of an embedded lab. However, there are some courses of a predominantly theoretical nature in which the instructional aims are best achieved by other means. If in doubt as to the nature of the course, the student should seek clarification from the instructor.

Computer Information Systems and Computer Science courses require lecture attendance of three hours per week for classroom lecture and participation; however, an additional investment of time outside of class is expected. In particular, those courses with a hands-on component may require considerable out-of-class time for writing, correcting, and/or running computer programs. NOTE: The time varies with each student, and students should be prepared to adjust out-of-class schedules to meet the demands of these courses.

Prerequisite courses may be waived only by approval of the department chairperson or the instructor. Exception: when the phrase "or equivalent" occurs in the prerequisite description, the prerequisite may be waived by any counselor or advisor if it appears that the student has knowledge approximately equivalent to the prerequisite.

The course number used prior to conversion to the Workforce Education Course Manual (course designation and numbers) is provided for comparison when students have already finished a portion of the degree plan.

BCIS 1305 Business Computer Applications (3-3-1)

This course discusses computer terminology, hardware, software, operating systems, and information systems relating to a business environment. The main focus of this course is on business applications of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. **Lab Fee.**

ITMC 1341 Implementing MS Windows 2000 Professional and Server

(3-3-0)

Prerequisites: ITSC 1301 and ITSC 1317 and ITSC 1325

This course provides students with the knowledge and skills necessary to install and configure Microsoft Windows 2000 Professional on stand-alone computers and on client computers that are part of a workgroup or domain. It provides the skills and knowledge necessary to install and configure Windows 2000 Server to create file, print, and servers. **Special Fee**

ITMC 1342 Implementing a MS Windows 2000 Network Infrastructure

(3-3-0)

Prerequisites: ITSC 1301 and ITSC 1317 and ITSC 1325

Installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows 2000 server family of products. **Special Fee**

ITMC 1401 Microsoft Windows 2000 Network and Operating System Essentials (MS 2151)

(4-3-1)

Prerequisites: ITSC 1301 and ITSC 1317 and ITSC 1325

An introduction to Microsoft Windows 2000 and to the networking technologies that it supports. **Special Fee**

ITMC 1419 Installing and Administering Windows 2000

(4-3-1)

Prerequisites: ITSC 1301 and ITSC 1317 and ITSC 1325

An introduction to Microsoft ® Windows 2000 operating system in a single domain environment. Topics include basic installation, configuration tasks, and day-to-day administration tasks in a Windows 2000-based network. **Special Fee.**

ITNW 1321 Introduction to Networking (Formerly CIS 2320)

(3-3-1)

Prerequisite: ITSC 1301

Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. The student is introduced to digital communications between hardware devices, including local as well as long-distance transmission. Attention to topics such as hardware devices, procedures, network arrangements and compatibility problems. **Lab Fee.**

ITNW 1325 Fundamentals of Networking
(3-3-0)

Prerequisites: ITSC 1301 and ITSC 1317 and ITSC 1325

Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. **Special Fee**

ITNW 1333 Microsoft Networking Essentials
(3-3-0)

Prerequisites: ITSC 1301 and ITSC 1317 and ITSC 1325

Instruction in networking essential concepts including the OSI reference model, network protocols, transmission media, and networking hardware and software. **Special Fee**

ITNW 1337 Introduction to the Internet
(3-3-1)

Introduction to the internet with emphasis on using the world wide web to locate, transfer and publish information. Survey of emerging technologies on the Internet.

ITNW 1354 Implementing and Supporting Windows NT Server 4.0
(3-3-0)

Prerequisites: ITSC 1301 and ITSC 1317 and ITSC 1325

A course in the development of skills necessary to implement, administer, and troubleshoot information systems that incorporate Windows NT Server 4.0 in a networked computing environment. **Special Fee.**

ITNW 1392 Special Topics in Business Systems Networking and Telecommunications
(3-3-0)

Prerequisites: ITSC 1301 and ITSC 1317 and ITSC 1325

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. **Special Fee**.

ITSC 1301 Introduction to Computers

(Formerly CIS 1301)

(3-3-1)

Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and application in business and other segments in society. Fundamentals of computer problem-solving and programming may be discussed and applied. Examines applications and software relating to a specific curricular area. Exact topics may be varied to reflect emerging technological changes. Provides a foundation for further study in computer science or computer information systems. **Lab Fee.**

ITSC 1305 Introduction to PC Operating Systems

(Formerly CIS 1322)

(3-3-1)

Prerequisite: ITSC 1301 or COSC 1300 or COSC 1301 or equivalent.

A study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. Emphasis on commands commonly needed by business applications programmers. Specific PC operating system may vary. This course is appropriate for CIS skills upgrade. **Lab Fee.**

ITSC 1309 Integrated Software Applications I

(Formerly CIS 1326)

(3-3-1)

Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Specific software may vary. Students operate the chosen software in the laboratory. This course is appropriate for skills upgrade. **Lab Fee.**

ITSC 1313 Internet/Web Page Development

(Formerly CIS 2313)

(3-3-1)

Prerequisites/Co-requisites: ITSC 1301 and ITSC 1309 or equivalent.

Instruction in the use of Internet services and the fundamentals of web page design and web site development. The student will create Web pages and supporting elements using HTML and current authoring tools and maintain Web pages and supporting elements. **Lab Fee.**

ITSC 1317 PC Operating Systems - DOS

(3-3-0)

Introduction to the DOS operating system. Topics include installation and configuration, file management, memory and storage management, peripheral device control, and use of utilities. **Special Fee**

ITSC 1325 Personal Computer Hardware

(Formerly CIS 2340)

(3-3-1)

Prerequisite: ITSC 1309 or equivalent.

A study of current personal computer hardware including personal computer assembly and upgrading, setup and configuration, and troubleshooting. The student is introduced to the fundamentals of PC architectural design to include basic hardware components and devices. Students learn how to troubleshoot minor hardware problems, make minor hardware repairs, configure and install hardware, and install necessary software drivers. **Lab Fee.**

ITSC 1391 Special Topics in Computer & Information Sciences

(Formerly CIS 2310)

(3-3-1)

Prerequisite: ITSC 1301 and ITSC 1309 or equivalent.

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to technology or occupation and relevant to the professional development of the student. Provides students with training in a current, relevant personal computer (PC) hardware, software or networking topic. This course may be repeated for credit as the topic changes. **Lab Fee.**

ITSC 2586 Internship – Computer and Information Sciences, General

(Formerly CIS 2599)

(5-1-20)

Prerequisite: Consent of advisor.

An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary.

ITSE 1318 Introduction to COBOL Programming

(Formerly CIS 1323)

(3-3-1)

Prerequisite: ITSC 1301 or equivalent.

Introduction to computer programming using COBOL. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Attention to topics such as loops, conditional branches, arrays, and subroutines. Students design, write, and test elementary programs. **Lab Fee.**

ITSE 1331 Introduction to Visual BASIC Programming

(Formerly CIS 1311)

(3-3-1)

Prerequisite/Co-requisite: ITSC 1301 or COSC 1300 or COSC 1301.

Introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Includes a brief review of machine-level concepts, such as the binary number system and ASCII coding, which provide the foundation for higher-level programming. Emphasis on programming, with attention to topics such as loops, conditional branches, arrays, and subroutines. Students design, write, and test simple business-oriented programs in a microcomputer environment. This course is appropriate for skills upgrade. **Lab Fee.**

ITSE 1350 Systems Analysis and Design

(Formerly CIS 2324)

(3-3-1)

Prerequisites: ITSC 1301 or equivalent and BUSI 1301 or equivalent.

Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools. The student examines the process of systems analysis/design and the typical business systems resulting from that process. Common structured methods, tools, and techniques of systems analysis are studied together with common computer-based business systems such as order tracking, accounting, materials and operations control. **Lab Fee.**

ITSE 1391 Special Topics in Computer Programming

(Formerly CIS 2344)

(3-3-1)

Prerequisite: ITSC 1301 and ITSC 1309.

Recommended: any other programming class.

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course is appropriate for CIS skills upgrade. **Lab Fee.**

ITSE 2309 Introduction to Database Programming

(Formerly CIS 2325)

(3-3-1)

Prerequisites: ITSW 2337

Application development using database programming techniques emphasizing database structures, modeling, and database access. The student adapts his/her knowledge of structured programming techniques to a language created specifically for database use. Emphasis is on the manipulation of databases at the program level, and the development of user-friendly, interactive programs. Students design, write and test programs. **Lab Fee.**

ITSE 2313 Web Authoring

(3-3-1)

Prerequisites: ITSC 1313 or equivalent.

Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Emphasis is on web site maintenance and business support to include e-commerce functions. **Lab Fee.**

ITSE 2351 Advanced COBOL Programming

(Formerly CIS 2333)

(3-3-1)

Prerequisite: ITSE 1318

Further applications of programming techniques using COBOL, including file access methods, data structures and modular programming, program testing and documentation. This course is a continuation of Introduction to COBOL Programming. The student is taught the use of standard business algorithms that require combination and nesting of the fundamental techniques covered in Introductory COBOL. Indexed file processing is also studied. Students design, write, and test programs. **Lab Fee.**

ITSW 1310 Presentation Media Software

(Formerly CIS 1331)

(3-3-1)

Prerequisite: ITSC 1301 and ITSC 1309 or equivalent.

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. The student is also taught the use of presentation graphics software as a tool to enhance productivity. Emphasis on the creation or modification of graphics applications as needed for typical business and professional situations. Students design, build, and test graphics applications in the laboratory. **Lab Fee.**

ITSW 1391 Special Topics in Data Processing Technology/ Technician

(Formerly CIS 2345)

(3-3-1)

Prerequisites: ITSC 1301 and ITSC 1309

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course is a practical application of the skills developed throughout the A.A.S. program in software applications. Case studies require the student to begin with needs analysis and continue through software selection, applications design, implementation, testing, and documentation. Students thus practice the application of software tools to simulated business situations in which a computer-based solution would be appropriate. The class is expected to work in a self-paced mode, as would professionals under a manager. **Lab Fee.**

ITSW 2334 Advanced Spreadsheets

(Formerly CIS 1330)

(3-3-1)

Prerequisite: ITSC 1301 or COSC 1301 and ITSC 1309 or equivalent, or COSC 1300.

Designed to provide an understanding of advanced functionality of electronic spreadsheets. The student is taught the use of electronic spreadsheet software as a tool to enhance productivity. Emphasis on the creation or modification of worksheet templates as needed for typical business and professional situations. Students design, build, and test spreadsheet applications in the laboratory. **Lab Fee.**

ITSW 2337 Advanced Database

(Formerly CIS 1332)

(3-3-1)

Prerequisite: ITSC 1301 or COSC 1301 and ITSC 1309 or equivalent. Designed to provide an understanding of advanced functionality of databases. The student is taught the use of database management software as a tool to enhance productivity. Emphasis on the creation of database applications as needed for typical business and professional situations. Attention is on topics such as data design, updating, access and reporting. Students design, build, and test database applications in the laboratory. **Lab Fee.**

COMPUTER SCIENCE

COSC 1300 Computer Literacy
(3-3-1)

The student is introduced to the effect of computers on society, the history and use of computers, computer applications in various segments of society, programming concepts, and hardware and software terminology. Exact topics may be varied to reflect emerging technological changes. Course **not** intended for Computer Science majors. **Lab Fee.**

COSC 1301 Introduction to Computer and Information Systems
(3-3-1)

The student is introduced to the field of computers and information systems through a systematic survey of major topics. Emphasis on internal computer structure and functions as well as applications and related terminology. Attention to such topics as hardware components, software applications, structured software design, data representation and storage, and the integration of elements in working systems. Exact topics may be varied to reflect emerging technological changes. Provides a foundation for further study in computer science or computer information systems. Course is intended as an introductory course for Computer Science and Information Science majors. **Lab Fee.**

COSC 1315 Fundamentals of Programming
(3-3-1)

Prerequisite: COSC 1301 or ITSC 1301 or COSC 1300.

The student is introduced to the fundamentals of computer programming, using a current programming language. Emphasis is on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files. **Lab Fee.**

COSC 1317 Programming in FORTRAN
(3-3-1)

Prerequisite: Any of the following: ITSE 1318 or COSC 1318, or COSC 1315.

The student adapts his/her knowledge of fundamental programming techniques to programming in FORTRAN language. Attention to such topics as file access, data structures, program control structures and modular program design as well as syntax of FORTRAN. Students design, write, and test programs. **Lab Fee.**

COSC 1318 Structured Programming in PASCAL
(3-3-1)

Prerequisite: COSC 1300 or 1301.

Recommended: ITSE 1318 or COSC 1315.

The student is introduced to structured programming techniques. Fundamental concepts such as data types, data structures and algorithms are emphasized. Special attention is paid to top down, modular design, testing and documentation. Programming language PASCAL is used for exercises. Students design, write and test programs. **Lab Fee.**

COSC 1320 Programming in "C"
(3-3-1)

Prerequisite: COSC 1301 and any other computer programming course.

The student is introduced to the use of fundamental programming techniques and related data structures as implemented in the "C" language. Students design, write and test programs in a microcomputer environment. **Lab Fee.**

COSC 2315 Data Structures
(3-3-1)

Prerequisite: COSC 1318

The student is introduced to complex data structures such as stacks, queues, heaps, linked lists and trees. Advanced programming techniques such as recursion, sorting, searching and algorithm analysis are also used. A structured programming language (PASCAL) is used for exercises. Students design, write, analyze and test programs that enforce the theoretical part of the course. **Lab Fee.**

COSC 2330 Advanced Structured Programming
(3-3-1)

Prerequisite: COSC 1301 and any other computer programming class.

This course will cover advanced preparing techniques not ordinarily found in an introductory programming course. Topics such as object oriented, cross-platform and visual programming will be covered. Students will be expected to develop real-life, stand alone applications in a language such as JAVA or C++. Previous programming experience in a high level structured language required. **Lab Fee.**

CRIMINAL JUSTICE

CRIJ 1301 Introduction to Criminal Justice
(3-3-0)

This course is a survey of the history and philosophy of criminal justice. It will examine ethical considerations, crime definitions by nature and impact, and an overview of the components of the criminal justice system. Included are law enforcement, court systems, prosecution and defense, trial process, and corrections.

CRIJ 1306 Court Systems and Practices
(3-3-0)

Prerequisite: CRIJ 1301.

This course studies the judiciary in the criminal justice system. Included are the structure of the court system, right to counsel, pretrial release, grand juries, the adjudication process, types and rules of evidence, and sentencing.

CRIJ 1307 Crime in America
(3-3-0)

This course is the study of American crime problems in historical perspective. Included are social and public policy factors affecting crime, impact and crime trends, a multi-disciplinary survey of major criminological theories, and the prevention of crime.

CRIJ 1310 Fundamentals of Criminal Law
(3-3-0)

Prerequisite: CRIJ 1301.

This course is a study of the nature of criminal law. Topics are: philosophical and historical development, major definitions and concepts, classification of crime, elements of crime and penalties using Texas statutes as illustrations, and criminal responsibility.

CRIJ 1313 Juvenile Justice System
(3-3-0)

Prerequisite: CRIJ 1301.

This course is a study of the juvenile justice process. Topics included in this course are specialized juvenile law, the role of juvenile law, of juvenile courts, of police agencies, and of correctional agencies, and the theories of delinquent conduct.

CRIJ 2301 Community Resources in Corrections
(3-3-0)

Prerequisite: CRIJ 1301.

This course is an introductory study of the role of the community in corrections, community programs for adults and juveniles, administration of community programs, legal issues and future trends in community treatment.

CRIJ 2313 Correctional Systems and Practices
(3-3-0)

Prerequisite: CRIJ 1301.

This course is a study of corrections in the criminal justice system, organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation and current and future issues.

CRIJ 2314 Criminal Investigation
(3-3-0)

Prerequisite: CRIJ 1301.

This course explores investigative theory, collection and preservation of evidence, sources of information, interview and interrogation, and uses of forensic sciences case and trial preparation.

CRIJ 2323 Legal Aspects of Law Enforcement
(3-3-0)

Prerequisite: CRIJ 1301.

The course studies police authority, responsibilities, constitutional constraints, laws of arrest, search, and seizure and police liability.

CRIJ 2328 Police Systems and Practices
(3-3-0)

Prerequisite: CRIJ 1301.

The course studies the police profession, organization of law enforcement systems, the police role, police discretion, police community interaction, current and future issues.

DISTRIBUTION LOGISTICS TECHNOLOGY

(See Logistics Management)

DRAMA

The theater program is geared to help students, both as participants and as audience, to understand and appreciate the unique value of theater, and to prepare majors and minors for successful transfer.

DRAM 1120 Rehearsal and Performance
(1-0-3)

A practicum in scene construction, lighting, sound, costuming, publicity, stage properties, acting, and general theater practice. This course may be repeated each semester for a maximum of four semester hours credit. All majors must be enrolled every semester.

DRAM 1310 Theater Appreciation
(3-3-0)

A course designed to provide a survey of the main fields of theater activity, thus providing a background for the appreciation and enjoyment of live theater through an understanding of the elements of theater management, play analysis, acting, directing, and technical theater.

DRAM 1341 Stage Make-up
(3-3-0)

This course examines the design and execution of make-up for the purpose of creating believable characters. A discussion of basic make-up principles and practical experience of make-up application.

DRAM 1351 Acting I
(3-3-0)

The development of basic skills and techniques of acting, including increased sensory awareness, greater self-confidence, stage movement, characterization, and improvisation.

DRAM 1352 Acting II
(3-3-0)

Prerequisite: DRAM 1351.

A continuation of Drama 1351 with special emphasis on the exploration and development of techniques for the creation of a characterization through the preparation and presentation of scenes and monologues.

DRAM 1376 Creative Dramatics
(3-3-0)

An introductory course which emphasizes the use of creative dramatics as a teaching tool. Scripting and directing children's plays, improvisation, pantomime, puppetry, storytelling, and a brief survey of dramatic literature for children. An excellent course for pre-school and elementary teachers.

DRAM 2336 Voice and Articulation
(3-3-0)

A practical course designed to develop an understanding of the use and function of the performer's voice as well as provide individual instruction in pronunciation and articulation to facilitate oral communication. (Same as Speech 1342.)

ECONOMICS

ECON 2301 Principles of Macroeconomics
(3-3-0)

Economic analysis of the entire economy is studied. The determination of aggregate income and employment, fiscal policy, operation of the monetary system, short-term income fluctuations, long-term income growth, problems of international trade and finance are all reviewed in this course.

ECON 2302 Principles of Microeconomics
(3-3-0)

Consumer behavior, cost of production, price and output decisions in various output situations are studied. Microeconomic problems and policies related to business, labor, cost-benefit analysis for the public sector, poverty, and discrimination are reviewed.

ELECTRO-MECHANICAL TECHNOLOGY

CETT 1208 DC-AC Circuits
(2-1-2)

Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques.

CETT 1325 Digital Fundamentals
(3-2-2)

An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits.

DFTG 1329 Electro-Mechanical Drafting
(3-2-2)

A basic course including layout and design of electro-mechanical equipment from engineering notes and sketches. Emphasis on drawing of electronic equipment control panels, interior hardware, exterior enclosures, detailed and assembly drawings with a parts list, and flat pattern layouts.

ELMT 1301 Basic Programmable Logic Controllers
(3-2-2)

An introduction to programmable logic controllers as used in industrial environments including basic concepts, programming, applications, troubleshooting of ladder logic, and interfacing of equipment.

ELMT 1380 Cooperative Education – Electromechanical Technology/Technician
(3-1-20)

An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience.

ELPT 1351 Electrical Machines
(3-2-2)

General principles and fundamentals of direct current (DC) motors, single-phase and polyphase alternating current (AC) motors, generators, and alternators. Emphasis on their construction, characteristics, efficiencies, starting, and speed control

HART 2431 Advanced Electricity
(4-4-1)

Advanced electrical instruction and skill building in installation and servicing of air conditioning and refrigeration equipment including detailed instruction in motors and power distribution and introduction to solid state devices.

HYDR 1305 Basic Hydraulics
(3-2-2)

Fundamentals of hydraulics including types of hydraulic pumps, cylinders, valves, motors, and related systems. Introduction to hydraulic schematic symbols as related to components.

HYDR 1345 Hydraulics and Pneumatics
(3-2-2)

Fundamentals of hydraulics and types of hydraulic pumps, cylinders, valves, motors, and related systems including operations, maintenance, and system analysis.

IEIR 1306 Electric Motors
(3-2-2)

Fundamentals of single phase and three phase alternating current motors and direct current motors including operating principles, characteristics, application, selection, installation, maintenance, and troubleshooting.

INTC 1312 Introduction to Instrumentation Technology
(3-3-0)

An overview of industries employing instrumentation technicians. A study of hazardous industrial locations and safe work practices. Introduction to ISO-9000 Process Safety Management concepts and fire prevention and fire fighting techniques.

INTC 1357 AC/DC Motor Control
(3-2-2)

A study of electric motors and motor control devices common to a modern industrial environment. A presentation of motor characteristics with emphasis on starting, speed control, and stopping systems.

WLDG 1421 Introduction to Welding Fundamentals
(4-3-3)

An introduction to the fundamentals of equipment used in oxy-fuel and arc welding, including welding and cutting safety, basic oxy-fuel welding and cutting, basic arc welding processes and basic metallurgy.

ENGINEERING

ENGR 1201 Introduction to Engineering
(2-2-0)

This course is an introduction to engineering as a discipline and a profession. It includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society.

ENGR 1304 Engineering Graphics
(3-2-4)

Prerequisite: MATH 1314, or departmental approval.

Graphical approach to the engineering design process. Includes technical communication, introduction to engineering drawing using standard drafting instruments and computer graphics application. **Lab Fee.**

ENGR 1371 Engineering Problems
(3-3-0)

Prerequisite: MATH 1316 (Trigonometry) or departmental approval.

Engineering as a career. The scientific calculator, the computer terminal, measurements and data, dimensional analysis. Solution of problems for students of engineering, physics and related technical fields; these problems include statics, dynamics, work, energy, and power, etc.

ENGR 1375 Engineering Drawing
(3-2-4)

Prerequisite: MATH 1314.

Graphical approach to the engineering design process. Includes geometric construction, orthographic projections, pictorials, etc. **Lab Fee.**

ENGR 2105 Fundamentals of Electric Engineering Laboratory
(1-0-3)

Prerequisites: ENGR 2305 or concurrent enrollment

ENGR 2105 is a laboratory course designed to complement the ENGR 2105 lecture. Selected laboratory studies will relate to topics covered in ENGR 2105 lecture. An introduction to basic measurement equipment and techniques. Analogue and digital simulation tools, performance of simple circuits using discrete devices and circuits, simple subsystem circuit design and laboratory technical communication. **Lab Fee.**

ENGR 2301 Statics

(3-3-0)

Prerequisites: MATH 2413 or concurrent enrollment; PHYS 1570 or concurrent enrollment.

Calculus-based study of force systems, free body diagrams. Engineering applications of equilibrium, centroids, and moments of inertia.

ENGR 2302 Dynamics

(3-3-0)

Prerequisites: ENGR 2301, MATH 2413 or concurrent enrollment; PHYS 1570.

Kinematics and kinetics, including Newton's Laws, work-energy and impulse-momentum applied to engineering problems involving particles and rigid bodies.

ENGR 2303 Engineering Mechanics - Statistics & Dynamics

(3-3-0)

Prerequisites: PHYS 1570

Combined, single-semester study of statics and dynamics. Calculus-based study of statics and dynamics of rigid bodies; vectors, forces, moments, centroids and moments of inertia; force-mass-acceleration, work-energy, and impulse momentum computation; kinematics and kinetics of particles.

ENGR 2304 Computer Programming for Engineering Applications

(3-2-2)

Prerequisites: MATH 2412

Introduction to computer programming with emphasis on the applications of engineering problem solutions using contemporary computer languages. Algorithms, data presentation, and program structures are developed and practiced on the computer. **Lab Fee.**

ENGR 2305 Fundamentals of Electrical Engineering

(3-3-0)

Prerequisites: MATH 2414

An introduction to basic measurement equipment and techniques. Analogue and digital simulation tools, performance of simple circuits using discrete devices and circuits, simple subsystem circuit design and laboratory technical communication.

ENGR 2332 Mechanics of Solids
(3-3-0)

Prerequisites: ENGR 2301, MATH 2413 or concurrent enrollment; PHYS 2570.

Internal forces and deformations in solids; stress, strain in elastic and plastic solids; applications to simple engineering problems.

ENGLISH

Students are required to take the TASP or Acuplacer prior to enrolling in an English class. Scores from the ACT or SAT may also be accepted. Information about the placement tests and cutoff scores for each course is available in the Assessment Center.

Developmental Courses

Students whose tests and cutoff scores indicate need for further preparation before attempting college level English courses must successfully complete English 0300 or English 0301 or both courses prior to enrolling in college level English 1301.

ENGL 0100 Basic English I Skills Lab (1-0-1)

Designed for students currently registered in ENGL 0300, this lab emphasizes writing improvement. Individualized and group settings provides additional instruction and practice to supplement ENGL 0300. **Students must take ENGL 0100 and ENGL 0300 together.**

ENGL 0101 Basic English Skills Lab (1-0-1)

Designed for students currently registered in ENGL 0301, this lab emphasizes writing improvement. Individualized and group settings provide additional instruction and practice to supplement ENGL 0301. This lab course may be repeated three times. Generally, it is optional and not a requirement.

ENGL 0300 Basic English I (3-3-0)

This course is for students who need to improve their basic skills in grammar, capitalization, punctuation, spelling, vocabulary, and sentence structure. The writing process is introduced, and practice is provided in writing, editing, and proofreading. English 0300 cannot be substituted for any part of the regular English curriculum. Students must earn a minimum grade of "C" in English 0300 before being permitted to enroll in English 0301. **Students must register in ENGL 0100 at the same time as ENGL 0300. (**3 lecture hours per week plus 1 hour in laboratory)

ENGL 0301 Basic English II

(3-3-0)

This course reviews standard English with emphasis on writing the complete essay. In addition, the student will review fundamental grammar, spelling, vocabulary, sentence structure, and punctuation. Laboratory hours in ENGL 0101 may be prescribed. ENGL 0301 cannot be substituted for any part of the regular English curriculum. Students must earn a minimum grade of "C" in ENGL 0301 before being permitted to enroll in ENGL 1301. (3 lecture hours per week)

Freshman Courses

Two composition courses are required of all students. Students who transfer from other institutions must prove successful completion of these courses which are preliminary to any sophomore level course.

ENGL 1301 Freshman Composition I

(3-3-0)

This course emphasizes training in academic reading and writing. Essays written will be based on a variety of purposes and be created in a multitude of forms. Students will study the principles of invention and arrangement and work to develop a sense of audience and purpose in their writing. Students must earn a minimum grade of "C" in ENGL 1301 before enrolling in ENGL 1302. ENG 1301 and 1302 cannot be taken concurrently. (3 lecture hours per week)

ENGL 1302 Freshman Composition II

(3-3-0)

Prerequisite: ENGL 1301.

This course is an introduction to the study of literature which will include poetry, drama, fiction, and other genres. Students are instructed in and required to write a formal research paper. (3 lecture hours per week)

Sophomore Courses

Students should consider their major and the requirements of the college or university to which they plan to transfer before enrolling in any sophomore level literature course. Literature courses may be taken in any order.

ENGL 2307 Creative Writing: Poetry and Fiction
(3-3-0)

Prerequisite: Any literature course.

Designed for students interested in learning the craft of fiction and poetry and enhancing the development of creative writing skills, this course generally is taught as a workshop in imaginative writing. The course may be repeated once for credit. (3 lecture hours per week)

ENGL 2311 Technical Writing
(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

Aimed at improving students' abilities to gather and to communicate technical information in their major fields of study, this course concentrates on technical papers, scientific reports, and business correspondence. An emphasis is placed on form and method. (3 lecture hours per week)

ENGL 2322 British Literature through the 18th Century
(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This course is a survey of British literature from its Anglo-Saxon beginnings through the Restoration and the 18th Century. A research paper or term project is required. (3 lecture hours per week)

ENGL 2323 British Literature in the 19th and 20th Centuries
(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This course is a survey of British literature and its major movements and genres from the Romantic Period to the present. A research paper or term project is required. (3 lecture hours per week)

ENGL 2327 Early American Literature
(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This course is a survey of American literature and its major movements and genres from the earliest times to the beginning of Realism. A research paper or term project is required. (3 lecture hours per week)

ENGL 2328 Modern American Literature

(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This course is a survey of American literature and its major movements and genres from the beginning of Realism to the present. A research paper or term project is required. (3 lecture hours per week)

ENGL 2332 World Literature from Antiquity through the Renaissance

(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This course is a study of representative genres and masterpieces of the literature of the world beginning with ancient writings and ending with the Renaissance. A research paper or term project is required. (3 lecture hours per week)

ENGL 2333 Modern World Literature

(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This course survey provides a study of the major genres, movements, and representative works from the Neoclassical period to the present. A research paper or term project is required. (3 lecture hours per week)

ENGL 2370 African American Literature

(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This American literature course investigates the range of African American letters beginning with oral songs, stories, and slave narratives. It will examine the major genres and literary movements up to the present. Writing will be required, both informal writing and the formal research paper or project. (3 lecture hours per week)

ENGL 2371 Mexican American Literature

(3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This American literature course investigates the prose, poetry, and drama of Mexican American or Chicano literature. It will examine the various literary movements. Writing will be required, both informal writing and the formal research paper or project. (3 lecture hours per week)

ENGL 2373 American Multi-cultural Literature (3-3-0)

Prerequisites: ENGL 1301 and ENGL 1302.

This course investigates the literature of various multi-cultural groups, such as African- American, Asian-American, Mexican-American, Native American, Jewish, Women, and any and all others. Topics vary according to each section offered. A research paper or term project is required. **The course may be repeated once for credit.** (3 lecture hours per week)

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES

The ESOL program at Palo Alto College is designed to: 1) prepare students for academic success at Palo Alto College; 2) empower students to become productive in their communities; and 3) assist students in reaching their professional and personal goals. Although the ESOL classes do not fulfill requirements for any degree, students receive credit for taking them. Upon completion of the last level, students take a placement test to determine their level for developmental English, Reading and Math.

The ESOL program consists of four levels. Each level is divided into four or five courses (3 semester hours each) for a total of 12 to 15 hours per semester. Each level contains speaking, listening comprehension, reading, vocabulary development, writing, and grammar. ESOL faculty use various learner-centered teaching strategies, including cooperative learning and group activities. Reading and writing

courses enhance critical thinking skills and are based on themes; conversational courses include small group interaction; and grammar courses are taught in context. Additionally, students have access to computer technology for writing assignments, communicating with other ESOL students and/or faculty by e-mail, researching on the Internet, and using multi-media software such as the English Language Learning Instructional System (ELLIS).

PLACEMENT TESTING

ESOL students are placed in an appropriate class/level based on written and oral assessments as well as advisement. Subsequent enrollment in more advanced ESOL courses is based on the student's successful completion of the prior ESOL class/level or by evaluation and approval of ESOL faculty.

NEW ESOL CLASSES

(Individualized Mastery-Based Instruction – IMBI classes):

These classes are for students who want to progress at their own pace.

Grammar - The class meets in a computer lab. Students complete six modules (units) for each ESOL level and learn grammar in context by completing grammar activities that are based on a different reading for each module. They also do additional grammar activities from the Internet.

0323.110: Low intermediate: Theme - significant and historic allocations in San Antonio and the region

0333.110: Intermediate: Theme - historical and contemporary people from San Antonio and the region

0343.110: High intermediate/advanced: Theme - academic fields of study such as business, computer science and education

Special Topics: The class meets in a computer lab**.** Students watch mini-*novellas* on themes of daily life, learn vocabulary and common expressions, and record their voices to improve their pronunciation**.**

0350.110 For Beginning/Low Intermediate students
Listening Comprehension I/II and Social Interactions

355.110 For Intermediate/Advanced students
Listening Comprehension III/IV and Vocabulary Building/Idioms

COURSE OFFERINGS

LEVEL I

(3-3-0)

Level I course offerings are for students whose native language is not English and who have little proficiency in English. Instruction focuses on the students' prior experiences and knowledge, as well as appropriate contexts and themes. Thematic content may include but is not limited to family, health, employment and social customs. Courses are offered in Writing, Conversational English, Reading and Vocabulary, and Grammar/Mechanics.

ESOL 0310	Writing I
ESOL 0311	Conversational English I
ESOL 0312	Reading & Vocabulary I
ESOL 0313	Grammar/Mechanics I

LEVEL II

(3-3-0)

Level II course offerings are for students who have completed Level I or whose placement test evaluation indicates Level II. Instruction focuses on the students' prior experiences and knowledge, as well as appropriate contexts and themes. Thematic content may include but is not limited to family, health, social customs and interesting places in San Antonio and the region. Courses are offered in Writing, Conversational English, Reading and Vocabulary, and Grammar/ Mechanics.

ESOL 0320	Writing II
ESOL 0321	Conversational English II
ESOL 0322	Reading & Vocabulary II
ESOL 0323	Grammar/Mechanics II

LEVEL III

(3-3-0)

Level III course offerings are for students who have completed Level II or whose placement test evaluation indicates Level III. Instruction focuses on the students' prior experiences and knowledge, as well as appropriate contexts and themes. Thematic content may include but is not limited to family, community, historical and contemporary personalities from Texas and the region, a comparison of cultures, education, problem solving and technology. Courses are offered in Writing, Conversational English, Reading and Vocabulary, and Grammar/ Mechanics.

ESOL 0330 Writing III
ESOL 0331 Conversational English III
ESOL 0312 Reading & Vocabulary III
ESOL 0333 Grammar/Mechanics III

LEVEL IV
(3-3-0)

Level IV course offerings are for students who have completed Level III or whose placement test evaluation indicates Level IV. Instruction focuses on the students' prior experiences and knowledge, as well as appropriate contexts and themes. Thematic content may include but is not limited to family, community, business, problem solving, issues in society, and technology. Courses are offered in Writing, Conversational English, Reading and Vocabulary and Grammar/ Mechanics.

ESOL 0340 Writing IV
ESOL 0341 Conversational English IV
ESOL 0342 Reading & Vocabulary IV
ESOL 0343 Grammar/Mechanics IV

MULTI-LEVEL COURSES
(3-3-0)

The two multi-level ESOL courses emphasize customized instruction for mastery-based, self-paced learning. The content for the courses is determined by the students' proficiency in one or more of the following areas: conversational English, listening comprehension, reading, vocabulary building, writing, and/or grammar. In 2002-2003, the courses are as follows:

ESOL 0350 Special Topics 1: Listening Comprehension I/II and Social Interactions
ESOL 0355 Special Topics 2: Listening Comprehension III/IV and Vocabulary Building/Idioms

ENVIRONMENTAL SCIENCE

ENVR 1401 Environmental Science
(4-3-3)

A general science course that serves as an introduction to the disciplines and methods involved in environmental studies from a natural science perspective. Topics will include principles of the scientific method, environmental philosophy and ethics, ecosystems, population dynamics, soil systems, hydrology, air, water, and soil pollution, land conservation, and public environmental policy. Topics also will include hazardous wastes and chemicals in the environment, basic toxicology, human health risk assessment, municipal waste disposal, energy sources, environmental regulation, geological and biological resources, and sustainability. The three-hour laboratory will provide opportunities to gather and analyze ecological data, learn techniques for environmental auditing, conduct local field trips, and use specialized equipment for basic environmental investigations. **Lab Fee.**

ENVIRONMENTAL TECHNOLOGIES

EPCT 1307 Introduction to Environmental Safety and Health (3-2-3)

(Replaces ENVT 1304 OSHA Regulations)

Prerequisite: EPCT 1311

An historic overview of environmental safety and health. Emphasis is on the interpretation, summarization, and application of occupational safety and health standards. This course provides a study of the U.S. Occupational Safety and Health Administration (OSHA) regulations that pertain to protecting workers from exposure to environmental hazards. This course is also designed to provide instruction concerning the development and implementation of a Hazard Communication Program for employees.

EPCT 1311 Introduction to Environmental Science (3-3-0)

An overview of environmental science and current global concerns, and a brief history of environmental ethics, resource use, and conservation. Emphasis is placed on understanding the interrelationships between natural and man made environments, the use of the scientific method in studying ecosystem dynamics, applying scientific principles to natural resource utilization, and learning the fundamental principles of resource economics and environmental health. This course is the occupational-technical equivalent to ENVR 1401 (Environmental Science).

EPCT 1328 Basic Wastewater Operations (3-3-0)

Prerequisite: ENVR 1401 or EPCT 1411

An introduction to the information and operational skills needed for wastewater treatment plants. The course will define the characteristics of wastewater, explain the collection system, differentiate the wastewater treatment process, provide knowledge of the operations of different treatment plants, and examine the Texas rules and regulations.

EPCT 1343 Treatment, Remediation, and Disposal Techniques (3-3-0)

Prerequisite: ENVR 1401 or EPCT 1411

A study of the skills required in treatment, remediation, and disposal of solid

waste, hazardous materials, and hazardous waste. Emphasis is placed on the treatment, remediation, and disposal technologies currently applicable in the field. The student will be introduced to the regulations and standards pertaining to treatment, remediation, and disposal of solid waste, hazardous materials, and hazardous waste. The student will also learn the processes and technologies involved in the treatment, remediation, and disposal of solid waste, hazardous materials, and hazardous waste.

EPCT 1344 Environmental Sampling and Analysis (3-2-2)

This course introduces the student to sampling protocols and procedures, quality assurance/quality control requirements, sample preservation techniques, and field analysis. Emphasis is placed on analyses commonly performed by field environmental technicians. The student will learn the proper selection methods for basic monitoring equipment, instrument calibration, sampling, field analysis, and sample preservation procedures. The student will also learn how to perform representative sampling methods and will prepare and evaluate the field documentation associated with sampling and field analysis.

EPCT 1349 Environmental Regulation Interpretation and Applications (3-3-0)

Prerequisite: ENVR 1401 or EPCT 1411

An in-depth study of the major federal and state environmental regulations, including NEPA, RCRA, CERCLA, CAAA, NPDES, the Texas Risk Reduction Standards, and selected DOT regulations. The student will learn the major components of these regulations, and explain their goals. The student will also interpret and apply these regulations to current practices involving hazardous materials and hazardous wastes and will identify the written documentation requirements for regulatory compliance.

EPCT 1392 Special Topics in Water Quality and Wastewater Treatment Technology/Technician – International Environment Management (3-3-0)

Prerequisite: ENVR 1401 or EPCT 1311 or instructor consent.

An overview of international environmental issues as they relate to Mexico. The economy, population, and industrial setting of Mexico will be addressed, as well as resource depletion and water supply needs. Additionally, wastewater treatment systems and techniques pertinent to Mexico will be studied. A field trip into Mexico may be required.

EPCT 1392 Special Topics in Water Quality and Wastewater Treatment Technology/Technician – Water Resources Management in South Central Texas

(3-3-0)

An overview of water supply and wastewater treatment issues as they relate to the economy and population of South Central Texas. The Edwards Aquifer will be addressed, as well as water use restrictions and water supply needs. Additionally, wastewater treatment systems and techniques pertinent to South Central Texas will be studied. Several field trips to nearby wastewater treatment plants, surface water supply reservoirs, and groundwater collection wells may be required.

EPCT 1401 Hazardous Waste Operations and Emergency Response (HAZWOPER) Training

(4-3-3)

This course meets the minimum certification requirements of a hazardous waste site worker as found in 29 CFR 1910.120. The student will be introduced to the hazards associated with the handling of hazardous waste and hazardous materials, and will learn the basics of writing and interpreting Health and Safety Plans. The student will also learn the proper methods of personal protective equipment selection and use, as well as respiratory protection.

EPCT 2333 Environmental Toxicology

(3-3-0)

A review of the research determining the systematic health effects of exposures to chemicals. Emphasis is placed on the discussion of risk factors, routes of exposure, control measures, and acute and chronic health effects. The student will assess the human health effects of hazardous materials, and will learn the major routes of entry, metabolic processes, and acute/chronic effects on target organs. The student will also be introduced to the solution of toxicological problems.

EPCT 2367 Practicum - Environmental and Pollution Control Technologies

(3-0-21)

Prerequisite: Discretion of advisor.

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay.

EPCT 2403 Surface and Groundwater Collection (4-3-2)

Prerequisite: ENVR 1401 or EPCT 1411.

An in-depth study of operations and maintenance procedures for surface and groundwater collection. The course will identify surface water sources, describe water reservoir management and intake structures, differentiate the types of wells, well hydraulics, and well development, define the physical and chemical characteristics of groundwater, and explain well location considerations.

FRENCH

FREN 1411 Elementary French I
(4-3-2)

An introduction to the four basic skills: listening comprehension, oral production, reading, and writing. Pronunciation, grammar, and practical vocabulary will be introduced. Language laboratory required. **Lab Fee.**

FREN 1412 Elementary French II
(4-3-2)

Prerequisite: FREN 1411 or Departmental approval.

A continuation of French 1411. Language laboratory required. **Lab Fee.**

FREN 2311 Intermediate French I
(3-3-0)

Prerequisite: FREN 1412 or placement test.

Review of French grammar and the expansion of basic language skills.

FREN 2312 Intermediate French II
(3-3-0)

Prerequisite: FREN 2311 or placement test.

The application of the French language in conversation, composition, and readings.

GEOGRAPHY

GEOG 1301 Physical Geography
(3-3-0)

An introduction to the elements of physical geography. Includes the use and interpretation of maps and globes, the study of landforms, climate, weather, soils, and earth-sun relationships, with a focus on the result of these processes and their relationship to human activity.

GEOG 1303 World Geography
(3-3-0)

A study of the similarities and differences of the major world regions with a focus on culture and human behavior.

GEOLOGY

GEOL 1401 Earth Sciences I
(4-3-3)

An introduction to principles and methods of Earth Science. Nature of the earth and its settings in space as revealed by a survey of Physical and Environmental Geology, Meteorology, and Oceanography. Designed for students not majoring in science or Engineering. Occasional field trips may be arranged. Must be taken with GEOL 1402 to fulfill the science requirement. **Lab Fee.**

GEOL 1402 Earth Sciences II
(4-3-3)

A survey of Astronomy, the effects of physical processes operating on the earth's surface (Geomorphology), and of earth history as interpreted from fossils and rocks (Historical Geology). Studies will include the significance to society of the earth sciences including environmental problems and natural resource exploration and utilization designed for students not majoring in science or Engineering. Occasional field trips may be arranged. Must be taken with GEOL 1401 or GEOL 1446 to fulfill the science requirement. **Lab Fee.**

GEOL 1403 Physical Geology
(4-3-3)

The nature and properties of rocks and minerals; processes by which they are formed, altered and transported. Nature and development of the landscape. Laboratory work includes the study of minerals, rocks and topographic maps. Occasional field trips may be arranged. Both 1403 and 1404 must be taken to fulfill the science requirement. **Lab Fee.**

GEOL 1404 Historical Geology
(4-3-3)

History of earth and development of life relative to geological time. Laboratory exercises will complement the lecture topics. Occasional field trips may be arranged. Both 1403 and 1404 must be taken to fulfill the science requirement. **Lab Fee.**

GEOL 1445 Oceanography
(4-3-3)

Methods and principles of Oceanography. Geological, physical, chemical and biological studies of the earth's oceans. Origin and continuing evolution of the ocean basins, air-sea and land-sea interactions, and life in the oceans. Field trips may be arranged. **Lab Fee.**

GEOL 1446 Astronomy
(4-3-3)

A survey of Astronomy including the history of Astronomy, telescopes, celestial mechanics, time and the seasons, the sun and the planets, stars and stellar evolution, nebula, galaxies, and cosmology. Field trips may be arranged. **Lab Fee.**

GERMAN

GERM 1411 Elementary German I
(4-3-2)

For students with little or no knowledge of German. An introduction to the four basic skills: listening comprehension, oral production, reading, and writing. Pronunciation, grammar, and practical vocabulary will be introduced. Language laboratory required. **Lab Fee.**

GERM 1412 Elementary German II
(4-3-2)

Prerequisite: GERM 1411 or Departmental approval.

A continuation of German 1411. Language laboratory required. **Lab Fee.**

GERM 2311 Intermediate German I
(3-3-0)

Prerequisite: GERM 1412 or placement test.

Review of German grammar and the expansion of basic skills.

GERM 2312 Intermediate German II
(3-3-0)

Prerequisite: GERM 2311 or placement test.

The application of the German language in conversation, composition, and readings.

GOVERNMENT

GOVT 2305 American Government I (National)

(Formerly GOVT 2302)

(3-3-0)

Government 2305 is a general survey course in American government covering the theories and concepts of government, the United States Constitution, politics, public opinion, political parties, human rights, and the functions of national, state and local government.

GOVT 2306 American Government II (State)

(Formerly GOVT 2301)

(3-3-0)

Government 2306 is a general survey of the United States and Texas Constitutions, federalism, citizenship, voting and local governments with an emphasis on Texas government. Credit in both Government 2305 and 2306 is necessary to satisfy the legislative requirement for graduation. It is recommended that students enroll in Govt. 2306 if only three hours of government are needed to meet the requirements of a technical curriculum or to satisfy the state requirements for teacher certification.

HEALTH

(See Physical Education)

HISTORY

HIST 1301 History of the United States, Part I
(3-3-0)

A general survey of United States history from the discovery of America through the Civil War era. Satisfies one-half the legislative requirement of six semester hours in American history.

HIST 1302 History of the United States, Part II
(3-3-0)

A general survey of United States history from the Civil War era to the present. Satisfies one-half the legislative requirement of six semester hours in American history.

HIST 2301 Texas History
(3-3-0)

A survey of Texas History from the Spanish exploration to the present.

HIST 2311 Western Civilization to the Seventeenth Century
(3-3-0)

History of Western civilization from the earliest time through the Seventeenth Century. Surveys Western civilization's roots in the Ancient Middle East, Greece, and Rome. Emphasis of the course is on Medieval Europe, Christian church history, the Renaissance, and the Reformation.

HIST 2312 Western Civilization Since the Seventeenth Century
(3-3-0)

History of Western civilization from the Seventeenth Century to the present. Surveys major aspects of the political, social, economic, and intellectual history of France, England, Germany, Italy, Russia, Spain, and other Western European nations. Emphasis of the course is on the Enlightenment, the Age of Revolution, Romanticism, and Twentieth Century totalitarianism.

HIST 2321 World Civilization to the Fifteenth Century (3-3-0)

Prerequisite: None.

Study of the cultural histories of particular civilizations important for understanding the modern world: classical Greco-Roman civilization, China of the Han and Tang dynasties, Latin America, medieval Europe, and Islam in the Middle East and Africa through the Fifteenth Century. Within a general framework of political, social, and economic history, the course emphasizes the literature, philosophy, art, and music of each of these civilizations.

HIST 2322 World Civilization Since the Fifteenth Century (3-3-0)

Prerequisite: None.

Study of the contact of civilizations and cultural change since the Fifteenth Century. It emphasizes cultural history, literature, philosophy, art, and music of selected civilizations such as Asian, African, and Meso American as well as selected time periods from European history.

HIST 2380 Mexican-American History (3-3-0)

Prerequisite: HIST 1301 and HIST 1302.

The historical economic, social and cultural development of minority groups. May include African-American, Mexican-American, Asian-American and Native American issues.

HUMAN DEVELOPMENT

HUMD 0300 Human Development
(3-3-0)

This course provides students with a variety of experiences and information related to learning, memory, motivation, and adjustment to help the student:

1) Identify personal strengths and weaknesses, interests, and values;
2) Develop effective study skills, college success strategies, and interpersonal skills;
3) Understand the process involved in making rational decisions for academic, personal, and career planning.

Students who satisfactorily complete this course will be exempt from the orientation requirement for an associate degree.

NOTE: Students desiring a course in Human Developmental Psychology should refer to the section of Psychology Courses.

HUMAN RESOURCE MANAGEMENT

HRPO 1301 Customer Relations

(3-3-0)

Topics address general principles of customer service including skills, knowledge, attitudes, and behaviors pertinent to the professional development of the student.

HRPO 1311 Human Relations

(Formerly OST 1310)

(3-3-0)

Practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment.

HRPO 2301 Human Resource Management

(formerly MGT 2310 Personnel Management)

(3-3-0)

Prerequisites: BMGT 1301 and BMGT 1303

Behavioral and legal approaches to the management of human resources in organizations. The student will be able to describe and explain the development of human resources management; evaluate current methods of job analysis, recruitment, selection, training/development, performance appraisal, promotion, and separation; discuss management's ethical, socially responsible, and legally required actions; asses methods of compensation and benefits planning; and examine the role of strategic human resource planning in support of organizational mission and objectives.

HRPO 2307 Organizational Behavior

(3-3-0)

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences.

HUMANITIES

HUMA 1301 Introduction to the Humanities (3-3-0)

This course is an interdisciplinary assessment of cultural, political, philosophical and aesthetic factors critical to the formulation of the values that shaped the historical development of the individual and of society. The course will involve frequent field trips.

HUMA 1302 World Cultures and Global Issues (3-3-0)

An interdisciplinary, multi-perspective assessment of cultural, political, philosophical, scientific and aesthetic factors critical to the formulation of values and historical development of the individual and society. **This course will focus on recent global and international issues.**

INFORMATION TECHNOLOGY

(For courses beginning ITSC, ITSE, ITSW, ITNW, see Computer Information Systems.)

INTERDISCIPLINARY STUDIES

IDST 1301 Schools and Society: An Introduction to Education (3-3-0)

An enriched and integrated preservice course and content experience that: 1) Provides active recruitment and support of undergraduates interested in careers in teaching, especially in high need fields such as secondary math and science education, bilingual education and special education; 2) Provides students with opportunities to participate in early field experiences including middle and high school classrooms with varied and diverse populations; 3) Provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introducing and analyzing the culture of schooling and classrooms from the perspectives of language, gender, socioeconomic, ethnic and disability-based academic diversity and equity.

IDST 2370 Individual, Family, and Community (3-3-0)

Prerequisite: ENGL 1301.

This course is an examination of the history, basic questions, major theories and significance of the social and behavioral sciences. It will focus on the scientific understanding of the individual, the family, and the community.

IDST 2371 Society and Social Issues (3-3-0)

Prerequisite: ENGL 1301.

This course is a study of the history, causes and implications of selected social and institutional issues such as change, ethnicity, gender, and social conflict. It emphasizes the making of informed, rational and moral decisions

IDST 2372 World Civilization to the Fifteenth Century (3-3-0)

Prerequisite: ENGL 1301.

This course is a study of the cultural histories of particular civilizations important for understanding the modern world: classical Greco-Roman civilization, China of the Han and Tang dynasties, Latin America, medieval Europe, and Islam in the Middle East and Africa through the Fifteenth Century. Within a general framework of political, social and economic history, the course emphasizes the literature, philosophy, art, and music of each of these civilizations.

IDST 2373 World Civilization Since the Fifteenth Century (3-3-0)

Prerequisite: ENGL 1301.

This course is a study of the contact of civilizations and cultural change since the Fifteenth Century. It emphasizes cultural history, literature, philosophy, art, and music of selected civilizations such as Asian, African, and Meso American as well as selected time periods from European history.

IDST 2374 World Literature I, The Narrative Mode (3-3-0)

Equivalent to ENGL 2332

Prerequisite: ENGL 1302

This course explores the narrative mode in literature across the world and across time. Readings will include a variety of short fiction and other works.

IDST 2375 World Literature, Dramatic and Lyric Modes (3-3-0)

Equivalent to ENGL 2333

Prerequisite: ENGL 1302

This course explores the dramatic and lyric modes in literature across the world and across time. Works such as Medea, Blood Wedding, the screenplay of Citizen Kane, and anthology of lyric poetry will be studied. Film will be reviewed in class in conjunction with reading of screenplay and the question of translation will be addressed in conjunction with lyric poetry.

IDST 2377 Modes of Inquiry Across the Fields of Study (3-3-0)

Prerequisite: ENGL 1302

This course is a study of thinking in the sciences, social studies, mathematics, language arts, and fine arts through interdisciplinary investigations. Course experiences include modeling, practice, and analysis of ways of inquiring in the several subject areas, seeking their implications for interdisciplinary inquiries.

LANDSCAPE AND HORTICULTURAL SCIENCE

HALT 1301 Principles of Horticulture
(3-2-2)

An overview of the horticulture industry, plant science, terminology, classification, propagation, environmental responses, and careers and opportunities in the field of horticulture.

HALT 1303 Herbaceous Plants
(3-2-2)

An in-depth study of herbaceous plant material. Topics include practices and procedures used in the identification, growth, propagation, maintenance, and utilization of herbaceous plants in the horticulture industry.

HALT 1319 Landscape Construction
(3-2-2)

Exploration of landscape construction materials and the methods used for installation. Topics on soil preparation, including wood, concrete, and masonry construction; and landscape lighting, including pools, spas, and general construction details.

HALT 1322 Landscape Design
(3-2-2)

A study of the principles and elements of landscape design. Topics include client interview, site analysis, plan view, scale, plant selection, basic drawing and drafting skills, and plan preparation.

HALT 1331 Woody Plant Materials
(3-2-2)

An in depth study of the woody plant materials used in the horticulture industry. Topics include identification, characteristics, adaptation, cultural requirements, pest and disease problems, and use in the landscape.

HALT 1333 Landscape Irrigation
(3-2-2)

In depth coverage of irrigation systems including equipment, design, performance, and maintenance. Topics include residential and commercial applications, troubleshooting, repair, and technological advances in irrigation systems.

HALT 1351 Landscape Business Operations
(3-3-0)

Instruction in the structure of the landscape business including cost estimation; organization; equipment needs; interpretation of financial reports; and material, labor, and equipment management. Emphasis on the types of landscape operations, marketing, legal forms, construction law, and safety.

HALT 1398 Special Topics in Horticulture
(3-2-2)

Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

HALT 2314 Plant Propagation
(3-2-2)

A study of the sexual and asexual propagation of plants used in horticulture. Topics include propagation by seeds, cuttings, grafting, budding, layering, division, separation, and tissue culture; and environmental factors of propagation.

HALT 2318 Soil Fertility and Fertilizers
(3-2-2)

An in-depth study of the chemistry, soil interaction, plant uptake, and utilization of essential plant nutrients. Topics include deficiency and toxicity symptoms, and the selection, application, and characteristics of fertilizer materials.

HALT 2323 Horticultural Pest Control
(3-2-2)

Examination of federal, state, and local laws and regulations governing the control of horticultural pests. Topics include procedures; methods; safety requirements; integrated pest management (IPM); and chemical, natural, and biological controls.

HALT 2386 Internship-Horticulture Service Operations & Management, General
(3-1-20)

A basic, intermediate, or advanced type of non-health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Direct supervision is provided by the faculty or the work supervisor. An internship may be a paid or unpaid learning experience.

LATIN

LATI 2311 Intermediate Latin I

(3-3-0)

Review and further mastery through readings in Roman civilizations and history based on Latin prose authors.

LATI 2312 Intermediate Latin II

(3-3-0)

Review and further mastery through readings in Roman civilizations and history based on the study of Latin poetry authors.

LIBRARY AND INFORMATION STUDIES

INFO 1371 Information Literacy
(3-3-0)

A study of the fundamentals of information — storage, retrieval, evaluation, documentation, and communication — from theoretically diverse perspectives. Topics include how to do research, MLA and APA styles of documentation, copyright laws, using the PC for acquiring information and solving problems, critical thinking about information, a survey of the types of information resources available, and the general principles of information organization, storage, and retrieval. The course will include the preparation of students for a rapidly changing environment and their adaptation to new information formats and technologies as they become available. (In core curriculum and transferable, pending Coordinating Board approval.)

LOGISTICS MANAGEMENT

BMGT 1313 Purchasing Management

(formerly DSLT 2330)

(A Manufacturing Management Certificate component)

(3-3-0)

Prerequisites: LMGT 1319 or Departmental Approval

This course is designed to present the purchasing process as it relates to such topics as inventory control, price determination, vendor selection, negotiation techniques and ethical issues. The focus of the course will be on the role and function of purchasing in the Logistics Management process.

BMGT 1331 Production/Operations Management

(formerly DSLT 2340)

(A Manufacturing Management Certificate component)

(3-3-0)

Prerequisites: LMGT 1319 or Departmental Approval and MATH 1314

This course focuses on the fundamentals of the various techniques used in the practice of production management to include location, design, and resource allocation. Topics include Demand Forecasting, Quality Processes, Flow Control, Project Management, Facility and Workforce Management using mathematical and statistical techniques.

IBUS 1301 Principles of Imports/Exports I

(An Enhanced International Logistics Certificate Component)

(3-3-0)

Prerequisites: BMGT 2373 or Departmental Approval

A study of export management processes and procedures. Topics include governmental controls, licensing of products, documentation, commercial invoices, and traffic procedures. Application to human and public relations, management of personnel, finance, and accounting procedures.

IBUS 1354 International Marketing Management
(An Enhanced International Logistics Certificate Component)
(3-3-0)

Prerequisites: BMGT 2373 or Departmental Approval

Analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Students will develop an international import/export plan.

IBUS 2341 International Comparative Management
(An Enhanced International Logistics Certificate Component)
(3-3-0)

Prerequisites: BMGT 2373 or Departmental Approval

A course study of cross-cultural comparisons of management and communications processes. Emphasis on cultural geographic distinctions and antecedents that affect individual, group and organizational behavior. Topics include sociocultural demographic, technological and political-legal environmental of cluster countries and their relationship to organizational communication and decision making.

IBUS 2345 Import Customs Regulations
(An Enhanced International Logistics Certificate Component)
(3-3-0)

A study of the duties and responsibilities of the licensed customs broker or customhouse broker. Topics include processes for customs clearance including appraisement, bonded warehouse entry, examination of goods, harmonized tariffs, fees, bonding, penalties, quotas, immediate delivery, consumption, and liquidation, computerized systems, laws, and regulations.

LMGT 1319 Introduction to Business Logistics Management
(formerly DSLT 1301 and BMGT 1319)
(A component of all Logistics Certificates)
(3-3-0)

Prerequisite: None

A systems approach to managing activities associated with the management of traffic, transportation, inventory, warehousing, packaging, order processing, and materials handling. The course is designed to provide an overview of the general fundamentals of logistics management, its scope, process, functions, and services in a global context. Emphasis on interrelationships among the logistics functions including regulatory agencies.

LMGT 1323 Domestic and International Transportation Management

(formerly DSLT 2320 and BMGT 3272)

(A Transportation Management Certificate component)

(3-3-0)

Prerequisites: LMGT 1319 or Departmental Approval

A course designed to present the principles and practices of transportation and its role in the Logistics Management process. Emphasis is placed on the physical transportation systems involved in the U.S. and global logistics system, carrier responsibilities and services, freight classifications, rates, tariffs, public policy and regulations. This course also includes global geography and the development of skills to solve transportation problems and issues as they affect the Logistics Management process. This is the capstone course for the Logistics Management Certificate.

LMGT 1325 Warehouse and Distribution Center Management

(formerly DSLT 1310 and BMGT 1371)

(A Warehouse Management Certificate component)

(3-3-0)

Prerequisites: LMGT 1319 or Departmental Approval

A course designed to place emphasis on physical distribution and total supply chain management. Includes warehouse operations and physical inventory management, warehouse management systems using hardware and software applications, bar codes, effective organizational structures, just in time logistics, continuous replenishment, and third party warehouse logistics services. This is the capstone course for the Warehouse Management Certificate.

LMGT 1393 Special Topics in Logistics Management

(formerly DSLT 1311 and BMGT 1393)

(3-3-0)

Prerequisites: LMGT 1319 or Departmental Approval

This course provides students the opportunity to explore relevant and changing topics in the Logistics Management field. Group projects, interaction with local industry, class lectures, and case studies as well as guest speakers will allow students to understand, appreciate, and apply the information in these topics in their Logistics Management career. Primary emphasis will be placed on management topics as they affect the Logistics area. Topics selected will vary.

LMGT 2330 International Logistics Management

(formerly DSLT 2350)

(An International Logistics Certificate component)

(3-3-0)

Prerequisites: Departmental Approval

This course is designed to identify and examine the principles and practices involved in International Logistics Management including the role of the multinational corporation. Attention is given to global strategic planning, production, supply, manpower/labor, and firm/hose country relationships. This course will also emphasize global geography, business communication, cultural, political, and legal issues affecting Global Logistics Management.

LMGT 2334 Principles of Traffic Management

(A Transportation Management Certificate component)

(3-3-0)

Prerequisite: LMGT 1319 or Departmental Approval

A study of the role and functions of a transportation traffic manager within a commercial or public enterprise. Includes training in rate negotiation, carrier and mode selection, carrier service evaluation, quality control, traffic pattern analysis, documentation for domestic and international shipments, claims, hazardous materials movement, and the state, federal, and international environments of transportation.

LMGT 2488 Logistics Management Internship

(formerly DSLT 2599 and BMGT 2583)

(4-0-20)

Prerequisites: Completion of all formal course work for the AAS Degree or Departmental Approval.

This is a capstone course for the AAS Degree in Logistics Management. Students are placed in a Logistics Management business for workplace experience. **Professional Liability Fee required.**

MANAGEMENT

(See Business Administration and Management, General; Business Marketing; Human Resource Management)

MATHEMATICS

Placement in all mathematics courses is made on the basis of a student's high school mathematical background and ACT or SAT scores, or other college-selected placement examinations. A graphing calculator is required for all college-level mathematics courses (MATH 1314 and above).

MATH 0100 Basic Mathematics Skills Lab
(1-0-2)

Corequisite: MATH 0300.

Designed for students currently registered in MATH 0300. Individualized and group settings provide additional practice and explanation. Repeatable up to 3 credits.

MATH 0101 Introduction to Algebra and Geometry Skills Lab
(1-0-2)

Corequisite: MATH 0301.

Designed for students currently registered in MATH 0301. Individualized and group settings provide additional practice and explanation. Repeatable up to 3 credits.

MATH 0104 Special Topics in Math - TASP Review
(1-1-1)

Prerequisite: MATH 0303 with a "C" or better, or concurrent enrollment in MATH 0303, and a failing math score on the TASP or Alternative TASP.

This TASP Review course is for students who have finished or are taking their last developmental Math course, but have failed the Math portion of the TASP or Alternative TASP exam. This is for students who in the past would have enrolled in the Math SPICE program. Topics include fundamental mathematics, algebra and geometry.

MATH 0300 Basic Mathematics
(3-3-0)

Corequisite: MATH 0100.

Topics include whole numbers including powers, fractions, decimals, ratio and proportion, percents, integers, interpreting charts and graphs, and linear equations involving one operation.

MATH 0301 Introduction to Algebra and Geometry

(3-3-0)

Corequisite: MATH 0101.

Prerequisite: MATH 0300 with a grade of "C" or better, or equivalent.

Topics include operations with real numbers, problem-solving, inductive and deductive reasoning, informal geometry, linear equations and inequalities including Distributive Axiom, and introduction to polynomials and exponents.

MATH 0302 Elementary Algebra

(3-3-0)

Prerequisite: MATH 0301 with a grade of "C" or better, or equivalent.

Topics include real numbers, polynomials, integral exponents, scientific notation, factoring, rational expressions, linear equations and inequalities, graphs of linear equations and inequalities in two variables, systems of linear equations, solutions of quadratic equations, and introduction to radicals..

MATH 0303 Intermediate Algebra

(3-3-0)

Prerequisite: MATH 0302 with a grade of "C" or better, or equivalent.

Topics include introduction to relations and functions, factoring sums and differences of cubes, factoring by grouping, radical expressions and equations, rational exponents, complex numbers, quadratic equations, completing the square, absolute value equations and inequalities, systems of equations, and the use of these concepts in problem-solving.

MATH 1314 College Algebra

(3-3-0)

Prerequisite: MATH 0303 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include functions, including algebra of functions, composites, inverses, graphs, Remainder Theorem, Factor Theorem, Rational Root Theorem, logarithmic and exponential functions; systems of equations using Cramer's Rule; matrices and determinants; Binomial Theorem; and arithmetic and geometric sequences and series with Sigma notation.

MATH 1316 Plane Trigonometry

(3-3-0)

Prerequisite: MATH 1314 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include circular and trigonometric functions, inverse circular functions, identities, conditional equations, graphs, solutions of triangles, polar coordinates, complex numbers, and vectors.

MATH 1324 Finite Mathematics
(3-3-0)

Prerequisite: MATH 1314 with a grade of "C" or better, or equivalent. Graphing calculator required.

For students of business administration and economics. Topics include combinatorial analysis, probability, matrix algebra, linear inequalities for quantitative management problems involving Baye's Theorem, mathematical expectation, binomial probability distributions, linear programming by both graphical and simplex methods, Markov chains, and input-output theory.

MATH 1325 Calculus for Business
(3-3-0)

Prerequisite: MATH 1314 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include limits, continuity, derivatives of polynomials and other algebraic functions, implicit differentiation, higher order derivatives, extrema, logarithmic and exponential functions; definite and indefinite integrals, and applications to business and business-related topics.

MATH 1332 Math for Liberal Arts
(3-3-0)

Prerequisite: MATH 0303 with a grade of "C" or better, or equivalent.

This course is designed for non-mathematics and non-science majors who need only three hours of mathematics for their degree requirements. Math 1332 cannot be used as a prerequisite for any other math course. The course includes topics selected from: sets, logic, number theory, geometry, algebra, personal finance, probability and statistics.

MATH 1348 Analytic Geometry
(3-3-0)

Prerequisite: MATH 1314 with a grade of "C" or better, or equivalent, and demonstrated knowledge of trigonometry. Graphing calculator required.

Topics include rectangular and polar coordinate systems conic sections; vectors, transformations and curve sketching; lines and planes in E3; and matrices and linear systems.

MATH 1350 Fundamentals of Mathematics I

(Formerly MATH 1335)

(3-3-0)

Prerequisite: MATH 1314 with a grade of "C" or better, or equivalent

This course is designed specifically for students who seek elementary or middle grade teacher certification. Topics include numeration systems and properties of whole numbers, integers, rational numbers and real numbers with an emphasis on problem solving.

MATH 1351 Fundamentals of Mathematics II

(3-3-0)

Prerequisite: MATH 1350 with a grade of "C" or better, or equivalent.

Topics include statistics, probability, geometric figures, measurement, transformational geometry and coordinate geometry.

MATH 1442 Elements of Statistics

(4-4-0)

Prerequisite: MATH 1314 with a grade of "C" or better, or equivalent. Graphing calculator required.

This course is a non-calculus introduction to statistics with integrated computer applications. Topics include distributions, histograms, exploratory data analysis, measures of location and dispersion, elementary probability functions (binomial, normal, and t-distribution, chi-square distribution), analysis of measurements (confidence intervals and hypothesis testing), analysis of paired data (linear regression and correlation), and the use of pre-packaged programs for the analysis of data.

MATH 2318 Linear Algebra

(3-3-0)

Prerequisite: MATH 1314 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include systems of linear equations, matrices and matrix operations, determinants, vectors and vector spaces, inner products, change of bases; linear transformations; and eigenvalues and eigenvectors.

MATH 2320 Differential Equations

(3-3-0)

Prerequisite: MATH 2414 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include differential equations of first order, linear equations of higher order, applications, introduction to power series methods, elements of the Laplace Transform; other topics include systems of equations and numerical methods.

MATH 2412 Precalculus

(4-4-0)

Prerequisite: MATH 1314 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include functions, including composites, inverses, and graphs; conic sections; circular and trigonometric functions, inverse circular functions, identities, conditional equations, graphs, solutions of triangles, polar coordinates, complex numbers and vectors; and mathematical induction.

MATH 2413 Calculus I

(4-4-0)

Prerequisite: The combination of MATH 1316 and MATH 1348 or the single course MATH 2412 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include limits, continuity, derivatives of algebraic functions and trigonometric functions, implicit differentiation and higher order derivatives; related rates, Rolle's Theorem, Mean Value Theorem, velocity, acceleration, curve sketching and other applications of the derivatives; antiderivatives, Riemann sums, definite integrals, Fundamental Theorem of Calculus, area, and derivatives and integrals of exponential and logarithmic functions.

MATH 2414 Calculus II

(4-4-0)

Prerequisite: MATH 2413 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include derivatives of inverse trigonometric functions, indeterminate forms, L'Hospital's Rule; techniques of integration, numerical methods, improper integrals, volume, arc length and other applications of integration; parametric equations; derivatives and areas in polar coordinates; and sequences and series.

MATH 2415 Calculus III

(4-4-0)

Prerequisite: MATH 2414 with a grade of "C" or better, or equivalent. Graphing calculator required.

Topics include vector calculus, vector valued functions, tangents to curves, velocity vector, curl, partial derivatives, chain rule, gradients, implicit functions, extrema of functions of several variables, multiple integrals including change of order and applications, surface integrals, and path independent line integrals.

MUSIC

Music

This section includes curriculum for non-major fine arts requirements and music major curriculum.

MUSI 1163 Improvisation I
(1-1-1)

Prerequisite: High School Band. Co-requisite: MUEN 1121 Jazz Ensemble. Materials and practices for improvising in the Jazz Idiom. **Applied Music Fee.**

MUSI 1181 Beginning Piano
(1-1-1)

Piano class for music majors with no piano skills or for non-music majors who desire to learn the instrument. **Applied Music Fee.**

MUSI 1182 Elementary Piano
(1-1-1)

Prerequisite: MUSI 1181 or Instructor's permission.
Continuation of MUSI 1181. **Applied Music Fee.**

MUSI 1183 Class Voice I
(1-0-3)

Student must audition on first class meeting. Group performs a variety of music from all historical periods. **Applied Music Fee.**

MUSI 1192 Beginning Guitar
(1-1-1)

Guitar class for music majors with no guitar skills, or non-music majors who desire to learn the instrument. **Applied Music Fee.**

MUSI 1193 Elementary Guitar
(1-1-1)

Prerequisite: MUSI 1192 or instructor's permission.
Continuation of MUSI 1192. **Applied Music Fee.**

MUSI 1216 Ear Training and Sight Singing I
(2-0-2)

This course emphasizes ear training, sight singing and keyboard skills. **Applied Music Fee.**

MUSI 1217 Ear Training and Sight Singing II
(2-0-2)

Prerequisite: MUSI 1216.

This course is a continuation of ET & SSI with additional emphasis on dictation, both melodically and harmonically. **Applied Music Fee.**

MUSI 1306 Music Appreciation
(3-3-0)

Introduction to music for the college student. Information and techniques for appreciation: basic elements, major forms, genres and style periods. Some outside attendance at concerts/recitals required.

MUSI 1308 Introduction to Music Literature
(3-3-0)

A survey of vocal and instrumental literature, melding forms and representing styles. FALL ONLY.

MUSI 1310 American Music – Jazz Appreciation
(3-3-0)

Surveys the evolution of the art of music as related to jazz; both individual musicians and stylistic details are explored. Emphasis is placed upon critical listening.

MUSI 1311 Basic Music Theory I
(3-3-0)

Co-requisite: All music majors must enroll in MUSI 1181.

For students with little or no previous training in music. Study includes rudiments of music: notation, intervals, major scales, triads, music vocabulary, elementary ear training and keyboard work.

MUSI 1312 Basic Music Theory II
(3-3-0)

Prerequisite: MUSI 1311 or instructor's permission.

A continuation of MUSI 1311 with emphasis on elementary music theory, ear-training and keyboard work.

MUSI 2216 Ear Training and Sight-Singing III
(2-0-2)

Prerequisite: MUSI 1217.

This course includes ear training, sight singing and keyboard work utilizing materials of 18th, 19th, and 20th century music. **Applied Music Fee.**

MUSI 2217 Ear Training and Sight-Singing IV
(2-0-2)

Prerequisite: MUSI 2216. Corequisite: MUSI 2312.

Ear-training, sight-singing, and keyboard work/materials of Eighteenth, and Twentieth Century music. **Applied Music Fee.**

MUSI 2311 Music Theory III
(3-3-0)

Prerequisite: MUSI 1312 or instructor's permission.

This sophomore level theory course for music majors includes analytical and composition techniques for Eighteenth, Nineteenth, and Twentieth Century music. Topics will include modulation, chromaticism, modes, and modern music. **Offered Fall Semester Only.**

MUSI 2312 Music Theory IV
(3-3-0)

Prerequisite: Music Theory III – 2311 or instructor's permission.

Continuation of MUSI 2311. MUSI 2217 must be taken concurrently. **Offered Spring Semester Only.**

Applied Music

Class lessons in piano, guitar, and voice require a period of two class hours per week.

MUAP 1100 Accordion – Private
(1-1-1)

A comprehensive study of the performance techniques of the accordion and the different styles of performance such as Tejano, Mariachi, polkas, and waltzes. **Applied Music Fee.**

MUAP 1101 Violin – Private
(1-1-1)

Technical studies to develop instrumental techniques. **Applied Music Fee.**

MUAP 1117 Flute – Private
(1-1-1)

Prerequisite: High School Band.

Includes the study of all scales, chromatic, arpeggios, various articulations, and short compositions from standard repertoire. **Applied Music Fee.**

MUAP 1129 Clarinet – Private
(1-1-1)

Prerequisite: High School Band experience or instructor's permission.

Technical studies to develop instrumental technique. Included will be the Rose studies, the Klose Method, all scales, exercise in various articulations and short compositions from standard clarinet repertoire. **Applied Music Fee.**

MUAP 1133 Alto-Saxophone – Private
(1-1-1)

Prerequisite: High School Band.

Corequisite: MUEN 1121 – Jazz Ensemble.

Technique will be developed through the study of Voxman's Advanced Method and Selected Studies and major scales and arpeggios. **Applied Music Fee.**

MUAP 1137 Trumpet – Private
(1-1-1)

Prerequisite: High School Band.

Corequisite: MUSI 1121 – Jazz Band.

Technical studies will include Voxman, all scales and arpeggios in extended register and transposition. **Applied Music Fee.**

MUAP 1145 Trombone – Private
(1-1-1)

Prerequisite: High School Band. Co-requisite: MUEN 1121 Jazz Ensemble.

Technique will be developed through the studies of Mantia, Couillad, Rochut, Arbon and exercises in various articulations. **Applied Music Fee.**

MUAP 1157 Percussion – Private
(1-1-1)

Prerequisite: High School Band. Co-requisite: MUEN 1121 Jazz Ensemble.

A comprehensive study of the performance techniques of snare drum, and multiple percussion study on drum set and pit drumming. **Applied Music Fee.**

MUAP 1181 Beginning Voice/Private Instruction
(1-1-1)

Open to students without previous vocal experience. Offers the opportunity for the development of the fundamentals of singing. **Applied Music Fee.**

MUAP 1182 Elementary Voice/Private Instruction (1-1-1)

Prerequisite: MUAP 1181.

Continuation of MUAP 1181. Open to students with previous vocal experience. Offers the opportunity for further development of the fundamentals of singing. **Applied Music Fee.**

MUAP 1189 Bass (Private) Development of Bass Techniques (1-1-1)

Prerequisite: High School Band. Co-requisite MUEN 1121 Jazz Ensemble

Development of bass techniques. **Applied Music Fee.**

MUAP 2170 Intermediate Piano I/Private Instruction (1-1-1)

Prerequisite: MUSI 1182 or instructor's permission.

Continuation of MUSI 1182. **Applied Music Fee.**

MUAP 2171 Intermediate Piano II/Private Instruction (1-1-1)

Prerequisite: MUSI 2170 or instructor's permission.

Continuation of MUSI 2170. **Applied Music Fee.**

MUAP 2172 Intermediate Guitar I/Private Instruction (1-1-1)

Prerequisite: MUSI 1193.

Continuation of MUSI 1193. **Applied Music Fee.**

MUAP 2173 Intermediate Guitar II/Private Instruction (1-1-1)

Prerequisite: MUSI 2172.

Continuation of MUSI 2172. **Applied Music Fee.**

Music Ensemble

Performance Ensembles include Choir, Mariachi, Conjunto and Jazz Groups and require three class hours per week. Music majors require four semesters of participation in an ensemble.

MUEN 1121 Jazz Ensemble

(1-0-3)

Prerequisite: High School Band experience or instructor's permission.

The Palo Alto College Jazz Ensemble will perform standard jazz repertoire. Three hours per week of rehearsal are required. May be repeated up to four semesters for credit. **Applied Music Fee.**

MUEN 1141 Choir

(1-0-3)

Group performs a variety of vocal music from all historical periods. May be repeated up to four semesters for credit. **Applied Music Fee.**

MUEN 1151 Beginning Mariachi Ensemble

(1-0-3)

The study of mariachi music through vocal and instrumental performance. May be repeated any number of times; however, only four hours will count toward a degree or transfer. **Applied Music Fee.**

MUEN 1152 Elementary Mariachi Ensemble

(1-0-3)

A continuation of MUEN 1151. Develop further vocal and instrumental performance techniques. **Applied Music Fee.**

MUEN 1155 Beginning Conjunto

(1-0-3)

The study of Conjunto music through vocal and instrumental performance. May be repeated any number of times, however, only four hours will count toward a degree or transfer. **Applied Music Fee.**

MUEN 1158 Jazz Show Choir

(1-0-3)

Audition required

Corequisite: MUEN 1141.

The Jazz Show Choir is a select group of singers who rehearse and perform Jazz and popular choral music for a small ensemble. Students should be concurrently enrolled in Choir (MUEN 1141). The ensemble rehearses three hours per week. **Applied Music Fee.**

OFFICE SYSTEMS TECHNOLOGY

(See Administrative Computer Technology)

ORIENTATION

ORIE 0100 College Orientation: Strategies for Success (1-0-0)

This course is designed to provide students with a variety of experiences and information which can help them adjust to college life and help make their experiences in college more successful. It helps students understand the institution's expectations of them. Emphasis is placed on information about college policies and procedures as well as personal development.

ORIE 1170 Goal Setting and Career Planning (1-1-0)

Designed to assist the undecided student in establishing academic and career goals. This is an application course to guide the student through the goal-setting and decision-making process in order to set realistic academic and career goals necessary for being successful in college.

ORIE 1171 Improving Academic Performance (1-1-0)

This course is designed for the academically at-risk student needing to improve his or her study and time management skills. Emphasis is placed on time planning, note-taking, test-taking, and various study techniques.

PHILOSOPHY

PHIL 1301 Introduction to Philosophy
(3-3-0)

This course investigates the fundamental questions of reality. It explores the meaning of life, truth, freedom, the existence of God, and social and political theory.

PHIL 1304 Major World Religions
(3-3-0)

This course is a comparative introduction to the origins, development, teachings and practices of the major world religions. Included are such faiths as Taoism, Confucianism, Hinduism, Buddhism, Judaism, Christianity, and Islam.

PHIL 2303 Logic
(3-3-0)

This course is an introduction to the art and science of reasoning well. It explores the difference between good and bad arguments through various tools, techniques, and principles.

PHIL 2306 Ethics
(3-3-0)

This course examines the questions of morality from theoretically diverse perspectives. Theories are applied to moral and social issues, with an emphasis on moral reasoning and decision making.

PHIL 2371 Business Ethics
(3-3-0)

This course is an examination of principles of moral conduct from theoretically diverse perspectives, with an emphasis on issues that guide behavior in the world of business. Specific problems to be considered include topics such as corporate responsibility, employee rights, the nature of the free enterprise system, environmental concerns, and ethical business practices.

PHYSICAL EDUCATION

Along with the physical activities, all physical education activity classes include cognitive content necessary for the successful completion of these courses. Writing is part of the curriculum requirement.

PHED 1101 Fencing
(1-1-2)

Students will learn basic foil techniques and footwork. History, rules, scoring systems, and terminology will be learned. **Lab Fee**.

PHED 1102 Adapted Physical Activity
(1-1-2)

This class is designed for physically disabled students. A release/limitation form that describes the student's condition and that contains activity suggestions from the student's doctor is required. **Lab Fee**.

PHED 1103 Beginning Softball
(1-1-2)

Infielder and outfielder techniques, batting, and throwing for distance and accuracy will be taught. Rules for slow-pitch will be emphasized but fast-pitch will also be covered. **Lab Fee.**

PHED 1104 Physical Conditioning
(1-1-2)

This class will work on strength, muscular endurance, flexibility, and cardiovascular fitness. Students will perform weight training, stretching, rope jumping, stationary bike riding, and some running activities in class. **Lab Fee**.

PHED 1105 Beginning Golf
(1-1-2)

Students will learn how and when to use woods and irons. Also to be covered are putting, different scoring systems, rules, and etiquette. **Lab Fee**.

PHED 1106 Weight Training
(1-1-2)

This class will focus on the development of strength and muscular endurance as they relate to overall health related fitness. Strength training theories, hypertrophy, balance, and body composition will be topics for discussion. Some cardiovascular work also will be encouraged. **Lab Fee**.

PHED 1107 Intermediate Weight Training
(1-1-2)

Prerequisite: PHED 1106 or permission of the department.

This course is a continuation of PHED 1106. Students will learn and practice advanced concepts such as circuit training and sports-specific training. **Lab Fee**.

PHED 1108 Beginning Bowling
(1-1-2)

This course is to introduce basic bowling skills. Students will learn grips, approaches, releases, rules, history, scoring, and equipment selection use, and care. **Special Fee**.

PHED 1109 Spin Bike I
(1-1-2)

This course is group exercise class designed to improve individualized cardiovascular fitness with the use of stationary bicycles. **Lab Fees**.

PHED 1110 Spin Bike II
(1-1-2)

This course is an advanced cardiovascular conditioning class using stationary bicycles. **Lab Fee**.

PHED 1111 Intermediate Fencing
(1-1-2)

Prerequisite: PHED 1101 or permission of the department.

This class is for students with credit in Beginning Fencing or equivalent experience. Basic skills will be reviewed and refined. New and advanced skill will be introduced. **Lab Fee**.

PHED 1112 Yoga
(1-1-2)

Yoga introduces the student to the philosophy and practice of various types of yoga, including Hatha Yoga, power yoga, yoga for fitness, and yoga for conditioning as a way to enhance physical, mental and spiritual well-being. **Lab Fee**.

PHED 1113 Beginning Basketball
(1-1-2)

This is a skill development class for beginners. Students will work daily on drills and activities designed to increase skills in passing, dribbling, ball handling, defense, and shooting. Team skills will be learned after fundamentals are mastered. **Lab Fee**.

PHED 1114 Intermediate Basketball
(1-1-2)

Prerequisite: PHED 1113 or permission of the department.

This course is a continuation of PHED 1113 and will focus on the development of increased individual skills as well as introducing team strategies and techniques. **Lab Fee**.

PHED 1115 Beginning Tennis
(1-1-2)

This class is for true beginners and others with no previous instruction in tennis. Court movements, grips, forehand and backhand ground strokes, volleys, and serves will be covered. **Lab Fee**.

PHED 1116 Intermediate Tennis
(1-1-2)

This class is designed for students with credit for Beginning Tennis or who have competitive experience. Stroke refinement, game strategies, and advanced drills will be included. **Lab Fee**.

PHED 1117 Beginning Volleyball
(1-1-2)

The student in this class will learn forearm pass, overhead pass, and overhead serve. Individual and paired drills, lead-up games, and conditioning activities will prepare students for competition. **Lab Fee**.

PHED 1118 Intermediate Volleyball
(1-1-2)

Prerequisite: PHED 1117 or permission of the department.

This course is for students with credit for Beginning Volleyball or pervious competitive experience. Basic skills will be reviewed and tested as well as spiking, blocking, team offense, and team defense strategies. **Lab Fee**.

PHED 1119 Intermediate Yoga
(1-1-2)

This course is a continuation of PHED 1112 and includes the philosophy and practice of various types of yoga, including Hatha Yoga, power yoga, yoga for fitness, and yoga for conditioning as a way to enhance physical, mental and spiritual well-being. Additional concepts and techniques will build on those learned in PHED 1112. **Lab Fee**.

PHED 1120 Walking
(1-1-2)

Students will learn about health-related physical fitness, monitoring their effort and progress, building a personal fitness plan for walking. **Lab Fee**.

PHED 1121 Advanced Basketball
(1-1-2)

This course provides for further development of advanced basketball skills and strategies. Emphasis is placed on team offense and defense concepts and techniques. **Lab Fee**.

PHED 1122 Folk, Square, and Social Dance
(1-1-2)

Fundamental techniques for folk dance, square dance, and social dance will be learned. Cultural aspect of each of theses forms will be studied. **Lab Fee**.

PHED 1123 Intermediate Golf
(1-1-2)

Intermediate golf skills, techniques and strategies are the focus of this class. Students will engage in play at a certified golf course. This course is offered off campus. **Special Fee**.

PHED 1124 Intermediate Water Aerobics
(1-1-2)

Additional exercises designed to increase cardiovascular fitness, flexibility, strength and muscular endurance. **Lab Fee**.

PHED 1125 Camping and Backpacking
(1-1-2)

Hiking, orienteering, packing, camping, and survival skills will be discussed and practiced. A weekend trips may be required. **Special Fee**.

PHED 1126 Private Fencing I
(1-1-2)

This course provides individual instruction in the basic fundamentals of movement and simple offense and defense with foil, as well as explanation of rules of foiling fencing. **Special Fee**.

PHED 1127 Private Fencing II
(1-1-2)

This course provides individual instruction for intermediate fencing skills. **Special Fee**.

PHED 1128 Private – Advanced Fencing
(1-1-2)

This course is a continuation of PHED 1111, which provides advanced levels of fencing techniques and introduces basic fundamentals of directing and judging fencing. **Special Fee**.

PHED 1129 Beginning Swimming
(1-1-2)

This is a class for students with no water experience, fear of the water, and/or no previous instruction in the following strokes: elementary backstroke, sidestroke, breaststroke, back crawl, and front crawl. Water orientation, floating, and gliding practice will lead up to stroke instructions. **Lab Fee**.

PHED 1130 Beginning Soccer
(1-1-2)

This is a basic level class. Beginning skills such as ball control, dribbling, passing, shooting, and defense will be practiced. Students will learn the rules and history of the sport. **Lab Fee**.

PHED 1131 Intermediate Swimming
(1-1-2)

Students who register for this class should be able to demonstrate skills on elementary backstroke, sidestroke, breaststroke, back crawl, and front crawl. Strokes to be introduced are: inverted breaststroke, lifesaving stroke, butterfly, and racing strokes. Water safety, basic rescue, and survival techniques will also be taught. **Lab Fee**.

PHED 1132 Lifesaving
(1-1-2)

Students registered for this class should be able to demonstrate all the strokes taught in beginning and intermediate swimming, as well as be able to swim 800 meters of freestyle laps without stopping. Successful completion of this class should qualify students to apply for Red Cross certification. **Lab Fee**.

PHED 1134 Aquatic Conditioning
(1-1-2)

This is a class for good swimmers who want to use swimming as a cardiovascular fitness activity. Training regimen for fitness, endurance swimming, and competition will be learned and practiced. **Lab Fee**.

PHED 1135 Water Aerobics
(1-1-2)

Exercises designed to increase cardiovascular fitness, flexibility, strength, and muscular endurance will be performed in shallow areas of the pool. This is a good class for overweight students with joint problems, and students who want a pool based class that does not involve swimming. **Lab Fee**.

PHED 1136 Beginning Scuba
(1-1-2)

Students will learn about selection, care, and use of equipment. Safety, underwater movements, and other topics will be learned and practiced. **Lab Fee**.

PHED 1137 Triathlon Training
(1-1-2)

Training theories and skill techniques for running, biking, and swimming will be learned and applied. Related factors such as nutrition, weight training, combination workouts, and competition skills also will be covered. Some experience is helpful but not mandatory. Students must provide their own bicycles. **Lab Fee**.

PHED 1140 Beginning Aerobics
(1-1-2)

This is an exercise-to-music class that could include any of the following: dance aerobics, sports moves aerobics, step aerobics, stretching, strength work, and muscular endurance work. Activities will be presented progressively. Fitness principles will be learned and practiced. **Lab Fee**.

PHED 1141 Intermediate Aerobics
(1-1-2)

Many of the same activities utilized in beginning aerobics also will be used in this class, but will start at a higher level. Additionally, students will apply exercise principles in developing a workout routine to be presented in class. **Lab Fee**.

PHED 1142 Cardio-Kickboxing
(1-1-2)

This course is designed to develop cardiorespiratory fitness, muscular endurance, flexibility and body composition through the use of combined kickboxing and aerobic activity. Hand weight, jump ropes and traditional floor work routines will be included in regular circuit, and interval workouts. Concepts of exercise and proper nutrition for a lifetime of health and weight management will also be discussed. **Lab Fee**.

PHED 1143 Intermediate Cardio-Kickboxing
(1-1-2)

This course is designed to develop cardiorespiratory fitness, muscular endurance, flexibility and body composition through the use of combined kickboxing and aerobic activity. Hand weight, jump ropes and traditional floor work routines will be included in regular circuit, and interval workouts. Concepts of exercise and proper nutrition for a lifetime of health and weight management will also be discussed. Prerequisite: NONE. **Lab Fee**.

PHED 1145 Beginning Modern Dancing
(1-1-2)

Students in this course will explore movement as an art form to achieve grace, poise, and self-expression. Fundamental movement patterns and dance composition will be part of course content. **Lab Fee**.

PHED 1150 Beginning Jogging
(1-1-2)

Students will learn how to use aerobic running in a fitness plan. Heath-related fitness components, safety, injury prevention, and training system will be taught. **Lab Fee**.

PHED 1155 Varsity Athletics
(1-1-2)

Prerequisite: Permission from instructor is necessary before enrollment. Students will learn training systems and techniques appropriate for various events in one particular sport. Participation in practice sessions and competitions is required. **Lab Fee**.

PHED 1238 Physical Fitness
(2-2-0)

This course introduces physical fitness concepts and the use of selected physiological variables of fitness. Suitable fitness program will be explored. **Lab Fee**.

PHED 1301 Introduction to Physical Education
(3-3-0)

This course, intended for physical education majors, is an orientation to the field of Health, Physical Education, and Recreation including the history, philosophy, fundamentals, current practices, and trends of profession. Career opportunities will be explored.

PHED 1304 Personal/Community Health
(3-3-0)

This course will investigate relationships among infectious disease, chronic disease, safety, and lifestyle factors in personal health. Government programs and policies, health care provision agencies, types of insurance, and current areas of interest in public health will be studied.

PHED 1306 First Aid
(3-3-0)

Students will learn Adult CPR and basic care techniques for injuries, burns, and poisoning. Upon successful completion of this course, students will earn Red Cross First Aid and CPR certification. **Lab Fee**.

PHED 1331 Physical Education in the Elementary Grades
(3-3-0)

This is a course in materials, methods and activities in physical education programs in elementary schools. The needs and interests at different grade levels are stressed.

PHED 1332 Movement Experience for Pre-School Children
(3-3-0)

This course meets the needs of those interested in movement and play for the pre-school child. Methods of learning, values of play, development of the child and organization of the environment are stressed.

PHED 1346 Substance Abuse
(3-3-0)

Students will examine the use and abuse of drugs in today's society. Emphasis will include physiological changes that occur, biochemical reactions, and brain triggers involved in substance abuse. Also included are psychological factors.

PHED 2101 Skill Analysis – Individual Activity
(1-1-2)

Specialized activity instruction involving skills, drills, rules, regulations, and skill performance in a variety of selected individual activities. **Lab Fee**.

PHED 2102 Skill Analysis – Dual Activity
(1-1-2)

Specialized activity instruction involving skills, drills, rules, regulations, and skill performance in a variety of selected dual activities. **Lab Fee**.

PHED 2103 Skill Analysis – Team Sport
(1-1-2)

Specialized activity instruction involving skills, drills, rules, regulations, and skill performance in a variety of selected team activities. **Lab Fee.**

PHYSICS

PHYS 1171 Concepts of Physics Laboratory
(1-0-2)

Prerequisite: PHYS 1305 or concurrent enrollment.

This course is designed to supplement PHYS 1305 or PHYS 1307 with laboratory experience related to the topics of these two courses. **Lab Fee.**

PHYS 1305 Introductory Physics I
(3-3-0)

Prerequisite: MATH 0303 or equivalent.

This course stresses the importance of science in the modern world, while not requiring a mathematical background beyond algebra. Topics include mechanics, heat, and sound. Some degree programs may require concurrent enrollment in PHYS 1171 for additional laboratory experience.

PHYS 1307 Introductory Physics II
(3-3-0)

Prerequisite: PHYS 1305.

Topics to be covered include electricity and magnetism, light, and atomic nuclear physics.

PHYS 1401 General Physics I
(4-3-3)

Prerequisite: MATH 1316 (Plane Trigonometry) or permission of the department.

For those preparing to enter medicine, dentistry, nursing, pharmacy, architecture, and for those who require a two-semester technical course in physics. Mechanics, sound, heat, and their applications. Must be followed by PHYS 1402 to satisfy a science requirement. **Lab Fee.**

PHYS 1402 General Physics II
(4-3-3)

Prerequisite: PHYS 1401.

Topics to be included: electricity, magnetism, light, and atomic nuclear physics. **Lab Fee.**

PHYS 1570 Mechanics & Heat
(5-4-3)

Prerequisite: MATH 2413 and High School Physics or Physics unit.
Corequisite: MATH 2414

For pre-engineering and physics majors or minors. The principles and applications of mechanics, heat, and fluids are covered through an analytic, problem-solving procedure. **Lab Fee.**

PHYS 2570 Electricity and Magnetism
(5-4-3)

Prerequisite: PHYS 1570.
Corequisite: MATH 2415.

For pre-engineering and physics majors or minors. The principles and applications of electricity and magnetism, wave phenomena, and some topics in modern physics are investigated. **Lab Fee**

PROFESSIONAL OFFICE

(For courses beginning with POFT and POFI, see Administrative Computer Technology)

PROFESSIONAL PILOT

(See Aviation)

PSYCHOLOGY

PSYC 2301 Introduction to Psychology
(3-3-0)

Psychology is the scientific study of behavior and mental processes. Topics include theoretical perspectives, scientific method, brain and nervous system, perception, behavioral conditioning, memory, thinking, human development, and personality. Psychotherapy, social psychology, and the types and causes of mental illness are also covered.

PSYC 2306 Human Sexuality
(3-3-0)

This course is the study of the physiological, psychological, anatomical and sociocultural aspects of human sexuality. Topics included are the patterns and control of fertility, sexual orientation and behavior, sexually-transmitted diseases, sexual problems and deviance, and the achievement of a positive sexual self-concept.

PSYC 2308 Developmental Psychology: Conception Through Childhood
(3-3-0)

Prerequisite: PSYC 2301.

This course is a study of cognitive, psychological, and physical aspects of development from conception through the school years with emphasis on current research methods and results.

PSYC 2314 Developmental Psychology: Life Span
(3-3-0)

Prerequisite: PSYC 2301.

This course is a study of maturational, social, emotional, cognitive, neurological, perceptual, sexual, and behavioral factors in human development.

PSYC 2316 Psychology of Personality
(3-3-0)

Prerequisite: PSYC 2301.

This course is a review of the major theories of personality and of the various techniques used to assess personality.

PSYC 2317 Statistics for the Behavioral Sciences
(3-3-0)

Prerequisite or Corequisite: MATH 0303.

This course is a study of basic descriptive and inferential statistics to include hypothesis testing for both correlational and experimental techniques applicable to the behavioral, social, and medical sciences. Probability, sampling theory, frequency distributions, measures of central tendency and variability, and hypothesis testing will be explored as well as various parametric and nonparametric tests of significance. This course will not fulfill mathematics requirements. It is recommended for behavioral science and allied health majors.

PSYC 2370 Abnormal Psychology
(3-3-0)

Prerequisite: PSYC 2301.

This course is a study of the description, current classifications, etiology, and treatment of major psychological disorders, including both functional and organic disorders.

PSYC 2371 Theories of Learning
(3-3-0)

Prerequisite: PSYC 2301.

This course is an examination of major theories about the nature of the learning process. Discussion will focus on the construction and evaluation of learning models. The practical implications of theoretical findings for the acquisition, maintenance, and elimination of behavior will be considered.

READING

Placement in developmental reading courses is based upon the scores from either the college's placement instrument or the results from the Texas Academic Skills Program (TASP). Students needing remediation/development will be placed in the appropriate course. Successful completion of the developmental reading courses, through READ 0303, will prepare students for TASP.

READ 0100 Basic Reading Skills Lab
(1-0-1)

Designed for students currently registered in READ 0300 to promote greater reading improvement. Individualized and group settings utilizing computers provide additional practice and explanation to supplement READ 0300.

READ 0101 Reading I Lab
(1-0-1)

Designed for students currently registered in READ 0301 to promote greater reading improvement. Individualized and group settings utilizing computers provide additional practice and explanation to supplement READ 0301.

READ 0102 Reading II Lab
(1-0-1)

Designed for students currently registered in READ 0302 to promote greater reading improvement. Individualized and group settings utilizing computers provide additional practice and explanation to supplement READ 0302.

READ 0103 Reading III Lab
(1-0-1)

Designed for students currently registered in READ 0303 to promote greater reading improvement. Individualized and group settings utilizing computers provide additional practice and explanation to supplement READ 0303.

READ 0300 Basic Reading Skills
(3-3-0)

Co-requisite: READ 0100

Designed for the student entering with special reading needs below 6th grade reading level. Class size controlled for individual attention. Three lecture hours per week, plus laboratory experiences as required.

READ 0301 Reading I

(3-3-0)

Co-requisite: READ 0101.

Prerequisite: READ 0300 or equivalent placement score.

Designed for the student reading between the 6th and 8th grade level and needing additional review, refinement and reinforcement of basic reading skills. Word recognition, vocabulary development, comprehension, fluency, and study skills will be stressed. Three lecture hours per week plus laboratory experiences as required. **Students must earn a minimum grade of C in READ 0300 before being permitted to enroll in READ 0301.**

READ 0302 Reading II

(3-3-0)

Co-requisite: READ 0102

Prerequisite: READ 0301 or equivalent placement score.

Designed for the student reading between the 8th and 10th grade level. Pertinent vocabulary, specific textbook comprehension, necessary study skills in context, and flexibility of reading rates are emphasized. Efficient reading techniques appropriate for academic demands are developed. Three lecture hours per week plus laboratory experiences as required. **Students must earn a minimum grade of C in READ 0301 before being permitted to enroll in READ 0302.**

READ 0303 Intermediate Reading

(3-3-0)

Co-requisite: READ 0103

Prerequisite: READ 0302 or equivalent placement score.

Designed for the student reading between the 10th and 12th grade level. Pertinent vocabulary, specific textbook comprehension, main idea, writer's intent, organization of ideas, and critical reasoning skills are emphasized. Strong emphasis on study skills. Three lecture hours per week plus laboratory experiences as required. This course is strongly recommended for students concurrently enrolled in college-level courses as well as for students who are working toward passing TASP. **Students must earn a minimum grade of C in READ 0302 before being permitted to enroll in READ 0303.**

SOCIAL WORK

SOCW 2361 Introduction to Social Work
(3-3-0)

This course is an introduction to the history, philosophy, and practice of social work. It examines case work, group work, and community organization.

SOCW 2362 Introduction to Social Welfare
(3-3-0)

Prerequisite: SOCW 2361.

This course studies the role of the social worker as well as social welfare in American society with emphasis on evaluation of current programs.

SOCIOLOGY

SOCI 1301 Introduction to Sociology
(3-3-0)

This course is designed to achieve insights into the development and workings of society. It includes cultural factors which underlie social change, social organization, socialization, stratification, social institutions, and social issues.

SOCI 1306 Contemporary Social Problems
(3-3-0)

This course is a survey of some of the major social problems of present society: poverty, drug abuse, alcoholism, prejudice, discrimination, family disorganization, mental illness, energy sources, environmental abuse, sexual deviance, and unemployment.

SOCI 2301 Marriage and the Family
(3-3-0)

Prerequisite: SOCI 1301.

This course is a practical approach to the institution of marriage and family. It includes examination and analysis of divorce, human sexuality, sex roles, mate selection, marital adjustment, family patterns in the middle and the later years, and family disorganization.

SPANISH

SPAN 1300 Beginning Conversational Spanish I
(3-3-0)

For students with little or no knowledge of Spanish. Development of the skills required to speak Spanish: conversation and the study of idiomatic expressions, basic grammatical structures, and culture. Does not fulfill degree requirements.

SPAN 1310 Beginning Conversational Spanish II
(3-3-0)

Prerequisite: SPAN 1300.

A continuation of SPAN 1300. Does not fulfill degree requirements.

SPAN 1411 Elementary Spanish I
(4-3-2)

For students with little or no knowledge of Spanish. An introduction to the four basic skills: listening comprehension, oral production, reading, and writing. Pronunciation, grammar, and practical vocabulary will be introduced. Language laboratory required. **Lab Fee.**

SPAN 1412 Elementary Spanish II

(4-3-2)

Prerequisite: SPAN 1411 or Departmental approval.

A continuation of SPAN 1411. Language laboratory required. **Lab Fee.**

SPAN 2311 Intermediate Spanish I

(3-3-0)

Prerequisite: SPAN 1412 or placement test

Conducted primarily in Spanish, this course provides an approach to the Hispanic culture. A review of Spanish grammar, the expansion of basic language skills, and readings of more advanced texts with a view toward Spanish and Latin American cultures are included.

SPAN 2312 Intermediate Spanish II

(3-3-0)

Prerequisite: SPAN 2311

A practical approach to reading literature in Spanish is provided. Conducted primarily in Spanish, the fine points of Spanish grammar and a survey of literary selections from the Hispanic world are covered.

SPAN 2316 Career Spanish I

(3-3-0)

Prerequisites: Elementary Spanish I and Elementary Spanish II or its equivalent

This third semester course presents realistic situations and the specialized vocabulary for business and finance professionals to communicate with members of the Hispanic community (local/global) in the course of their daily work.

SPAN 2317 Career Spanish II

(3-3-0)

A continuation of career Spanish 2316. Emphasis on advanced oral and written communication related to technology, marketing, and the Internet for conducting business transactions.

SPNL 1342 Business Spanish (Logistics)
(3-3-0)
(An International Logistics Management Certificate component)

Prerequisite: LMGT 1319 and SPAN 2311 or Departmental approval

Development of Spanish oral and written communication skills related to the business environment including medical, business, commercial, and legal terminology, including a review of basic Spanish grammar. This course concentrates on the business logistics environment to include materials management (manufacturing), physical distribution (transportation and warehousing), and import/export terminology.

SPEECH COMMUNICATION

Speech is the basic communication tool. These courses are geared to help students improve their ability to communicate in both social settings and in the workplace. Students should consult their advisors, counselors, or speech department before selecting speech courses.

SPCH 0301 Oral Communication Skills
(3-3-0)

Development of speaking, listening, nonverbal communication skills for situations at home, school, and work. Emphasis on using communication skills to build self-confidence and reduce nervousness in oral presentations.

SPCH 0302 Intermediate Conversational English for Non-Native English Speakers
(3-3-0)

This course is designed to provide extensive oral practice in spoken English. The focus is on oral construction of sentences, idioms, and conversational speech in everyday situations and occasion-specific situations. This course should be taken after SPCH 0370 and 0371 or with departmental permission..

SPCH 0303 Public Speaking for Non-Native Speakers of English
(3-3-0)

This course is designed to be a public speaking preparatory course for non-native speakers of English. The focus is to develop the skills necessary in a formal speaking situation as well as teach techniques used to deal with speaking anxiety. This course should be taken after SPCH 0370, 0371, and 0302 or with departmental permission and before entering the SPCH 1311 (Fundamentals of Speech) course required for most degree plans.

SPCH 0370 Pronunciation I for the Non-Native Speakers of English
(3-3-0)

Specifically designed to enhance the oral competency of non-native English speakers. The focus is on English sounds, the stress patterns used in English and pronunciation.

SPCH 0371 Pronunciation II and Beginning Conversational English for Non-Native English Speakers

(3-3-0)

Prerequisite: SPCH 0370 or counselor/faculty recommendation.

Continuation of SPCH 0370 for students wanting additional work, with emphasis on practice in conversational English.

SPCH 1311 Fundamentals of Speech

(3-3-0)

Aimed at understanding and demonstrating the fundamentals of oral communication and participation in group speaking situations. Focus is on critical thinking skills and preparing and delivering different types of speeches.

SPCH 1315 Public Speaking

(3-3-0)

Prerequisite: SPCH 1311, SPCH 1321, or consent of the instructor.

Designed for students wanting to continue their work in public speaking. Course concentrates on refining techniques of speaking and critical thinking skills learned in the prerequisite course. Possible areas for practice include persuasion techniques and theories, longer informative presentations, and specialty speeches. Appropriate for students entering the fields of Speech, Communication, or Public Relations.

SPCH 1318 Interpersonal Communication

(3-3-0)

Designed for the student wanting to improve communication skills in one-to-one settings and small groups. A study and practice of effective interpersonal concepts and techniques. Includes subjects such as listening, assertive communication, conflict resolution, cultural diversity, and gender/family communications. Emphasis on self-improvement, building confidence, and understanding others. **Offered Fall Semester only.**

SPCH 1321 Business and Professional Speech

(3-3-0)

Designed to provide students with the fundamentals and techniques of business and professional presentations. Study of organizational communication and the types of communication used in business settings. Includes critical thinking skills, interviewing, group process, and formal presentations.

SPCH 1342 Voice and Articulation
(3-3-0)

A practical course designed to develop an understanding of the use and function of the voice, as well as provide individual instruction in pronunciation and articulation to facilitate oral communication. Recommended for communication, education, drama, radio/TV/film, speech and voice majors. (Same as Drama 2336.)

SPCH 1373 American Sign Language Basic I
(3-3-0)

Introduction to American Sign Language. Emphasis will be placed on acquiring visual receptive skills and basic communication using the direct experience method. Aspects of Deaf culture and community will be incorporated. (May be taken for foreign language credit.)

SPCH 1374 American Sign Language Basic II
(3-3-0)

Prerequisite: SPCH 1373.

A continuation of SPCH 1373. Further development of receptive, expressive, and basic conversational skills as well as the cultural features of the language. (May be taken for foreign language credit.)

SPCH 2341 Oral Interpretation
(3-3-0)

The study of the principles and techniques used in the analysis and oral performance of literature. Recommended for elementary education, drama, speech, and English majors preparing to teach literature.

TURFGRASS AND GOLF COURSE MANAGEMENT

HALT 1301 Principles of Horticulture
(3-2-2)

An overview of the horticulture industry, plant science, terminology, classification, propagation, environmental responses, and careers and opportunities in the field of horticulture.

HALT 1303 Herbaceous Plants
(3-2-2)

An in-depth study of herbaceous plant material. Topics include practices and procedures used in the identification, growth, propagation, maintenance, and utilization of herbaceous plants in the horticulture industry.

HALT 1322 Landscape Design
(3-2-2)

A study of the principles and elements of landscape design. Topics include client interview, site analysis, plan view, scale, plant selection, basic drawing and drafting skills, and plan preparation.

HALT 1324 Turfgrass Science & Management
(3-2-2)

In-depth coverage of various species of warm and cool season grasses including their uses, application, adaptability, environmental tolerances, anatomy, and physiological responses.

HALT 1331 Woody Plant Materials
(3-2-2)

An in-depth study of the woody plant materials used in the horticulture industry. Topics include identification, characteristics, adaptation, cultural requirements, pest and disease problems, and use in the landscape.

HALT 1333 Landscape Irrigation
(3-2-2)

In-depth coverage of irrigation systems including equipment, design, performance, and maintenance. Topics include residential and commercial applications, troubleshooting, repair, and technological advances in irrigation systems.

HALT 1345 Golf/Sports Field/Park Management
(3-3-0)

An overview of the construction and management of specialized turf features such as putting greens, tee boxes, bunkers, and sand-based ball fields. Topics include the equipment and cultural practices utilized for intensively managed turf areas.

HALT 1346 Specialized Turfgrass Management
(3-2-2)

Instruction in the structure of the landscape business including cost estimation; organization; equipment needs; interpretation of financial reports; and material, labor, and equipment management. Emphasis on the types of landscape operations, marketing, legal forms, construction law, and safety.

HALT 1397 Special Topics in Turf Management
(3-2-2)

Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

HALT 2312 Turfgrass Maintenance
(3-2-2)

Instruction in common turfgrass cultural practices. Topics include calculation and application of materials and the operation and maintenance of equipment.

HALT 2318 Soil Fertility and Fertilizers
(3-2-2)

An in-depth study of the chemistry, soil interaction, plant uptake, and utilization of essential plant nutrients. Topics include deficiency and toxicity symptoms, and the selection, application, and characteristics of fertilizer materials.

HALT 2323 Horticulture Pest Control
(3-2-2)

Examination of federal, state, and local laws and regulations governing the control of horticultural pests. Topics include procedures; methods; safety requirements; integrated pest management (IPM); and chemical, natural, and biological controls.

HALT 2383 Cooperative Education - Turf Management (3-1-20)

An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience.

VETERINARY TECHNOLOGY

VTHT 1125 Pharmacological Calculations (1-1-0)

Skill development in calculating oral and parenteral drug dosages.

VTHT 1191 Special Topics in Veterinary Technology (1-1-0)

Prerequisites: VTHT 2366, VTHT 1349, VTHT 2313, VTHT 2301, VTHT 2323, VTHT 1291

This course provides students the opportunity to explore relevant and changing topics on the veterinary field. Group projects, interactions with local industry, class lectures, and case studies as well as guest speakers will allow students to understand, appreciate, and apply the information in the topics in their veterinary career. Primary emphasis will be placed on management topics as they affect the veterinary area. Topics will vary.

VTHT 1205 Veterinary Medical Terminology (2-2-0)

Prerequisites: CHEM 1406; SPCH 1311, 1318, or 1321; ITCS 1309, 1301, or COSC 1301; ENGL 1301; BIOL 1413 or 1408

The student will be introduced to word parts, directional terminology, and analysis of common veterinary terms. The student will define, apply, and analyze common veterinary terms.

VTHT 1209 Veterinary Nutrition (2-1-2)

Prerequisites: CHEM 1406; SPCH 1311, 1318, or 1321; ITCS 1309, 1301, or COSC 1301; ENGL 1301; BIOL 1413 or 1408

The student will learn the fundamentals of energy and non-energy producing nutrients and their sources and functions. Integration of concepts including digestion, absorption, and metabolism with application to normal and therapeutic nutritional needs. Tech-Prep articulated. Via distance learning.

VTHT 1291 Special Topics
(2-1-3)

Prerequisites: CHEM 1406; SPCH 1311, 1318, or 1321; ITCS 1309, 1301, or COSC 1301; ENGL 1301; BIOL 1413 or 1408; VTHT 1301, VTHT 1105, VTHT 1309, VTHT 1413

This course provides the students with knowledge on animal care, housing, sanitation, as well as identification and control of internal and external parasites on domestic and ruminant animals. Group projects and interaction with local clinics and shelters will provide adequate knowledge used in their veterinary career.

VTHT 1301 Introduction to Veterinary Technology
(3-3-0)

Prerequisites: CHEM 1406; SPCH 1311 1318, or 1321; ITCS 1309, 1301, or COSC 1301; ENGL 1301; BIOL 1413 or 1408

The student will be introduced to the profession of veterinary technology with emphasis on basic techniques, handling and care of domestic animals, and ethical and professional requirements. The student will demonstrate basic restraint, medication, and treatment techniques for domestic animals; identify breeds of domestic animals; and specify the distinct job responsibilities of a veterinary technician in a modern veterinary practice including physical exams, basic care, feeding, sanitation, public and/or client relations and ethical and legal issues.

VTHT 1317 Veterinary Office Management
(3-2-2)

Prerequisites: VTHT 2325, VTHT 2331, VTHT 1341, VTHT 1191

Practical experience in management of the veterinary hospital. Emphasis on client relations, record keeping, inventory, employment skills, and computer skills in the veterinary environment. The student will demonstrate effective client relation, communication, and computer skills; apply basic business principles such as the proper maintenance of medical records; and display employment skills including interviewing, resume writing, and proper dress. **Lab Fee**.

VTHT 1341 Anesthesia and Surgical Assistance (3-2-4)

Prerequisites: VTHT 2366, VTHT 1349, VTHT 2313, VTHT 2301, VTHT 2323, VTHT 1291

In-depth application of surgical, obstetrical, and anesthesia techniques including identification and use of instruments and equipment. The student will identify instruments used in veterinary surgery; demonstrate operating room etiquette and the use of sterile technique; perform pre-anesthesia evaluation, administer and monitor anesthesia, and provide post-anesthesia care; recognize and respond appropriately to anesthetic emergencies; and assist with routine surgical and obstetrical procedures. Supplemental lectures via distance learning. **Lab Fee**. **Professional Liability Required**.

VTHT 1345 Veterinary Radiology
(3-2-3)

Prerequisites: VTHT 2325, VTHT 2331, VTHT 1341, VTHT 1191

Presentation of theory and principles and practical application of radiology within the field of veterinary medicine. The student will implement and follow recommended safety procedures; prepare and use technique charts; take and process diagnostic radiographs using stationary and portable x-ray machines; properly care for radiographic equipment; and label, file, and store radiographs. Supplemental lectures via distance learning. **Lab Fee**. **Professional Liability Required**.

VTHT 1349 Veterinary Pharmacology
(3-2-2)

Prerequisites: VTHT 1301 VTHT 1105, VTHT 1309, VTHT 1413, VTHT 1291

Fundamentals of pharmacology including recognition, calculations, labeling, packaging, and administration of common veterinary drugs, biologics, and therapeutic agents. Discussion of normal and abnormal responses to the agents. The student will recognize general types and groups of drugs, prepare, label, package, and dispense pharmaceuticals in a ethical/legal manner; calculate dosages using proper weights, units, and measures; explain and use appropriate routes and methods of drug administration; and differentiate between normal and abnormal responses to medications. Supplemental lectures via distance learning. **Lab Fee.**

VTHT 1413 Veterinary Anatomy and Physiology
(4-2-4)

Prerequisites: CHEM 1406; SPCH 1311, 1318, or 1321; ITCS 1309, 1301, or COSC 1301; ENGL 1301; BIOL 1413 or 1408

Gross anatomy of domestic animals including physiological explanations of how each organ system functions. The student will identify and describe the major anatomical and physiological systems of domestic animals and apply this knowledge to common disease processes. Supplemental lectures via distance learning. **Lab Fee.**

VTHT 2260 Veterinary Clinicals
(2-0-6)

Prerequisites: VTHT 2325, VTHT 2331, VTHT 1341, VTHT 1191

A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. **Lab Fee**. **Professional Liability Required**.

VTHT 2301 Canine & Feline Clinical Management (3-2-3)

Prerequisites: VTHT 1301, VTHT 1105, VTHT 1309, VTHT 1413, VTHT 1291

Survey of feeding, common management practices, and care of canines and felines in a clinical setting. Review of common diseases of canine and felines encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of canines and felines in a clinical setting; and recognize common disease pathophysiology. Supplemental lectures via distance learning. **Lab Fee**. **Professional Liability Required**.

VTHT 2313 Lab Animal Clinical Management (3-2-3)

Prerequisites: VTHT 1301 VTHT 1105, VTHT 1309, VTHT 1413, VTHT 1291

Survey of feeding, common management practices, and care of laboratory animals in a clinical setting. Review of common diseases of laboratory animals encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of laboratory animals in a clinical setting; and recognize common disease pathophysiology. **Lab Fee**. **Professional Liability Required**.

VTHT 2323 Veterinary Clinical Pathology I (3-2-3)

Prerequisites: VTHT 1301 VTHT 1105, VTHT 1309, VTHT 1413, VTHT 1291

In-depth study of hematology and related chemistries with emphasis on lab procedures. The student will perform complete blood counts (CBC's); recognize abnormal blood conditions; perform common blood chemistries; demonstrate appropriate use of diagnostic equipment; and perform pre-anesthesia evaluation. Supplemental lectures via distance learning. **Lab Fee**. **Professional Liability Required**.

VTHT 2325 Large Animal Assisting Techniques (3-2-3)

Prerequisites: VTHT 2366, VTHT 1349, VTHT 2313, VTHT 2301, VTHT 2323, VTHT 1291

Study of basic restraint and proper management, treatment, and medication techniques for farm animals. The student will perform basic restraint of farm animals; demonstrate proper treatment and medication techniques; and identify common disease of and management techniques for farm animals. Supplemental lectures via distance learning. **Lab Fee**. **Professional Liability Required**.

VTHT 2331 Veterinary Clinical Pathology II (3-2-3)

Prerequisites: VTHT 2366, VTHT 1349, VTHT 2313, VTHT 2301, VTHT 2323, VTHT 1291

In-depth study of urinalysis and cytology. Survey of microbiological techniques. Emphasis on laboratory procedures. The student will perform urinalysis, cytological, and basic microbiological techniques; review abnormal blood condition and common blood chemistries; demonstrate appropriate use diagnostic equipment and perform pre-anesthesia evaluation. **Lab Fee**. **Professional Liability Required**.

VTHT 2366 Veterinary Technology Practicum (3-0-21)

Prerequisites: CHEM 1406; SPCH 1311, 1318, or 1321; ITCS 1309, 1301, or COSC 1301; ENGL 1301; BIOL 1413 or 1408; VTHT 1301, VTHT 1105, VTHT 1309, VTHT 1413, VTHT 1291, VTHT 1349, VTHT 2313, VTHT 2301, VTHT 2323

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. The course may be repeated if topics and learning outcomes vary. **Professional Liability Required**.

CROSS-REFERENCE FOR NEW COURSE NUMBERS

Aviation Technology

Prior Course Rubric and Number	Prior Course Title	New Course Rubric and Number	New WECM Course Title
PLT 1210	Private Pilot Flight I (Lab)	AIRP 1315	Private Flight
PLT 1211	Private Pilot Flight II (Lab)	AIRP 1315	Private Flight
AVT 1300	Introduction to Aviation	AIRP 1313	Introduction to Aviation
PLT 1301	Private Pilot Ground School School	AIRP 1317	Private Pilot Ground
PLT 1302	Instrument Rating Ground School	AIRP 1351	Instrument Ground School
AVT 1303	Aviation Safety	AIRP 1345	Aviation Safety
PLT 1312	Commercial Pilot Flight I (Lab)	AIRP 1355	Intermediate Flight
PLT 2161	Multi-Engine Ground School	AIRP 1391	Special Topic in Aircraft Pilot & Navigator (Professional)
PLT 2163	Multi-Engine Flight Training (Lab)	AIRP 2151	Multi-engine Flight (One Hour Course)
PLT 2262	Flight Instructor Airplane Flight Training (Lab)	AIRP 2236	Certified Flight Instructor-AP
PLT 2265	Aerobatics (Lab)	AIRP 1391	Special Topic in Aircraft Pilot & Navigator (Professional)
PLT 2303	Commercial Pilot Ground School	AIRP 2337	Commercial Ground School
AVT 2307	Meteorology	AIRP 1307	Aviation Meteorology
PLT 2313	Commercial Pilot Flight II (Lab)	AIRP 2350	Instrument Flight
PLT 2314	Commercial Pilot Flight III (Lab)	AIRP 2339	Commercial Flight
AVT 2321	Introduction to Aviation Law	AVIM 2337	Aviation Law
AVT 2325	Airport Planning and Management	AVIM 2335	Airport Management
AVT 2335	Essentials of Aviation Management	AVIM 1301	Introduction to AVT Management

AVT 2351	Cooperative Work Experience in Aviation	AVIM 1X80, 1X81, 2X80, 2X81--Management	Aviation Management
		AIRP 1X80, 1X81, 2X80, 2X81--Pilot	Aircraft Pilot & Navigator (Professional)
PLT 2361	Flight Instructor Ground School	AIRP 2349	Instructor Ground School
PLT 2365	Advanced Aircraft Systems	AIRP 2333	Aircraft Systems
AVT 2369	Airline Management Principles	AVIM 2331	Airline Management

*Rubrics (four letter course designations) will be common across the state.

Computer Information Systems

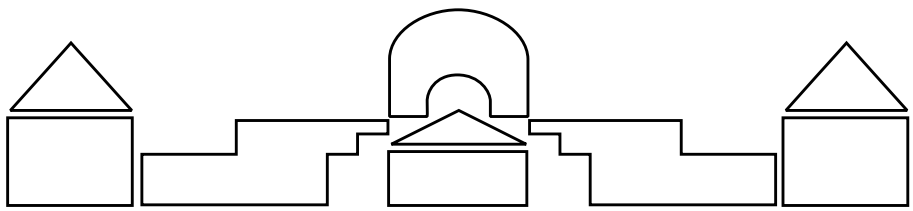
Prior Course Rubric and Number	**Prior Course Title**	**New Course Rubric and Number**	**New WECM Course Title**
CIS 1301	Introduction to Computers	ITSC 1301	Introduction to Computers
CIS 1311	Visual Basic	ITSE 1331	Intro. to Visual Basic Programming
CIS 1322	Personal Computer Operating Sys.	ITSC 1305	Intro. to PC Operating Systems
CIS 1323	Introductory COBOL Programming	ITSE 1318	Introduction to COBOL Programming
CIS 1326	Intro. to Personal Comp. Skills	ITSC 1309	Integrated Software Applications
CIS 1330	Spreadsheet Software Applications	ITSW 1334	Advanced Spreadsheets
CIS 1331	Presentation Graphics Software Appl.	ITSW 1310	Presentation Media Software
CIS 1332	Database Mgt. Software Applications	ITSW 2337	Advanced Database
CIS 2310	CIS Special Topics	ITSC 1391	Special Topics in Comp. & Info. Scien.
CIS 2313	Web Authoring	ITSE 1313	Internet/Web Page Development
CIS 2320	Telecommunications and Networks	ITNW 1321	Introduction to Networking
CIS 2324	Systems Analysis and Business Sys.	ITSE 1350	Systems Analysis and Designs
CIS 2325	Programming in a Database Lang.	ITSE 2309	Introduction to Database Programming
CIS 2333	Intermediate COBOL Programming	ITSE 2351	Advanced COBOL Programming
CIS 2340	Fundamentals of PC Hardware Maintenance	ITSC 1325	Personal Computer Hardware

CIS 2344	System-Specific Enhancements to COBOL	ITSE 1391	Special Topics in Computer Programming
CIS 2345	Advanced Applications Design	ITSW 1391	Special Topics in Data Processing Technology/ Technician
CIS 2599	Internship	ITSC 2586	Internship-Computer and Information Science, General
None	New Offering	ITSC 2313	Web Authoring

Administrative Computer Technology (formerly Office Systems Technology)

Prior Course Rubric and Number	Prior Course Title	New Course Rubric and Number	New WECM Course Title
OST 1101	Keyboard Speed and Accuracy Development I	POFT 2203	Speed and Accuracy Building--Level 1
OST 1102	Keyboard Speed and Accuracy Development II	POFT 2204	Speed and Accuracy Building--Level 2
OST 1103	Keyboard Speed and Accuracy Development III	POFT 2205	Speed and Accuracy Building--Level 3
OST 1109	Miscellaneous Office Machines	POFT 1331	Business Machine Applications
OST 1301	Keyboarding	POFT 1329	Keyboarding and Document Formatting (for non-majors)
OST 1302	Keyboarding II	POFT 1429	Keyboarding and Document Formatting (for majors)
OST 1304	Introduction to Shorthand	POFT 1345	Shorthand/Notetaking I
OST 1305	Principles of Records Management	POFT 1319	Records and Information Management I
OST 1306	Office Management	POFT 1309	Adminstrative Office Procedures I
OST 1310	Human Resources and You	HRPO 1311	Human Relations
OST 1311	Business Writing	POFT 1302	Business Communications I
OST 1314	Intermediate Shorthand	POFT 2343	Shorthand/Notetaking II
OST 1317	Elementary Accounting	ACNT 1303	Introduction to Accounting I
OST 1320	Word Processing Applications	ITSW 1301	Introduction to Word Processing
OST 1330	Word Processing I	POFT 2301	Document Formatting and Skillbuilding
OST 1340	Software Applications	POFT 1301	Computer Applications I
OST 2310	Building A Professional Image	POFT 1313	Professional Development for Office Personnel
OST 2321	Business Communications	POFT 2312	Business Communications II
OST 2323	Machine Transcription	POFT 2321	Machine Transcription

OST 2325	Cooperative Work Experience	POFT 2380	Cooperative Education - Adminstrative Assistant/ Secretarial Science General
OST 2326	Office Procedures and Administration	POFT 1349	Administrative Office Procedures II
OST 2330	Word Processing II	POFI 2301	Word Processing
OST 2332	Advanced Document Production	POFT 2333	Advanced Document Formatting and Skillbuilding
OST 2333	Advanced Machine Transcription	POFT 1392	Special Topics in Adminstrative Assistant/ Secretarial Science General
OST 2334	Advanced Shorthand	POFT 1392	Special Topics in Adminstrative Assistant/ Secretarial Science General
OST 2345	Advanced Software Applications	POFT 1341	Computer Applications II
OST 2360	Desktop Publishing	POFT 2331	Desktop Publishing for the Office



THE PEOPLE

PALO ALTO COLLEGE

ADMINISTRATION

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Vacant ..... Vice President of Academic Affairs
Vacant ..... Vice President of Student Affairs
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Cecilia Gonzales, Ed.D. ..... Dean, Science & Technology
Gloria Elaine Hilario, M.Ed., M.S.L.S.. ..... Dean, Learning Resources
Stacey Johnson, M.A. ..... Interim Dean, Arts, Humanities & Social Sciences
Rodger W. Minatra, Ed.D. ..... Dean, Occupational, Technical & Continuing Education

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Eloisa Cordova ..... Returning Adult Center
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Gerardo Mechler, M.Ed. ..... Coordinator, Developmental Learning Labs
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Rosalicia Medrano, M.B.A ..... Dual Credit/Off -Site Coordinator
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Tami Musser, B.A. ..... Director of Student Support Services
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Lydia Marie Ortega, M.A. ..... Senior Job Placement Specialist
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Mario Ramirez, B.A. ..... Audio Visual Coordinator
Robert J. Ramirez, B.B.A. ..... Coordinator of Veterans Affairs
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J. Gary Shelman, M.B.A. ..... Director, Information & Communication Technology
Jane Velasquez ..... Community Outreach Coordinator
Cynthia Villafranco, M.A. ..... Public Information Officer
Susan Woods, M.A. ..... Continuing Education Specialist
Dolores Zapata, B.E.E.S. ..... Recruiter/Advisor

ALAMO COMMUNITY COLLEGE DISTRICT ADMINISTRATIVE STAFF

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Ernest A. Martinez, Ph.D. ..... Executive Vice Chancellor
Carlos Ramirez, BB.A., C.P.A. ..... Vice Chancellor for Fiscal Affairs
Charles W. Burmeister, Ph.D. ..... Vice Chancellor for Mgt, Info System & Technology
Adelina S. Silva, Ph.D. ..... Vice Chancellor for Student & Community Development
Lenora Chapman, C.P.A. ..... Treasurer
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Theresa Fayette, M.A. ..... Director of Human Resources
Richard G. Hernandez, M.A. ..... Director of Student Financial Services
Terrie C. Hoffmann, A.A.S. ..... Chief, Department of Public Safety
Linda O'Nave, B.A. ..... Director of Acquisitions & Administrative Services
Raymond M. Patterson, B.B.A., C.P.A . ..... Director of Internal Audits
Carol Riley, C.P.A. ..... Controller
Valerio A. Santos, B.S. ..... Director of Facilities
Leo Zuniga, B.A. ..... Directorf of Governmental & Community Affairs, Marketing & Public Relations

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Marcelo Casillas, 2008
Charles Conner, 2006
Jesse H. Gonzales, 2006
Vincent Lazaro, 2004
Donald L. McClure, Sr., 2004
Luz Maria Prieto, 2004
James Rindfuss, 2008
Dr. Eugene Sprague, 2006

*Date following board member's name indicates expiration of term.

The College District administers four colleges — Palo Alto College, St. Philip's College, San Antonio College, and Northwest Vista College.

FULL-TIME FACULTY

Javier Aguirre, Instructor of History: B.A., M.A., University of Texas at San Antonio

Alfredo Gil Alvarez, Jr., Assistant Professor of Mathematics: A.A.S., San Antonio College; B.S., M.S., Southwest Texas State University

Jennifer Andermatt, Instructor of English: B.S., Texas A&I University; M.A., Texas A&M University

Mary L. Apolinar, Assistant Professor of Counseling: B.A., Southwest Texas State University; M.A., Our Lady of the Lake University

Theresa Morkovsky Arburn, Associate Professor of Biology: B.A., Our Lady of the Lake University; M.S., University of Texas at San Antonio; Ph.D., University of Texas at Austin

Norman Armstrong, Instructor of History: B.A., M.A., St. Mary's University

Diane Beechinor, Assistant Professor of Biology: B.S., M.S., Southwest Texas State University

Joseph Booker, Instructor of English: B.A., M.A., Incarnate Word College

Vincent Bradford, Assistant Professor of Physical Education: B.S., San Jose State University; M.Ed., University of Texas at Austin
Monica M. Bratcher, Instructor of Mathematics: B.S., M.S., University of Texas at San Antonio

Cakky Brawley, Assistant Professor of Art: B.F.A., Texas Tech University; M.F.A. Indiana University

Anna Bustamante, Instructor of Physical Education: B.S., M.Ed., University of the Incarnate Word

Antonio Castillo, Associate Professor of Mathematics: B.S., M.S., Southwest Texas State University; Ph.D., University of Texas at Austin

Rafael C. Castillo, Professor of English: B.A., St. Mary's University; M.A., University of Texas at San Antonio

Brad S. Chandler, Assistant Professor of Biology: B.S., M.S., Southwest Texas State University

Duane F. Conley, Associate Professor of Computer Information Systems and Computer Science: B.A., University of Texas at Austin; Ph.D., Yale University

Frank J. Crayton, Assistant Professor of Reading: B.S., M.S., Southwest Texas State University

Jose A. Cruz, Associate Professor of Mathematics: B.A., University of Puerto Rico; M.S., M.A., Texas A & M University Kingsville

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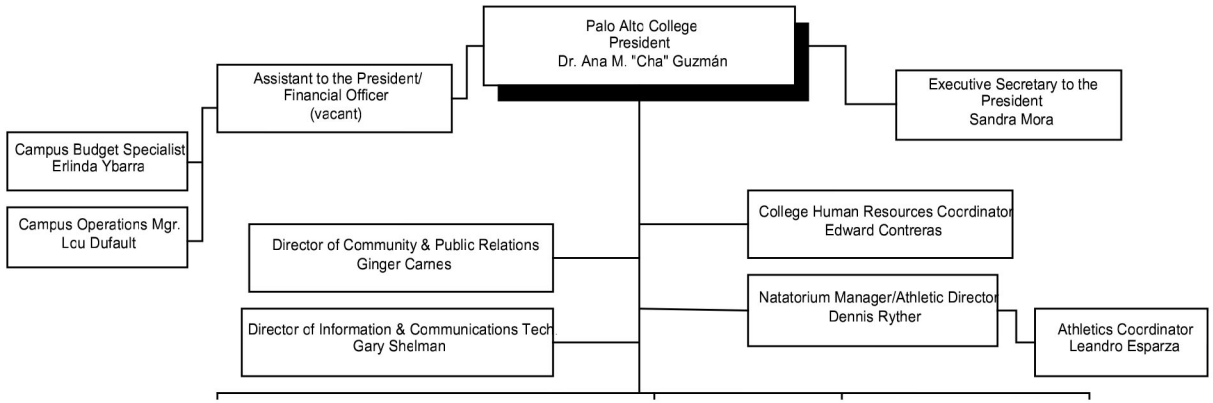

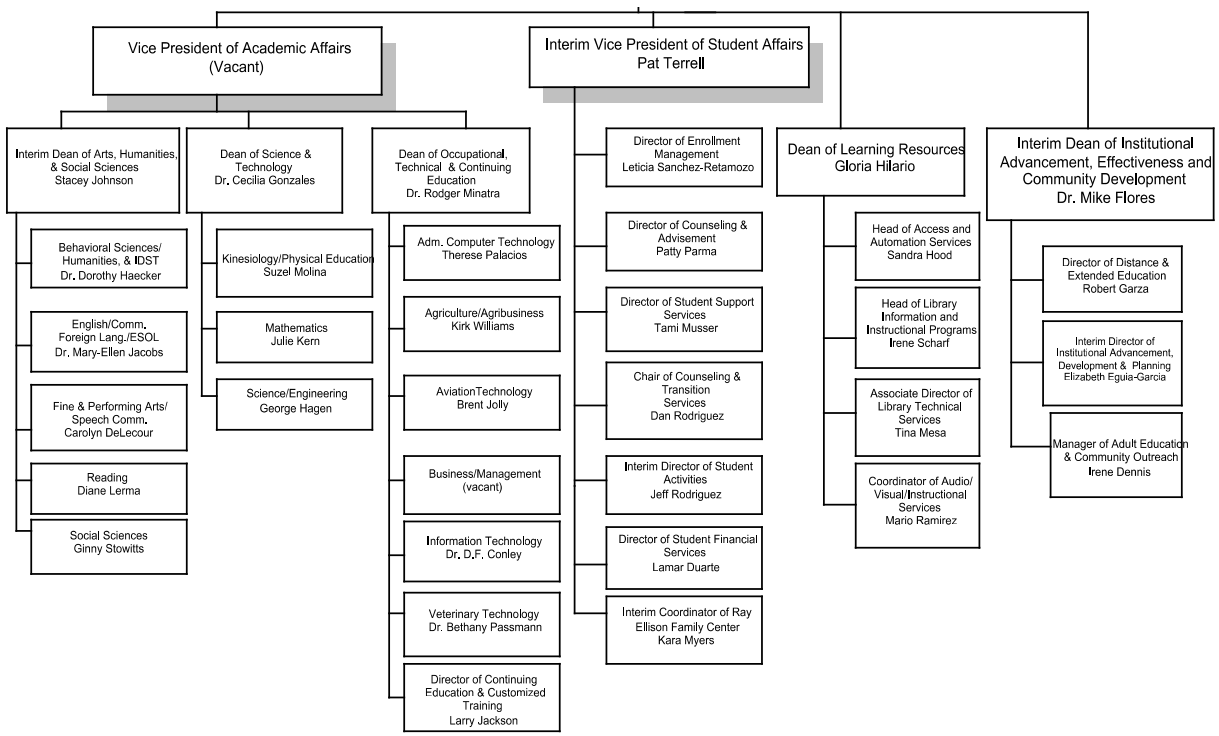

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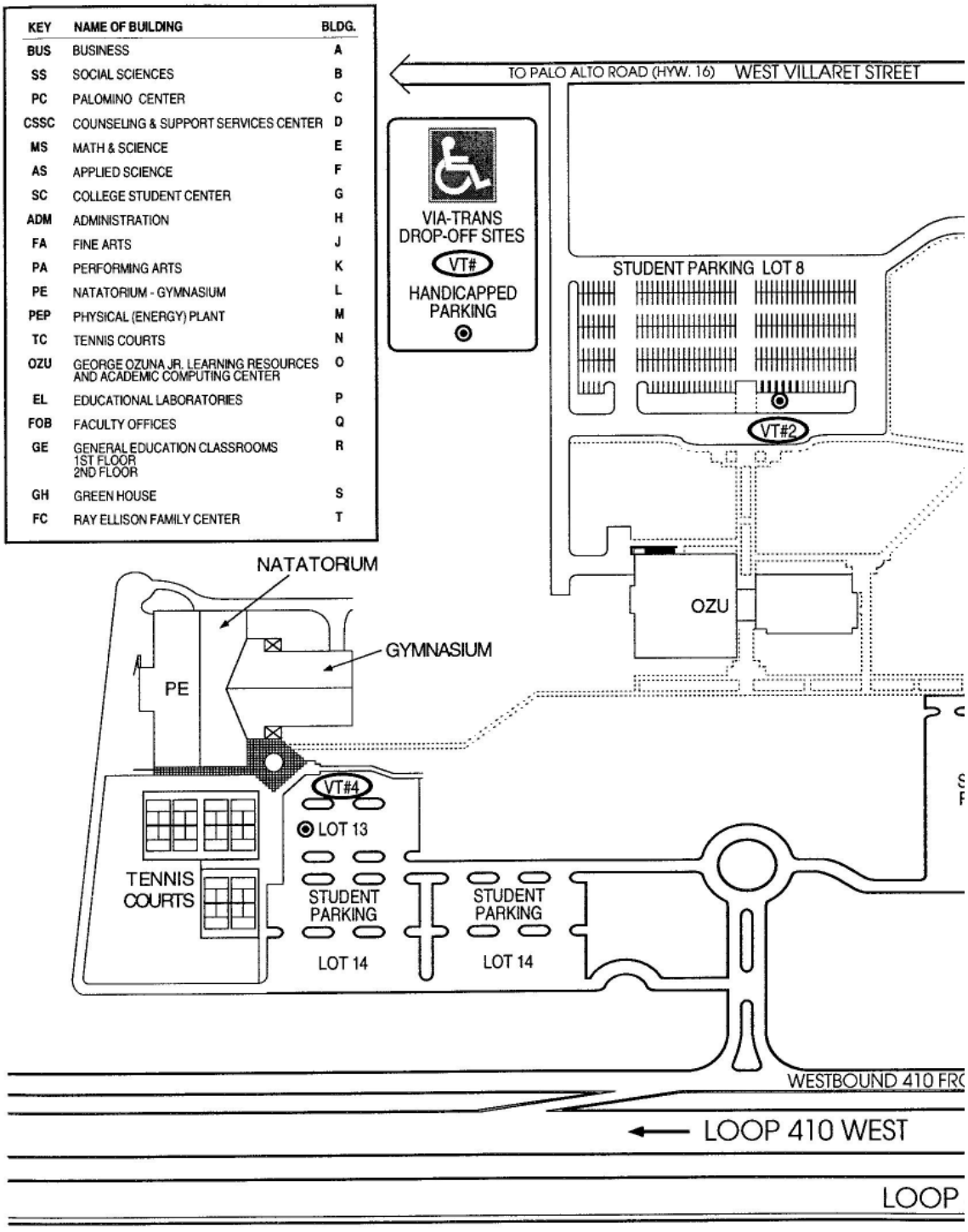
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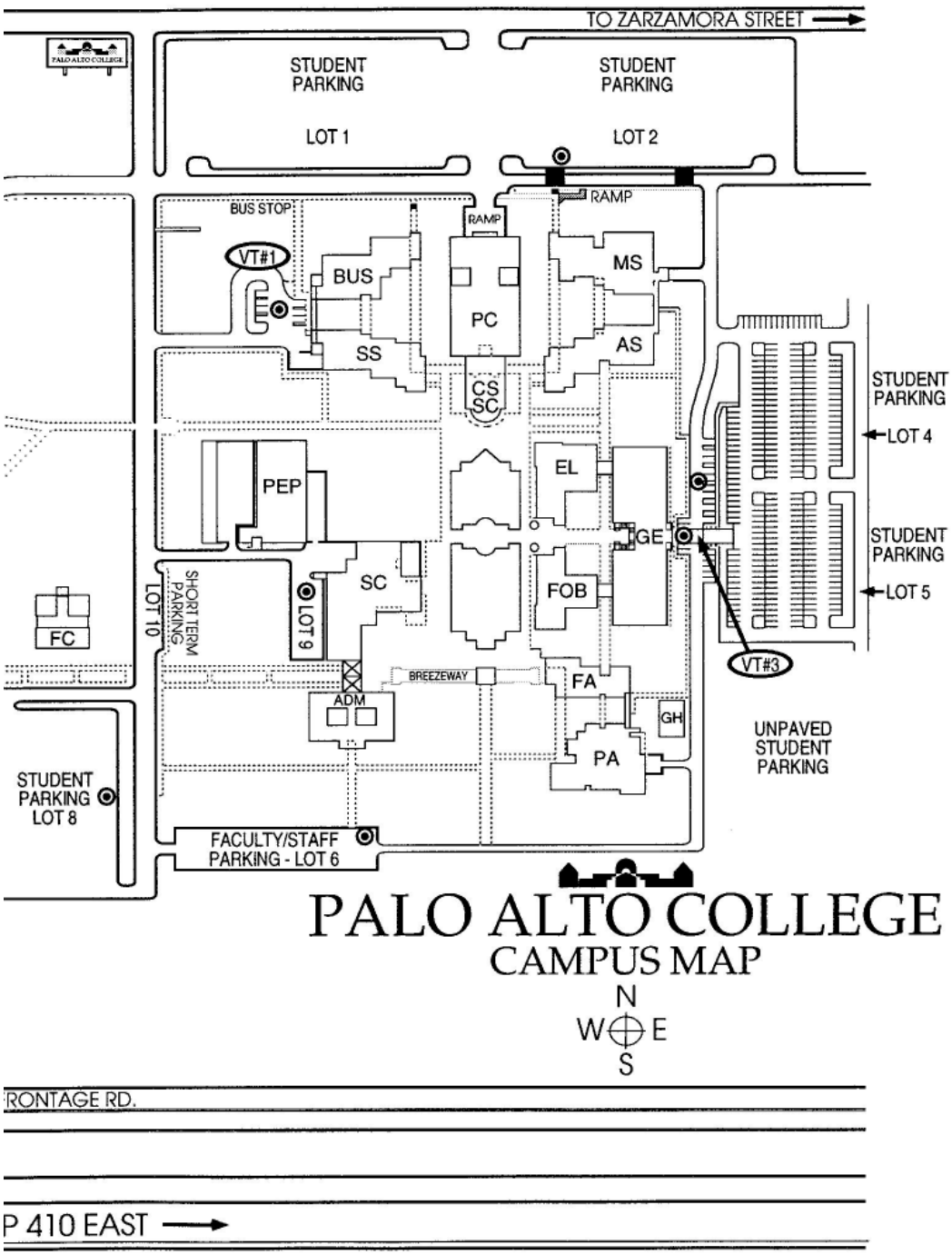
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