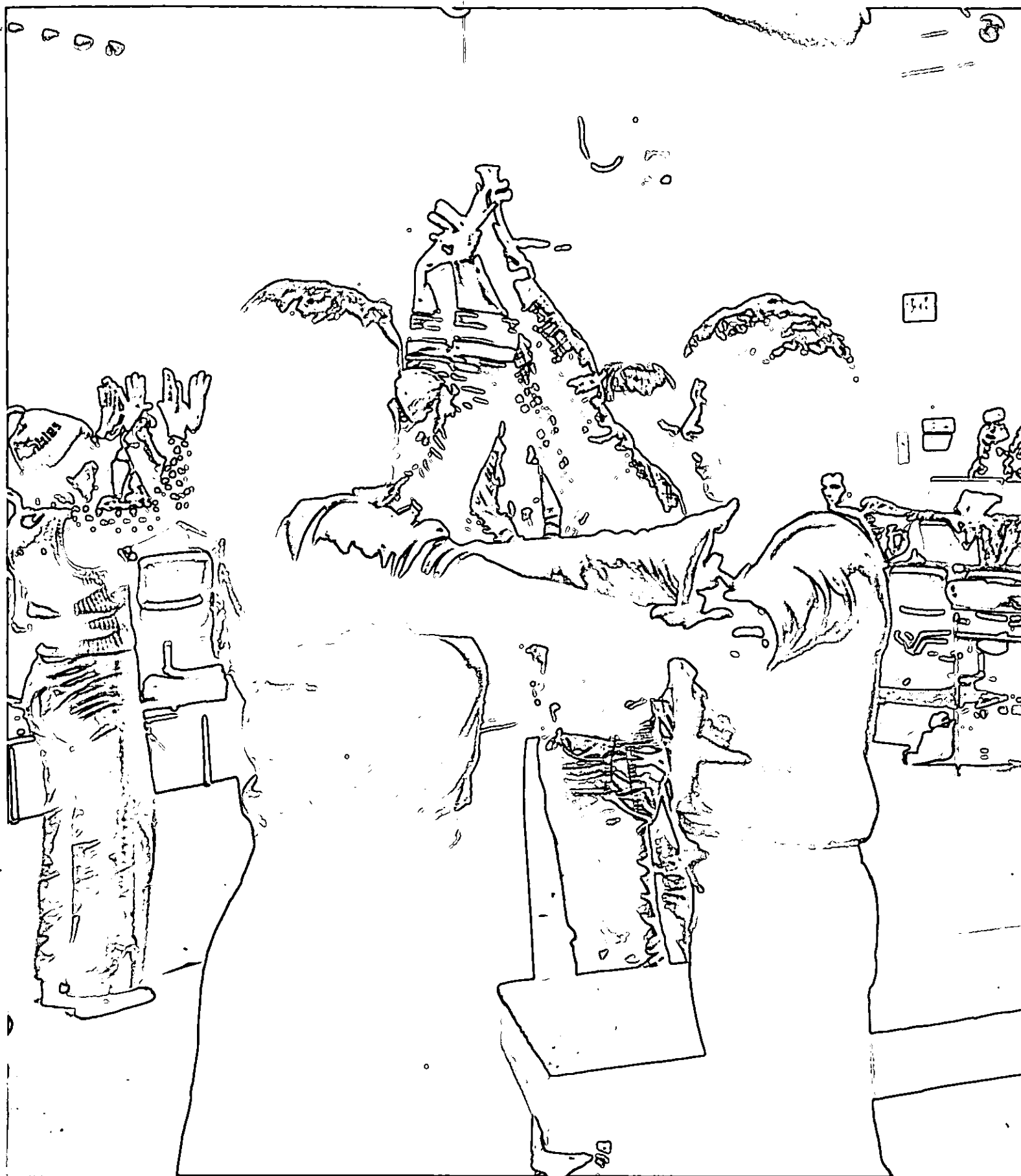


# EL CENTRO COLLEGE

1978-79

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## NOTICE

Portions of this catalog are subject to change without notice, due to decisions of the Dallas County Community College District's Board of Trustees, the Coordinating Board for Texas Colleges and Universities, the Texas Education Agency or other regulatory agencies. In the case of discrepancies between this catalog and the Dallas County Community College District's Policies and Procedures Manual, the District Policies and Procedures Manual shall prevail.



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Excellence  
Innovation  
Opportunity  
Flexibility  
Diversity  
Understanding

**C**AN YOU THINK OF BETTER REASONS TO PICK EL CENTRO COLLEGE? The school that has earned a national reputation as well as the respect of the community offers new and exciting approaches toward degrees or educational aspirations in a variety of fields. We have students majoring in the traditional academic fields with courses fully transferable to senior colleges or universities as well as students majoring in technical-occupational programs that are designed to give a student a degree and a job in one or two years. We also have thousands of students every year who enroll in our continuing educational or non-credit courses because they want to enrich their lives either vocationally or avocationally. We call these offerings community service courses. The diversity of our educational program makes the curriculum at El Centro one of the broadest ranging in the country.

The proof of the El Centro philosophy is in the classroom. For instruction is our business, though instruction isn't always or often in the traditional mold. Teaching at El Centro is based on the premise that we teach students, first, and then subject matter. Learning is a personal thing at El Centro — an exchange of ideas and not an indoc-







but also an educational atmosphere you might not have experienced anywhere before. Office doors are open. Instructors are willing and eager to help. Counselors concentrate on being a go-to friend as well as a guiding influence and source of help on any problem and not on forcing you into some program or course outside your interest.

trination, a forum for discussion and reasoning. El Centro is the result of a well planned effort to provide the best college, the best education, available anywhere — bar none. The instructors were selected from a nationwide search. They are the basis of an earned reputation of El Centro excellence and also the roots of the innovative approach to learning which has become the trademark of the college.

Simply, what all this means is that you would find at El Centro not only academic excellence



Students do not "sit at the feet of the master" as has long been the philosophy at the traditional "University."

El Centro College holds a unique, even radical view about education — that it is best accomplished when teacher and student "come together" on an interpersonal level, that it is an individual matter and always a unique experience rather than the assembly line learning often dictated by numbers.

So what kind of student attends El Centro College? We can best answer with a question. What kind of people live in metropolitan Dallas? All types. The "typical" student fresh out of high

school looking for an education and some fun is enrolled here. But the student mix at El Centro does not stop with a "typical" student. Some of Dallas' finest students are here. And so are some who have never been considered "college material" making good on a second chance provided by El Centro's innovative programs. Some 16 students last year were 16 years of age or under. Thirty-three were 60 or over. Fifty students were 41 years old. One hundred and sixty-four were 34 years old. About 3,076 were 18 to 25. Some were business people trying to further their education, finish a degree, or learn a new job. Some majored in English and studied the poetry of Keats who

have left the ivory tower. We have said that learning is our business. Our teachers get down to business with students, both inside the classroom and out. They hold the view that students are the only reason they are here and not the other way around. They are the cream of the crop, the finest teachers that could be hired, for they have an important job to do.

El Centro College offers classes in many down-town office buildings for employees, classes in the County Jail for both inmates and jailers, and classes at both public and private high schools for seniors.

El Centro believes that we are here for one reason — to serve our students and in so doing serve our community. That's the important differ-



said that beauty was truth and truth, beauty, that that was all we knew on earth and all we needed to know. Some studied the philosophy of Descartes who said that all man knows is that he exists: "I think, therefore I am." And some students studied mid-management and earned part of their credits on their jobs. And some students studied to be chefs, and some to be architects, and some to be computer operators, and some to be... the list goes on. And so the atmosphere within El Centro is unique, but its students are not much different from people on the other side of its doors who live and work and do all the things people do in a metropolis. For El Centro's students are as diverse and exciting as Dallas.

And what kind of people would you find as administrators and teachers at El Centro? Well first of all, you would probably find them. (Which isn't the case everywhere.) El Centro's teachers

ence. El Centro's philosophy doesn't end when you turn the page. It is reflected in people. Our personnel, whether instructors or counselors or office staff, and even our students, reflect the concept of "community" which is more than a name at this community college. For at El Centro College a close relationship exists among all those who make up the college and a very real feeling of community is achieved.

El Centro, then, is a school with much to offer. Maybe more than any college, it's a school that can offer you what you always thought a college should.

# Admissions

## General Admissions Policy

Applications will be accepted any time prior to registration. Registration priorities are assigned according to alphabetical sequence. All applicants are limited in their selection of classes to those available when they register.

## Admission Requirements

1. **Beginning Freshmen:** Students enrolling in college for the first time may apply if they are: a. A graduate from an accredited high school. b. A graduate from an unaccredited high school who is eighteen years of age. c. A non-high school graduate who is eighteen years of age and whose high school class has graduated. d. A high school student recommended by the high school principal. (See concurrent enrollment.)

2. **Transfer Students:** a. College transfer applicants will be considered for admission on the basis of their previous college record. Academic standing for transfer applicants will be determined by the Office of Admissions based on the standards established by El Centro College. b. Students on scholastic or disciplinary suspension from another institution must petition the Committee on Admission and Retention for special approval.

3. **Former Students:** Former Dallas County Community College District students will be required to submit an application for readmission to any one of the District colleges. A student will not be readmitted to any college within the District if he or she has unsettled financial debts at any of the District colleges.

4. **Non-credit Students:** Students seeking enrollment in non-credit courses are directed to contact the Division of Community Service Programs.

Exceptions to these requirements will be referred to the Committee on Admission and Retention.

## Admission Procedures

The following material must be submitted to the Office of Admissions before a student's entrance file is considered complete.

an application for admission

an official transcript from the last school (high school or college) attended. Transcripts are required by El Centro's accrediting agency and are important for program advising in the counseling office. Students who are seeking a certificate or associate degree are required to submit transcripts of all previous college work prior to the end of the first semester.

written proof from a medical office of — a negative tuberculin skin test or chest X-ray — a polio immunization if the applicant is under 19 years of age — a diphtheria/tetanus injection within the last ten years.

This medical proof is required by state law (Senate Bill 27).

## Special Requirements for Veterans Admission

All veterans entering El Centro for the first time must complete an assessment process administered by the Counseling Division. If need for Developmental Studies is indicated, that need will be certified and the veteran may take Developmental Studies without charge to his entitlement. Veterans may not receive Veterans Administration benefits for taking Developmental Studies unless there is an official certification reflecting the need to take such courses in the veteran's file.

Veterans are responsible for submitting transcripts of all successfully completed credit hours from other institutions to the Admissions Office. Certification for Veterans Administration benefits will not be processed until transcripts are received.

## Advisement Procedures

When all requirements of admission procedures are met, students are invited to an advisement session. This session may be conducted individually or as a group with a counselor; however, new students are expected to attend a Self-Assessment Lab for advisement. The Lab is designed to help students to make schedule choices for themselves upon assessment data available for each student and probabilities of success in

courses or programs at El Centro. The Lab requires one day and is designed to meet the needs of students who are enrolling in college for the first time and who expect to attend full-time.

A variety of test instruments may be used for assessment and placement in courses or Programs; however, none are required for admission. These instruments are used as counseling tools for more reliable placement. For those students who wish to send their ACT scores for placement use, the ACT code for El Centro is 4079.

Developmental Studies are provided for those students who may require developmental assistance in reading, writing, or math. Test data, transcripts of previous work, and counseling assessment may be used to determine a placement in this program.

## Acceptance of Transfer Credit

Transfer credit will be given for all college level passing work completed at accredited colleges and universities. The Registrar's Office will be responsible for the evaluation of all transfer work.

Consideration will be given to those unaccredited institutions which are offering degrees in specialized areas if they are approved by the accrediting agencies which have jurisdiction. Credit will be limited to courses which have a DCCCD equivalent.

Students who have successfully mastered college-level skills or materials through means other than an accredited college or university may be eligible for advanced standing or placement in

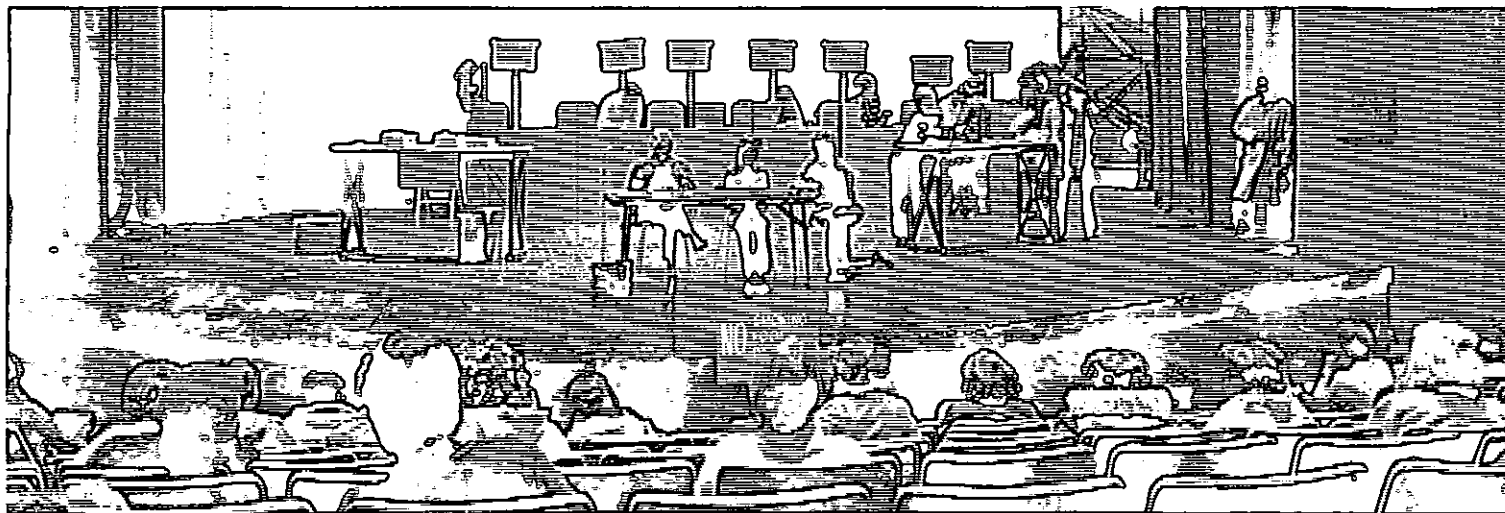
**W**ELCOME We at El Centro hope that this catalog will provide you with the information that you need as a prospective student or as one of the students continuing your career education at this college. We also hope that the catalog will project some of the stimulating and challenging educational experiences that this college offers for those who choose to enroll here. No mere catalog, however, can ever give you the real feeling of being a part of our exciting educational community. We suggest that you see for yourself by joining us.

If we have not included all of the information you need in making decisions about your educational plans or your future, we welcome questions and suggestions. Our purpose is to fully serve the educational needs of the Dallas County community, and we can do this more effectively if we hear from you. Thank you.

Ruby H. Herd  
President







specific disciplines. Such credit may be awarded on the basis of the student's passing appropriate examinations approved by the Division Chairman.

Credit from foreign institutions is generally not acceptable toward degree requirements at El Centro College. Any questions concerning foreign credit should be referred to the Registrar.

### Student Diversity

El Centro College encourages the attendance of mature students of all ages from all ethnic backgrounds and fully complies with the provisions of Title VI of the Civil Rights Act of 1964 (P.L. 88-352).

### Equal Educational Opportunity Policy\*

Dallas County Community College District is committed to providing equal educational and employment opportunity regardless of sex, marital or parental status, race, color, religion, age, or national origin. Title IX of the Educational Amendments of 1972 prohibits discrimination on the basis of sex in any educational program or activity receiving federal financial assistance by way of grant, contract, or loan. Title VI of the Civil Rights Act of 1964 is similar in its prohibition of discrimination on the basis of race, color, sex, or national origin. Equal educational opportunity includes: admission, recruitment, extracurricular programs and activities, facilities, access to course offerings, counseling and testing, financial assistance, employment, health, and insurance ser-

vices, and athletics. Dallas County Community College District also is committed to equal opportunities for the physically or mentally handicapped in compliance with federal regulation. It is the declared policy of the Dallas County Community College District to comply with all the requirements of Title IX of the Educational Amendments of 1972 and Title VI of the Civil Rights Act of 1964 as they now exist or hereafter are amended.

Student grievances shall be handled in accordance with the existing administrative channels of the college. When a student believes a condition of the college, which affects him, is unjust, inequitable, or discriminatory, an appeal can be made to the administrator in charge of that area. Appeals to higher administrative authority shall be considered based on the merits of the case.

\*Title IX

### Family Educational Rights and Privacy Act of 1974

In compliance with the Family Educational Rights and Privacy Act of 1974, Federal Law 93-380, information classified as "directory information" may be released to the general public without the written consent of the student.

Directory information is defined as:

1. Student name
2. Student address
3. Telephone listing
4. Dates of attendance
5. Most recent previous educational institution attended

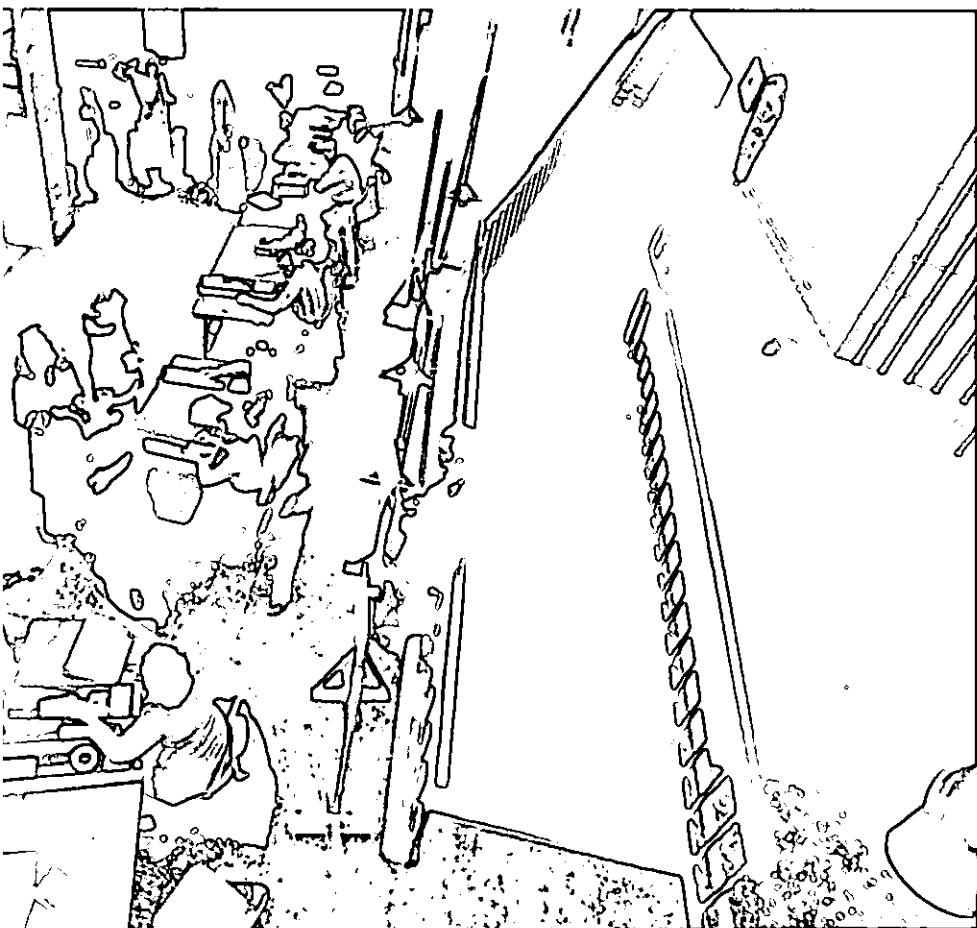
6. Other information including major field of study and degrees and awards received

A student may request that all or any part of the directory information be withheld from the public by making written request to the Registrar's Office during the first 12 class days of a fall or spring semester, or the first 4 class days of a summer term. If no request is filed, information will be released upon inquiry. No telephone inquiries will be acknowledged; all requests must be made in person.

Directory information is the only part of a student record that may be released without written consent from the student. No transcript or inquiries concerning an academic record will be released under any circumstances without WRITTEN CONSENT from the student specifying the information to be given out.

### Foreign Students

El Centro College is authorized under Federal Law to enroll non-immigrant alien students. How-



ever, under present conditions, foreign students are not admitted until all admission requirements are complete. For details contact the Registrar a semester in advance of your anticipated date of enrollment. A personal interview with the foreign student advisor and special permission from the President of the College is required before admission can be finalized. In addition to admission requirements for all other students, foreign students must demonstrate proficiency in English, provide evidence of financial ability, and meet with the foreign student advisor for general counseling concerning their potential for profiting from the educational programs of El Centro College. Admission procedures for foreign students are regulated by the President of the College and may require her permission for enrollment. Under present conditions, foreign students are not admitted until all admission requirements are complete.

### Concurrent Enrollment

1. A limited number of high school seniors may be concurrently enrolled upon recommendation of the high school principal.

2. The colleges in the Dallas County Community College District have no geographical boundary restrictions for enrollment at any of the campuses. Admission requirements for all of the colleges are established by the DCCCD Board of Trustees and are the same for all District colleges. Students may enroll in more than one college at the same time.

### Community Service

The Community Service Division of El Centro College offers a variety of non-credit courses designed to provide continuing education opportunities for individuals desiring to upgrade their present skills or learn new skills, cultural and community enrichment programs, personal entertainment and recreation, and resource for industry, government and professional groups needing

to supplement their own training and development programs.

Registration for these courses does not require a high school diploma or college transcript since no credits or grades are issued. However, Continuing Education units will be offered in compliance with guidelines from the Southern Association of Colleges and Schools.

The C.E.U. (continuing education unit) is officially defined as "ten contact hours of participation in an organized continuing education or extension experience under responsible sponsorship, capable direction, and qualified instruction." The C.E.U. should not be interpreted as a substitute for college credit; it is merely a means of recording and accounting for the various continuing education activities which one has accumulated over a period of years.

Community Service programs are offered on the El Centro campus site as well as other off-campus locations. These programs are an important element in the El Centro College concept of the "Community College" and all efforts will be made to comply with the educational needs of Dallas County either on our campus or other locations where applicable.

### Name, Address, and Social Security Number

1. Students are reminded to inform the Office of the Registrar of any changes which occur in their name or address.

2. All applicants are required to furnish a social security number which is used as the student's identification number and to insure accuracy of student records.

### Servicemen's Opportunity College

El Centro College, along with the other colleges of the DCCCD and in cooperation with other community colleges in the United States, participates in the Servicemen's Opportunity College. This program enables the institution to plan with the serviceman an educational experience regardless of his/her mobility pattern. For further information contact the Counseling Division.



# Fees

## Tuition and Fees

Tuition is charged on a sliding scale according to the number of credit hours in which a student is enrolled as well as the student's place of legal residence.

Tuition for credit courses will be charged according to the Tuition and Fees schedule.

Tuition may vary from the schedule for students enrolled in certain curricula or occupational programs:

Fall or Spring Term

A.D. Nursing and Licensed Vocational Nursing Programs — \$4.00 per semester credit unit within the minimum, and maximum amounts; minimum of \$20.00 and maximum of \$50.

Summer Term

A.D. Nursing and Licensed Vocational Nursing Programs — \$10.00 per semester unit with a minimum of \$25.00 and a maximum of \$50.

Certain other programs such as Fire Protection Technology and certain technical occupational programs which fit the reciprocal agreement between the DCCCD and the TCICD may have special tuition rates (see page 59).

Tuition is subject to change by the DCCCD Board of Trustees or the Texas legislature without notice.

## Special Fees

**Audit Fee:** The charge for auditing a course is at the same rate as taking a course for credit, regardless of the number of hours enrolled, except that a student services fee is not charged.

Laboratory fee (per lab) ...\$2.00 to \$8.00 a semester

Music fee (private lessons)\*.....\$20.00 per ½ hour

(maximum charge for one course). \$35.00 per hour

Physical education activity fee\*\*...\$5.00 a semester

Credit by Examination.....\$20.00 per exam

\*Available only to music students enrolled for 12 hours or more.

\*\*Laboratory fees for bowling and scuba courses will vary in accordance with the actual cost of equipment rental for each student.

## Additional Fees

Additional fees may be assessed as new programs are developed with special laboratory costs. These fees will always be kept to a basic practical minimum for the program involved. A graduation fee is not assessed students receiving a degree; however, each student will pay for cap and gown rental.

## Refund Policy

The refund policy is based on the fact that student tuition and fees provide only a fraction of the cost of providing educational opportunities. When a student enrolls in a class, he or she reserves a place which cannot be made available to another student unless the student officially drops the class during the first week of the semester. Also, a student's original enrollment represents a sizable cost to the District whether or not the student continues in that class. Therefore, a refund will be made only under the following conditions:

1. No 100% refund is granted unless college error is involved.
2. An 80% refund of tuition and fees may be obtained through the date noted in the college calendar. Eighty percent refunds will be given through the first

two class days of a six week summer session or a Fastrak semester. Refunds for flexible entry courses will be considered through completion of the second day of class from the date of enrollment. No refund will be granted after the dates referred to above.

3. A physician's statement must be submitted with petitions related to medical reasons for withdrawing from college.
4. Requests for refunds must be submitted before the end of a semester session for which the refund is requested.

5. A refund of less than \$4.00 for tuition and/or fees will not be made.

6. Refund Petition forms are available in the office of the Vice President of Student Services

A student who feels that a refund request is due to an extenuating circumstance beyond the limits of the refund policy should be explicit when completing the Refund form. All requests for refund will be referred to the Committee on Admission and Retention. Refund checks normally require one month from date of approval.

## DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

### Tuition and Student Services Fee Schedule

#### Fall, Spring Sessions, 1978-79

Semester	In-District			Out-of-District			Out-of-State*			Out-of-Country		
Cr. Hrs.	Tuition	Fees	Total	Tuition	Fees	Total	Tuition	Fees	Total	Tuition	Fees	Total
1	25		25	25		25	40		40	200		200
2	25		25	40		40	80		80	200		200
3	25		25	60		60	120		120	200		200
4	25		25	80		80	160		160	200		200
5	30		30	100		100	200		200	200		200
6	36	4	40	120	4	124	240	4	244	240	4	244
7	42	4	46	140	4	144	280	4	284	280	4	284
8	48	4	52	160	4	164	320	4	324	320	4	324
9	54	4	58	180	4	184	360	4	364	360	4	364
10	60	4	64	200	4	204	400	4	404	400	4	404
11	64	4	68	204	4	208	440	4	444	440	4	444
12	68	7	75	208	7	215	480	7	487	480	7	487
13	72	7	79	212	7	219	520	7	527	520	7	527
14	76	7	83	216	7	223	560	7	567	560	7	567
15	80	7	87	220	7	227	600	7	607	600	7	607
16	84	7	91	224	7	231	640	7	647	640	7	647
17	88	7	95	228	7	235	680	7	687	680	7	687
18	92	7	99	232	7	239	720	7	727	720	7	727
19	96	7	103	236	7	243	760	7	767	760	7	767
20	100	7	107	240	7	247	800	7	807	800	7	807

### Tuition Schedule

#### Summer Sessions, 1979

Semester	Out-of-District			Out-of-State*			Out-of-Country		
Credit Hours	In-District	(Other Texas Counties)							
1	25	30		45			100		
2	25	60		90			100		
3	30	90		135			135		
4	40	120		180			180		
5	50	150		225			225		
6	60	180		270			270		
7	64	184		310			310		
8	68	188		350			350		
9	72	192		390			390		

\*A non-resident student is hereby defined to be a student of less than eighteen (18) years of age living away from his family and whose family resides in another state, or whose family has not resided in Texas for the twelve (12) months immediately preceding the date of registration; or a student eighteen (18) years of age who resides out of the state or who has not been a resident of the state twelve (12) months immediately preceding the date of registration.

# Philosophy & Growth

**T**HE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT'S seven innovative educational communities are dedicated to a common goal: serving in the best possible way the complex, varied and ever-changing educational requirements of a growing metropolitan community.

Each of the District's seven colleges — Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland — is therefore committed to providing every person in Dallas County a quality educational experience, whether the person is a youth setting forth toward a degree in medicine, or an adult wanting to enrich his/her leisure hours with an interesting hobby.

There is a place for a student who wishes to spend a year or two preparing to enter a trade or profession and a place for an employed person who wants additional training in an occupational field.

There is a place for the very bright high school student who is ready to undertake college-level training in advance of graduation from secondary school and a place for the high school dropout who has come to realize the necessity of education in today's complex, demanding society.

There is, simply stated, a place for **everyone**.

Of primary importance to the district's goal is making certain that a student's educational program is tailored to his/her needs, abilities and ambitions. The philosophy of the district is to create an educational program for an individual, rather than to try to squeeze or stretch an individual to fit an "educational mold."

All students are offered competent, intensive counseling to help discover their goals and special abilities. Continued guidance is available to students who decide to alter their career goals during their college experience. This emphasis on counseling, rare in some institutions, is routine procedure at all district colleges.

The district officially became the Dallas County Community College District in 1972 when its philosophy, function and breadth outgrew the traditional "junior" college label. The new name more closely states the district's mission — to meet the educational needs of the entire metropolitan community.

Dallas County voters created the district in May 1965 and approved a \$41.5 million bond issue.

The following year the district's first college, El Centro, opened its doors for the fall semester in the heart of downtown Dallas. In August, 1970, Eastfield College and Mountain View College enrolled their first students; and the multi-campus district envisioned by the district planners became a reality. Richland College became the district's fourth college in the fall of 1972.

## COLLEGE STAFF

### ADMINISTRATION

President	<b>Ruby H. Herd</b> 746-2179
Vice President of Instruction	<b>Carlos Gonzalez</b> 746-2182
Vice President of Student Services	<b>Ric Abbott</b> 746-2177
Vice President of Business Services	<b>Robert L. Ware</b> 746-2193

How do the district's colleges serve the educational requirements of such a complex family? The answer is found in educational offerings in four broad categories:

— For the student seeking the first two years of work toward the goal of a bachelor's or higher degree, the colleges offer a wide range of courses which are transferable to senior colleges and universities.

— For the student wishing to enter an occupation at a level above the bottom rung of the ladder, the colleges offer one-year and two-year programs of credit courses covering specific technical-occupational fields.

For employed persons wishing to improve their knowledge in their fields, or to train for a move into a new occupational field . . . the colleges offer a broad range of credit and non-credit adult education courses.

— For the person who simply wants to make life a little more interesting, there are community service programs offering a myriad of subjects on cultural, civic and avocational topics.

In September of 1972, the voters of Dallas County approved the sale of an additional \$85 million in bonds, thereby paving the way for the expansion of existing campuses as needed and the planning and construction of three more colleges. The first priority in the expansion program was the remodeling and enlarging of El Centro College. The first phase of that program was completed in time for the 1976-77 academic year.

In 1977, Dallas County Community College District opened two new campuses, Cedar Valley College in Lancaster and North Lake College in Irving. Brookhaven, the final campus in the seven-college master plan, opened for enrollment in August, 1978.



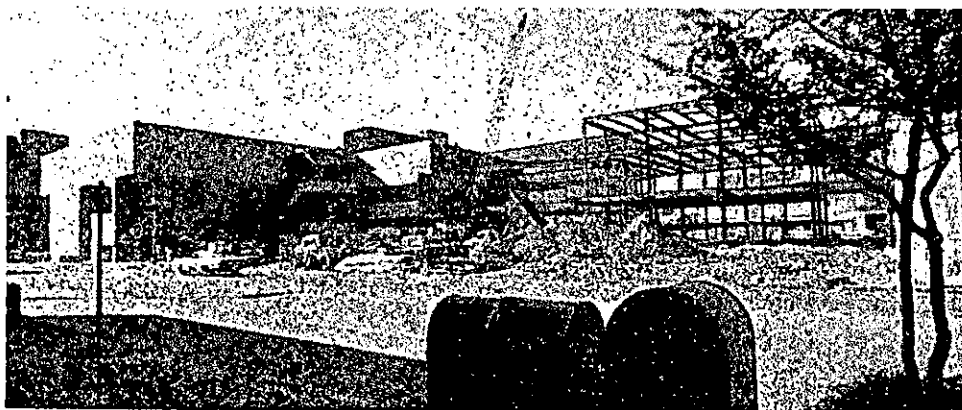
Dean of Instructional Services	<b>Carey L. Rector</b> 746-2186
Associate Dean, Learning Resources	<b>Ted Carley</b> 746-2292
Associate Dean, Technical/Occupational	<b>Tom Goza</b> 746-2252
Associate Dean, Health Occupations	<b>Mary Hardy</b> 746-2392
Associate Dean, Extended Day Programs	<b>Betty Wehrle</b> 746-2184
Assistant Dean, Community Services	<b>Ray Witherspoon</b> 746-2191

### ADMINISTRATIVE SERVICES

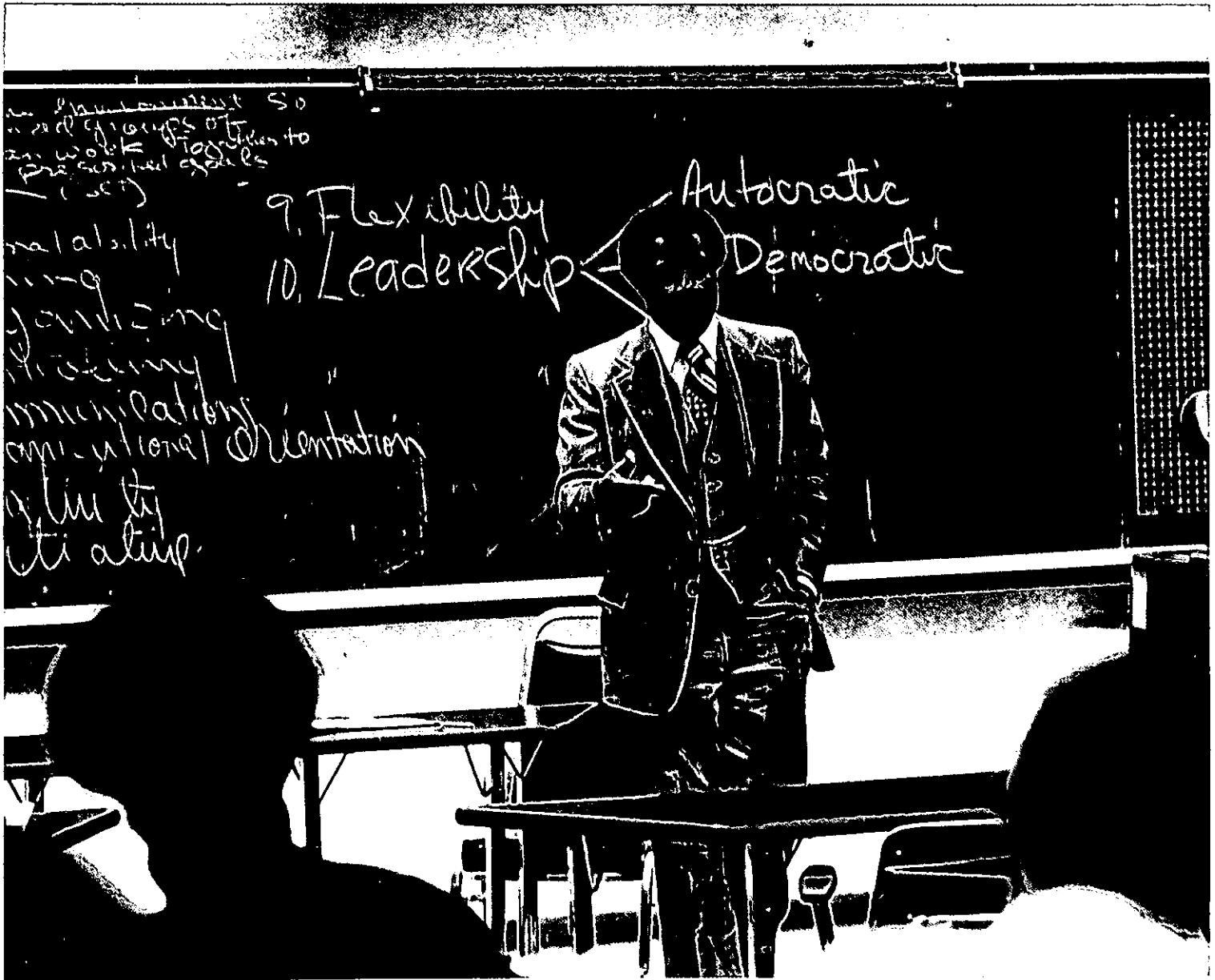
Information Systems User Coordinator	<b>Gary Bray</b> 746-2436
Director of Admissions and Registrar	<b>John Davis</b> 746-2311
Director of Security	<b>George Doughty</b> 746-2233
Director of Student Development	<b>Asa Hunt</b> 746-2230
Director of Physical Plant	<b>Bobby Hunt</b> 746-2245
Assistant Dean, Health Occupations	<b>Kay Kiefer</b> 746-2369
Assistant Director of Student Development	<b>Lou King</b> 746-2230
Director of Student Financial Aid	<b>Elizabeth Disco</b> 746-2199
Resource Specialist	<b>Ann McGee</b> 746-2470
Assistant to the President	<b>Paxton Moore</b> 746-2262
Director of Public Information	<b>Cathy Oppel</b> 746-2152
Assistant Director of Community Services	<b>Judy Pouncey</b> 746-2191
Director of Counseling	<b>Don Tanner</b> 746-2172
Director of Student Health Services	<b>Jean E. Wyckoff</b> 746-2268

### INSTRUCTION DIVISION CHAIRPERSONS

Business	<b>Brenda Reed</b> 746-2344
Communications	<b>Robert Bennett</b> 746-2328
Developmental Studies	<b>Gary Verett</b> 746-2401
Humanities	<b>Arin Peltier</b> 746-2354
Health Occupations	<b>Mary Hardy</b> 746-2369
Science and Mathematics	<b>Robert Agnew</b> 746-2376
Social Science	<b>Rhuwan Rountree</b> 746-2360



# Course Descriptions



**I**n the following list of courses, the credit value of each course in semester units is indicated. Below the credit value is the number of hours devoted to lecture and/or laboratory.

To make it possible for a greater number of courses to be offered at El Centro College, many courses in specialized fields are offered on alternate years only. The student should take this into consideration when developing his or her long-range program.

Because students are concerned about the transfer of credit to other colleges, the following numbering system is designed to clarify which courses at ECC are parallel to those courses offered by colleges granting the bachelor's degree: Courses numbered 100 and above are considered comparable to lower division courses in state colleges and universities. All such courses are applicable to the associate degrees. Courses numbered below 100 are essentially developmental in nature and generally do not transfer; however, some four-year colleges may accept these courses for elective credit. Consult specific catalogs regarding these possibilities.

The prerequisites for any course may be waived by the Instructor and the Vice President of Instruction.



## Accounting

(See Business 201, 202, 203, 238, 239)

## Advertising and Sales Promotion

(See Business 233)

## Anthropology

**Anthropology 100** 3 Cr.  
**Introduction to Anthropology** 3 Lec.

A survey of the origin of mankind involving the processes of physical and cultural evolution, ancient man, preliterate man today. Attention is centered on fossil evidence, physiology and family/group roles and status.

**Anthropology 101** 3 Cr.  
**Cultural Anthropology** 3 Lec.

A survey of the cultures of the world with emphasis on those of North America. The concept of culture, social and political organization, language, religion and magic; elementary anthropological theory. (This course is offered on campus and may be offered via television.)

**Anthropology 104** 3 Cr.  
**American Indian Culture** 3 Lec.

This course attempts to lead to a better understanding of native Americans from three perspectives: native American history and prehistory; traditional Indian cultures; and native Americans today. The latter theme stresses current topics such as discrimination, poverty, employment, reservations, the Bureau of Indian Affairs, self-determination, health care, etc.

**Anthropology 110** 3 Cr.  
**The Heritage of Mexico** 3 Lec.

This course presents major historical developments and personalities which have shaped the Mexican nation, with emphasis on cultures and customs. Beginning with the peoples who inhabited the country before the Spanish conquest, the course leads to modern Mexico, emphasizing the historical relations between Mexico and the United States and the role of the Mexican-American in the contemporary United States. The student may register for either Anthropology 110 or History 110.

## Apparel Design

**Apparel Design 232** 3 Cr.  
**Design Development** 2 Lec., 4 Lab.

*Prerequisites:* Pattern Design 131, Design 136; concurrent enrollment in Apparel Design 237 and Pattern Design 230. The principles of design for apparel are studied through each instructional unit. Fabric selection and trimming are considered each assignment. Laboratory fee required.

**Apparel Design 233** 3 Cr.  
**Design Development** 2 Lec., 4 Lab.

*Prerequisites:* Apparel Design 232; concurrent enrollment in Apparel Design 238 and Pattern Design 231. A continuation of developing design principles. The garment cost and construction techniques are emphasized along with selection of fabric and trimming. Laboratory fee required.

**Apparel Design 237** 2 Cr.  
**Style Trends and Research** 2 Lec.

*Prerequisites:* Pattern Design 131, Design 136; concurrent enrollment in Apparel Design 232 and Pattern Design 230. A study of current trends in the apparel industry. The student

develops workroom sketches of designs for children, junior petite, junior, active sportswear, misses and suits.

**Apparel Design 238** 2 Cr.  
**Style Trends and Research** 2 Lec.

*Prerequisites:* Apparel Design 237; concurrent enrollment in Apparel Design 233 and Pattern Design 231. A continuation of the current trends in apparel industry. Student develops sketches of designs for half sizes, dressy dresses and lingerie. The student selects one size range for a complete research report.

## Architecture

**Architecture 130** 3 Cr.  
**Architectural Graphics I** 2 Lec., 4 Lab.

The study of orthographic projection, isometric and oblique drawing, shade and shadow. Emphasis upon linework and lettering in pencil and ink. Laboratory fee required.

**Architecture 133** 3 Cr.  
**Architectural Graphics II** 2 Lec., 4 Lab.

The study of perspective drawing, shade and shadow. Emphasis upon theory of drawing, linework and lettering in pencil and ink. Laboratory fee required.

**Architecture 134** 3 Cr.  
**Freehand Drawing I** 2 Lec., 4 Lab.

Fundamental approach to mastering the technique of pencil drawing with emphasis upon eye to hand coordination. Principles of light, shade, scale, proportion, line and tonal quality using both pencil and conte crayon. Exercises using book references, human models and indoor-outdoor sketching are utilized. Laboratory fee required.

**Architecture 135** 3 Cr.  
**Freehand Drawing II** 2 Lec., 4 Lab.

Drawing with pen and ink as well as use of brush with ink and ink washes for tonal effects are incorporated within a multitude of practical applications. Exercises using book references, human models and indoor-outdoor sketching are utilized. Laboratory fee required.

**Architecture 136** 3 Cr.  
**Introduction to Architecture I** 2 Lec., 4 Lab.

The study of human awareness to the environment as translated into architecture through basic design principles. Laboratory fee required.

**Architecture 137** 3 Cr.  
**Introduction to Architecture II** 2 Lec., 4 Lab.

Continuation of Architecture 136 with emphasis upon methods by which information is assembled and basis of decision making for the formulation of architectural objectives. Laboratory projects to include an application of programming research and analysis. Laboratory fee required.

**Architecture 230** 3 Cr.  
**History of Modern Architecture** 3 Lec.

*Prerequisite:* Sophomore standing. Influences upon, and architectural expressions of man, from the industrial revolution to the present day.

**Architecture 232** 3 Cr.  
**Basic Architectural Photography** 2 Lec., 4 Lab.

*Prerequisites:* Architecture 137 and sophomore standing. A study of the basic theories of film, exposure, development, flash, filters, and printing. Practical applications and uses in Architectural illustrations to be investigated with emphasis upon good composition, negative and print qualities.

**Architecture 233** 3 Cr.  
**History of Architecture Survey to 1850** 3 Lec.

A survey of Architecture and influences upon the development of Architecture to the industrial revolution.

**Architecture 234** 3 Cr.  
**Building Technology — Materials and Methods** 3 Lec.

*Prerequisites:* Architecture 236; Architecture 234 may be taken concurrently with Architecture 236. An analysis of architectural materials and their uses. Introduction to specifications and codes. Investigation of structural systems.

**Architecture 236** 3 Cr.  
**Construction Drawings** 2 Lec., 4 Lab.

*Prerequisite:* Architecture 130 or instructor's permission. An introduction to construction drawings and their interrelationship with design and specifications. Emphasis upon total concept of construction documents and detailing. Laboratory fee required.

**Architecture 240** 3 Cr.  
**Media Skills I** 2 Lec., 4 Lab.

Introduction and practice in the practical use of varied media of presentation as applied to an in-office situation. Pencil, water color, pen and ink, colored pencil and felt tip markers are used on assorted materials in a variety of techniques.

**Architecture 241** 3 Cr.  
**Media Skills II** 2 Lec., 4 Lab.

Practice in additional media techniques of presentation that can be utilized for future office use. Pastel, carbon pencil, tempera, transparent and opaque water color are utilized to gain proficiency and versatility in the art of visual communication.

**Architecture 248** 4 Cr.  
**Architectural Design, Grade II** 2 Lec., 6 Lab.

*Prerequisites:* Architecture 130 and 137. Research into design theory for the solution of architectural problems. Emphasis upon functional and aesthetic values through three-dimensional problem solving studies.

**Architecture 249** 4 Cr.  
**Architectural Design, Grade II** 2 Lec., 6 Lab.

*Prerequisite:* Architecture 248. Continuation of Architecture 248 with emphasis upon functional and aesthetic solutions based upon individual programming and research.

**Architecture** 801 811 1 Cr.  
802 812 2 Cr.  
803 813 3 Cr.  
804 814 4 Cr.

(See Cooperative Work Experience)

## Art

**Art 103** 1 Cr.  
**Introduction to Art** 3 Lab.

An introduction to materials and techniques of studio art for the non-major, involving basic design concepts and traditional media. Laboratory fee required.

**Art 104** 3 Cr.  
**Art Appreciation** 3 Lec.

Films, lectures, slides, and discussions on the theoretical, cultural, and historical aspects of the visual arts. Attempts to develop visual and aesthetic awareness, thus relating art to the student as an individual.

**Art 105** 3 Cr.  
**Survey of Art History** 3 Lec.

This course covers the chronological sequence of art from the pre-historic through the Renaissance. Explores the cultural, geophysical, and personal influences on art styles, offering the student a broader range of ideas which will enable him to relate the past to his own work and provide stimuli for his future works.

**Art 106** 3 Cr.  
**Survey of Art History** 3 Lec.

This course covers the chronological sequence of art from the Baroque through the present. Explores the cultural, geophysical, and personal influences on art styles, offering the student a broader range of ideas which will enable him to relate the past to his own work and provide stimuli for his future works.

**Art 110** 3 Cr.  
**Design I** 2 Lec., 4 Lab.

A study of basic concepts of design using two-dimensional materials. Use of line, color, illusion of space or mass, texture, value, shape, and size in composition. Required of all art and interior design majors. Open to all interested students.

**Art 111** 3 Cr.  
**Design II** 2 Lec., 4 Lab.

A study of basic concepts of design with three-dimensional materials, using mass, space, movement and texture. Required of all art majors. Open to all interested students. Laboratory fee required.

**Art 114** 3 Cr.  
**Drawing I** 2 Lec., 4 Lab.

A beginning course investigating a variety of media, techniques and subjects which explores perceptual and descriptive possibilities with consideration of drawing as a developmental process as well as an end in itself. Required of all art majors. Open to others who are interested.

## Courses via TV

**EL CENTRO COLLEGE** is offering several courses via television. These courses are Business 105, Earth Science 117, English 101 and 102, Government 201, Humanities 101, Psychology 105 and 201, and History 101. Content of and credit for these courses is the same as for similar courses taken on campus.

Television courses include viewing of two 30-minute television programs on KERA-Channel 13 each week, plus reading assignments and study guide assignments. Students come to the El Centro College campus for an orientation at the beginning of the semester, for one or two seminars (discussion meetings) and for three or four tests during the semester. These visits to the campus are normally scheduled so that they may be attended either in the afternoon, at night or on the weekends.

Television courses may be taken in conjunction with on-campus courses or by persons who are taking no on-campus instruction.

**Art 115** 3 Cr.  
**Drawing II** 2 Lec., 4 Lab.  
*Prerequisite:* ART 114. Expansion of Drawing I stressing the expressive and conceptual aspects of drawing including the human figure within a spatial environment. Required of all art majors. Open to others who are interested.

**Art 116** 3 Cr.  
**Introduction to Jewelry** 2 Lec., 4 Lab.  
*Prerequisites:* Art 110, Art 111, or permission of instructor. The basic techniques of fabrication and casting of metals, with emphasis on original design. Laboratory fee required.

**Art 118** 3 Cr.  
**Creative Photography for the Artist I** 2 Lec., 4 Lab.  
*Prerequisites:* Art 110, Art 114 or consent of the instructor. Creative use of the camera and photosensitive materials as a means of making expressive graphic images. Emphasis will be upon black and white processing and printing techniques. Laboratory fee required.

**Art 119** 3 Cr.  
**Creative Photography for the Artist II** 2 Lec., 4 Lab.  
*Prerequisite:* Art 118 or consent of instructor. A continuation of Art 118 with emphasis upon color processing and printing techniques. Laboratory fee required.

**Art 199** 1 Cr.  
**Art Seminar** 1 Lec.  
 A one hour weekly lecture and seminar where area artists, critics, and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements, as well as the specifics of being artists in our contemporary society.

**Art 201** 3 Cr.  
**Drawing III** 2 Lec., 4 Lab.  
*Prerequisites:* Art 110, ART 111, ART 115, sophomore standing and/or permission of the Division Chairman. Analytic and expressive drawing of the human figure, stressing study of movement and volume. Laboratory fee required.

**Art 202** 3 Cr.  
**Drawing IV** 2 Lec., 4 Lab.  
*Prerequisites:* ART 201, sophomore standing and/or permission of the Division Chairman. A continuation of ART 201 with emphasis on individual expression. Laboratory fee required.

**Art 203** 3 Cr.  
**Art History** 3 Lec.  
*Prerequisites:* ART 105 and ART 106. A chronological study of the development of the art of western man during the Renaissance period. Emphasis on development of Renaissance art in northern and southern Europe.

**Art 204** 3 Cr.  
**Art History** 3 Lec.  
*Prerequisite:* ART 105 and ART 106. A chronological study of the development of the art of western man from late 19th century through today. Emphasis on development of modern art in Europe and America.

**Art 205** 3 Cr.  
**Painting I** 2 Lec., 4 Lab.  
*Prerequisites:* ART 110, ART 111, ART 115 or permission of the instructor. A studio course stressing fundamental concepts of painting with acrylics and/or oils. Emphasis on painting from still life, models, and the imagination.

**Art 206** 3 Cr.  
**Painting II** 2 Lec., 4 Lab.  
*Prerequisite:* ART 205. Continuation of Painting I with emphasis on individual expression.

**Art 208** 3 Cr.  
**Sculpture I** 2 Lec., 4 Lab.  
*Prerequisites:* ART 110, ART 111, ART 115 or permission of the instructor. An exploration of various sculptural approaches in a variety of media and using different techniques. Laboratory fee required.

**Art 209** 3 Cr.  
**Sculpture II** 2 Lec., 4 Lab.  
*Prerequisite:* ART 208. A continuation of Sculpture I with emphasis on individual expression. Laboratory fee required.

**Art 210** 3 Cr.  
**Commercial Art I** 2 Lec., 4 Lab.  
*Prerequisites:* ART 110, ART 111, ART 115 or consent of the instructor. An introduction to the working world of commercial art with emphasis on the acquisition of professional attitudes and basic studio skills through the working out of typical commercial assignments. Laboratory fee required.

**Art 211** 3 Cr.  
**Commercial Art II** 2 Lec., 4 Lab.  
*Prerequisite:* ART 210. A continuation of ART 210 with added emphasis on layout and design concepts through increased individual assignments, work with simple art for reproduction techniques and the development of a professional portfolio. Laboratory fee required.

**Art 212** 3 Cr.  
**Advertising Illustration** 2 Lec., 4 Lab.  
*Prerequisite:* ART 210. Problems of the illustrator are investigated while exploring the elements he uses. Projects involving basic solution to contemporary illustration are developed.



**Art 215** 3 Cr.  
**Ceramics I** 2 Lec., 4 Lab.  
*Prerequisites:* ART 110, ART 111, ART 115 or permission of instructor. Building of pottery forms by coil, slab and use of wheel; glazing and firing. Laboratory fee required.

**Art 216** 3 Cr.  
**Ceramics II** 2 Lec., 4 Lab.  
*Prerequisite:* ART 215 or permission of instructor. A study of glaze technology and advanced problems in the creation of sculptural and utilitarian ceramic ware. Laboratory fee required.

**Art 228** 3 Cr.  
**Three Dimensional Design** 2 Lec., 4 Lab.  
*Prerequisites:* Art majors — ART 110, ART 111, and ART 114. Drafting technology majors — Drafting 183 and Engineering 186. Development of three-dimensional projects in metal, plastic, and wood through the stages of design: idea, sketches, research, working drawing, model and finished product. Emphasis is on function, material and aesthetic forms. Laboratory fee required.

## Banking and Finance

**Banking & Finance 101** 3 Cr.  
**Credit Management** 3 Lec.

*Prerequisite:* Credit and Collection Principles. Working methods of credit management and control are developed and applied to cases that involve making credit decisions, fixing credit limits, handling complicated accounts, adjustments, extensions, composition settlements, assignments, reorganizations and bankruptcies. Stress is laid upon credit and financial analysis relating to profitability, capacity to pay debts and provide essential services, and ability to withstand adversity. Trade credit is examined as a commitment of corporate assets.

**Banking & Finance 103** 3 Cr.  
**Introduction to Banking** 3 Lec.  
 This course presents broad basic fundamentals of bank functions in a descriptive fashion so that the student may acquire an operational perspective of banking services offered.

**Banking & Finance 104** 3 Cr.  
**Money and Banking** 3 Lec.  
 This course presents the basic economic principles most closely related to the subject of money and banking. The course stresses the practical application of the economics of money and banking to the financial institution. Some of the subjects covered include structure of the commercial banking system; the nature and functions of money, banks and

the money supply; cash assets and liquidity management; bank investments, loans, earnings and capital; the Federal Reserve System and its policies and operations; Treasury Department operations; and the changing international monetary system.

**Banking & Finance 105** 3 Cr.  
**Comparative Financial Institutions** 3 Lec.  
 The nature, functions and relationships of financial institutions, money markets and capital markets. An investigation of the role, characteristics and operations of banking, savings and loan and financial credit institutions; their similarities, differences, capabilities, customer orientation and effect of state and federal regulatory agencies on operations.

**Banking & Finance 106** 2 Cr.  
**Introduction to the Savings Association Business** 2 Lec.  
 This survey course introduces students to the modern business world and to the role of savings associations. Savings associations' historical development, present-day organization, competition, and future direction are presented, and students acquire a solid foundation for more specialized courses of study.

**Banking & Finance 107** 2 Cr.  
**Savings Association Operations** 2 Lec.  
 An overview of the internal operations of a savings association; this course surveys the work done throughout the institution, outlines the responsibilities of various departments, and illustrates the inner-relationship of all job assignments.

**Banking & Finance 110** 3 Cr.  
**Federal Reserve System** 3 Lec.  
 This course examines the operations and policies of the Federal Reserve System. Attention is given to international monetary affairs, especially the changing role of gold, economic developments and goals which affect the stability of the American economy, and Federal Reserve efforts to adapt and influence the changing economic environment.

**Banking & Finance 111** 3 Cr.  
**Trust Functions and Services** 3 Lec.  
 This course presents a complete picture of the services rendered by institutions engaged in trust business. Topics covered are the history of trust services and institutions, trust powers and government supervision, trust department services, property, wills, settlement of estates, personal and insurance trusts, personal agencies, guardianship, employee benefits trusts, corporate trusts and agencies, investment of trust funds, and management of property and mortgage.

**Banking & Finance 112** 3 Cr.  
**Installment Credit** 3 Lec.  
 This course emphasizes the details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance, and rate structure and yields.

**Banking & Finance 113** 3 Cr.  
**Credit Card Banking** 3 Lec.  
 This course is designed to assist students in understanding

the overall aspects of operating a bank charge plan. It briefly touches on marketing of credit cards.

**Banking & Finance 114** 3 Cr.  
**Teller Training** 2 Lec., 1 Lab.

An intensive concentrated course of study and practical hands-on experience designed to train tellers in the basics of teller operations. Topics covered include: fundamentals of negotiable instruments, introduction to the care and handling of money, deposits, checking and savings transactions, special teller functions and balancing, cashing and paying checks. The importance of public relations in the teller's job, security measures, fraud and robbery are also covered.

**Banking & Finance 115** 3 Cr.  
**Credit and Collection Principles** 3 Lec.

This is a basic course in credit and collections. The topics studied include the nature and function of credit, types and classification of credit, principles of bank and commercial credit, factors of credit risk, sources of information, analysis of agency reports, interchange services, and collection procedures.

**Banking & Finance 116** 1 Cr.  
**Construction Lending** 1 Lec.

The course provides a broad overview of construction lending in commercial banks and covers such topics as analysis of applications, permanent financing, construction loan participations and servicing, commitment procedures, bonding and developer guarantees, advances, inspections, legal work, unsecured construction financing, land and development loans, and bank relationships with mortgage bankers.

**Banking & Finance 117** 2 Cr.  
**Letters of Credit** 2 Lec.

The subjects covered include shipping documents, mechanics of letters of credit, payment and reimbursement, and document examination.

**Banking & Finance 118** 1 Cr.  
**Installment Loan Interviewer** 1 Lec.

This course will introduce the student to proper techniques to use when interviewing a loan customer. Topics covered include Reg B requirements and how to handle "problem" customers. Role playing will be used.

**Banking & Finance 119** 1 Cr.  
**New Accounts** 1 Lec.

A survey of basic problems working with new bank accounts. It describes how the new account function interrelates with marketing and covers such legal questions as: who can open an account; what documents are necessary to open an account; does federal law require social security number or tax identification number; the legal rights of survivorship upon the death of one of the signers.

**Banking & Finance 120** 1 Cr.  
**Selling Bank Services** 1 Lec.

This seminar teaches how to recognize and meet bank customer's needs — Checking accounts, savings accounts, savings services, loans to individuals, safe deposit, travelers checks, and cross-selling. Extensive use of role play and programmed instruction.

**Banking & Finance 121** 1 Cr.  
**Loss Prevention** 1 Lec.

This seminar focuses on check examination and cashing, check swindles, identification with and without credentials, bank holdups, and security procedures.

**Banking & Finance 122** 1 Cr.  
**Safe Deposit** 1 Lec.

This seminar is for persons interested in safe deposit operations and who want to become more effective on the job. Safe deposit security, legal concerns, access, insurance, contracts, powers of attorney, customer relations, recordkeeping, and safekeeping procedures are some of the topics discussed.

**Banking & Finance 123** 1 Cr.  
**Loan and Discount** 1 Lec.

This seminar teaches the essential facts about promissory notes, including calculating interest and discounting commercial paper, guaranties; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks; and the concepts of attachment, perfection, priority, default, and foreclosure. The seminar uses programmed instruction and several simulation exercises.

**Banking & Finance 124** 1 Cr.  
**Stocks and Bonds** 1 Lec.

Among the topics covered are what stocks and bonds are and how they function; how to transfer ownership; the classes and kinds of stocks, bonds, and government securities.

**Banking & Finance 125** 3 Cr.  
**Saving Association Lending** 3 Lec.

This course introduces students to lending operations of savings associations and concentrates on procedures for handling conventional one-to-four family mortgage loans, home improvement loans and mobile home loans. Specialized areas of savings association lending, including large scale mortgage loans, the role of government in home financing, the management of real estate owned, and whole loan sales and participations are also studied.



**Banking & Finance 201** 3 Cr.  
**Advanced Credit Analysis** 3 Lec.

*Prerequisite: Credit and Collection Principles.* The techniques of credit decision-making are studied in detail. The methods of financial analysis, such as ratio calculation, cash flow determination and comparative analysis are discussed and applied, through case method, to the solution of business problems. Risk appraisal is also studied in the light of general economic conditions, the natures of particular businesses, and the conditions and trends in various industries.

**Banking & Finance 202** 3 Cr.  
**Credit Law** 3 Lec.

Specific legalities regarding credit and the granting of credit with particular emphasis on credit regulation and State of Texas Commercial and Consumer laws.

**Banking & Finance 203** 3 Cr.  
**Public Relations and Marketing of Financial Services** 3 Lec.

This course is designed to present the student with a practical working knowledge of the role and importance of public relations to the finance industry, both collectively and as applied to individual institutions e.g., commercial banks, savings and loan associations, credit unions and other financial organizations. Emphasis is also placed on the promotion and marketing of financial services and evaluation of comparative marketing tactics and strategies.

**Banking & Finance 204** 3 Cr.  
**Federal Regulations of Banking** 3 Lec.

Some of the topics covered are agencies regulating banks, bank charters, bank reports and examinations, federal limitations on banking operations, and the regulation of bank expansion. Emphasis is on supervision rather than the role of the federal government as it indirectly influences the operations of banks through fiscal and monetary policy decisions.

**Banking & Finance 205** 3 Cr.  
**Analyzing Financial Statements** 3 Lec.

*Prerequisite: Business 201.* This course includes characteristics of financial statements and financial statement analysis. Goals, methods, and tools of analysis: analysis of profit and loss, accounts receivable, inventories, and balance sheets; the relationship of balance sheet accounts to sales; and projected statements and cash budgets.

**Banking & Finance 206** 3 Cr.  
**Negotiable Instruments and the Payments Mechanism** 3 Lec.

The aim is to improve understanding of how the law operates within the framework of federal and state banking statutes, court decisions, and administrative regulations. Legal situations that occur in the deposit, collection, dishonor and return, payment of checks and other cash items, and the relationship of the various parties in bank collection channels are explored, as are relationships between a bank and its depositor and some of the legal aspects of other bank service operations.

**Banking & Finance 207** 2 Cr.  
**Savings Account Administration** 2 Lec.

This course describes the insuring agency, the insurance contract and insurance coverage of savings accounts; explains procedures involved in opening savings accounts; defines problem areas and routine procedures for handling inactive or dormant accounts, loans secured by savings accounts, and creditor actions in reaching debtors' accounts; describes the relationship of liquidity levels and sav-

ings withdrawals as used by association financial managers; defines association terms appropriate for advertising of savings accounts and describes additional services to savers.

**Business 209** 3 Cr.  
**Principles of Insurance** 3 Lec.

This survey course in insurance is oriented toward business applications and is designed to inform the student of the life, property and casualty insurance needs of business and industry with emphasis on a systematic approach to risk management. Included are the study of credit life insurance, property, auto, accounts receivable, business interruption, key-man life insurance, accident and health, business liability, workmen's compensation, bonding and title insurance coverages.

## Biology

**Biology 101** 4 Cr.  
**General Biology** 3 Lec., 3 Lab.

This course is a prerequisite for all higher level biology courses and should be taken in sequence. Recommended for science majors. Emphasis is structure and function at the cell, tissue, and organ system levels of organization in both plants and animals. Laboratory fee required.

**Biology 102** 4 Cr.  
**General Biology** 3 Lec., 3 Lab.

This course is a continuation of Biology 101. Emphasis is Mendelian and molecular genetics, evolutionary mechanisms, plant and animal development, and the energetics and regulation of ecological communities. Laboratory fee required.

**Biology 115** 4 Cr.  
**Biological Science** 3 Lec., 3 Lab.

A presentation of selected topics in Biological Science for the non-science major including the cell concept, basic chemistry as it relates to biology, an introduction to genetics, cellular processes such as mitosis, meiosis, respiration, photosynthesis, and plant and animal reproduction. Laboratory fee required. (This course is offered on campus and may be offered via television.)

**Biology 116** 4 Cr.  
**Biological Science** 3 Lec., 3 Lab.

No Prerequisite. A study of selected topics of Biological Science for the non-science major including all systems of the human body, disease, drug abuse and aging, evolution ecology and man in relation to his environment. Laboratory fee required.

**Biology 120** 4 Cr.  
**Introduction to Human Anatomy and Physiology** 3 Lec., 2 Lab.

The first semester of a two semester course in anatomy and physiology, introducing the normal structure of the human body, its cells, organs, and systems, and the functioning of these units. This course serves as a foundation for present and future specialization for students of A. D. Nursing and Allied Health disciplines. Other students interested in the study of the functioning of the human body should consult a counselor. No science background is presupposed. Thorough grounding in the basic chemistry of life processes, cell theory, genetics, embryology and anatomy and physiology will be provided. Coordination of body systems for integral functioning will be stressed. Laboratory fee required.

**Biology 121** 4 Cr.  
**Introduction to Human Anatomy and Physiology** 3 Lec., 2 Lab.  
*Prerequisite:* Biology 120. A continuation of Biology 120. Laboratory fee required.

**Biology 123** 4 Cr.  
**Applied Anatomy & Physiology** 3 Lec., 2 Lab.  
 This is a one semester survey of the Human Anatomy and Physiology. The subject matter will be dealt with according to the various body systems. The course is suggested for students of the health occupations in accordance with their program requirements; it is open to other students. This course will apply toward meeting the science requirement for non-science majors. No previous science background is presumed. Laboratory fee required.

**Biology 216** 4 Cr.  
**General Microbiology** 3 Lec., 4 Lab.  
*Prerequisite:* Biology 102 or consent of instructor. A study of microbes with emphasis on growth, reproduction, nutrition, genetics and ecology of micro-organisms. Laboratory activities will constitute a major part of the course. Recommended for science majors and science related programs. Laboratory fee required.

**Biology 221** 4 Cr.  
**Anatomy and Physiology I** 3 Lec., 3 Lab.  
*Prerequisite:* Biology 102 or approval of instructor. Recommended for science majors. First course of a two course sequence. Structure and function as related to the human skeletal, muscular and circulatory system. Emphasis placed on the inter-relationships of these systems. Laboratory fee required.

**Biology 222** 4 Cr.  
**Anatomy and Physiology II** 3 Lec., 3 Lab.  
*Prerequisite:* Biology 221 or approval of instructor. Second course of a two course sequence. Structure and function as related to the human digestive, nervous, respiratory, reproductive and endocrine systems. Emphasis placed on the inter-relationships of these systems. Laboratory fee required.

**Biology 290**  
 (See Ecology 291)

## Bookkeeping

(See Business 131, 132)

## Business Mathematics

(See Mathematics 130)

## Business

**Business 105** 3 Cr.  
**Introduction to Business** 3 Lec.  
 Provides overall picture of business operation; includes analysis of specialized fields within business organization; identifies role of business in modern society. (This course is offered on campus and may be offered via television.)

**Business 128** 4 Cr.  
**Data Entry Concepts** 2 Lec., 5 Lab.  
*Prerequisite:* Credit in Business 172 or one year of typing in high school. Designed to provide skills using card oriented and buffered display equipment. Emphasis is placed on speed and accuracy for performing the basic functions, record formatting with protected and variable fields, utilizing a variety of source documents, program control, and multiple program levels. Laboratory fee required.

**Business 131** 3 Cr.  
**Bookkeeping I** 3 Lec.  
 The fundamental principles of double-entry bookkeeping as applied to practical business situations. Emphasis is given to the following: financial statements, trial balances, work sheets, special journals, adjusting and closing entries. A practice set covering the entire business cycle will be completed.

**Business 132** 3 Cr.  
**Bookkeeping II** 3 Lec.  
*Prerequisite:* Business 131. Attention will be given to accruals, bad debts, taxes, depreciations, controlling accounts, and business vouchers. Bookkeeping for partnerships and corporations will be introduced.

**Business 136** 3 Cr.  
**Principles of Management** 3 Lec.  
 A study of the process of management including the functions of planning, organizing, leading, and controlling. Particular emphasis on policy formulation, decision making processes, operating problems, communications theory, and motivation techniques.

**Business 137** 3 Cr.  
**Principles of Retailing** 3 Lec.  
 The operation of the retail system of distribution. The inter-relationship of consumer demand, inventory control, the buying sequence, personnel requirements, use of computer

in retailing, store location and layout, and credit policies.

**Business 143** 3 Cr.  
**Personal Finance** 3 Lec.  
 A study of everyday financial problems encountered in managing personal affairs. Includes financial planning, insurance, budgeting, use of credit, home ownership, savings, investment and tax problems. (This course can be offered on campus and via television.)

**Business 150** 4 Cr.  
**Management Training** 20 Lab.  
*Prerequisite:* Concurrent enrollment in approved Mid-Management Program. Supervised employment in the student's chosen field. Intended to provide practical experience for students preparing for careers in business management. Business 150 will be offered the first semester.

**Business 151** 4 Cr.  
**Management Training** 20 Lab.  
*Prerequisite:* Concurrent enrollment in approved Mid-Management Program. A continuation of Business 150. Business 151 will be offered the second semester.

**Business 153** 3 Cr.  
**Small Business Management** 3 Lec.  
 The student will be studying the fundamental approaches to planning, establishing and operating a small business. The day-to-day operation of the business and reporting procedures will be studied as well as exploring the concepts of general management.

**Business 154** 2 Cr.  
**Management Seminar: Role of Supervision** 2 Lec.  
*Prerequisites:* Concurrent enrollment in Business 150 and preliminary interview by Mid-Management faculty. Problem analysis and project development for students majoring in Mid-Management. Special emphasis is placed upon the development of management, goal setting and planning, leadership, communication and motivation as applied to the student's work experiences.

**Business 155** 2 Cr.  
**Management Seminar: Personnel Management** 2 Lec.  
*Prerequisites:* Business 150, Business 154, and concurrent enrollment in Business 151. A study of the principles, policies, and practices relating to the personnel functions of business as applied to the student's work experiences.

**Business 157** 3 Cr.  
**Small Business Bookkeeping and Accounting Practices** 3 Lec.  
 The student will study basic bookkeeping and accounting techniques essential to small business financial management and be able to apply them to the analysis and preparation of basic financial statements such as profit and loss, cash flow and statements of financial worth all fundamental to small business operations.

**Business 159** 4 Cr.  
**Beginning Shorthand** 3 Lec., 2 Lab.  
*Prerequisite:* Credit in or concurrent enrollment in Business 172 or one year of typing in high school. Introduction of fundamental principles of Gregg Shorthand, Diamond Jubilee Series. Includes development of ability to read, write and transcribe shorthand outlines. Development of knowledge of mechanics of English.

**Business 160** 3 Cr.  
**Office Machines** 3 Lec.  
 Office machines is designed to provide the student with a skill in the operation of such machines as adding machines, printing calculators, electronic display calculators, and elec-

tronic printing calculators. Emphasis is placed on developing the touch system for both speed and accuracy. A review of the fundamental mathematics needed for successful machine use in the typical office situation is included in the course.

**Business 162** 3 Cr.  
**Office Procedures** 3 Lec.  
*Prerequisite:* Business 172 or one year of typing in high school. Duties, responsibilities, and personal qualifications of the office worker are emphasized. Units of work include filing, reprographics, mail, telephone, financial transactions, and job applications.

**Business 165** 3 Cr.  
**Introduction to Word Processing** 3 Lec.  
*Prerequisite:* Business 172 or one year of high school typing. Provides an overall picture of word processing and its effect on traditional office operations. A study of word processing terminology and word processing centers which combine up-to-date equipment with streamlined paper handling procedures. Training in the transcription and distribution of business communications. Reinforcement of English skills and English mechanics.

**Business 166** 4 Cr.  
**Intermediate Shorthand** 3 Lec., 2 Lab.  
*Prerequisites:* Credit in Business 159 or one year of shorthand in high school, credit in Business 172 or one year of typing in high school. Application of the principles of Gregg Shorthand to develop the following: increased speed dictation, accuracy in typing from shorthand notes, and emphasis on the beginning techniques of transcription skills. Included will be oral reading of shorthand outlines, speed building dictation, and mailable copy. Special attention will be given to English fundamentals such as grammar, punctuation, etc.

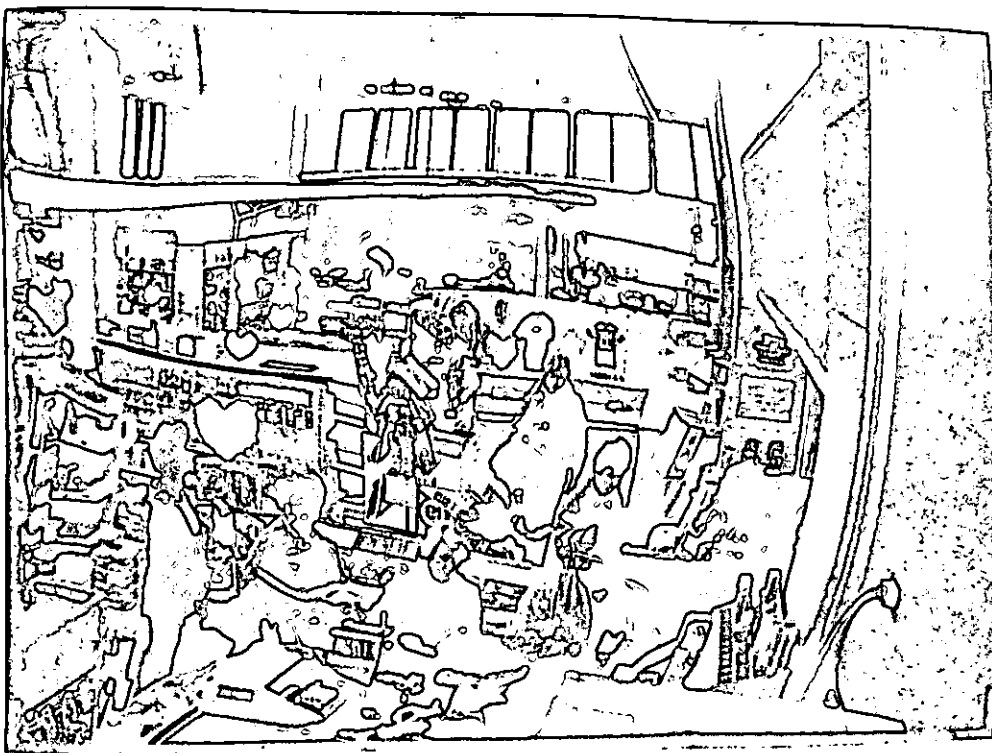
**Business 167** 3 Cr.  
**Legal Terminology & Transcription** 3 Lec.  
*Prerequisite:* Completion of intermediate typewriting or typing speed of 50 words per minute; completion of introduction to word processing. This course is designed to acquaint students with legal terminology, including correct spelling and use of legal terms and Latin words and phrases, and provides intensive practice in building speed and accuracy in the transcription of legal terms.

**Business 172** 3 Cr.  
**Beginning Typing** 2 Lec., 3 Lab.  
 Fundamental techniques in typewriting are developed. The skills involved in typing manuscripts, business letters and tabulation are introduced. This course is for students with no previous training in typewriting.

**Business 174** 2 Cr.  
**Intermediate Typing** 1 Lec., 2 Lab.  
*Prerequisite:* Credit in Business 172 or one year of typing in high school. Further development of techniques. Emphasis will be placed on problem solving, increasing speed and accuracy in typing business forms, correspondence and manuscripts.

**Business 201** 3 Cr.  
**Principles of Accounting I** 3 Lec.  
 Theory and practice of measuring and interpreting financial data for business units: study of problems of income measurement, such as depreciation, inventory valuation and credit losses; the operating cycle and the preparation of financial statements. (This course is offered on campus and may be offered via television.)





**Business 202** 3 Cr.  
**Principles of Accounting II** 3 Lec.  
*Prerequisite:* Business 201. Accounting procedures and practices applicable to partnerships and corporations; the use of cost data, budgetary controls, analysis and interpretation of financial reports for use by creditors, investors, and management.

**Business 203** 3 Cr.  
**Intermediate Accounting** 3 Lec.  
*Prerequisite:* Business 202. An intensive study of the concepts, principles, and practice of modern financial accounting. Included is a complete study of the purposes and procedures underlying the financial statements.

**Business 205** 3 Cr.  
**Business Finance** 3 Lec.  
*Prerequisites:* Economics 201 or 202. This course is designed to give the students a working knowledge of the financial system in the free enterprise system. Interest rates, value analysis, financing of business firms and government, security markets, analysis of financial requirements for decision making and capital requirements.

**Business 206** 3 Cr.  
**Principles of Marketing** 3 Lec.  
 A study of the scope and structure of marketing institutions in the marketplace today. Analysis of the marketing functions, consumer behavior, market research, sales forecasting and relevant state and federal laws.

**Business 210** 3 Cr.  
**Small Business Organization, Acquisition and Finance** 3 Lec.  
 The student will study alternative strategies and procedures for organizing a business, the planning necessary for establishing a business, evaluation of business for acquisition purposes, and how to prepare and present a loan proposal.

**Business 211** 3 Cr.  
**Small Business Operations** 3 Lec.  
 The student will be introduced to problems associated with day to day operations of small business. Case studies and problem solving will be emphasized to prepare the student to cope with full range of operational management problems such as compliance with regulations, personnel administration, accounts receivable management, and business insurance.

**Business 230** 3 Cr.  
**Salesmanship** 3 Lec.  
 A course in general salesmanship involving the factors of successful selling of goods and ideas. Buying motives, sales psychology, customer approach, and sales techniques are studied.

**Business 231** 3 Cr.  
**Business Correspondence** 3 Lec.  
*Prerequisites:* Credit in Business 172 or one year of typing in high school; credit in Communications 131 or English 101. A practical course that includes a study of letter forms, the mechanics of writing, and composing various types of communications. A critical analysis of the appearance and content of representative business correspondence is made.

**Business 233** 3 Cr.  
**Advertising and Sales Promotion** 3 Lec.  
 Introduces the fundamental principles, practices and common media used in persuasive communication. Includes an insight into buyer behavior, use of advertising media to motivate consumers, and methods of stimulating salespeople

and retailers. Familiarizes the student with the management of promotion programs with respect to goals, strategies, evaluation and control of promotional activities.

**Business 234** 3 Cr.  
**Business Law** 3 Lec.  
 This course is designed to acquaint the student with the historical and ethical background of the law and to familiarize him with present day principles of law. Particular emphasis on contracts, property (bailments, sales, leases, wills, and estates), and torts.

**Business 237** 3 Cr.  
**Organizational Behavior** 3 Lec.  
 This course endeavors to focus on the persisting human problems of administration in modern organization as they relate to the theory and methods of behavioral science.

**Business 238** 3 Cr.  
**Cost Accounting** 3 Lec.  
*Prerequisite:* Business 202. The theory and practice of accounting for a manufacturing concern. Detailed study of the measurement and control of material, labor and factory overhead for the job order and process cost system. Budgets, variance analysis, standard costs, joint and by-products costing will be discussed.

**Business 239** 3 Cr.  
**Income Tax Accounting** 3 Lec.  
*Prerequisites:* Business 202 or consent of instructor. Provides an understanding of basic income tax laws applicable to individuals and sole proprietorships. Subjects treated include personal exemptions, gross income, business expenses, non-business deductions, capital gains and losses. Emphasis is on those problems commonly encountered in the preparation of income tax returns.

**Business 242** 3 Cr.  
**Personnel Administration** 3 Lec.  
 Personnel administration is a business course designed to provide a solid foundation in the fundamentals, theories, principles and practices of people management. Emphasis will be on people and the factors that are relevant to employment of people; i.e., recruitment, selection, training, job development, interactions with others, labor management relations, government regulations, etc. The managerial functions of planning, organizing, staffing, directing, and controlling will provide the framework for applying the principles which are significant in personnel interactions and management.

**Business 250** 4 Cr.  
**Management Training** 20 Lab.  
*Prerequisites:* Business 150-151; concurrent enrollment in Business 254. Continuation of supervised employment in the student's chosen field. Intended to provide increased supervisory responsibility for students preparing for careers in business management. Business 250 will be offered the first semester.

**Business 251** 4 Cr.  
**Management Training** 20 Lab.  
*Prerequisites:* Business 150-151; concurrent enrollment in Business 255. A continuation of Business 250. Business 251 will be offered the second semester.

**Business 254** 2 Cr.  
**Management Seminar — Organizational Development** 2 Lec.  
*Prerequisites:* Business 151, 155 and concurrent enrollment in Business 250. A study of the organizational objectives and

management of human resources including the various approaches to organizational theory as applied to the student's work experiences.

**Business 255** 2 Cr.  
**Management Seminar — Business Strategy, the Decision Process and Problem Solving** 2 Lec.  
*Prerequisites:* Business 250, Business 254 and concurrent enrollment in Business 251. Business strategy and the decision making process applied to the first line supervisor and middle-management positions. Specific emphasis will be placed upon the application of the student's course knowledge and work experiences.

**Business 256** 3 Cr.  
**Office Management** 3 Lec.  
 A study of the organization, design, and control of office activities. Included is a study of standards of office practice; office services; wage payment plans; selection, and training and supervising of office employees; office planning, organizing, and controlling techniques; and duties and responsibilities of the office manager.

**Business 265** 3 Cr.  
**Word Processing Practices and Procedures** 3 Lec.  
*Prerequisite:* Successful completion of Business 165. Theory and practice of translating ideas into words, putting those words on paper and turning that paper into communication. Emphasis on training in composing and dictating business communications, developing teamwork skills setting priorities, scheduling, understanding procedures, researching, storing and retrieving documents, and managing word processing systems, further development of transcribing and magnetic keyboarding skills. Reinforcement of typing skills and English mechanics. Goal is development of employable skills in an office or word processing center.

**Business 266** 4 Cr.  
**Advanced Shorthand** 3 Lec., 2 Lab.  
*Prerequisites:* Credit in Business 166 or two years of shorthand in high school, credit in Business 174 or two years of typing in high school. Emphasis is on specialized speed building dictation, timed typewritten mailable transcription, additional vocabulary building, and extensive production work capabilities. Continued development of this high level skill enables the student to meet the challenges presented in any office situation.

**Business 273** 2 Cr.  
**Advanced Typing** 1 Lec., 2 Lab.  
*Prerequisite:* Credit in Business 174 or two years of typing in high school. Decision Making and timed production of all types of business material are emphasized. A continuation of skill development and a review of typing techniques are also stressed. This course will demand accuracy at advanced speeds.

**Business 274** 3 Cr.  
**Legal Secretarial Procedures** 3 Lec.  
*Prerequisite:* Completion of intermediate typewriting or typing speed of 50 words per minute; completion of intermediate shorthand or shorthand dictation speed of 80 words per minute. This course is designed for (1) the student who is training for a career as a legal secretary; (2) the secretary who wishes to train for a career as a legal secretary; (3) the legal secretary who desires a more comprehensive background in legal secretarial procedures. Specialized training is provided in knowledges and skills required of legal secretaries in the areas of reminder and filing systems, telephone usage, dictation and correspondence, preparation of legal documents, the court system, client contacts, use of the law library, research techniques, timekeeping, billing, law office book-keeping, legal secretarial ethics, and how to obtain a legal secretarial position.

**Business 275** 3 Cr.  
**Secretarial Procedures** 3 Lec.  
*Prerequisites:* Completion of or concurrent enrollment in Business 174 and completion of or concurrent enrollment in either Business 166 or Business 265. This course is designed primarily to make the student think in terms of initiative, creative thinking, and follow-through within these units of work; in-basket exercises, decision-making problems, utilization of the shorthand/transcription skills, units on public and personal relations, supervisory principles, business ethics, and organizing time and work.

**Business 703 803** 3 Cr.  
**704 804** 4 Cr.  
**713 813** 3 Cr.  
**714 814** 4 Cr.

(See Cooperative Work Experience)

## Chemistry

**Chemistry 101** 4 Cr.  
**General Chemistry** 3 Lec., 3 Lab.  
*Prerequisite:* Developmental Mathematics 093 or equivalent. Designed for science and science-related majors. The course includes the fundamental laws and theories dealing with the



structure and interactions of matter and the use of these principles in understanding the properties of matter, chemical bonding, chemical reactions, the physical states of matter and changes of state. The fundamental principles are applied to the solution of quantitative problems relating to chemistry. Laboratory fee required.

**Chemistry 102** 4 Cr.  
**General Chemistry** 3 Lec., 3 Lab.  
*Prerequisite:* Chemistry 101. Designed for science and science-related majors, this course is a continuation of Chemistry 101. The fundamental concepts introduced previously, together with additional ones, are applied to a variety of topics, including solutions and colloids, chemical kinetics and equilibrium, electrochemistry, and nuclear chemistry. Qualitative inorganic analysis is included in the laboratory work. Laboratory fee required.

**Chemistry 115** 4 Cr.  
**General Chemistry** 3 Lec., 3 Lab.  
*Prerequisite:* Developmental Mathematics 091 or equivalent. Designed for non-science majors, the course traces the development of theoretical concepts and the evolution of these concepts in explaining various observations and laws relating to chemical bonding reactions, states of matter, solution, electrochemistry and nuclear chemistry. The descriptive chemistry of some common elements and inorganic compounds is included. Laboratory fee required.

**Chemistry 116** 4 Cr.  
**General Chemistry** 3 Lec., 3 Lab.  
*Prerequisite:* Chemistry 115. Designed for non-science majors, this course covers organic chemistry and biochemistry. The important classes of organic compounds are surveyed with the concept of structure providing the central theme. The biochemistry section includes carbohydrates, proteins, lipids, chemistry of heredity, disease and therapy and plant biochemistry. Laboratory fee required.

**Chemistry 170** 3 Cr.  
**Chemistry of Flammable Materials** 3 Lec.  
*Prerequisite:* Chemistry 116. Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, handling hazardous materials, i.e., flammable liquids, combustible solids, and gases. Emphasis on emergency situations and most favorable methods of handling fire fighting control.

**Chemistry 201** 4 Cr.  
**Organic Chemistry I** 3 Lec., 4 Lab.  
*Prerequisite:* Chemistry 102. Designed for science and science related majors. An integrated introductory course in organic chemistry dealing with the fundamental types of organic compounds, their nomenclature, classification, reactions, and applications. The reactions of aliphatic and aromatic compounds are discussed in terms of modern electronic theory with emphasis on reaction mechanisms.

stereo-chemistry, transition state theory, and technique of organic synthesis. Laboratory fee required.

**Chemistry 202** 4 Cr.  
**Organic Chemistry II** 3 Lec., 4 Lab.  
*Prerequisite:* Chemistry 201. Designed for science and science related majors, this course is a continuation of Chemistry 201. Emphasis will be given to the further development of aliphatic and aromatic systems, polyfunctional compounds including amino acids, proteins, carbohydrates, sugars, heterocyclic and related compounds. Instrumental techniques will be used to identify compounds. Laboratory fee required.

**Chemistry 203** 4 Cr.  
**Quantitative Analysis** 2 Lec., 6 Lab.  
*Prerequisites:* Chemistry 102, Mathematics 101 or Mathematics 104 or equivalent. This course includes the principles of chemistry as applied by the analytical chemist to quantitative determinations. Topics include gravimetry, oxidation-reduction, indicators, and acid-base theory. Laboratory experience focuses on the fundamentals of gravimetric and volumetric analysis with an introduction to colorimetry. Laboratory fee required.

**Chemistry 234** 4 Cr.  
**Instrumental Analysis** 2 Lec., 6 Lab.  
*Prerequisite:* Chemistry 203. This course emphasizes the role of modern electronic instrumentation in analysis. Laboratory work includes infrared and ultraviolet spectroscopy, gas chromatography, potentiometric titration, and electrochemistry as analytical tools. Laboratory fee required.

## College Learning Skills

**College Learning Skills 100** 1 Cr.  
**College Learning Skills** 1 Lec.  
This course will provide individualized study and practice in reading, study skills and/or composition. It is designed for students who wish to extend their learning skills for academic or career programs. May be repeated for a maximum of three (3) credits.

## Communications

**Communications 131** 3 Cr.  
**Applied Composition and Speech** 3 Lec.  
The study of communications skills as a practical means of preparing for successful performance in the student's chosen vocation. Practice in writing letters, applications, resumes, and short reports.

**Communications 132** 3 Cr.  
**Applied Composition and Speech** 3 Lec.  
*Prerequisite:* Communications 131 or consent of instructor. The study of communication processes with emphasis on written persuasion directly related to occupational training and work experience. Use of expository techniques in business letters and documented reports. Practice in oral communications.

## Computing Science

**Computing Science 131** 3 Cr.  
**RPG Programming** 2 Lec., 2 Lab.  
*Prerequisite:* Data Processing 133 or consent of the instructor. An elective course to provide programming skills using the Report Program Generator. Emphasis will be on the language techniques and not on operation and functioning of the equipment. Program problems will emphasize card processing and will include Basic Listing, Multicard records and multi-file processing. Designed for programmers and programmer trainees who require RPG in their job environment. System/3 techniques will also be included. Laboratory fee required.

**Computing Science 175** 3 Cr.  
**Introduction to Computer Science** 3 Lec.  
Provides a basic understanding of the computer, cultural impact, history of computers, vocabulary, flow charts, data representation, and an introduction to procedure-oriented languages with general applications.

**Computing Sciences 176** 3 Cr.  
**Fortran Programming** 2 Lec., 2 Lab.  
*Prerequisite:* Math 101 or Data Processing 137. Designed to provide programming skills for those students who need to use the computer as a tool in solution of problems in their curriculum. Fortran is especially suitable for mathematical formulas and will provide valuable assistance for students in the math and science disciplines. Laboratory fee required.

**Computing Science 230** 4 Cr.  
**Advanced Assembly Language Coding** 3 Lec., 3 Lab.  
*Prerequisite:* Data Processing 231. Further development of programming skills using the Assembly Language instruction set of the System/360. Topics of study will include Indexing, Indexed Sequential File Organization, Table Search Methods, Data and Bit Manipulations Techniques, Code Translation, advanced problem analysis, and debugging techniques. Floating point operations will be introduced. Laboratory fee required.

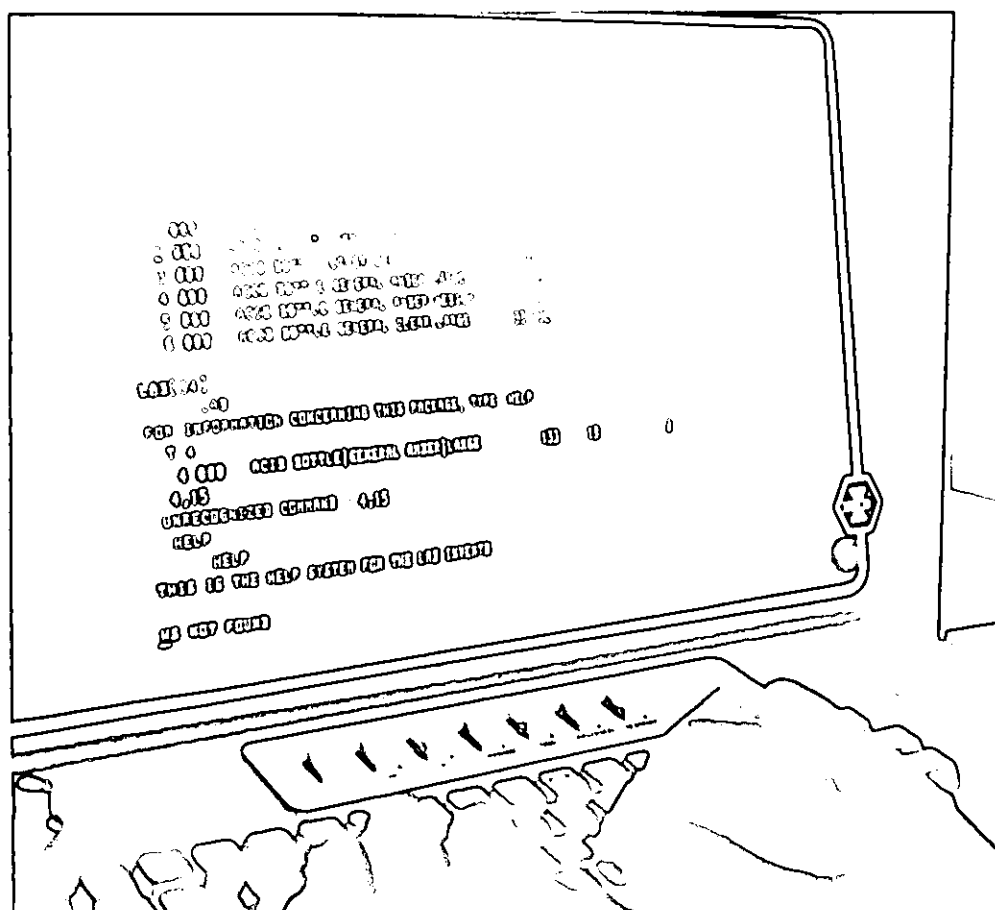
**Computing Sciences 240** 4 Cr.  
**Telecommunications I** 3 Lec., 4 Lab.  
*Prerequisite:* A minimum of 2 semesters of a high level language and credit in Data Processing 232, or permission of the instructor. Introduction to telecommunications concepts including systems configuration of a teleprocessing network on a third generation computer, telecommunications vocabulary, MODEMS, terminal configuration, polling simulation and common carrier characteristics. Student will investigate, analyze and design an existing telecommunications system and a student conceived national data system.

**Computing Science 241** 4 Cr.  
**Telecommunications II** 3 Lec., 3 Lab.  
*Prerequisite:* Computing Science 240. Continuation of Computing Science 240. Included concepts: basic telecommunications programming, terminal configurations, line configurations, synchronous transmission, asynchronous transmission and polling techniques at the central unit. Laboratory fee required.

**Computing Science 250** 3 Cr.  
**Contemporary Topics in Computer Science** 3 Lec.  
*Prerequisite:* A minimum of two semesters of a high level language, or employment in the computer industry and permission of the instructor. A study of recent developments and topics of current interest.

## Cooperative Work Experience

701, 711, 801, 811 1 Cr.  
702, 712, 802, 812 2 Cr.  
703, 713, 803, 813 3 Cr.  
704, 714, 804, 814 4 Cr.  
*Prerequisite:* Completion of two courses in the student's major and instructor/coordinator approval. This course constitutes an on-the-job application of theory and laboratory instruction received in the formal courses of the student's major curricula. The student will be placed in a work-study position in his technical/occupational field that will test his skill and ability to function successfully in that respective occupation. The student's learning in this course will be guided



by a set of learning objectives formulated at the beginning of each semester by the student, his instructor/coordinator, and his supervisor at work. The instructor will determine if the learning objectives are valid and will give final approval for credit. The student will have a regularly scheduled meeting with his instructor and will complete appropriate assignments given to him by his instructor.

## Dance

**Dance 150** 3 Cr.  
**Beginning Ballet I** 2 Lec., 3 Lab.

Course designed to explore basic ballet technique — posture, balance, coordination of body, rhythm, and flow of physical energy through the art form. Theory, terminology, ballet history, and current attitudes and events in ballet will also be studied. Barre exercises and centre floor combinations given. Laboratory fee required.

**Dance 151** 3 Cr.  
**Beginning Ballet II** 1 Lec., 7 Lab.

*Prerequisite:* Dance 150. Continuation of Beginning Ballet I with emphasis on expansion of combinations at the Barre. Addition of 'connecting' steps learned at centre. Introduction of jumps and pirouettes. Laboratory fee required.

**Dance 155** 1 Cr.  
**Jazz I** 3 Lab.

A course designed to introduce students to basic skills of jazz dance with emphasis on general body technique and development, rhythm awareness, jazz styles and rhythmic combinations of movement. Laboratory fee required.

**Dance 156** 1 Cr.  
**Jazz II** 3 Lab.

*Prerequisite:* Jazz I or consent of instructor. A course designed for the continuance of work on skills and style inherent in jazz dance. Class work will deal with technical skills, combinations of steps and skills into dance patterns, and exploration of composition in Jazz form. Laboratory fee required.

**Dance 160** 3 Cr.  
**Introduction to Dance History** 3 Lec.

A history of primitive, classical and contemporary dance forms.

**Dance 250** 3 Cr.  
**Intermediate Ballet I** 1 Lec., 3 Lab.

*Prerequisite:* Beginning Ballet II - Dance 151. Program designed to continue on an intermediate level of ballet technique with more complicated exercises at the barre and centre floor. Emphasis on long series of movements, adagio,

jumps, etc. Precision of movement stressed. Laboratory fee required.

**Dance 251** 3 Cr.  
**Intermediate Ballet II** 1 Lec., 3 Lab.

*Prerequisite:* Intermediate Ballet I — Dance 250. Beginning pointe work for women. Specialized beats, tours for men. Individual proficiency and technical virtuosity developed. Laboratory fee required.

**Dance 252** 1 Cr.  
**Coaching and Repertoire** 2 Lab.

*Prerequisite:* Intermediate Ballet II and consent of instructor. Variations (male and female) and Pas De Deux from standard ballet repertoire are studied, with the student learning to notate same. Course is designed to give the dancer individual coaching, with special attention given to the correction of any particular problems. May be repeated for credit. Laboratory fee required.

## Data Processing

**Data Processing 133** 4 Cr.  
**Beginning Programming** 3 Lec., 4 Lab.

*Prerequisite:* Credit in, or concurrent enrollment in Data Processing 137 or another math course. An introductory course to acquaint the student with the elements of programming computers using the COBOL language. Skills in problem formulation, flow charting, coding check out, and documentation are developed through laboratory assignments using the computer. Programs are designed to provide competency utilizing cards. Advise concurrent enrollment in Computing Science 175. Laboratory fee required.

**Data Processing 136** 4 Cr.  
**Intermediate Programming** 3 Lec., 4 Lab.

*Prerequisite:* Credit in Data Processing 133, 137 or another math course. Further development of skills and proficiency using COBOL including levels of totals, group printing concepts, table build and search techniques, isam disk concepts, matching record and file maintenance concepts using disk. Advise concurrent enrollment in Data Processing 138. Laboratory fee required.

**Data Processing 137** 3 Cr.  
**Data Processing Mathematics** 3 Lec.

This course is designed as an introductory course stressing ideas and understanding of principles of computer computation. Areas to be covered include the number system, fundamental processes, number bases, and the application of mathematics to typical business problems and procedures.

**Data Processing 138** 3 Cr.  
**Data Processing Logic** 3 Lec.

*Prerequisite:* Data Processing 133. This course is designed to develop and explore the basic logic necessary for problem solving utilizing the computer. Areas covered include flow-charting standards, techniques for basic logic operations, table search and build techniques, types of report printing, conditional tests, multiple record types, sequential file maintenance, and introduction to system flowcharting.

**Data Processing 139** 3 Cr.  
**Technician** 2 Lec., 4 Lab.

*Prerequisite:* Completion of, or concurrent enrollment in Computing Science 175 or consent of the instructor. Training in physical data handling techniques. Concepts will include: integrity of data fundamentals of computer operations, system data flow, and job data flow. Machines to be used: sorter, reproducer, burster, decollator, and computer input/output devices. Laboratory fee required.

**Data Processing 140** 4 Cr.  
**Operations — Console** 3 Lec., 3 Lab.

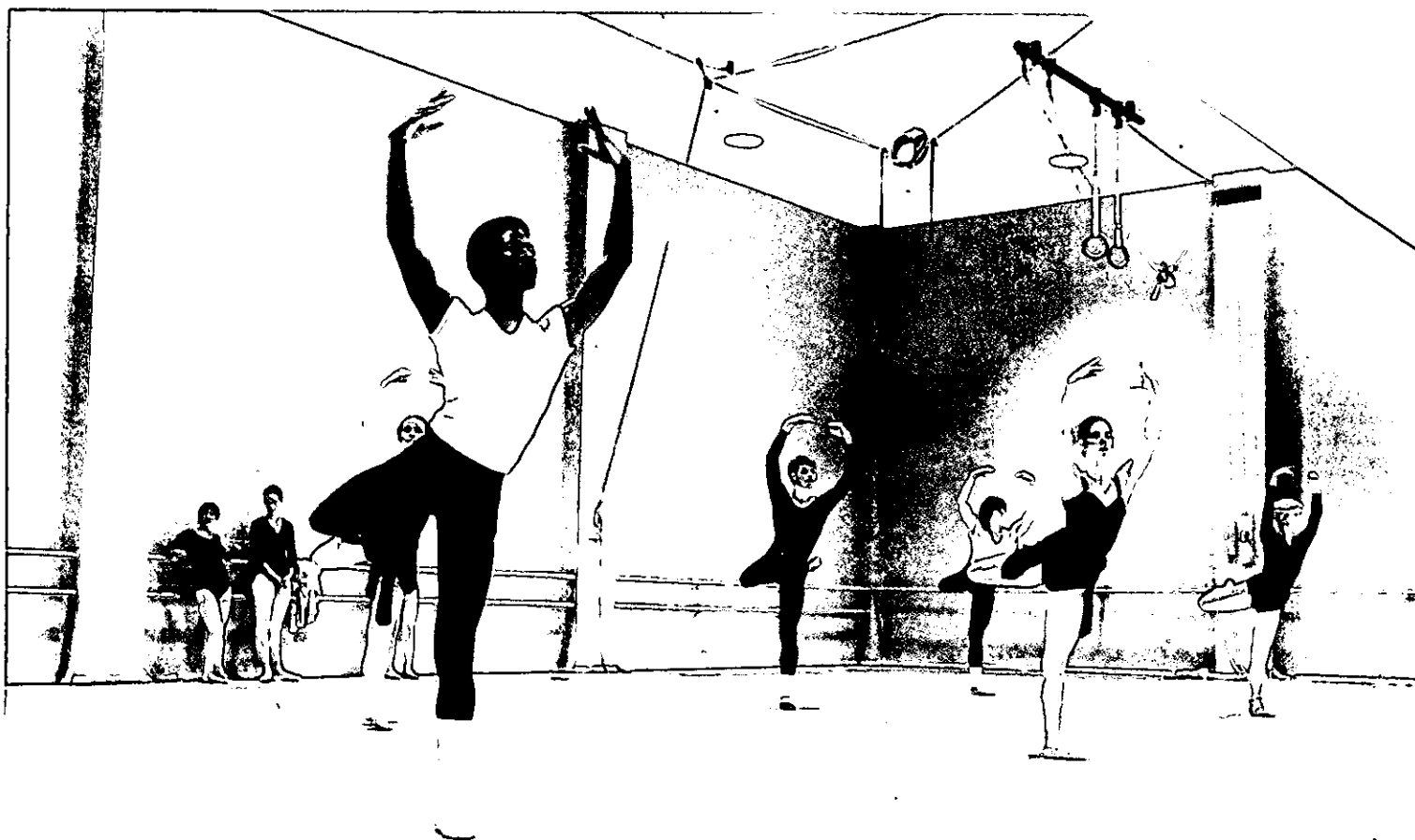
*Prerequisites:* Data Processing 137 and Data Processing 139. Computer operation from a console in a batched mode on a multi-programming third generation computer. Concepts to be included: third generation system concepts, librarian techniques, spooling techniques, use of peripheral equipment and its specific data organization, scheduling, system starts, system communications, and JCL. Laboratory fee required.

**Data Processing 231** 4 Cr.  
**Advanced Programming** 3 Lec., 4 Lab.

*Prerequisite:* Data Processing 136 or consent of the instructor. Provides additional language capabilities and third-generation hardware concepts using the Assembly Language instruction set of the IBM 360-370. It will include an in-depth study of the Standard Instruction Set and the Decimal Feature instructions. Data Structure, System Organization, Linkage Conventions and selected Macro-Instructions will also be presented. Laboratory fee required.

**Data Processing 232** 4 Cr.  
**Applied Systems** 3 Lec., 4 Lab.

*Prerequisite:* Data Processing 136. Introduces and develops skills required to analyze existing systems and to design new systems. Each student is required to complete a case study which involves all facets of system design from the original source of data to final reports including flowcharts and documentation. Fall semester offered day only. Spring offered night only.



**Data Processing 233** 4 Cr.  
**Operating Systems** 3 Lec., 4 Lab.  
*Prerequisite:* Data Processing 231. The objective of this course is to acquaint the student with concepts of an operating system, JCL, and utilities, and provide him the technical knowledge required to work effectively in this environment. The internal functions of an operating system are analyzed and training is given in the use of JCL and utilities. Laboratory fee required.

**Data Processing 236** 4 Cr.  
**Advanced Cobol Techniques** 3 Lec., 4 Lab.  
*Prerequisite:* Credit in Data Processing 133 and 136 or consent of the instructor. Advanced problem solving using the Cobol Programming Language. Special emphasis is given to sequential and random processing techniques utilizing disk. Additional ANSI Cobol conventions will be covered including set/search table lookup, sort verb, report writer, as well as modular programming techniques. Laboratory fee required.

**Data Processing 242** 4 Cr.  
**Computer Hardware and Data Base Systems** 3 Lec., 4 Lab.  
*Prerequisite:* Computing Science 175, one year of a high level language, Data Processing 232 or permission of the instructor. Comparison of organization and architecture of large, medium, small, minicomputer, and microcomputers. Digital number systems. Machine language and assemblers. How on-line and off-line data base systems work. Data management and introduction to currently used data bases (IMS, Total, ADABAS, etc.) and graphic systems. Laboratory fee required.

**Data Processing 243** 3 Cr.  
**Computer Center Management** 3 Lec.  
*Prerequisite:* Computing Science 175, a minimum of 1 semester of a high level language, Business 136 or permission of the instructor. Analyzing, planning, organizing and production orientation and control, personnel and the relative effects which these functions have on information and real time systems as well as methods for computer selection and evaluation.

**Data Processing**  
**Programmer 701, 711, 801, 811** 1 Cr.  
 (See Cooperative Work Experience)  
**Data Processing 702, 712, 802, 812** 2 Cr.  
 (See Cooperative Work Experience)  
**Data Processing 703, 713, 803, 813** 3 Cr.  
 (See Cooperative Work Experience)  
**Data Processing 704, 714, 804, 814** 4 Cr.  
 (See Cooperative Work Experience)

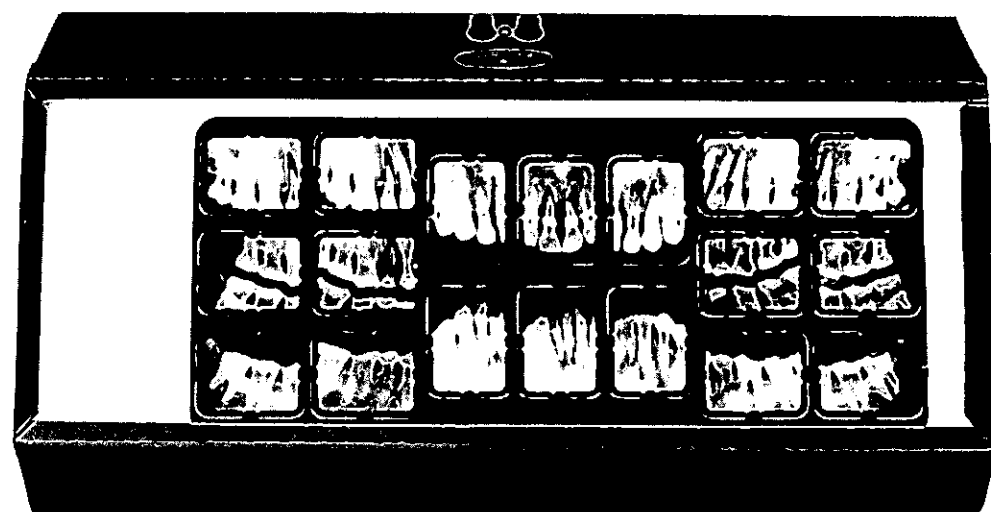
## Dental Assisting Technology

**Dental Assisting 140** 1 Cr.  
**Introduction to the Dental Profession** 1 Lec.  
 A study of dentistry as it has evolved to a profession. The growth and development of the dental association and the auxiliary associations and educational background of each, and how the dental assistant student acquires and retains certification, personal requirements, professional conduct and interpersonal relationships of the dental team. A study to identify the legal, ethical, moral, and professional responsibilities of the dentist and auxiliaries in the practice of dentistry. Terminology relating to this course.

**Dental Assisting 141** 4 Cr.  
**Dental Anatomy and Physiology** 3 Lec., 3 Lab.  
 A study of embryology and the development of the face and oral cavity, oral histology, eruption and exfoliation of the primary dentition and eruption of the secondary dentition, morphology of the teeth and anatomy and physiology of the head and neck. Terminology relating to this course. Laboratory fee required.

**Dental Assisting 142** 3 Cr.  
**Dental Assisting I** 2 Lec., 4 Lab.  
 A study of the function of the dental assistant in chairside assisting, terminology, safety rules and regulations, care and preparation of the dental equipment and operatories, seating the dental patient, identification and use of dental instruments, use of high-velocity suction apparatus, four handed sit down dentistry with different methods of passing instruments, application and removal of rubber dam, application of topical anesthetics, preparing local anesthetics, and different methods of charting the oral cavity findings. Laboratory fee required.

**Dental Assisting 143** 2 Cr.  
**Dental Microbiology and Pathology** 2 Lec., 1 Lab.  
 A study of microbiology as it relates to methods of sterilization and disinfectants used in caring for dental instruments, equipment, and dental operatories. Oral pathology, signs and symptoms of the diseases of the hard and soft dental tissues and oral cavity. Terminology as it relates to this course. Laboratory fee required.



**Dental Assisting 144** 4 Cr.  
**Dental Materials I** 3 Lec., 3 Lab.  
*Prerequisite:* 'C' average in Dental Assisting 140, 141, 142, and 143. A study of the history, terminology, structure and properties of dental materials. Introduction to dental laboratory equipment, care, use and safety rules and regulations to be followed in the dental laboratory. Introduction to weights and measurements and their application in the dental laboratory. Methods, techniques and manipulation to acquire skill in handling gypsum products, dental waxes, alginate impression materials, compound and shellac bases, dental cements, restorative materials, thermal basis, cavity liners, abrasive and polishing agents. Gold foils, nuva fill and sealants, pouring casts, trimming and finishing study casts. Laboratory fee required.

**Dental Assisting 145** 2 Cr.  
**Dental Roentgenology I** 2 Lec., 1 Lab.  
*Prerequisite:* 'C' average in Dental Assisting 140, 141, 142, and 143. A study of history, terminology, theory of the roentgen ray, care and safety measures of x-ray equipment, radiation, hazards and safety precautions of patient and operator. Care and storage of film, types of dental films used, film composition, exposing, processing and mounting x-rays, using open cone bisecting angle technique. How to prevent faulty roentgenograms. Laboratory fee required.

**Dental Assisting 146** 2 Cr.  
**Dental Assisting II** 2 Lec., 1 Lab.  
*Prerequisite:* 'C' average in Dental Assisting 140, 141, 142, and 143. A study of the dental specialties, endodontics, oral surgery and general anesthetic orthodontics, pedodontics, periodontics, prosthodontics, pathology and public health, preparation and instrumentation. The vital signs of a patient will be introduced and practice sessions held. An introduction to hospital dentistry. Use of hand instruments to remove cement from dental restorations and bands, ligature ties, removing sutures, socket dressing, periodontal packs and temporary medicinal fillings. Terminology as it relates to this course. Laboratory fee required.

**Dental Assisting 240** 2 Cr.  
**Dental Materials II** 1 Lec., 2 Lab.  
*Prerequisite:* 'C' average in Dental Assisting 144, 145, and 146. A further study in dental materials, so the student will use all dental materials that she will use in the everyday practice in the dental office, adding new materials such as reversible hydrocolloids, asbestos and wax spacers, custom made trays, rubber base impression material, die stone, inlay wax, sprucing procedures, investment material, burnout, casting procedures, finishing castings, temporary acrylic jackets or crowns, temporary dentures and repairing prosthesis. Terminology as it relates to this course. Laboratory fee required.

**Dental Assisting 241** 2 Cr.  
**Dental Roentgenology II** 1 Lec., 2 Lab.  
*Prerequisite:* 'C' average in Dental Assisting 144, 145 and 146. A further study of dental x-rays with the introduction of long, open cone, parallel technique, occlusal films, extraoral films and panoramic procedures. Practice on short and long cone techniques and processing, mounting, filing of dental films. Terminology as it relates to this course. Laboratory fee required.

**Dental Assisting 242** 3 Cr.  
**Dental Office Administration I** 3 Lec.  
*Prerequisite:* 'C' average in Dental Assisting 144, 145, and 146. A course designed to study in detail front office routines of the dental office including dental team responsibilities, office policies for employee and patient, telephone techniques, greeting people in the office, patient information, credit ratings, appointment control, referrals; patient charts, check and receipt writing, deposit slips, petty cash, day sheets, recall system; inventory and supplies, filing, prescriptions, staff schedules, accounts payable and banking procedures. Terminology as it relates to this course.

**Dental Assisting 243** 3 Cr.  
**Dental Assisting Clinic Seminar I** 3 Lec.  
*Prerequisite:* 'C' average in Dental Assisting 144, 145, and 146. A class to share clinical experiences and discuss problems that have been encountered during the dental assisting internship in dental clinics, hospital, and offices. Special counseling with individual students.

**Dental Assisting 244** 6 Cr.  
**Dental Assisting Internship I** 18 Lab.  
*Prerequisite:* 'C' average in Dental Assisting 144, 145, and 146. Students will receive practical dental assisting experience at chairside in dental clinics, dental school, hospitals, health agencies in the community. The student will rotate in clinics every 6 weeks to give as much work experience as possible.

**Dental Assisting 245** 3 Cr.  
**Dental Office Administration II** 3 Lec.  
*Prerequisite:* 'C' average in Dental Assisting 240, 241, 242, 243, and 244. A further study of front office procedures adding collection control, correspondence, office records, laws pertaining to collections and records, business summary, dental payment plans, 3rd party insurance, radiographs in dental care programs, case presentations, income tax records and patient psychology in the dental office. Terminology as it pertains to this course.

**Dental Assisting 246** 3 Cr.  
**Preventive Dentistry** 3 Lec.  
*Prerequisite:* 'C' average in Dental Assisting 240, 241, 242, 243 and 244. A study of oral hygiene, use of phase microscope in preparing dental plaque smears, learning and teaching a preventive program to patients, diet and nutrition, first aid and CPR and emergencies as they apply to the dental office. Pharmacology, the laws that apply to drugs and prescriptions and how it applies to the dental office. Terminology as it pertains to this course.

**Dental Assisting 247** 3 Cr.  
**Dental Assisting Clinic Seminar II** 3 Lec.  
*Prerequisite:* 'C' average in Dental Assisting 240, 241, 242, 243 and 244. A class to share clinical experience and discuss problems that have been encountered during the dental assisting internship, in dental clinics, hospital and offices. Special counseling with individual students.

**Dental Assisting 248** 6 Cr.  
**Dental Assisting Internship II** 18 Lab.  
*Prerequisite:* 'C' average in Dental Assisting 240, 241, 242, 243, and 244. Students will receive practical dental assisting experience at chairside and office procedures in dental clinics, dental school, hospitals and other health agencies in the community. The student will rotate in clinics every 6 weeks to give as much work experience as possible.

## Design

**Design 128** 2 Cr.  
**Introduction to Mass Produced Apparel** 2 Lec., 2 Lab.  
 A study of the analysis and interpretation of mass production in the fashion industry.

**Design 129** 1 Cr.  
**Industrial Garment Construction** 3 Lab.  
 The study and application of equipment, techniques and skills involved in construction of mass produced apparel. Laboratory fee required.

**Design 135** 3 Cr.  
**Textiles** 2 Lec., 2 Lab.  
 A study of fibers, yarns, fabrics, and finishing processes, including the identification and analysis of all types of construction methods and their application in industry. The course will consider a graphic history of textiles of the traditional styles and will make comparative analysis with con-

temporary developments. A guided design systems approach will be implemented in the laboratory experience.

**Design 136** 3 Cr.  
**Fashion Sketching** 2 Lec., 4 Lab.

A study of structure of the fashion figure. The student learns simple methods for making quick sketches in order to retain ideas and communicate style information.

**Design 234** 3 Cr.  
**History of Costume** 3 Lec.

*Prerequisite:* Design 135. A study of the development of garments from the earliest times through the 18th Century with a consideration of the customs which affect garment styles.

**Design 235** 3 Cr.  
**History of Costume** 3 Lec.

*Prerequisite:* Design 234. A continuation of the study of the development of garments from the 18th Century to the present day. Consideration will be given to customs influence upon the current mode.

## Developmental Studies

### Developmental Mathematics

Developmental Mathematics courses are offered on a self-paced, individualized basis. These courses may be taken for review of mathematics skills. Developmental Mathematics 093 satisfies prerequisites for Mathematics 101, 104, 111, and 115. Developmental Mathematics 091 satisfies prerequisites for Mathematics 130, 139, and 195.

**Developmental Mathematics 090** 3 Cr.  
**Pre-Algebra Mathematics** 3 Lec.

This course is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals, and percentages and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. It is the first step in the mathematics sequence and includes an introduction to algebra.

**Developmental Mathematics 091** 3 Cr.  
**Elementary Algebra** 3 Lec.

*Prerequisite:* Developmental Mathematics 090 or equivalent. This course is designed to develop an understanding of first year algebra. It includes special products and factoring, fractions, equations, graphs, functions, and an introduction to geometry.

**Developmental Mathematics 093** 3 Cr.  
**Intermediate Algebra** 3 Lec.

*Prerequisite:* One year of high school algebra or Developmental Mathematics 091. Includes the terminology of sets, properties of real numbers, fundamental operations on polynomials and fractions, products, factoring, radicals, and rational exponents. Also covered are solutions of linear, fractional, quadratic, and systems of linear equations, coordinate systems, and graphing.

### Developmental Reading

Students can improve and refine their performance in the English sequence by enrolling in Developmental Reading courses. Developmental Reading 090, 091 are valuable skill development courses for English 101. Reading 101 is especially helpful in English 102 and the sophomore level literature courses. See catalogue description in reading for full course content.

**Developmental Reading 090** 3 Cr.  
**Techniques of Reading/Learning** 3 Lec.

Developmental Reading 090 is designed to meet individual needs for proficiency in reading comprehension, vocabulary development, study skills, and reading for success in academic areas and career advancement. It emphasizes learning how to learn and includes reading/learning experiences developed to strengthen the total educational background of each student. Developmental Reading 090 and Developmental Reading 091 are offered in a laboratory setting employing varied instructional methods.

**Developmental Reading 091** 3 Cr.  
**Techniques of Reading/Learning** 3 Lec.

Developmental Reading 091 is designed to meet individual needs for proficiency in reading comprehension, vocabulary development, study skills, and reading for success in academic areas and career advancement. It emphasizes learning how to learn and includes Reading/Learning experiences developed to strengthen the total educational background of each student. Developmental Reading 090 and Developmental Reading 091 are offered in a laboratory setting employing varied instructional methods.

### Developmental Writing

Students can improve their level of success in all courses requiring writing assignments by registering for Developmental Writing. These courses, offered for one to three hours credit, consider organization skills, and research paper styles, as well as individual writing weaknesses.



**Developmental Writing 090** 3 Cr.  
**Writing** 3 Lec.

Developmental Writing 090 emphasizes the diagnosis and correction of deficiencies in basic writing skills. Spelling, grammar, vocabulary improvement, and principles of sentence and paragraph structure (as well as experience in organization for composition) are taught in a laboratory utilizing individualized instruction techniques.

**Developmental Writing 091** 3 Cr.  
**Writing** 3 Lec.

Developmental Writing 091 is a sequel to Writing 090 and concentrates on the composition process; therefore, it is important to develop the student's skills of organization, transition and revision. His program of composition will vary according to his individual needs, which may include brief, simple forms as well as more complex critical and research writing.

## Drafting

**Drafting 135** 2 Cr.  
**Reproduction Processes** 1 Lec., 3 Lab.

A study of equipment and processes used to reproduce technical art: graphic arts process camera, lithographic offset printing, diazo reproduction, blueprinting, photodrafting, microfilming, photocopying, silk screen printing, printed circuit board etching, thermography, typographics, xerography, engravings, and others. A special section of the course is a study of the rapidly expanding field of computergraphics. Laboratory work includes the preparation of flats for the printing of a brochure. Laboratory fee required.

**Drafting 136** 3 Cr.  
**Geological and Land Drafting** 2 Lec., 4 Lab.

*Prerequisites:* Drafting 183 or equivalent\* and Mathematics 196. This is a specialty course to prepare one for work in the area of civil drafting. Drawings completed are relief maps, plan and profile drawings, roadways, pipelines, petroleum and geophysical maps. Calculations are made from surveyor's notes to plot a traverse and to determine area. A set of drawings is prepared for a residential subdivision, a shopping center, or some other type of land development. (\*Equivalent is based on high school drafting courses or on student's work experience. Sample of drawings and/or high school transcript must be presented.)

**Drafting 160** 2 Cr.  
**Manufacturing Fundamentals** 2 Lec.

This is a study of manufacturing fundamentals and production methods. The course is designed to acquaint the student with modern fabrication techniques and equipment used in industry. It also correlates the functions of drafting and its role in the industrial world.

**Drafting 182** 2 Cr.  
**Technician Drafting** 1 Lec., 3 Lab.

A beginning drafting course to enable students to read and interpret engineering drawings. Topics covered include multiview drawings, pictorial drawings, dimensioning, measurement with scales, schematic diagrams and printed circuit boards.

**Drafting 183** 4 Cr.  
**Basic Drafting** 2 Lec., 6 Lab.

A beginning course for students who have had little or no previous experience in drafting. The principle objectives are basic understanding of orthographic projection; skill in orthographic, axonometric, and oblique sketching and drawing; lettering fundamentals; applied geometry; fasteners; sectioning; tolerancing; auxiliaries; experience in using handbooks and other resource materials; and development of design skills. U.S.A.S.I., government and industrial standards are used. Emphasis is placed on both mechanical skills and graphic theory.

**Drafting 184** 3 Cr.  
**Intermediate Drafting** 2 Lec., 4 Lab.

*Prerequisite:* Drafting 183 or equivalent\*. The instructional units provide additional understanding of drafting problems, place emphasis on the design function, and introduce several specialized drafting areas that are valuable for the designer. This course includes the detailing and assembling of machine parts, gears and cams, jigs and fixtures, a study of metals and metal forming processes, drawing room standards and reproduction of drawings. The student is assigned to work that requires him to make complete and accurate detail and assembly drawings. Laboratory fee required.

(\*Equivalent is based on high school drafting courses or on student's work experience. Sample of drawings and/or high school transcript must be presented.)

**Drafting 230** 3 Cr.  
**Structural Drafting** 2 Lec., 4 Lab.

*Prerequisites:* Drafting 184 and Mathematics 196. A study of stresses, thermal and elastic qualities of materials such as beams and columns, etc.; requires the student to develop structural plans, details and shop drawings of components of buildings to include steel, reinforced concrete, and timber structures. Emphasis will be placed on drafting of appropriate drawings for fabrication and erection of structural components.

**Drafting 231** 3 Cr.  
**Electronic Drafting** 2 Lec., 4 Lab.

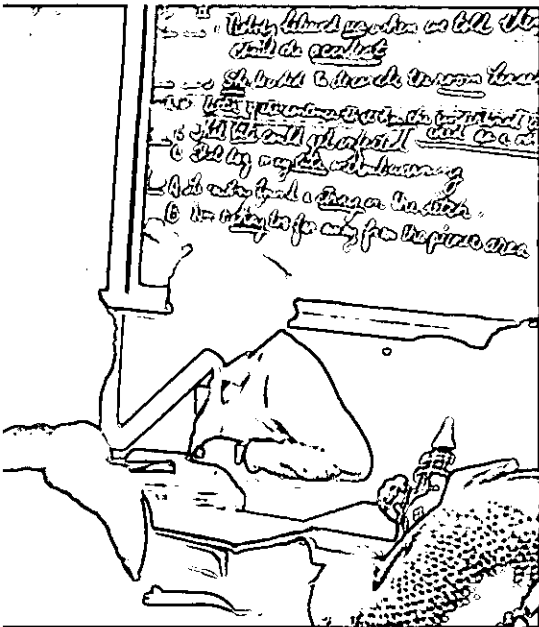
*Prerequisite:* Drafting 183. Develops skills in drawing and understanding of drawings used in the electronics industry. Topics include logic diagrams, schematic diagrams, interconnecting wiring diagrams, printed circuit boards, integrated circuits, component packaging, chassis design and current practices.

**Drafting 232** 3 Cr.  
**Technical Illustration** 2 Lec., 4 Lab.

*Prerequisite:* Drafting 183. Instruction and experience in the rendering of three-dimensional drawings. Orthographic views and engineer's sketches are developed into isometric, dimetric, perspective, and diagrammatic drawings of equipment and their environments. Mechanical lettering, air brush retouching of photographs, use of commercially prepared pressure sensitive materials, and layout of electronics schematics are included in the course. Laboratory fee required.

**Drafting 234** 4 Cr.  
**Advanced Technical Illustration** 2 Lec., 6 Lab.

*Prerequisite:* Drafting 232. An area of specialization is chosen and pursued in depth. Examples are pictorials for color separation printing, air brush renderings, letterforms for logos and hand lettering, complex exploded views in isomet-



use, energy resource depletion, overpopulation, and the effects of unguided technological development. Through documentaries and interviews with experts, an emphasis is placed on proper planning of societal and individual action in order to protect the natural environment. (This course may be offered via television.)

## Economics

**Economics 201** 3 Cr.  
**Principles of Economics I** 3 Lec.

The fundamental principles of macroeconomics. Economic organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations and growth. Sophomore standing recommended. (This course is offered on campus and may be offered via television.)

**Economics 202** 3 Cr.  
**Principles of Economics II** 3 Lec.

*Prerequisite: Economics 201 or the consent of the instructor.* The fundamental principles of microeconomics. Theory of demand, supply, and price of factors; income distribution; theory of the firm. Emphasis also on international economics and contemporary economic problems.

## Educational Paraprofessional

**Educational Paraprofessional 129** 3 Cr.  
**Communications Skills for Educational Paraprofessional** 3 Lec.

This course is a survey of techniques and methods for encouraging the development of language skills in students with whom the paraprofessional works. Specific topics include: creative writing, story telling, appreciation of literature, tutoring techniques, cursive and manuscript handwriting and listening skills.

**Educational Paraprofessional 131** 3 Cr.  
**Introduction to Educational Processes I** 3 Lec.

The primary purpose of this course is to define the role of the educational paraprofessional within the school structure and to develop an understanding of the organization and administration of the public school system. Special attention will be given to the development of effective interpersonal relationships. Through direct experiences with students on a one-to-one basis, the paraprofessional trainee will observe and study the developmental patterns of students. A study will be made of the general principles of human growth and development.

**Educational Paraprofessional 132** 3 Cr.  
**Introduction to Media** 1 Lec., 4 Lab.

An introduction to basic skills associated with the preparation of graphic and projected materials and the operation of selected audiovisual equipment.

**Educational Paraprofessional 133** 3 Cr.  
**Introduction to Educational Process II** 3 Lec.

This course is designed to further develop the educational paraprofessionals' understanding, skills and attitudes in providing a wholesome learning environment in the classroom. The facilitation of learning with small groups of stu-

dents will be emphasized through didactic and field experiences. The unique factors affecting the growth and development of students in a pluralistic society will be emphasized along with a study of the educational paraprofessional responsibilities as a member of the educational team.

**Educational Paraprofessional 135** 3 Cr.

**Arts and Crafts for Educational Paraprofessionals** 3 Lec.

The course acquaints the student with the variety of creative art materials and methods appropriate for use in programs for children as well as opportunities for participation in the use of these materials. Creating an attractive classroom environment with the use of classroom displays, charts, poster art, and bulletin boards will be incorporated in the course.

**Educational Paraprofessional 231** 2 Cr.

**Educational Paraprofessional Seminar I** 2 Lec.

The first seminar section is designed to provide an opportunity for the teacher aide trainees to discuss their experiences as trained observers and participants in the classroom strategies and procedures, supervision techniques and instructional skills.

**Educational Paraprofessional 232** 4 Cr.

**Educational Paraprofessional Practicum I** 20 Lab.

(See Cooperative Work experience 804). The practicum section will include supervised laboratory experiences in inner-city classrooms under the direct supervision of a teacher. Basic principles of learning and motivation will be applied to the teaching.

**Educational Paraprofessional 235** 2 Cr.

**Educational Paraprofessional Seminar II** 2 Lec.

This section of the seminar will provide the teacher aide trainee an opportunity to continue his experiences in the classroom while obtaining professional consultation and group experiences with his classmates. Small group interaction will enable the trainee to share experiences, demonstrate specific skills and techniques, participate in simulated classroom situations and clarify hypotheses developed in the supporting educational activities. The overall objective will be to provide a means for integrating and relating the total individual and collective experiences of the curriculum into a meaningful pattern.

**Educational Paraprofessional 236** 4 Cr.

**Educational Paraprofessional Practicum II** 20 Lab.

(See Cooperative Work Experience 814)

This section of the practicum will continue to provide the teacher aide trainee supervised laboratory experiences in classrooms under the supervision of a teacher. Basic principles of learning and motivation will be applied to the teacher-learning situation.

**Educational Paraprofessional 245** 1 Cr.

**Diversified Studies** 1 Lec.

A course designed to meet specialized needs and/or interest of educational paraprofessionals in selected areas of Special Education, Bilingualism, Child Development, Educational Media, Library, Physical Education, Counseling, Health Services or other disciplines as approved by the instructor.

**Educational Paraprofessional 246** 2 Cr.

**Diversified Studies** 2 Lec.

A course designed to meet specialized needs and/or interest of educational paraprofessionals in selected areas of Special Education, Bilingualism, Child Development, Educational Media, Library, Physical Education, Counseling, Health Services or other disciplines as approved by the instructor.

**Educational Paraprofessional 247** 3 Cr.

**Diversified Studies** 3 Lec.

A course designed to meet specialized needs and/or interest of Educational Paraprofessionals in selected areas of Special Education, Bilingualism, Child Development, Educational Media, Library, Physical Education, Counseling, Health Services or other disciplines as approved by the instructor.

**Educational Paraprofessional 804-814** 4 Cr.  
(See Cooperative Work Experience)

## Engineering

**Engineering 105** 3 Cr.

**Engineering Design Graphics** 2 Lec., 4 Lab.

Provides the basic graphic fundamentals necessary for engineering communications and engineering design. Teaches standard engineering graphical techniques, auxiliaries, sections, graphical analysis, pictorial and working drawings in a framework which introduces the student to rational processes of creative engineering. Laboratory fee required.

**Engineering 106** 3 Cr.

**Descriptive Geometry** 2 Lec., 4 Lab.

*Prerequisite: Drafting 183 or Engineering 105.* Provides training in the visualization of three-dimensional structures, and in accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Attention is given to the generation and classification of lines and surfaces, as well as intersections, developments, auxiliaries and revolutions. Laboratory fee required.

ric, perspective renderings, design of commercial displays, and art for slide presentations. Laboratory fee required.

**Drafting 701** 1 Cr.

(See Cooperative Work Experience)

**Drafting 703** 3 Cr.

(See Cooperative Work Experience)

**Drafting 713** 3 Cr.

(See Cooperative Work Experience)

**Drafting 803** 3 Cr.

(See Cooperative Work Experience)

**Drafting 813** 3 Cr.

(See Cooperative Work Experience)

## Earth Science

**Earth Science 117** 4 Cr.

**Earth Science** 3 Lec., 3 Lab.

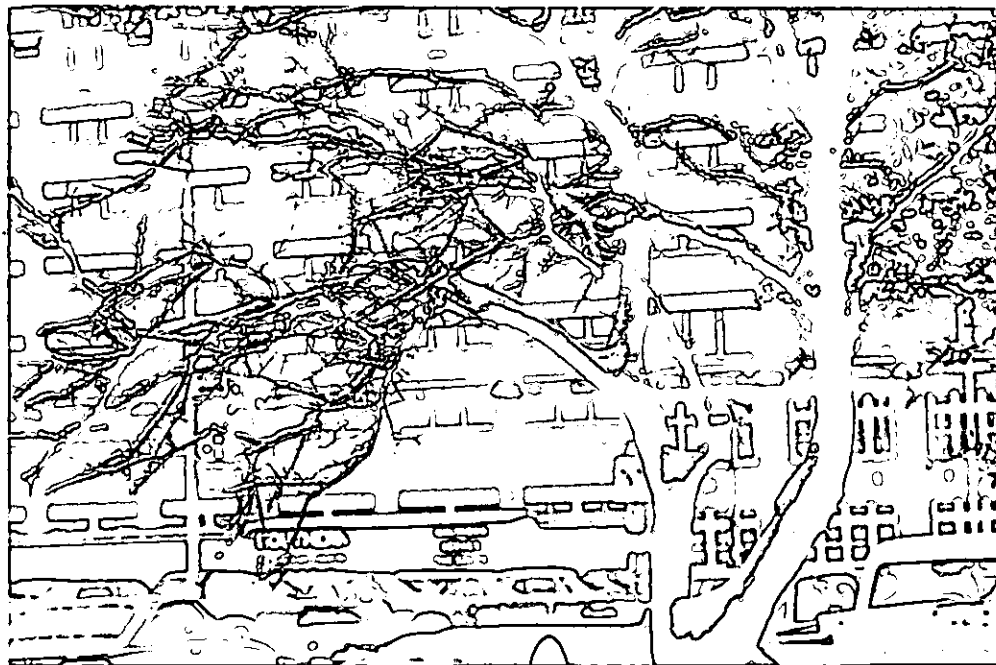
The course encompasses the interaction of the Earth Sciences and man's physical world. Geology, astronomy, meteorology, and space science are emphasized through the application of selected principles and concepts of the applied sciences. The course is directed toward the non-science major. Laboratory fee required. (This course is offered on campus and may be offered via television.)

## Ecology

**Ecology 291** 3 Cr.

**Man and His Environment II** 3 Lec.

A course designed to increase environmental awareness and knowledge. Areas of study include pollution, erosion, land





**Engineering 186** 2 Cr.  
**Manufacturing Processes** 1 Lec., 2 Lab.  
 Introduces the student enrolled in technical programs to the many steps involved in manufacturing a product. This is accomplished by involving the class in producing a device with precision. The student gains practical experience with working drawings, a variety of machine tools, and the assembly of components. The student is made aware of the factors involved in selecting materials and economical utilization of materials. Laboratory fee required.

## English

(Also see Developmental Reading and Developmental Writing)

**English 101** 3 Cr.  
**Composition and Expository Reading** 3 Lec.  
 A course designed to develop the student's skills in writing and in the critical analysis of prose. (This course is offered on campus and may be offered via television).



**English 102** 3 Cr.  
**Composition and Literature** 3 Lec.  
*Prerequisite: English 101.* Writing and reading activities in poetry, drama, the short story, and the novel. Designed to increase the student's understanding and enjoyment of good literature. (This course is offered on campus and may be offered via television).

**English in the Sophomore Year**  
 (English 201, 202, 203, 204, 205, 206, 215, and 216 are independent units of three credit hours each, from which any combination of two will be selected to satisfy degree requirements in sophomore English. Student should consult catalog of the senior college he expects to attend for requirements in his major before choosing English courses).

**English 201** 3 Cr.  
**British Literature** 3 Lec.  
*Prerequisite: English 102.* A study of significant works of British literature from the Old English period through the eighteenth century.

**English 202** 3 Cr.  
**British Literature** 3 Lec.  
*Prerequisite: English 102.* Study of important works from the Romantic period to the present.

**English 204** 3 Cr.  
**World Literature** 3 Lec.  
*Prerequisite: English 102.* Study of ten to twelve important post-Renaissance works of continental Europe, England, and America.

**English 205** 3 Cr.  
**American Literature** 3 Lec.  
*Prerequisite: English 102.* Study of the works of the important writers before Whitman in the context of their times.

**English 206** 3 Cr.  
**American Literature** 3 Lec.  
*Prerequisite: English 102.* Reading and analysis of representative works from Whitman to the present.

**English 209** 3 Cr.  
**Creative Writing** 3 Lec.  
*Prerequisite: English 102.* Writing of fiction; short story, poetry and short drama.  
**English 215** 3 Cr.  
**Studies in Literature** 3 Lec.  
*Prerequisite: English 102.* The student will read, analyze and discuss selections in literature organized by genre, period, or geographical region. Course titles and descriptions will be available each semester prior to registration. Some topics in the past have been: Black Literature; Literature of the Southwest; Literature of the South.

**English 216** 3 Cr.  
**Studies in Literature** 3 Lec.  
*Prerequisite: English 102.* The student will read, analyze and discuss selections in literature organized by theme, interdisciplinary content, or major author. Course titles and descriptions will be available each semester prior to registration. Some topics in the past have been: Literature and Psychology; Literature and Philosophy; The Detective Story; The Black Poet; Women and Literature; Existential Literature.

Even though the course content of English 215 and English 216 may vary from section to section and semester to semester, only three (3) hours of credit may be earned in each of these courses. VA and other benefits may be affected when a student re-enrolls in a course he has already successfully completed.

## Fire Protection

**Fire Protection 131** 3 Cr.  
**Introduction to Fire Protection** 3 Lec.  
 History and philosophy of fire protection; review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organizations; a discussion of current related problems and review of expanding future fire protection problems.

**Fire Protection 132** 3 Cr.  
**Fire Prevention Theory and Application** 3 Lec.  
 The objectives and views of inspections, fundamental principles, methods, techniques, and procedures of fire prevention administration. Fire prevention organization; public cooperation and image; recognition of fire hazards; insurance problems and legal aspects; development and implementation of a systematic and deliberate inspection program. Survey of local, state, and national codes pertaining to fire prevention and related technology. Relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards.

**Fire Protection 135** 3 Cr.  
**Introduction to Fire Administration** 3 Lec.  
 An in-depth study of the organization and management as

related to a fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relation of various government agencies to fire protection areas. Fire service leadership as viewed from the company officer's position.

**Fire Protection 136** 3 Cr.  
**Fire Investigation and Arson** 3 Lec.  
 A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussion of laws, decisions and opinions; kinds of arsonists, interrogations procedures, cooperation and coordination between fire fighters and arson investigators and other related topics.

**Fire Protection 138** 3 Cr.  
**Introduction to Fire Operations** 3 Lec.  
 An introduction to fire operations and procedures; proper use and operations of fire apparatus, equipment, and rescue procedures; communication systems and dispatch procedures; pump operations and fire service hydraulics.

**Fire Protection 139** 4 Cr.  
**Fire Operations Strategy** 3 Lec., 1 Lab.  
 Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment and apparatus. Emphasis is to be placed on pre-planning, study of conflagration problems, fire ground organization problem-solving related to fire ground decision-making and attack tactics and strategy. Use of mutual aid and large scale command problems.

**Fire Protection 231** 3 Cr.  
**Fire Protection Through Building Construction** 3 Lec.  
 Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures, and related data focused on fire protection concerns; review of related statutory and suggested guidelines, both local and national in scope. Review of model building codes and life safety code.

**Fire Protection 232** 3 Cr.  
**Protection Systems in Industry** 3 Lec.  
 Specific concerns and safeguards related to business and industrial organizations. A study of industrial fire brigade organization and development, plant lay-out, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organization. Study of elementary industrial fire hazards in manufacturing plants.

**Fire Protection 233** 3 Cr.  
**Fire Protection Systems** 3 Lec.  
 Study of the required standard for water supply; special hazards protection systems; automatic sprinklers and special extinguishing systems; automatic signaling and detection systems; rating organizations and underwriting agencies.

**Fire Protection 234** 3 Cr.  
**Industrial Fire Protection II** 3 Lec.  
*Prerequisite: Fire Protection 232.* Development of fire and safety organizations in industry; relation between private and public fire protection organizations; current trends, deficiencies and possible solutions for industrial fire problems; role of insurance and other special organizations; an in-depth study of specific industrial processes, equipment, facilities and work practices to understand the potential hazards and techniques to detect and control such hazards. Field trips to selected plants and demonstrations of new techniques, equipment and innovations.

**Fire Protection 235** 3 Cr.  
**Fire Administration II** 3 Lec.  
*Prerequisite: Fire Protection 135.* Study to include insurance rates and ratings, preparation of budgets, administration and organization of training the fire department; city water requirements, fire alarm and communication systems; importance of public relations, report writing and record keeping; measurements of results, use of records to improve procedures and other related topics, legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings.

**Fire Protection 236** 3 Cr.  
**Legal Aspects of Fire Protection** 3 Lec.  
 A study of legal rights and duties, liability concerns and responsibilities of the fire department while carrying out their duties. Introduction and basic concepts of civil and criminal law, the Texas and federal judicial structure, and cities' liability for acts of the fire department and fire prevention bureaus. An in-depth study of various cases concerning fire fighters, fire departments, and municipalities.

**Fire Protection 237** 3 Cr.  
**Hazardous Materials II** 3 Lec.  
*Prerequisite: Chemistry 170.* Hazardous materials covering storage, handling, laws, standards, and fire fighting techniques associated with chemicals, gases, flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuel, and radio-active materials. The formation of toxic

fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids, and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radio-active materials and operational procedures.

**Fire Protection 238** 3 Cr.

**Fire Safety Education** 3 Lec.  
A survey of physical, chemical, and electrical hazards and their relationship to loss of property and/or life. Study of codes, laws, problems, and cases. Detailed examination and study of the physical and psychological variables related to the occurrence of casualties. Safe storage, transportation and handling techniques are stressed to eliminate or control potential risks.

**Fire Protection 239** 3 Cr.

**Fire Service Communications** 3 Lec.

The development of fire alarm systems, the various types of systems, installation, operation and testing of the most common systems: receiving, dispatching, and radio communication procedures; F.C.C. regulations, the fire alarm operations office, mutual aid systems, fire station communications and facilities, response and fire ground procedures, emergency operations, code and numbering systems, required records and reports; technological advances.

**Fire Protection 240** 3 Cr.

**Fire Insurance Fundamentals** 3 Lec.

The relationship between fire defenses, fire losses, and insurance rates are studied. Basic insurance principles, fire loss experience, loss ratios, state regulations of fire insurance, key rate system, applying the I.S.O. grading schedule and other topics are stressed. Relationship of insurance to modern business; principles of property and casualty insurance contracts, corporate structure of insurance companies.

**Fire Protection 241** 3 Cr.

**Advanced Fire Loss Statistical Systems** 3 Lec.

An in-depth study of computerized systems that may be utilized for storing and retrieval of fire loss statistics, also, techniques and procedures for programming various types of records and reports valuable to the fire service. Exploration of the new systems of micro-filming including the modern technology of COM (Computer Output Microfilm) and the systems utilizing microfiche, including reduction ratios and various type readers. A review of standards for the uniform coding for fire protection as developed by the NFPA in Pamphlet 901 and 901 AM.

**Fire Protection 242** 3 Cr.

**Urban Fire Problem Analysis** 3 Lec.

Intensive study of the urban fire problem. Problems covered by lack of zoning and other land use laws. Operation research techniques, and systems engineering are utilized as analytic procedures for the technological assessment of public fire protection, including water supply, fire alarm, and fire department traditional assessment methods and urban analysis. Socio-economic and management factors as related to city planning. Environment problems incurred should be studied in depth.

**Fire Protection 243** 3 Cr.

**Technical Writing for Firemen** 3 Lec.

*Prerequisite: English.* Advanced writing in technical, scientific, and business fields: reports, proposals, and other papers; correspondence. Emphasis on collecting, organizing, and presenting materials applicable to various specialized areas.

niques. Laboratory fee required.

**Food Service 124** 3 Cr.

**Food Service Sanitation and Safety** 3 Lec.

A lecture demonstration course to acquaint the student with the basic principles of micro-biology and how to apply this knowledge to the need for personal cleanliness; cause, control, and investigation of illness caused by food contamination; sanitary practices in food preparation; proper dishwashing procedures; sanitation of kitchen, dining room, and all equipment; the use of cleaning materials and proper procedures in using them; garbage and refuse disposal. General safety precautions including elementary first aid.

**Food Service 132** 3 Cr.

**Food Purchasing, Handling and Storage** 3 Lec.

A lecture course covering the study of quantity food purchasing policies and procedures; receiving and storage requirements, procedures and controls. The market availability of food supplies and the analysis of food quality and specification writing is covered.

**Food Service 135** 3 Cr.

**Nutrition and Menu Planning** 3 Lec.

A lecture course in the study of food nutrients, their digestive and absorptive characteristics, and the relationship of food to development and maintenance of health. Study is made of the nutritional needs of all age groups with application to the planning of satisfying and interesting meals for commercial and institutional food service operations, considering such factors as psychological needs and type of operation as well as available equipment and personnel.

**Food Service 136** 3 Cr.

**Supervisory Techniques for Food Service** 3 Lec.

A course designed to develop an understanding of basic principles in selecting, training, and supervising personnel in the total food service environment. It includes personnel policies, job descriptions, methods of teaching, preparation of schedules, and procedures for work improvement.

**Food Service 138** 3 Cr.

**Food Service Cost Control** 3 Lec.

*Prerequisite: Food Service 132 and Mathematics 130.* A course covering the essential principles and procedures of effective food cost control which will enable the student to gain a firm understanding of these principles and then adapt them to any food service operation.

**Food Service 140** 3 Cr.

**Elementary Bakery Training** 2 Lec., 4 Lab.

This course covers the operation of the baker. Basic doughs, breads, pies, cookies, sweet and puff doughs are analyzed and produced in quantity. The proper handling of the pastry bag is stressed. Also covered are all types of fillings, butter creams, puddings, cakes, cake decorating and frostings. The use of proper flours to achieve desired product is stressed. Laboratory fee required.

**Food Service 141** 4 Cr.

**Bakery Production Management** 3 Lec., 5 Lab.

This course covers the industrial practices and procedures in producing quality baked goods. The present day production methods will be stressed in handling frozen doughs and producing pies, cookies, cakes, breads, sweet doughs and cream goods. Laboratory fee required.

**Food Service 142** 3 Cr.

**Baking Technology** 2 Lec., 4 Lab.

This course deals with the application of chemical and

physical principles to baking practices. Covered will be baking terminology, the composition and purity of materials used in baking, processing methods, flour tests, yeast tests, the uses of acids, bases, salts, tabs and oils and the use of bakery machinery to achieve industry acceptable products. Laboratory fee required.

**Food Service 143** 3 Cr.

**Bakery Merchandising** 3 Lec.

The application of retail merchandising methods as applied to baked goods will be covered in this course. The production and promotion of specialties for various holidays will be stressed. Window and showcase displays and the general areas of baked goods distribution will be covered.

**Food Service 220** 4 Cr.

**Quantity Food Preparation and Service** 3 Lec., 5 Lab.

*Prerequisite: Food Service 122.* A lecture-laboratory course offering field training study of quantity food procedures and techniques with emphasis on retention of nutritive value of foods. Kitchen organization and planning of quantity production, use of large and small institutional equipment, food control and the associated supervisory problems as related to institutional and commercial food service. Includes study and use of convenience foods. Laboratory fee required.

**Food Service 222** 4 Cr.

**Advanced Quantity Food Preparation and Service** 3 Lec., 5 Lab.

*Prerequisite: Food Service 122.* Continuation of Food Service 220 emphasizing the fundamental principles in planning and management of quantity food production and service under field training conditions. Practice in production of entire meal, including evaluation and controls. Study of quality food standards of various cost levels. Includes equipment planning and layout as well as maintenance of all types of food preparation equipment. Laboratory fee required.

**Food Service 231** 3 Cr.

**Food Service Financial Management** 3 Lec.

A problem-solving course which deals with profit planning, cost analysis, break-even point analysis, budgets, income statements and balance sheets for commercial food service operations. Emphasis is also directed to cost management, ratio analysis and feasibility studies for food service operations.

**Food Service 233** 3 Cr.

**Food Marketing** 3 Lec.

A lecture course which introduces the student to the area of distribution of the finished product. It is geared to the consumer-oriented approach of the operation of a food service facility. Covers the activities involved in the generation of markets and customers and in the development and distribution of customer satisfying foods and services.

**Food Service 237** 2 Cr.

**Organization and Management** 3 Lec.

A study of the organizational structure of various types of group care institutions is made. Administration and tools of management, budget and cost analysis are emphasized.

**Food Service 238** 3 Cr.

**Garde-manger Training** 2 Lec., 4 Lab.

*Prerequisite: Food Service 122.* This course covers preparation of the cold buffet and includes salads, sandwiches, ice carvings, lard sculptures, chaud froids hors d'oeuvres, pates, cold fish, poultry, meats and game. This course also covers

## Food Service

**Food Service 119** 3 Cr.

**Food Service Equipment** 3 Lec.

A lecture-demonstration course which presents food service equipment specifications, uses, cleaning and preventive maintenance procedures, preparation, cooking, refrigeration, storage and clean-up items are included. Application of air conditioning, electricity, gas and plumbing fundamentals as they relate to food service facilities are covered. Basic principles of layout analysis and design are included as well as effective utilization of equipment and space.

**Food Service 120** 3 Cr.

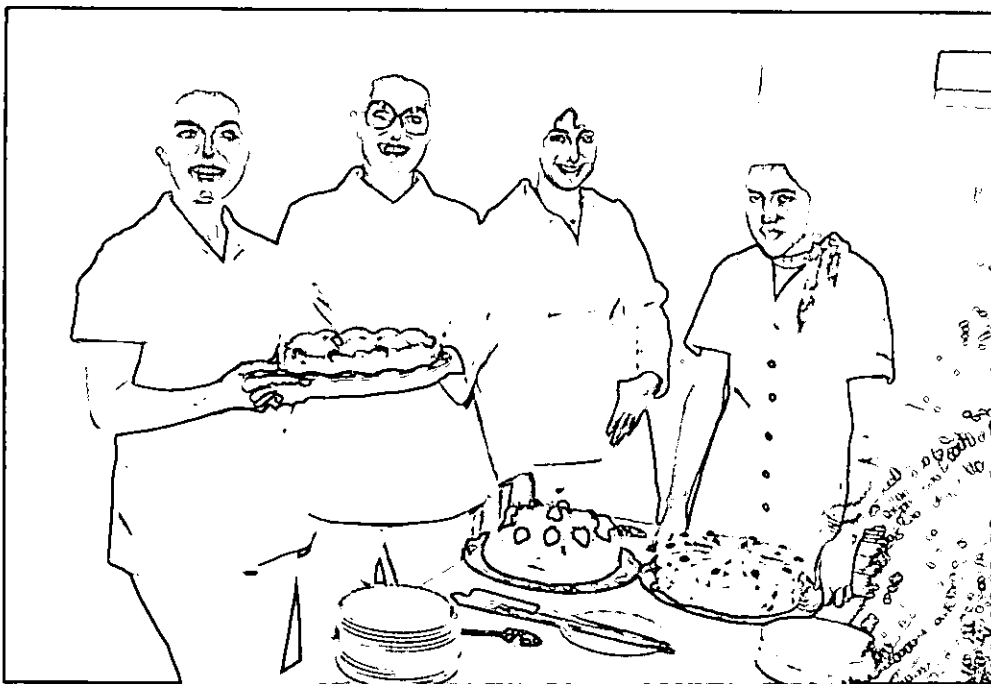
**Basic Food Preparation** 2 Lec., 4 Lab.

A lecture laboratory course in fundamentals of quality food preparation and cookery with emphasis on the importance of the person to be served, and the provision of nutritionally adequate meals. Emphasis is on food preparation techniques, selection of equipment, and the effective utilization of time. Laboratory fee required.

**Food Service 122** 3 Cr.

**Advanced Food Preparation** 2 Lec., 4 Lab.

*Prerequisite: Food Service 120.* Continuation of Food Service 120 with an introduction to large quantity procedures and basic food preparation management. Covered are basic cookery and procedure, safety and sanitation factors, selection of equipment involved in food preparation, with particular stress on high quality in relation to preparation tech-



the accurate and proper set-up of the Garde-manger Station. Laboratory fee required.

**Food Service 239** 3 Cr.  
**Saucier Training** 2 Lec., 4 Lab.  
*Prerequisite:* Food Service 122. This course covers the preparation of basic soups, sauces, vegetables, garnitures, all meats, fish, poultry and game. This course also covers the accurate and proper set-up of the saucier station. Laboratory fee required.

**Food Service 240** 6 Cr.  
**Food Service Work Experience I** 2 Lec., 20 Lab.  
 Supervised employment in a food service operation or institutional food service facility. The weekly conference is designed to provide each student an opportunity to discuss in a group setting, his or her learning experiences at an operational level.

**Food Service 241** 6 Cr.  
**Food Service Work Experience II** 2 Lec., 20 Lab.  
 Supervised employment in a facility or health care setting other than one selected for food service 240. This will enable the student to gain experience in more than one type of food or nutrition service. In case of diverse operations moving from one department to another will meet the intent of this course. The weekly conference will afford students the opportunity to discuss their experience with invited industry representatives who are themselves involved in operating various types of food service facilities.

**Food Service 242** 4 Cr.  
**Community Nutrition** 3 Lec., 3 Lab.  
*Prerequisite:* Food Service 135. A lecture-laboratory course in the application of nutrition knowledge in providing care for people. A study of how people eat and why they eat as they do, the racial and cultural aspects of food and nutrition, the socio-economic and psychological aspects of providing nutrition throughout the life cycle and techniques of interviewing and evaluating nutrition care. Laboratory fee required.

**Food Service 243** 4 Cr.  
**Clinical Nutrition** 3 Lec., 3 Lab.  
*Prerequisite:* Food Service 135. A lecture-laboratory course with emphasis on the modification of nutrition care to accommodate individuals with cardiovascular disease, diabetes, weight control, malnutrition and other health problems requiring adjustments in food and nutrition intake. Laboratory fee required.

**Food Service 244** 4 Cr.  
**Child Nutrition** 3 Lec., 3 Lab.  
*Prerequisite:* Food Service 135. A lecture-laboratory course with emphasis on nutrition care of children beginning with birth and extending through childhood and adolescence. Special emphasis is made to the contribution of feeding programs in child care centers and schools. Laboratory fee required.

**Food Service 245** 3 Cr.  
**Advanced Pastry Shop Training** 2 Lec., 4 Lab.  
*Prerequisite:* Food Service 140. This course covers the operation of the pastry shop. Covered is the analysis and production of French pastry, hot and cold desserts, pastillage, ice creams and ices, sugar fantasies, chocolate work, decorations with cornet. Stressed are advanced techniques in continental pastries. Laboratory fee required.

**Food Service 247** 3 Cr.  
**Beverage Operations and Service** 3 Lec.  
 A course dealing with beverage operations service as used in

the commercial sector. Covered are the elements of basic bar operations, sales control, beverage service and profits. A detailed analysis of the organization of a beverage bar, wine cellar or catered beverage service.

**Food Service 804** 4 Cr.  
 (See Cooperative Work Experience)  
**Food Service 814** 4 Cr.  
 (See Cooperative Work Experience)

## French

**French 101** 4 Cr.  
**Beginning French** 3 Lec., 2 Lab.  
 Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension and oral expression. Laboratory fee required.

**French 102** 4 Cr.  
**Beginning French** 3 Lec., 2 Lab.  
*Prerequisite:* French 101 or equivalent. Continuation of French 101 with emphasis on idiomatic language and complicated syntax. Laboratory fee required.

**French 201** 3 Cr.  
**Intermediate French** 3 Lec.  
*Prerequisite:* French 102 or equivalent. Reading, composition, grammar review and intense oral practice.

**French 202** 3 Cr.  
**Intermediate French** 3 Lec.  
*Prerequisite:* French 201 or equivalent. Continuation of French 201 with reading selections drawn more directly from contemporary literary sources. Composition.

## Geography

**Geography 101** 3 Cr.  
**Physical Geography** 3 Lec.  
 A survey of the physical makeup of the earth: weather and climate, topography, plant and animal life, land and sea. Attention is directed toward the earth in space, use of maps and charts and place geography.

**Geography 102** 3 Cr.  
**Economic Geography** 3 Lec.  
 A study of the relation of man to his environment and his utilization of natural resources, dealing with problems of production, manufacture, and distribution of goods throughout the world. The aspects of primitive subsistence and degrees of commercialism are considered.

**Geography 103** 3 Cr.  
**Cultural Geography** 3 Lec.  
 Development of regional variations of culture, including the distribution of races, religions, languages, and aspects of material culture, with emphasis on origins and diffusion.

## Geology

**Geology 101** 4 Cr.  
**Physical Geology** 3 Lec., 3 Lab.  
 Study of earth materials and processes for science and non-science majors. Includes introduction to geochemistry, geophysics, examination of the earth's interior, magnetism, setting in space, minerals, rocks, structure and geologic processes.

Laboratory fee required.

**Geology 102** 4 Cr.  
**Historical Geology** 3 Lec., 3 Lab.  
*Prerequisite:* Geology 101 or permission of the instructor. Study of earth materials and processes within a time perspective. For science and non-science majors. Utilizes fossils, geologic maps, and field studies to interpret geologic history. Laboratory fee required.

## Government

**Government 201** 3 Cr.  
**American Government** 3 Lec.  
*Prerequisite:* Sophomore standing recommended. An introduction to the study of political science: origin and development of constitutional democracy (United States and Texas); federalism and intergovernmental relations; local government; parties, politics and political behavior. Satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

**Government 202** 3 Cr.  
**American Government** 3 Lec.  
*Prerequisites:* Government 201 and sophomore standing recommended. A study of the United States and Texas legislative process, the executive and the bureau structure, the judicial process, civil rights and liberties, domestic policies. Other topics include foreign relations and national defense. Satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

**Government 205** 3 Cr.  
**Studies in Government** 3 Lec.  
*Prerequisites:* Government 201 and six hours of history or government. A treatment of selected topics in government.

## History

**History 101** 3 Cr.  
**History of the United States** 3 Lec.  
 A general presentation of United States History, commencing with the European background and first discoveries. The pattern of exploration, settlement and development of institutions is followed throughout the colonial period and the early national experience to 1877. (This course is offered on campus and may be offered via television.)

**History 102** 3 Cr.  
**History of the United States** 3 Lec.  
*Prerequisite:* History 101 recommended. A survey of the unfolding of United States History from the Reconstruction Era to the present day. The study includes social, economic and political aspects of American life and follows the development of the United States as a world power. (This course is offered on campus and may be offered via television.)

**History 105** 3 Cr.  
**Western Civilization** 3 Lec.  
 A survey of the background for development of civilization in the West from ancient time through the Enlightenment; the Mediterranean World including Greece and Rome; the Middle Ages and the beginnings of modern history. Particular attention is paid to Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization.

**History 106** 3 Cr.  
**Western Civilization** 3 Lec.  
 The unfolding of the pattern of modern western civilization from the Enlightenment to current times. A study of the Age of Revolution and the beginning of industrialism; the nineteenth century and the social, economic, and political factors of recent world history.

**History 110** 3 Cr.  
**The Heritage of Mexico** 3 Lec.  
 This course presents major historical developments and personalities which have shaped the Mexican nation, with emphasis on cultures and customs. Beginning with the peoples who inhabited the country before the Spanish Conquest, the course leads to modern Mexico, emphasizing the historical relations between Mexico and the United States and the role of the Mexican-American in the contemporary United States. The student may register for either Anthropology 110 or History 110.

**History 112** 3 Cr.  
**Latin American History** 3 Lec.  
 This course presents major historical developments and personalities which have influenced the course of Latin American history, with examination of Indian cultures, the conquistadors, Spanish administration, the wars of independence, relations with the United States and concludes with a brief survey of relevant contemporary problems.





**History 120** 3 Cr.  
**Afro-American History** 3 Lec.  
 A study of the role of the Negro in American History; overview of the slave trade and slavery in the United States; focus on contributions of the Negro in the U.S. from colonial times. Emphasis on political, economic and sociological factors of the 20th century.

**History 204** 3 Cr.  
**American Minorities** 3 Lec.  
*Prerequisites: Sociology 101 and/or six hours of U.S. History recommended.* The principal minority groups in American society; their sociological significance and historic contributions. An emphasis will be placed on problems of inter-group relations, social movements and related social changes occurring on the contemporary American scene. The student may register for either History 204 or Sociology 204.

**History 205** 3 Cr.  
**Studies in U.S. History** 3 Lec.  
*Prerequisites: Sophomore standing and six hours of American history.* A treatment of selected topics in the history of the United States.

## Home Economics

**Home Economics 101** 3 Cr.  
**Basic Design** 2 Lec., 4 Lab.  
 A study of the fundamental principles of art, design, and color as basis for developing originality and art appreciation in the home and in clothing. Laboratory experiences enhance the development of creative abilities by the application of the fundamental principles. This course is for students interested in home economics.

**Home Economics 102** 3 Cr.  
**Food Selection and Preparation** 2 Lec., 4 Lab.  
 A study of basic nutrition involving the function and value of various foods and the factors related to food selection and preparation such as cost, availability, and time and methods required for preparation. Laboratory experiences relate the application of the fundamental principles of food selection, preparation and service to the problem of providing attractive, nutritious meals for the individual and family. Laboratory fee required.

**Home Economics 110** 3 Cr.  
**Clothing and Home Design** 2 Lec., 4 Lab.  
*Prerequisite: Home Economics 101 or ART 101.* The study and advanced application of color and design to the costume and in the home. Designed for students interested in home economics.

## Hotel-Motel Operations

**Hotel-Motel Operations 110** 3 Cr.  
**Principles of Hotel Administration** 3 Lec.  
 This lecture problem-solving course analyzes the physical aspects of Hotel-Motel operations including procedures for emergencies, check cashing, use of credit cards and collection of accounts receivable. Emphasis will also be given to guest relations, guest room facilities, protection of the property and the development of the properties' growth.

**Hotel-Motel Operations 112** 3 Cr.  
**Hotel-Motel Housekeeping** 3 Lec.  
 A lecture demonstration course designed to provide the basic methods, procedures and policies which govern the housekeeping of a hotel or motel. Departmental organiza-

tion, location of the departmental employee supervision, work organization and assignments, materials and equipment used by the housekeeping staff, and room design and layout are covered by this course.

**Hotel-Motel Operations 114** 3 Cr.  
**Front Office Procedures** 2 Lec., 4 Lab.  
 Training in the fundamental everyday procedures of the hotel-motel front desk. The course will cover the use of forms such as the guest registration card and other means of providing service. Also operation of the room rack, selling of rooms, correspondence relating to reservation and inquiries, and general problems relating to the accommodation of present, future and former guests. The detailed presentation of methods of handling guests' accounts receivable in hotels of various sizes. The operation of NCR 4200 is the major equipment used in this class and its uses are extensively analyzed.

**Hotel-Motel Operations 116** 3 Cr.  
**Hotel-Motel Maintenance and Engineering** 3 Lec.  
 A lecture problem-solving course which examines the set-up of the maintenance and engineering departments of various size and type properties. The technical information to establish effective preventive programs as well as maintenance procedures will be covered.

**Hotel-Motel Operations 210** 3 Cr.  
**Hotel-Motel Sales Development** 3 Lec.  
 A lecture course which will cover the techniques used to develop a marketing plan for any size operation and shows how to tie all of the departments of a hotel operation into a coordinated team. The organization and functioning of a sales department, sales tools, techniques, advertising and types of markets are emphasized.

**Hotel-Motel Operations 212** 3 Cr.  
**Hotel-Motel Accounting** 3 Lec.  
 Principles of Hotel and Motel Accounting; including the meaning and purposes of accounting, journalizing, periodic adjustments and formal statements are covered. Emphasis on analysis of financial statements to be used as practical tools in making decisions in the operation of hotels and motels.

**Hotel-Motel Operations 214** 3 Cr.  
**Hotel-Motel Law** 3 Lec.  
 A lecture case study course designed to create an awareness of the responsibilities and rights which the law imposes on and grants to the innkeeper, and illustrates the consequences caused by failure in those responsibilities. The attitude of courts toward an innkeeper involved in litigation where negligence and liability is involved are main topics of this course.

**Hotel-Motel Operations 216** 3 Cr.  
**Hotel-Motel Property Management** 3 Lec.  
 A lecture-seminar course covering all phases of property management. Emphasis will be placed on guest's first impressions, the staffing, training, capital investments, cost analysis, rentals and renovation of all types and sizes of properties.

**Hotel-Motel Operations 240** 6 Cr.  
**Hotel-Motel Work Related Experience I** 2 Lec., 20 Lab.  
 Supervised employment in an approved work station or a hotel or motel. Designed to provide practical experience of the industry. The weekly conference is designed to provide each student an opportunity to discuss, in a group setting, his or her learning experience at an operational level. A total of 20 hours per week per semester is required.

**Hotel-Motel Operations 241** 6 Cr.  
**Hotel-Motel Work Related Experience II** 2 Lec., 20 Lab.  
 Supervised employment in a facility or station other than one selected for Hotel-Motel Operations 240. This will enable the student to gain experience in more than one type of size of property. The weekly conference will afford students

the opportunity to discuss their experience with invited industry representatives who are themselves involved in operating or servicing hotels and motels. A total of 20 hours per week per semester is required.

## Human Development

**Human Development 102** 1 Cr.  
**Orientation** 1 Lec.

This is a course to help the student be successful in college. The student will make an individual contract with the instructor. Student experiences will include appropriate subject 'Packages' such as 'Improving your Vocabulary', 'How to Take Notes', 'Study Skills', and 'Listening Skills'. Also, an evaluation session with a counselor is included. A 'Package' may be made up of programmed materials, filmstrips, tapes, slides, seminars, learning activities, or other appropriate materials.

**Human Development 104** 3 Cr.  
**Educational and Career Planning** 3 Lec.

A course in human development designed to identify problem areas of concern to the student who is entering college for the first time and to develop approaches to problem solving in relation to educational and career decisions through the process of group counseling. Activities are planned to promote mature interpersonal involvement within the group, the college, and the community through an understanding of the causes and effects of one's own behavior in relation to himself and others.

**Human Development 105** 3 Cr.  
**Basic Processes of Interpersonal Relationships** 3 Lec.

A course in human development designed to explore interpersonal relations through a study of theory and concepts of small group processes and actual participation in the human experience. Students will be given an opportunity to participate in experiences planned to increase one's sensitivity to self and to others. A variety of activities is planned, partly by each class, designed to meet certain specific human needs of the students in the class.

**Human Development 106** 3 Cr.  
**Personal and Social Growth** 3 Lec.

A course which deals with human development from the standpoint of the interaction between a person and his society. Understanding of self, the influences of society contributing to the development of self, and the success of the individual within a society are investigated. Adjustment to family, school, and society is developed.

**Human Development 107** 3 Cr.  
**Developing Leadership Behavior** 3 Lec.

A course in human development designed to meet specific needs of students through participation in activities. The focus of this course will be on the development of group dynamics, leadership, and human relations skills. Students will be required to participate in the management experience of planning, execution, and evaluation of activities. The theoretical body of knowledge regarding leadership development and growth in group dynamics and management skills will be emphasized.

## Humanities

**Humanities 101** 3 Cr.  
**Introduction to the Humanities** 3 Lec.

Through an examination of interrelated examples of man's creative achievements, the Humanities course attempts to enlarge awareness and increase understanding of the nature of man and the values of human life. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.)

**Humanities 102** 3 Cr.  
**Advanced Humanities** 3 Lec.

*Prerequisite: Humanities 101 and/or permission of instructor.* Humanities 102 is an in-depth and critical clarification of human value choices through the context of the humanities. It is designed to explore universal concerns such as man's relationship to himself and to others, the search for meaning, and man as a loving, believing and hating being as revealed by artists, playwrights, filmmakers, musicians, dancers, philosophers and theologians. The intent is to provide a sense of the commonality of human experience across cultures and civilizations and an understanding of the premises on which value choices are made.

## Interior Design

**Interior Design 120** 3 Cr.  
**Basic Planning** 2 Lec., 4 Lab.

*Prerequisite: Interior Design major and concurrent enrollment in Interior Design 121.* Learning to use drafting instruments

in drawing two and three dimensions forms, floorplans, interior elevations, furniture layouts, and electrical plans. The reading of blueprints, use of architectural symbols, and printing are emphasized.

**Interior Design 121** 3 Cr.

**Basic Color Theory for Interior Design** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design major and concurrent enrollment in Interior Design 120. The study of color theory, color systems, and mixing techniques of transparent and opaque pigments. The practice of using values, tints and intensities. Basic color schemes and color psychology applied to Interior Design 120 projects.

**Interior Design 122** 3 Cr.

**Color Theory and Illustration for Interior Design** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design 120, 121 and concurrent enrollment in Interior Design 123 and 225. Interpretive rendering of materials and textures. Theory and technique to be applied to elevations and perspective projects from Interior Design 123. Color scheme applied to total space concept.

**Interior Design 123** 3 Cr.

**Advanced Planning and Perspective** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design 120, 121 and concurrent enrollment in Interior Design 122 and 225. The student applies methods and principles of one and two point perspective. Orthographic, oblique and isometric projections are made of furniture studies. Advanced plans and elevations are incorporated into portfolio presentations.

**Interior Design 220** 3 Cr.

**History of Interior Arts I** 2 Lec., 3 Lab.

*Prerequisites:* Interior Design 122, 123, 225 and concurrent enrollment in Interior Design 233 and 226. A study of the evolution of the interior arts and related architectural development from Egyptian through French. The student compiles a notebook of supplementary material. Lectures, slides, field trips, and reports provide research information.

**Interior Design 221** 3 Cr.

**History of Interior Arts II** 2 Lec., 3 Lab.

*Prerequisites:* Interior Design 220, 233, 226 and concurrent enrollment in Interior Design 224, 225, and 235. Continuation of study of evolutions of interior arts from English through Oriental with related architectural development. The student compiles a notebook of supplementary material. Lectures, field trips, slides and reports provide research information.

**Interior Design 224** 3 Cr.

**Interior Graphics and Illustration** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design 220, 226, and 233 and concurrent enrollment in Interior Design 221 and 235. Traditional interior design problems are illustrated by the use of floor plans, elevations, furniture layout, electrical plan and a rendered two-point perspective. Emphasis is on preparation of different types of presentational boards.

**Interior Design 225** 3 Cr.

**Architectural Drawing I** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design 120, 121, and concurrent enrollment in Interior Design 122 and 123. Designing of a basic residential floor plan and delineation of all working drawings, plot plan, foundation plan, details sections, elevations.

**Interior Design 226** 3 Cr.

**Architectural Drawing II** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design 122, 123, 225 and concurrent enrollment in Interior Design 220 and 233. Rendering three-dimensional objects from still life, human and architectural forms, with emphases of freehand perspective in mixed media.

**Interior Design 233** 3 Cr.

**Fabrications I** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design 122, 123, 225 and concurrent enrollment in Interior Design 220 and 226. The study of principles of good design, of furniture upholstery, woods, finishes, frame constructions, materials, drapery making, wall coverings, plastics and metals. The course is geared for general understanding of technical methods rather than for learning the craftsmanship.

**Interior Design 234** 3 Cr.

**Fabrications II** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design 220, 226, 233 and concurrent enrollment in 221, 224 and 235. The application and implementation of good design principles using materials studied in Fabrications I. Geared for a practical working knowledge of crafts and techniques involved in constructions and installations.

**Interior Design 235** 3 Cr.

**Inner Space Composition and Presentation** 2 Lec., 4 Lab.

*Prerequisites:* Interior Design 220, 226 and 233 and concurrent enrollment in Interior Design 221, 224, and 234. The organization of all elementary principles of interior design for problem-solving assignments and finished presentation. Emphasis is to be on preparation of material for presentation. Concentration on traditional projects.

**Interior Design 237** 4 Cr.

**Advanced Principles of Interior Design** 3 Lec., 3 Lab.

*Prerequisites:* Interior Design 221, 224, 234, 235 and concurrent enrollment in Interior Design 340, 342, and 811 or 341. Organization of all aspects of interior and related exterior



space by coordination of color and design involving all materials and principles in the form of professional problem solving and formal presentation for contemporary design. Emphasis placed on contemporary residential interior projects. Field trips and student notebook.

**Interior Design 238** 4 Cr.

**Client Psychology Survey and Business Procedures** 3 Lec., 3 Lab.

*Prerequisites:* Interior Design 342, 237, 340, and 811 or 341, and concurrent enrollment in Interior Design 239 and 343. A study of designer and client relations, how to analyze and meet the client's needs by interview and survey. How to calculate the proper design and presentation to the individual client. Application of color psychology principles, guest speakers, in-the-field on-the-job projects. How to use source catalogs and showrooms and local crafts and workrooms. How to estimate costs and make contracts. How to coordinate orders, fabrications and installations. Studio organization and professional ethics. Field trips and student notebook.

**Interior Design 239** 4 Cr.

**Principles of Commercial Interior Design** 3 Lec., 3 Lab.

*Prerequisites:* Interior Design 340, 342, 237 and 811 or 341, and concurrent enrollment in Interior Design 238 and 343. Continuation of Interior Design 237 with field trips to professional studios, workrooms and factories. Special emphasis placed on the study of commercial interiors. Both traditional and contemporary. Survey of the latest trends and materials with special project assignments making use of them.

**Interior Design 340** 2 Cr.

**Lighting and Acoustics** 1 Lec., 2 Lab.

*Prerequisites:* Interior Design 221, 224, 235 and concurrent enrollment in Interior Design 237, 342, and 811 or 341. A study of effective lighting and acoustics for residential and commercial applications. Electrical plans and specifications to correlate with projects in Interior Design 342. Field trips included.

**Interior Design 341** 1 Cr.

**Special Project** 1 Lec.

*Prerequisites:* Interior Design 221, 224 and 235 and concurrent enrollment in Interior Design 237, 340, and 342. Assignment of design problem to be solved by analysis, plan, illustration and presentation accomplished by outside work due at end of semester. Regular instructor consultation scheduled. Problem scope directed and controlled by instructor.

**Interior Design 342** 3 Cr.

**20th Century Designs** 3 Lec.

*Prerequisites:* Interior Design 221, 224, 234 and 235 and concurrent enrollment in Interior Design 237, 340, and 811 or 341. Concentration on 20th Century Interior Design and current developments in environmental design. Study of new materials and their application. Field trips included.

**Interior Design 343** 2 Cr.

**Research and Presentation** 2 Lec.

*Prerequisites:* Interior Design 237, 340, 341 or 811, and 342 and concurrent enrollment in Interior Design 238 and 239. Development and defense of in-depth problem solved by a complete design process from survey to final presentation to jury at end of semester.

**Interior Design 811** 1 Cr.

(See Work Experience)

## Journalism

**Journalism 101** 3 Cr.

**Introduction to Mass Communications** 3 Lec.

A Survey course designed to provide students with a panoramic view of the field of mass communications and an understanding of the role of mass media in modern society. Not restricted to journalism majors.

**Journalism 102** 3 Cr.

**News Gathering and Writing** 2 Lec., 3 Lab.

*Prerequisite:* Typing ability. Beginning reporting, study of types of news, leads, body treatment of story, feature in lead, facts, background, and practice in writing straight news story. Required for all journalism majors.

## Keypunch

(See Business 128 — Data Entry Concepts)

## Legal Assistant

**Legal Assistant 131** 3 Cr.

**Introduction to Legal Technology** 3 Lec.

Must be taken concurrently with Legal Assistant 135 except with permission of instructor. Review development of legal technician concept; study the legal profession, its ethics, and unauthorized practice; establish the 'new profession' concept; study history of American law, its classification for study and analysis, and the various areas of law as classified; begin 'in depth' study of legal research and bibliography including research problems; add introduction to legal drafting and writing.

**Legal Assistant 133** 3 Cr.

**Law of Real Property and Real Estate Transaction** 3 Lec.

*Prerequisite:* Legal Assistant 131. A study of the law of real property and in-depth survey of the more common types of real estate transactions and conveyances, such as deeds.



contracts, leases, deeds of trust, etc; drafting problems involving various types of these instruments; and special research project related to the subject matter; study of the system of recording and search of public documents.

**Legal Assistant 134** 3 Cr.  
**Principles of Family Law** 3 Lec.

*Prerequisite:* Legal Assistant 131. Such topics as divorce, separation, custody, legitimacy, adoption, change of name, guardianship, support, Domestic Relations Court procedures, and separation agreements are covered in this course.

**Legal Assistant 135** 3 Cr.  
**Texas Legal Systems** 3 Lec.

*Prerequisite:* Legal Assistant 131. A study of the court system of Texas. Includes an examination of the various types of legal practices as they relate to the courts and general principles of court administration. Elements of the federal court system are reviewed.

**Legal Assistant 231** 3 Cr.  
**Wills, Trusts, and Probate Administration** 3 Lec.

*Prerequisite:* Legal Assistant 135. Study of the more common forms of wills and trusts, and a survey of the fundamental principles of law applicable to each; a study of the organization and jurisdiction of the Texas Probate Court; a detailed analysis of the administration of estates in Texas Probate; review of estate and inheritance taxes applicable to such estates.

**Legal Assistant 232** 3 Cr.  
**Tort and Insurance Law and Claims Investigation** 3 Lec.

*Prerequisite:* Legal Assistant 135. A study of the fundamental principles of the law of torts and insurance, including special research assignments related to the subject matter; consideration of the techniques of investigation involved in the lawyer's handling of tort and insurance claims; a study of the various forms of pleadings involved in commencing such claims in court actions.

**Legal Assistant 233** 3 Cr.  
**Income Taxation and Legal Accounting** 3 Lec.

*Prerequisite:* Legal Assistant 135 and Business 201. Study of Federal, state and local income taxation of individuals and tax-paying entities such as estates, trusts, and corporations. Emphasis is placed on the preparation of basic tax returns and other tax-related documents. The course also includes a general introduction to accounting as it relates to legal problems.

**Legal Assistant 234** 3 Cr.  
**Personal Property, Sales and Credit Transactions** 3 Lec.

*Prerequisite:* Legal Assistant 135. A study of the law of personal property, contracts, including those special forms related to the law of sales and credit transactions, special drafting problems of various instruments and legal research projects; and a survey of the Uniform Commercial Code and its effect on the course subject matter.

**Legal Assistant 235** 4 Cr.  
**Techniques of Legal Practice and Procedures** 3 Lec., 3 Lab.

*Prerequisite:* Legal Assistant 135, 133, 231, 233. This course coordinates with other Legal Technology courses and provides specialized training in the actual preparation of legal documents on a case method. Questions of statute of limitations, client interviews and interview forms, complaints, interrogatories, depositions, answers, motions, orders to show cause, third-party practice, orders, medical records, judgments, pre-trials, settlements, and releases are some of the topics discussed.

**Legal Assistant 236** 2 Cr.  
**Legal Office Management** 2 Lec.

*Prerequisite:* Legal Assistant 231, 232, 233 and Business 201. This course will provide the ethical considerations applicable to the legal technician, office organization, specialized bookkeeping and accounting for attorneys, fees and billing procedures, scheduling and calendaring, legal research, management of personnel, proofreading, management of investigations and file preparation, legal drafting, management and organization procedures for specialized areas of law, special considerations with respect to attorney's trust account, preparation of law office forms, check list and files, and disbursement on behalf of clients.

## Long Term Health

**Long Term Health 152** 3 Cr.  
**Introduction to Nursing Home Administration** 3 Lec.

Review is made of the history and philosophy of nursing homes. Understanding and review and application of nursing home standards, the typical working organization and the study of gerontology. Preparation of job descriptions for the nursing home staff. Review of the functions, methods and procedures of administering a nursing home including policy writing for admission, discharge, patient care, transfer, emergency, operations, etc. The course assists the administrator in defining and relating the concepts, technology, and other technical aspects of nursing home operation.

**Long Term Health 156** 3 Cr.  
**Psychology of Patient Care** 3 Lec.

This course familiarizes the administrator with the

personality dynamics involved in helping the geriatric patient adjust to his new dependent environment; understanding the problems specifically related to psychological, emotional, and social needs, with an introduction to alternate courses of action to meet these needs.

**Long Term Health 157** 3 Cr.  
**Technology of Patient Care** 3 Lec.

This course includes a detailed study of the technical aspects of nursing home operation, including medical records, pharmacology, and medical terminology patient care and nursing procedures, safety, physical therapy equipment, recreational therapy, and sanitation.

**Long Term Health 158** 3 Cr.  
**Rehabilitation and Recreation** 3 Lec.

To include rehabilitation, creative hobbies, recreational activities planning for the handicapped and aged, planning involvement of patients with other community agencies, etc.

**Long Term Health 235** 3 Cr.  
**Nursing Home Administration Law** 3 Lec.

Nature and scope of law; court system; law of contracts; business organizations, including partnerships and corporations; state community property laws, torts, bailments, employer/employee relationships; introduction to theory practice of insurance as applicable to owners of nursing homes with emphasis on burden of financial loss, contractual arrangements and contracts and legal liabilities for bodily injury and property damage to patients and visitors.

**Long Term Health 236** 3 Cr.  
**Financial Management of the Nursing Home** 3 Lec.

*Prerequisite:* Principles of Accounting I. Techniques and strategies of financial information for management decision-making in the nursing home, emphasizing the budgeting process and relationships between statistical and financial data. Includes study of special accounting requirements of medicare and other government programs.

**Long Term Health 252** 6 Cr.  
**Nursing Home Internship I** 2 Lec., 20 Lab.

Management Internship supervised by a preceptor-administrator approved by the state board of licensure for nursing home administrators in an approved facility. Two hours classroom plus twenty hours of on-the-job administrative training per week. Critique to classroom discussions of ways to assist the new entrant into the nursing home administrative career field.

**Long Term Health 254** 6 Cr.  
**Nursing Home Internship II** 2 Lec., 20 Lab.

Management Internship supervised by a preceptor-administrator approved by the state board of licensure for nursing home administrators, in an approved facility. Two hours classroom plus twenty hours on-the-job administrative training per week. Critique of current job and its related experience, correlating these experiences to classroom discussion of ways to assist the new entrant into the nursing home administrative career field.

## Machine Transcription

(See Business 165 and Business 265)

## Management

(See Business)

## Mathematics

(Also See: Developmental Mathematics: Supplementary instruction in mathematics is available through Learning Skills Center.)

## Mathematics

**Mathematics 101** 3 Cr.  
**College Algebra** 3 Lec.

*Prerequisite:* Two years of high school algebra or Developmental Mathematics 093. A study of functions and relations, absolute values, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem and algebraic proof.

**Mathematics 102** 3 Cr.  
**Plane Trigonometry** 3 Lec.

*Prerequisite:* Mathematics 101 or equivalent. A study of angular measure, functions of angles, identities, solution of triangles, equations, inverse trigonometric functions, logarithms and complex numbers.

**Mathematics 106** 5 Cr.  
**Elementary Functions and Coordinate Geometry** 5 Lec.

*Prerequisites:* Two years of High school algebra, and one semester of trigonometry. A study of the algebra of functions to include the following: polynomial, rational, exponential, logarithmic and trigonometric functions, functions of two variables, complex numbers, vectors, and analytic geometry to include conics, transformation of coordinates, polar coordinates, parametric equations, and three dimensional space.

**Mathematics 111** 3 Cr.  
**Mathematics for Business and Economics I** 3 Lec.

*Prerequisite:* Two years of high school algebra or Developmental Mathematics 093. A study of equations, inequalities, matrices, linear programming, and linear, quadratic, polynomial, rational, exponential, and logarithmic functions. Applications to business and economic problems are emphasized.

**Mathematics 112** 3 Cr.  
**Mathematics for Business and Economics II** 3 Lec.

*Prerequisite:* Mathematics 111. Study of sequences and limits, differential calculus, integral calculus, optimization and appropriate applications.

**Mathematics 115** 3 Cr.  
**College Mathematics I** 3 Lec.

*Prerequisites:* One year of high school algebra and one year of high school geometry or two years of high school algebra or Developmental Mathematics 093. A course designed for liberal arts students which includes the study of logic, mathematical patterns, mathematical recreations, systems of numeration, mathematical systems, sets and statements, and sets of numbers. Historical aspects of the above topics will also be emphasized.

**Mathematics 116** 3 Cr.  
**College Mathematics II** 3 Lec.

*Prerequisite:* Mathematics 115. A course designed for liberal arts students which includes the study of algebra, linear programming, permutations, combinations, probability and geometry. Historical aspects of the above topics will also be emphasized.

**Mathematics 121** 3 Cr.  
**Analytic Geometry** 3 Lec.

*Prerequisite:* Mathematics 102 or equivalent. A study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space.

**Mathematics 130** 3 Cr.  
**Business Mathematics** 3 Lec.

*Prerequisite:* One year of high school algebra or Developmental Mathematics 091 or the equivalent. A study of simple and compound interest, bank discount, payrolls, taxes, insurance, markup and markdown, corporate securities, depreciation, and purchase discounts. This course is intended pri-



marily for specialized occupational programs.

**Mathematics 139** 3 Cr.  
**Applied Mathematics** 3 Lec.  
*Prerequisite:* One year of high school algebra or *Developmental Mathematics 091* or equivalent. A study of commercial, technical, and other applied uses of mathematics. An effort will be made to tailor the course to fit the needs of the students enrolled in each section.

**Mathematics 195** 3 Cr.  
**Technical Mathematics** 3 Lec.  
*Prerequisite:* *Developmental Mathematics 091* or the equivalent. A course designed for technical students covering a general review of arithmetic; a treatment of the basic concepts and the fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, a treatment of the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, stated problems, determinants, progressions, and the binomial theorem.

**Mathematics 196** 3 Cr.  
**Technical Mathematics** 3 Lec.  
*Prerequisite:* *Mathematics 195*. A course for technical students which includes a study of the following: the trigonometric functions of angles, trigonometric identities, inverse trigonometric functions, trigonometric equations, complex numbers, logarithms, vectors, and the solution of triangles.

**Mathematics 202** 3 Cr.  
**Introductory Statistics** 3 Lec.  
*Prerequisite:* Two years of high school algebra or consent of instructor. A study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability and applications to various fields.

**Mathematics 222** 3 Cr.  
**Calculus I** 3 Lec.  
*Prerequisite:* *Mathematics 121*. Limits, continuity, differentiation of algebraic and transcendental functions, and applications, maxima and minima, antiderivatives and indeterminate forms.

**Mathematics 223** 3 Cr.  
**Calculus II** 3 Lec.  
*Prerequisite:* *Mathematics 222*. The indefinite integral, definite integral, and applications, techniques of integration, improper integrals, and infinite series.

**Mathematics 224** 3 Cr.  
**Advanced Calculus** 3 Lec.  
*Prerequisite:* *Mathematics 223*. Multiple integrals, partial differentiation, vector analysis, series, and hyperbolic functions.

## Medical Assisting Technology

**Medical Assisting Technology 150** 1 Cr.  
**Orientation to Medical Office Careers** 1 Lec.  
*Prerequisite:* Admission to the Medical Assisting Technology or Medical Transcription programs. An introduction to the medical office and to the roles of the medical assistant and the medical transcriptionist. A study of the professional and interpersonal relationships of the medical office worker with the office personnel, the patient, the physician and others. An introduction to the history of medicine, the great men and women of medicine and their discoveries.

**Medical Assisting Technology 151** 4 Cr.  
**Medical Terminology** 4 Lec.  
*Prerequisite:* Admission to the Medical Assisting Technology or Medical Transcription program with concurrent enrollment in *Biology 123* or consent of the instructor. A study of the basic structure of medical words, including prefixes, suffixes, roots, combining forms and plurals. Emphasis is placed on pronunciation, spelling and definition of medical terms. Exercises are given in the use of the medical dictionary.

**Medical Assisting Technology 152** 2 Cr.  
**Medical Law and Ethics** 2 Lec.  
*Prerequisite:* Admission to the Medical Assisting Technology or Medical Transcription programs. An introduction to the principles of medical ethics and ethical behavior of the physician and patient, including contracts, professional liability, malpractice and the medical practice acts. The legal relationship of the medical assistant-transcriptionist in regard to the physician's legal responsibilities in the practice of medicine.

**Medical Assisting Technology 153** 3 Cr.  
**Medical Office Microbiology and Sterilization Procedures** 2 Lec., 2 Lab.  
*Prerequisite:* Admission to the Medical Assisting Technology program. A study of fundamental microbiology and methods of sanitation, asepsis and sterilization. Operation of sterilization equipment, application of the principles of asepsis in handwashing, dressings, creating and maintaining

a sterile field. Demonstration of the proper disposal of contaminated materials.

**Medical Assisting Technology 160** 4 Cr.  
**Medical Transcription** 2 Lec., 6 Lab.  
*Prerequisite:* Admission to the Medical Assisting Technology or Medical Transcription program. Completion of *Medical Assisting 151 Medical Terminology* and *Business 174 Intermediate Typing* (or equivalent) with a GPA of 2.0 or better or consent of the instructor. This course is designed to develop speed and accuracy in typing, skill in the use of transcribing equipment and expansion of medical-surgical terminology. Practice in completion of medical forms and in transcribing medical-surgical reports and medical correspondence is emphasized.

**Medical Assisting Technology 161** 3 Cr.  
**Medical Office Administrative and Management Procedures** 3 Lec.  
*Prerequisite:* Admission to the Medical Assisting Technology or Medical Transcription programs. This course deals with the basic principles of medical office communications. An introduction to medical recordkeeping in medicine, types of records, reports, computerized and statistical procedures and the function of the hospital medical record department in relation to the medical office. The student will be instructed in the fundamentals of medical office management, care of equipment, ordering of office supplies and office housekeeping.

**Medical Assisting Technology 162** 3 Cr.  
**Medical Office Bookkeeping and Insurance Procedures** 3 Lec.  
*Prerequisite:* Admission to the Medical Assisting Technology program. A study of the fundamentals of medical office bookkeeping and financial recordkeeping. Including the pegboard system and an introduction to computerized accounting. An appraisal of health insurance plans, including a study of benefits and claims procedures with an emphasis on completion of claim forms.

**Medical Assisting Technology 163** 3 Cr.  
**Medical Office Clinical Medical Assisting Procedures** 2 Lec., 2 Lab.  
*Prerequisite:* Admission to the Medical Assisting Technology program. Lectures and Laboratory experiences in which the student is introduced to the role of the clinical medical assistant; techniques of the examining room; patient handling and preparation; taking and recording vital signs; assisting the physician with examination, treatments and minor surgery and handling office emergencies. Ordering, storing and inventory of medical supplies and care of equipment will also be included.

**Medical Assisting Technology 164** 3 Cr.  
**Medical Office Pharmacology and Drug Administration** 2 Lec., 2 Lab.  
*Prerequisite:* Admission to Medical Assisting Technology. The student will be able to identify basic drugs, their use and effect on the body and to calculate dosage and solutions; how to define and use the correct abbreviations and terminology relating to drugs. How to identify medications that are regulated by Bureau of Narcotics and Dangerous Drugs and the records that are required to be kept. Know how to order, store and inventory drugs and the proper procedure for disposal of drugs which have expired. Identify the methods of drug administration including giving injections, selections of sites and techniques. Laboratory fee required.

**Medical Assisting Technology 170** 3 Cr.  
**Medical Office X-Ray Orientation and Electromedical Instrumentation** 5 Lec., 5 Lab.  
*Prerequisite:* Admission to Medical Assisting Technology Program. This course will prepare the student to communicate instructions for proper preparation for X-ray examinations to the patient, identify safety hazards and precautions which should be observed relevant to the x-ray equipment and to demonstrate proper handling and storage of the finished product. The course includes instruction in the methods of electrocardiography, including operation of the machine, specific techniques and mounting the tracing. Further, the course includes instruction in the operation and care of other electromedical instruments: Ultrasound and Ultraviolet Light. Laboratory fee required.

**Medical Assisting Technology 171** 3 Cr.  
**Medical Office Laboratory Procedures** 5 Lec., 5 Lab.  
*Prerequisite:* Admission to the Medical Assisting Technology Program. Lecture and Laboratory sessions demonstrating the purpose, techniques and recording of basic laboratory procedures commonly performed in a physician's office; urinalysis, blood counts, gram stains, sedimentation rates, pregnancy tests, etc. the collection, preparation, and labeling of specimens the understanding of clinical laboratory reports and assisting patients by giving the proper instructions for their preparation for clinical lab tests. Laboratory fee required.

**Medical Assisting Technology 172** 6 Cr.  
**Medical Assisting Externship** 2 Lec., 38 Lab.  
*Prerequisite:* Completion of all Medical Assisting Technology courses with an over all GPA of 2.0 or above. Practical work experience under supervision in a private medical of-

fice, clinic or hospital with classroom reports and critique. The student will be assigned regular duties and will be responsible to the supervisor in charge. The work will be coordinated by a member of the medical assisting faculty. A minimum of 180 hours is required in the clinical setting for externship.

## Medical Lab Technology

**Medical Lab Technology 133** 4 Cr.  
**Hematology** 3 Lec., 4 Lab.  
*Prerequisite:* Acceptance into the Medical Laboratory Technician program with an ACT composite score of 18 and concurrent enrollment in *Medical Laboratory Technology 135*. The theory and basic techniques utilized in the hematological examination of blood will be presented. Laboratory fee required.

**Medical Lab Technology 135** 3 Cr.  
**Urinalysis** 2 Lec., 4 Lab.  
*Prerequisite:* Acceptance into the Medical Laboratory Technician program with an ACT composite score of 18 and a math score of 18 and concurrent enrollment in *Medical Laboratory Technology 133*. This course serves to orient the student to the medical laboratory in addition to presenting the theory and laboratory procedures used in the analysis of urine. Laboratory fee required.

**Medical Lab Technology 138** 4 Cr.  
**Immunology** 3 Lec., 4 Lab.  
*Prerequisite:* 'C' average in *Medical Laboratory Technology 133* and *135*, and a GPA of 2.0 or better in non-technical course work. The basic theory and principles of immunology will be presented. Building upon this background, the laboratory procedures utilized in the serological and immunohematological examination of blood and serum shall be considered. Laboratory fee required.

**Medical Lab Technology 139** 8 Cr.  
**Clinical Practice I** 2 Lec., 33 Lab.  
*Prerequisite:* 'C' average in *Medical Laboratory Technology 138* and a GPA of 2.0 or better in non-technical course work. The student will be assigned to a hospital laboratory for supervised clinical practice in the areas of hematology, serology, blood banking and urinalysis.

**Medical Lab Technology 229** 4 Cr.  
**Medical Microbiology I** 3 Lec., 4 Lab.  
*Prerequisite:* Satisfactory completion of the first year of the *Medical Laboratory Technician* program. The fundamentals of microbial life will be presented and, building upon this background, the methods and procedures used in diagnostic microbiology will be covered. These will include the principle of aseptic technique, susceptibility testing of bacteria, quantification of bacteria in body fluids, and the isolation and identification of selected bacteria of medical importance. The normal body flora will be discussed and the association of the bacteria studied with disease in man will be emphasized.

**Medical Lab Technology 231** 4 Cr.  
**Clinical Chemistry** 3 Lec., 4 Lab.  
*Prerequisite:* "C" average in *Medical Lab Technology 229* and successful completion of *Chemistry 203*. A course devoted to the theory and procedures used in the clinical chemistry laboratory. Manual and automated methods will be presented in lectures and laboratory assignments. Laboratory fee required.

**Medical Lab Technology 236** 4 Cr.  
**Medical Microbiology II** 3 Lec., 4 Lab.  
*Prerequisite:* *Medical Laboratory Technology 229*. A continuation of *Medical Laboratory Technology 229* which will include the study of the isolation and identification procedures for selected bacteria of medical importance, fungi, and parasites. Laboratory fee required.

**Medical Lab Technology 238** 8 Cr.  
**Clinical Practice II** 2 Lec., 33 Lab.  
*Prerequisite:* 'C' average in *Medical Laboratory Technology 229* and *231* with a GPA of 2.0 or better in non-technical course work. The student will be assigned to a clinical laboratory for supervised experience in diagnostic microbiology and clinical chemistry.

## Music

**Music 101** 4 Cr.  
**Freshman Theory** 3 Lec., 3 Lab.  
 Development and cultivation of musicianship skills, especially in the areas of tonal and rhythmic perception and articulation. Presentation of the essential elements of music: introduction to sight-singing, keyboard, and notation.

**Music 102** 4 Cr.  
**Freshman Theory** 3 Lec., 3 Lab.  
*Prerequisite:* *Music 101* or consent of instructor. Introduction to part-writing and harmonization with triads and their in-

versions; classification of chords; seventh chords, sight-singing, dictation and keyboard harmony.

**Music 104** 3 Cr.  
**Music Appreciation** 3 Lec.

A concise survey of the basic elements of music and their application in the music literature of Western civilization, particularly from the Baroque to the present. Relevant cultural influences upon the music of each era are observed.

**Music 110** 3 Cr.  
**Music Literature** 3 Lec.

A course dealing with the characteristics of sound, the elements of music, performance media and musical texture as seen in the music of recognized composers in the major periods of music history. Special emphasis is given to the music of the late Gothic, Renaissance and Baroque eras.

**Music 111** 3 Cr.  
**Music Literature** 3 Lec.

*Prerequisite: Music 110.* A continuation of the studies introduced in Music 110. A study of the compositional procedures and forms employed by the creators of music. Attention is focused upon the music of the classical, Romantic and Modern periods.

**Music 113** 3 Cr.  
**Foundations in Music I** 3 Lec.

Emphasis upon participation and the necessary skills for satisfactory performance in singing, playing an instrument, listening, creating rhythmic responses. Development of increasing ability to manage notation (music reading).

**Music 114** 3 Cr.  
**Foundations in Music II** 3 Lec.

*Prerequisite: Music 113.* Designed to help prepare students with limited music training for Music 101 or to further their general music understanding. Course emphasis will include rhythmic and melodic training, understanding of basic chord functions, melody, textures, and basic analysis of music.

**Music 117** 1 Cr.  
**Piano Class I** 2 Lab.

Class instruction in the areas of basic musicianship and piano skills designed primarily for those with no knowledge in piano skills. Open to all students. May be repeated for credit.

**Music 118** 1 Cr.  
**Piano Class II** 2 Lab.

Includes techniques, skills, harmonization, transposition, improvisation, accompanying, sight-reading and performing various styles of repertoire. Open to all students. May be repeated for credit.

**Music 119** 1 Cr.  
**Guitar Class I** 2 Lab.

Class instruction covering the basics of guitar skill, designed primarily for those with limited knowledge in the reading of music or playing the guitar. Open to all students. May be repeated for credit.

**Music 120** 1 Cr.  
**Guitar Class II** 2 Lab.

*Prerequisite: Music 119 or the equivalent.* A continuation of the skills introduced in Music 119 with emphasis on perfecting classical guitar techniques and music reading skills. May be repeated for credit.

**Applied Music**

Subject to enrollment, students may receive private instruction in the following courses: Piano, Organ, Voice, Violin, Viola, Cello, Double Bass, Flute, Oboe, Clarinet, Bassoon, Saxophone, Trumpet, French Horn, Trombone, Baritone, Tuba, Percussion, Guitar, Electric Bass, and Drum Set. Private Music may be repeated for credit.

**Music 121-143** 1 Cr.  
**Applied Music — Minor** 1 Lec.

Private instruction in the student's secondary area. One half hour lesson a week. Open to students registered in music theory, ensembles, and other music major or minor courses. Fee required. Private Music may be repeated for credit.

**Music 251-270** 1 Cr.  
**Applied Music — Major** 1 Lec.

Private instruction in the area of the student's major instrument, primarily for music performance majors. Two half hour lessons a week. Open to students registered in music theory, ensembles, and other music major or minor courses. Fee required.

**Music 150** 1 Cr.  
**Chorus** 3 Lab.

*Prerequisite: Consent of instructor.* Open to all students of the college, the chorus studies and performs a wide variety of music representing the literature of the great eras of music history. May be repeated for credit.

**Music 151** 1 Cr.  
**Voice Class I** 2 Lab.

A course teaching the principles of breathing, voice production, tone control, enunciation and phrasing. Two group lessons a week. Open to all non-voice majors. May be repeated for credit.

**Music 152** 1 Cr.  
**Voice Class II** 2 Lab.

A continuation of Music 151 with emphasis on solo singing, appearance in studio recital, stage deportment, and person-

ality development. Open to all non-voice majors. Two group lessons a week. May be repeated for credit.

**Music 155** 1 Cr.  
**Vocal Ensemble** 3 Lab.

A select group for mixed voices concentrating upon excellence of performance. Membership is open to any student by audition, who, in the opinion of the director, possesses special interest and skills in performance of advanced choral literature. May be repeated for credit.

**Music 160** 1 Cr.  
**Band** 3 Lab.

*Prerequisite: non-wind instrument majors, consent of the instructor.* The band studies and performs a wide variety of music in all areas of band literature. Required of all wind instrument majors. May be repeated for credit.

**Music 173** 1 Cr.  
**Percussion Ensemble** 3 Lab.

Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director. May be repeated for credit.

**Music 175** 1 Cr.  
**String Ensemble** 3 Lab.

Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director. May be repeated for credit.

**Music 177** 1 Cr.  
**Chamber Ensemble** 3 Lab.

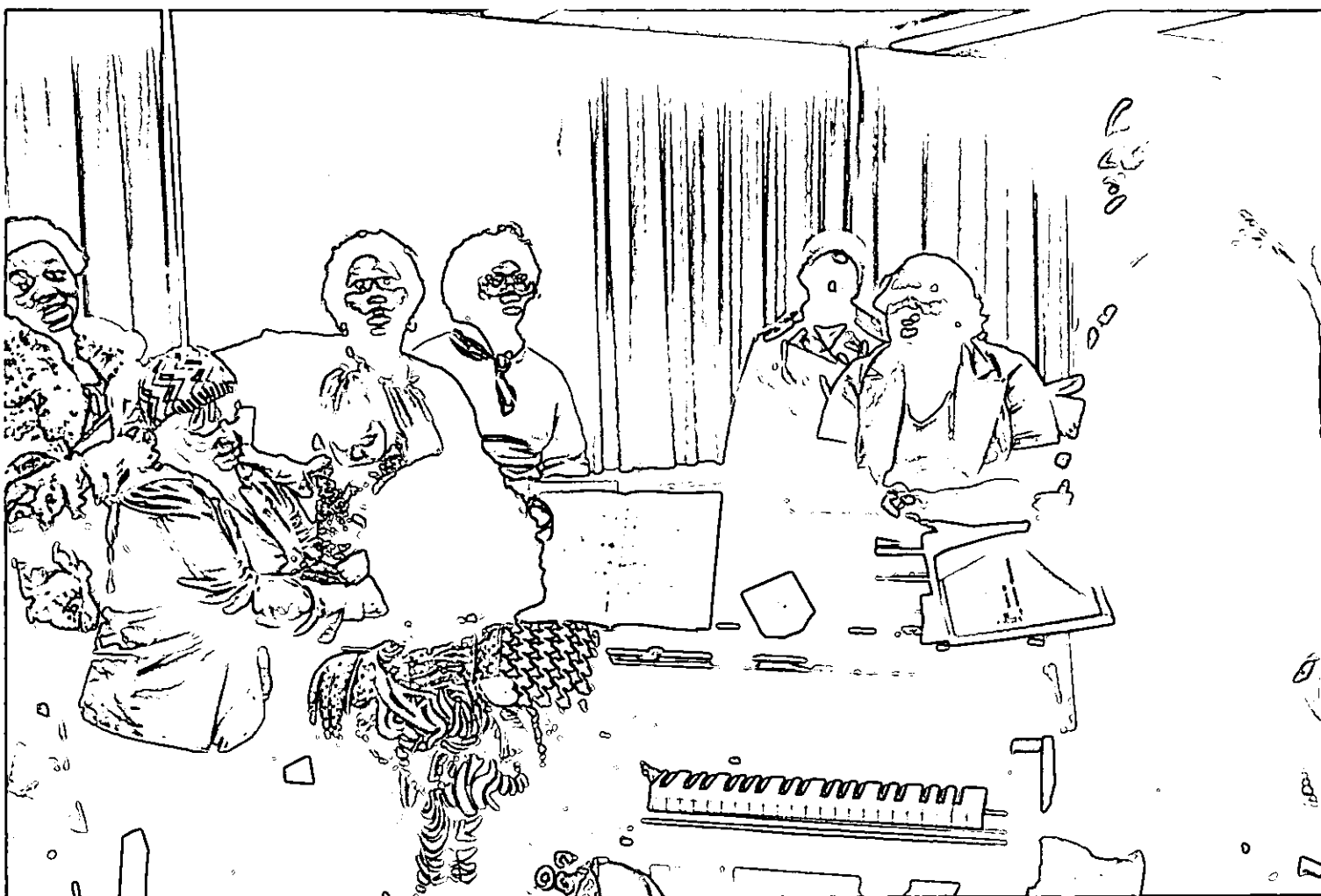
Select group of instrumentalists or vocalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director. May be repeated for credit.

**Music 185** 1 Cr.  
**Stage Band** 3 Lab.

*Prerequisite: Consent of instructor.* The stage band studies and performs a wide variety of music with emphasis on the jazz-oriented big-band styles of the 1960's. May be repeated for credit.

**Music 199** 1 Cr.  
**Recital** 2 Lab.

One period per week designed to allow students of private lessons an opportunity to perform before an audience. Required for all music majors and open to all other students. Credit for this course does not apply to the Associate degree. May be repeated for credit.



**Music 201** 4 Cr.  
**Sophomore Theory** 3 Lec., 3 Lab.  
*Prerequisite:* Music 101-102 or consent of instructor. A continuation of freshman theory, including a study of larger forms, thematic development, chromatic chords including the neapolitan sixth and augmented sixth chords, diatonic seventh chords with advanced sight-singing, keyboard harmony and ear training.

**Music 202** 4 Cr.  
**Sophomore Theory** 3 Lec., 3 Lab.  
*Prerequisite:* Music 201 or equivalent or by consent of instructor. A continuation of Music 201, including a study of sonata-allegro form, ninth, eleventh and thirteenth chords, exploration of new key schemes, impressionism, melody, harmony, tonality and formal processes as they apply to twentieth century music with a comparable advance in sight-singing, keyboard harmony and ear training.

**Music 221-241** 2 Cr.  
**Applied Music — Concentration** 1 Lec.  
 Private instruction in the area of the student's concentration. Two half hour lessons a week. Open to students registered in music theory, ensembles, and other music major or minor courses. Fee required. Private music may be repeated for credit.

## Nursing

**Nursing 141** 7 Cr.  
**Nursing I** 4 Lec., 9 Lab.  
*Prerequisites:* Admission to the program. Completion of Physical Science 118 or its equivalent. Completion of or concurrent enrollment in Biology 120 and Psychology 105. Nursing I is the basic course in nursing which serves as a foundation on which other nursing courses will build and expand. Technical, observational and communicative skills will be developed to enable the student to meet the basic physical, emotional and spiritual needs of the patient. Content and selected clinical experiences will enable the student to begin to plan, implement and assess nursing care for all age groups. Basic concepts in mental health, nutrition and pharmacology are included. Laboratory fee required.

**Nursing 142** 7 Cr.  
**Nursing II** 4 Lec., 9 Lab.  
*Prerequisites:* "C" grade in Nursing 141 and successful completion of or concurrent enrollment in Biology 121 and Psychology 201. Nursing II is the augmentation and application of the basic principles, concepts and skills from Nursing I in the family situation. The impact of stress, environmental, physiological, and psychological on the individual and the family is examined through planned clinical experiences. The commonality of illness as it occurs in all age groups encourages the student to correlate and apply information from all sources in delivering necessary care to the patients. Laboratory fee required.

**Nursing 240** 4 Cr.  
**Nursing III — Summer Only** 7 Lec., 15 Lab.  
*Prerequisites:* "C" grade in Nursing 141 and Nursing 142. Nursing III is a continuation of Nursing II and emphasizes the acquisition of additional abilities in the areas of assessment and team concept related to the delivery of health care. Laboratory fee required.

**Nursing 243** 9 Cr.  
**Nursing IV** 5 Lec., 12 Lab.  
*Prerequisites:* "C" grade in Nursing 141, 142, 240. Completion of Biology 120, 121 and Psychology 105, 201. Nursing IV requires students to utilize abilities developed previously in the curriculum in order to provide nursing care to patients with increasingly complex physical and mental pathologic conditions. Always stressed is the commonality of the disease process in various situations and ages. The theory and clinical portions of the course are so designed to encourage the student to develop skill in making nursing judgements based on information gathered from all areas. Laboratory fee required.

**Nursing 242** 9 Cr.  
**Nursing V** 5 Lec., 12 Lab.  
*Prerequisites:* "C" grade in Nursing 141, 142, 240 and 243. Nursing V is a continuation of Nursing IV which deals with increasingly complex situations. Additionally the student is acquainted with aspects of the nursing profession not previously explored. Included in this seminar portion of the course are topics such as, the changing scope of nursing, nursing organizations and emphasis on continued personal and professional development. Laboratory fee required.

## Office Machines

(See Business 160)

## Operating Room Technology

**Operating Room Technician 140** 2 Cr.  
**Medical Terminology** 2 Lec.  
 A study designed to acquaint the student with the origin and structure of medical terms so that a medical vocabulary can be built.

**Operating Room Technician 141** 8 Cr.  
**Operating Room Techniques** 6 Lec., 10 Lab.  
 Admission to the OR Technician program, concurrent enrollment in or previous completion of Biology 123. An introduction to the environment of the operating room. The basic principles of asepsis, sterilization, preparation and care of surgical supplies and equipment and ethical-legal implications studied. Also the basic care and safety of the patient in the operating room is presented.

**Operating Room Technician 152** 8 Cr.  
**Operating Room Procedures** 4 Lec., 20 Lab.  
*Prerequisite:* Grade of "C" in Operating Room Technician 140 & 141 and successful completion of Biology 123. A course in which the student expands the basic principles from Operating Room Technician 141 to include specific patient preparation, medication, instrumentation and complications related to selected surgical procedures. Laboratory fee required.

**Operating Room Technician 153** 7 Cr.  
**Clinical Practice** 0 Lec., 35 Lab.  
*Prerequisite:* Grade of "C" in Operating Room Technician 152. This course provides the practical clinical experience in the operating room. An effective level of practice and knowledge must be demonstrated by the student in various operating room procedures.

**Operating Room Technician 154** 2 Cr.  
**Seminar** 2 Lec., 0 Lab.  
*Prerequisite:* Grade of "C" or better in Operating Room Technician 152. Study of special problems which correlate with the individual needs of students during clinical practice. Continuing education is discussed in this seminar.

## Pattern Design

**Pattern Design 130** 5 Cr.  
**Pattern Drafting and Draping** 3 Lec., 9 Lab.  
*Prerequisite:* Enrollment in Design Institute. Student learns the fundamental principles to draft and drape basic patterns in collars, skirts, sleeves, and dresses. Basic techniques are developed in pattern grading and pattern work by using the latest apparel industry equipment. Laboratory fee required.

**Pattern Design 131** 5 Cr.  
**Pattern Drafting and Draping** 3 Lec., 9 Lab.  
*Prerequisite:* Pattern Drafting and Draping 130. Student learns the intermediate level of pattern work in collars, skirts, sleeves, and dresses in misses sizes. Through lecture, discussions, and demonstrations the student develops technical skills in making patterns.

**Pattern Design 230** 5 Cr.  
**Creative Pattern Design** 3 Lec., 9 Lab.  
*Prerequisite:* Pattern Design 131. Student learns techniques to develop patterns for children, junior petite, junior, active sportswear, misses, and suits. Special assignments for Apparel Design students. Laboratory fee required.

**Pattern Design 231** 5 Cr.  
**Creative Pattern Design** 3 Lec., 9 Lab.  
*Prerequisite:* Pattern Design 230. Student learns to develop patterns for half sizes, dressy dresses and lingerie. Speed techniques are developed in creating patterns. Special assignments for Apparel Design students.

## Philosophy

**Philosophy 102** 3 Cr.  
**Introduction to Philosophy** 3 Lec.  
 A survey course designed to acquaint the student with some of the fundamental problems in philosophy and with methods used to deal with them. Some principle views, both ancient and modern, are examined as possible solutions.

**Philosophy 105** 3 Cr.  
**Logic** 3 Lec.  
 An analysis of the principles of logical thinking. An effort is made to apply logic's methods and tools to real life situations. Fallacies, definitions, analogies, syllogisms, Venn Diagrams, and other topics are discussed.

**Philosophy 202** 3 Cr.  
**Introduction to Social and Political Philosophy** 3 Lec.  
*Prerequisite:* Three hours of philosophy or consent of instructor. An examination of the relationships of philosophical ideas to the community with emphasis on concepts of natural rights, justice, education, freedom and responsibility.

**Philosophy 203** 3 Cr.  
**Ethics** 3 Lec.  
*Prerequisite:* Three hours of philosophy or consent of instructor. A survey of the classical and modern theories of the moral nature of man, posing alternative views of his responsibilities to self and society. The course is designed to verify the ethical issues and their metaphysical and epistemological bases so as to assist the student toward sound application of ethical principles in his own life.

**Philosophy 210** 3 Cr.  
**Studies in Philosophy** 3 Lec.  
*Prerequisite:* Three hours of philosophy and consent of the instructor. Students will study a philosophical problem, movement, or special topic. Course topics will change each semester and may be repeated for credit.

## Photography

**Photography 110** 3 Cr.  
**Introduction to Photography and Photo-Journalism** 2 Lec., 4 Lab.  
 Introduction to photography and photo-journalism. The general mechanics of camera lenses and shutters, general characteristics of the photographic films, papers, and chemicals. Proper photographic darkroom procedures including enlarging, processing, contact printing, exposing of photographic films and papers. Study of artificial lighting. Laboratory fee required.

**Photography 111** 3 Cr.  
**Advanced Photography and Photo-Journalism** 2 Lec., 4 Lab.  
 Advanced photography and photo-journalism. Utilization of everything taught in 110, with emphasis on refining techniques. Special emphasis on photographic communication. Laboratory fee required.

**Photography 120** 4 Cr.  
**Commercial Photography I** 3 Lec., 3 Lab.  
 Commercial/contract photography including field, studio and darkroom experience associated with social photography, portraiture and studio photography, fashion and theatrical portfolio and publicity photography and convention photography. Includes use of natural, stationary, flash and strobe artificial lights. Laboratory fee required.

**Photography 121** 4 Cr.  
**Commercial Photography II** 3 Lec., 3 Lab.  
 Further commercial/contract assignments including publicity photography, architectural photography, interior photography and produce advertising photography, advanced exploration in latest equipment, papers, films, print and presentation techniques. Additional exchange with sample clients, employers studios and agencies. Laboratory fee required.



# Physical Education: Activity Courses

One of the main objectives of the Physical Education division is to provide the opportunity for each student to become skilled in at least one physical activity which will prepare him for personal enjoyment of leisure time. Students are urged to take advantage of the program by registering for a physical education activity course each semester.

## Physical Education 100 Lifetime Sports Activities

1 Cr.  
3 Lab.  
Students are provided an opportunity for participation and instruction in various lifetime sports. Selection may be made from archery, badminton, bowling, golf, handball, racquetball, softball, swimming, tennis, and other sports. Activities may be offered singularly or in combinations. Instruction shall be presented at the beginner and advanced-beginner levels. The course is designed for male and female students and may be repeated for credit providing students select different activities. Laboratory fee required.

## Physical Education 108 Social Recreation

3 Cr.  
3 Lec.  
Introduces the methods and materials for planning, organizing and conducting social activities for different age groups.

## Physical Education 109 Outdoor Recreation

3 Cr.  
3 Lec.  
A study of the development and trends of outdoor recreation and organized camping.

## Physical Education 111 Beginning Wrestling

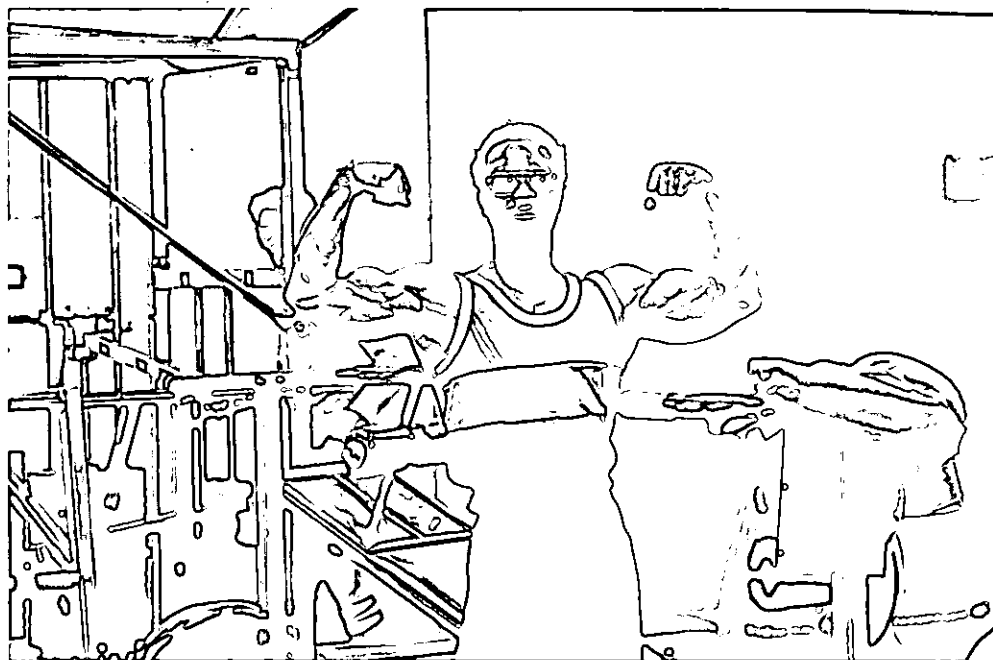
1 Cr.  
2 Lab.  
Basic wrestling fundamentals, techniques, rules and strategy will be taught. Emphasis will also be placed upon spectator appreciation. Uniform required. Laboratory fee required.

## Physical Education 113 Handball and Racquetball

1 Cr.  
2 Lab.  
Designed to provide the student an opportunity for basic skills development in handball and racquetball. Uniform required. Laboratory fee required.

## Physical Education 114 Beginning Badminton

1 Cr.  
2 Lab.  
This course is designed to teach the history, rules, and beginning skills involved in the playing of badminton. Uniform required. Laboratory fee required.



## Physical Education 115 Physical Performance Lab

1 Cr.  
3 Lab.  
This course is designed to diagnose and measure the student's physical condition and prescribe a program of exercise to carry with him through life. Much of the course work will be carried on in the Physical Performance Laboratory. Co-educational. May be repeated for credit. Uniform required. Laboratory fee required.

## Physical Education 116 Intramural Athletics

1 Cr.  
2 Lab.  
A co-educational activity course designed to offer intramural competition in a variety of co-educational activities. May be repeated for credit. Uniform required. Laboratory fee required.

## Physical Education 117 Beginning Archery

1 Cr.  
2 Lab.  
Co-educational course in Beginning Archery. Equipment furnished. No uniform required. Laboratory fee required.

## Physical Education 118 Beginning Golf

1 Cr.  
2 Lab.  
A co-educational course in Beginning Golf. Equipment furnished. No uniform required. Laboratory fee required.

## Physical Education 119 Beginning Tennis

1 Cr.  
2 Lab.  
A co-educational course designed for the beginner. Basic tennis fundamentals will be stressed. Uniform required. Laboratory fee required.

## Physical Education 121 Folk Dance

1 Cr.  
2 Lab.  
Participation in a variety of folk dances from other lands. Cultural backgrounds and costume study is included as a part of the course. Laboratory fee required. No uniform required.

## Physical Education 122 Beginning Gymnastics

1 Cr.  
2 Lab.  
A co-educational course in beginning gymnastics, emphasizing basic skills in tumbling and in the various apparatus events. Uniform required. Laboratory fee required.

## Physical Education 124 Social Dance

1 Cr.  
2 Lab.  
Students who have limited experience in dance will find this course beneficial. Ballroom and social dance includes fundamental steps and rhythms of the fox-trot, waltz, tango, and recent dance steps. "Country" dancing includes reel, square dance, and other related dances. No uniform required. Laboratory fee required.

## Physical Education 125 Conditioning Exercise

1 Cr.  
3 Lab.  
Enables the student to develop an understanding of exercise and its effect on the body and improve physical fitness through a variety of conditioning activities. Uniform required. Laboratory fee required.

## Physical Education 127 Basketball and Volleyball

1 Cr.  
2 Lab.  
Techniques, rules and strategy of the game will be taught and the emphasis will be on playing the game. Uniform required. Laboratory fee required.

## Physical Education 129 Modern Dance

1 Cr.  
2 Lab.  
A co-educational, beginning class in Modern Dance. Uniform required. Laboratory fee required.

## Physical Education 131 Weight Training and Conditioning

1 Cr.  
3 Lab.  
A course designed for those students who desire instruction and participation in weight training and conditioning techniques. May be repeated for credit. Uniform required. Laboratory fee required.

## Physical Education 134 Outdoor Education

1 Cr.  
3 Lab.  
A co-educational course designed to provide students with the opportunity to gain knowledge and skills in outdoor education and camping activities through planned and incidental experiences. Including a week end camp-out. No uniform required. Laboratory fee required.

## Physical Education 200 Lifetime Sports Activities II

1 Cr.  
3 Lab.  
A continuation of Physical Education 100. Students are provided an opportunity for participation and instruction in selected activities. Activities shall be presented at the intermediate and intermediate/advanced levels. For male and female students. Laboratory fee required. May be repeated for credit.

## Physical Education 217 Intermediate Archery

1 Cr.  
2 Lab.  
This course is designed for the student who has had previous experience in archery and who would like to engage in target shooting and field archery. The student furnishes



equipment, and no uniform is required. Laboratory fee required.

**Physical Education 218** 1 Cr.  
**Intermediate Golf** 2 Lab.  
*Prerequisite:* Permission of instructor. A course designed to develop skills and techniques beyond the "beginner" stage. Laboratory fee required.

**Physical Education 219** 1 Cr.  
**Intermediate Tennis** 2 Lab.  
*Prerequisite:* Permission of instructor. A course designed to develop skills and techniques beyond the "beginner" stage. Uniform required. Laboratory fee required.

**Physical Education 222** 1 Cr.  
**Intermediate Gymnastics** 2 Lab.  
*Prerequisite:* Physical Education 122. A course designed to develop skills and techniques beyond the "beginner" stage. Uniform required. Laboratory fee required.

**Physical Education 225** 2 Cr.  
**Skin and Scuba Diving** 1 Lec., 2 Lab.  
*Prerequisite:* Intermediate swimming or permission of instructor. A coeducational course designed to give students knowledge and experience in the proper use of equipment, safety, physiology, and open water diving. Students successfully completing all course requirements will receive certification as basic scuba divers from the Professional Association of Diving Instructors (PADI) or the National Association of Underwater Instructors (NAUI). All equipment will be supplied except mask, fins, and snorkel. The student will rent equipment as specified at the time of registration. Laboratory fee required.

**Physical Education 234** 2 Cr.  
**Water Safety Instructor** 1 Lec., 2 Lab.  
*Prerequisite:* Current advanced life saving card. Principles and techniques for instructors in water safety and life saving classes. Satisfactory completion of course qualifies the student to test for certification by the red cross as water safety instructor. Uniform required. Laboratory fee required.

## Non-Activity P.E.

**Physical Education 101** 3 Cr.  
**Fundamentals of Health** 3 Lec.  
A study of personal and community health. Emphasis placed on causative factors of mental and physical health and the means of disease transmission and prevention. For majors, minors, and students with specific interest.

**Physical Education 144** 3 Cr.  
**Introduction to Physical Education** 3 Lec.  
Designed for professional orientation in physical education, health and recreation. Brief history, philosophy and modern trends of physical education, teacher qualification, vocational opportunities, expected competencies, and skill testing comprise the contents of the course. For students majoring in the Physical Education.

**Physical Education 257** 3 Cr.  
**Standard and Advanced First Aid** 3 Lec.  
Theory and practice in the standard and advanced courses of the American National Red Cross in first aid safety.

## Physical Science

**Physical Science 118** 4 Cr.  
**Physical Science** 3 Lec., 2 Lab.  
A study of the basic principles and concepts of physics, chemistry and nuclear science. The course relates these basic sciences to man's physical world at an introductory level. This course is intended primarily for the non-science major. Laboratory fee required.

**Physical Science 119** 4 Cr.  
**Physical Science** 3 Lec., 2 Lab.  
The course encompasses the interaction of the Earth Sciences and man's physical world. Geology, Astronomy, Meteorology and Space Science are emphasized through the application of selected principles and concepts of the applied sciences. The course is directed toward the non-science major. Laboratory fee required.

## Physics

**Physics 111** 4 Cr.  
**Introductory General Physics** 3 Lec., 3 Lab.  
*Prerequisite:* Two Years high school algebra, including trigonometry or equivalent. The first semester of a two semester course designed for pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who require a two-semester technical course in physics. This course includes a study of mechanics and heat. Laboratory includes one hour problem session. Laboratory fee required.

**Physics 112** 4 Cr.  
**Introductory General Physics** 3 Lec., 3 Lab.  
*Prerequisite:* Physics 111. A continuation of Physics 111 which includes the study of electricity, magnetism, light, and sound. Laboratory includes one hour problem session. Laboratory fee required.

**Physics 131** 4 Cr.  
**Applied Physics** 3 Lec., 3 Lab.  
*Prerequisite:* Mathematics 195 or concurrent enrollment in Mathematics 195. The first half of a one year course designed to explain the basic concepts of the property of matter, mechanics, and heat. Emphasis will be placed on application and problem solving. Designed primarily for students enrolled in technical programs. Laboratory includes a one hour problem session. Laboratory fee required.

**Physics 132** 4 Cr.  
**Applied Physics** 3 Lec., 3 Lab.  
*Prerequisite:* Physics 131. A continuation of Physics 131 designed to explain basic concepts in the areas of sound, light, electricity, magnetism, and atomic theory. Laboratory includes a one hour problem session. Laboratory fee required.

**Physics 201** 4 Cr.  
**General Physics** 3 Lec., 3 Lab.  
*Prerequisite:* Credit or concurrent registration in Mathematics 126. Principles and application of mechanics, wave motion, and sound emphasizing fundamental concepts, problem solving, notation, and units. Designed primarily for physics, chemistry, mathematics, and engineering majors. Laboratory includes a one hour problem session. Laboratory fee required.

**Physics 202** 4 Cr.  
**General Physics** 3 Lec., 3 Lab.  
*Prerequisites:* Physics 201 and credit or concurrent registration in Mathematics 227. Principles and applications of heat, electricity, magnetism and optics emphasizing fundamentals, concepts, problem solving, notation and units. Laboratory includes a one hour problem session. Laboratory fee required.



## Police Science

**Police Science 134** 3 Cr.  
**Criminal Evidence and Procedure** 3 Lec.  
A study of trial and courtroom procedure; parties in the case; the rules of evidence; decision and punishment; due process re-emphasized.

**Police Science 137** 3 Cr.  
**Police Community Relations** 3 Lec.  
The role of the individual officer in achieving and maintaining public support; human relations, public information; relationships with violators and complainants.

**Police Science 140** 3 Cr.  
**Introduction to Law Enforcement** 3 Lec.  
The student will acquire a basic philosophy and history of systems of justice in this nation. Included is a survey of police problems, crime trends and statistics, organizations and jurisdiction of local, state and federal enforcement agencies. Surveys of professional opportunities and personnel qualifications are studied. The course should provide the student with a basic understanding of the evolution of the American

police system. Within the purview of the course is a general history of police systems which provides a frame of reference for the analysis of modern trends and thinking in the police service. The broad objectives of the course are designed to stimulate student interest and develop capabilities for law enforcement service.

**Police Science 141** 3 Cr.  
**Police Organization and Administration** 3 Lec.  
*Prerequisite:* Police Science 140. To present: (1) basic philosophies of organizational technology, (2) common structures of organization, (3) patterns of administrative processes and the management of general and specialized police studies in the dynamic processes of organization. The course includes an examination of traditional organizational concepts, administrative techniques, personnel policies and operating systems.

**Police Science 142** 3 Cr.  
**Police Organization and Administration** 3 Lec.  
*Prerequisite:* Police Science 140. To present: (1) basic philosophies of organizational technology, (2) common structures of organization, (3) patterns of administrative processes and the management of general and specialized police studies in the dynamic processes of organization. The course includes an examination of traditional organizational concepts, administrative techniques, personnel policies and operating systems.

**Police Science 142** 3 Cr.  
**Legal Aspects of Law Enforcement** 3 Lec.  
*Prerequisite:* Police Science 140. To provide opportunity for the student to acquire a basic philosophy in criminal jurisprudence, a working knowledge of criminal statutes and a survey of case law. This course also is a basic orientation designed to provide the student with a rationale for placing criminal law in its proper perspective in the American system of justice. Within the course will be legal definitions and procedures applied to operational techniques in law enforcement.

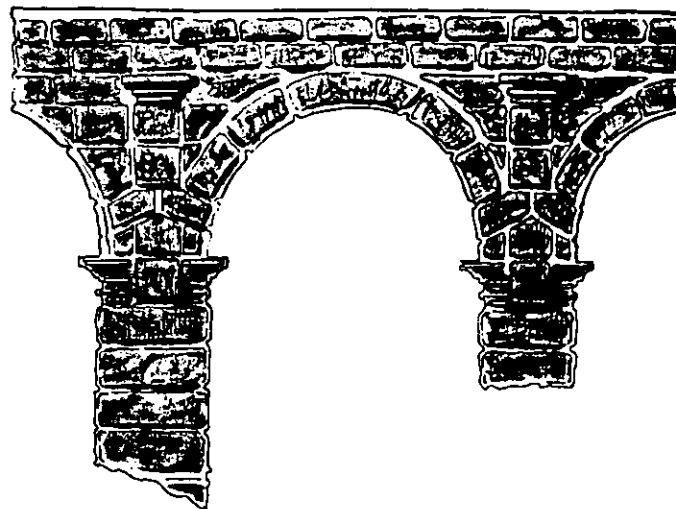
**Police Science 143** 3 Cr.  
**Practical Spanish for Public Service Personnel** 3 Lec.  
Practical Spanish for Public Service Personnel is a conversational Spanish course designed primarily for police officers to provide those persons working in public service with the

fundamental skills to communicate effectively with the Spanish-speaking community they serve. The successful student will develop the necessary minimal skills in understanding, speaking, and listening to the Spanish of the local area. The course will concentrate on a highly specialized vocabulary taught in English and Spanish with extensive conversational drills in Spanish.

**Police Science 144** 3 Cr.  
**Practical Spanish for Public Service Personnel** 3 Lec.  
*Prerequisite:* Police Science 143. A conversational Spanish course to provide those persons working in public service with the fundamental skills to communicate effectively with the Spanish-speaking community they serve. The course will build on understanding, speaking and listening skills established in Police Science 143. Specialized vocabulary and conversational drills in English and Spanish will be continued.

**Police Science 146** 3 Cr.  
**Patrol Administration** 3 Lec.  
*Prerequisite:* Police Science 140. For the student to acquire a basic philosophy and history of systems dealing with patrol functions, to study the principles of organization and func-





# EL CENTRO COLLEGE

## APPLICATION FOR ADMISSION

Complete all items. **PLEASE PRINT!**

1. SOCIAL SECURITY NUMBER:

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2. NAME: give full legal name. Do not use initials unless initials constitute your legal name.

☐ Mr.

☐ Ms.

last name

first

middle

3. ADDRESS:

number & street

city

county

state

zip

4. PHONE:

5. BIRTH DATE:

mo.

day

yr.

6. Give name, if different from above, that will appear on

transcripts from other institutions

7. ETHNIC BACKGROUND:

☐ Caucasian

☐ Negro

☐ Mexican-American

☐ Oriental

☐ American Indian

8. CHECK EACH APPROPRIATE AREA:

Veteran ☐ Yes

☐ No

Do you receive

veteran's benefits?

☐ Yes

☐ No

AGE: ☐ 18 or over

☐ under 18

9. HIGH SCHOOL ATTENDED:

school name

city & state

10. DID YOU GRADUATE?

☐ Yes

☐ No

DATE OF GRADUATION

11. LIST ALL COLLEGES ATTENDED, REGARDLESS OF CREDIT EARNED, INCLUDING THE COLLEGES OF THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT:

college	dates attended	degree
college	dates attended	degree
college	dates attended	degree

12. IF YOU ARE NOT A CITIZEN OF THE UNITED STATES, COMPLETE THE FOLLOWING:

Country of citizenship

Type of Visa

13. RESIDENCY INFORMATION:

Do you live in Dallas county?

Have you lived in Texas for the past twelve months?

IF YOU ARE UNDER 18, COMPLETE THE FOLLOWING:

Have your parents lived in Texas for the past twelve months?

Do your parents live in Dallas County?

Name of Parent or Guardian:

14. IF YOU HAVE EVER SERVED ON ACTIVE DUTY IN THE MILITARY, COMPLETE THE FOLLOWING:

Home of record at time of induction

Date of induction into active duty

Date of release from active duty

Are you requesting an EARLY RELEASE from military service?

15. MAJOR FIELD OF STUDY:

SEMESTER YOU PLAN TO ENTER:

☐ Fall

☐ Spring

☐ 1st Summer

☐ 2nd Summer

17. CHECK ONE

☐ Day student

☐ Night

I CERTIFY THAT THE INFORMATION GIVEN ON THIS APPLICATION IS COMPLETE AND ACCURATE.

Date

Applicant's Signature

---

Place  
Stamp  
Here

**EL CENTRO COLLEGE**  
MAIN AT LAMAR  
DALLAS, TX. 75202

---

FOLD AND SEAL, \_\_\_\_\_

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DO NOT WRITE BELOW THIS LINE

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Health Center  
Main & Lamar Dallas, Texas 75202

This information is strictly for the use of the Health Services and will not be released to anyone without your knowledge and consent.

9

10

32

(OVER)

**I AM INTERESTED IN FURTHER INFORMATION ABOUT:**

	YES	NO		YES	NO
WEIGHT REDUCTION	<u>0</u> 77	<u>1</u> 77	FAMILY PLANNING	<u>0</u> 78	<u>1</u> 78
PRE-MARITAL COUNSELING	<u>0</u> 79	<u>1</u> 79	PRENATAL CARE	<u>0</u> 80	<u>1</u> 80
DRUG ADDICTION	<u>0</u> 81	<u>1</u> 81	FIRST AID	<u>0</u> 82	<u>1</u> 82
AID TO STOP SMOKING	<u>0</u> 83	<u>1</u> 83			

I GRANT PERMISSION FOR AID TREATMENT BY THE HEALTH CENTER STAFF—YES 0 NO 1  
84 84

DO YOU HAVE MEDICAL INSURANCE? YES 0 NO 1  
85 85

Place  
Stamp  
Here

**EL CENTRO COLLEGE**  
HEALTH CENTER  
MAIN AT LAMAR  
DALLAS, TX. 75202

**Print answers to all questions.**

LAST NAME (Print)		FIRST NAME		MIDDLE	
HOME ADDRESS (Number and Street)		CITY OR TOWN	STATE	ZIP CODE	DATE OF BIRTH
NAME, RELATIONSHIP, AND ADDRESS OF NEXT OF KIN					HOME TELEPHONE NUMBER
ENROLLMENT DATE:	MARITAL STATUS:	CITIZEN: U.S.		EMERGENCY TELEPHONE NO.	
	S ____ W ____	Other ____		(While you are in school)	
Fall ____ Spring ____ Summer ____ Year ____	M ____ D ____	Where? ____		Fulltime (12 hours or more) <input type="checkbox"/>	
ARE YOU A VETERAN? Yes ____ No ____				Part-time (less than 12 hours) <input type="checkbox"/>	
REQUIRED IMMUNIZATIONS FOR ALL STUDENTS					

	Completed		Date of Last Injection
	Yes	No	
Diphtheria/Tetanus (within 10 years)			
Polio (if under age 19) (within 10 years)			

REQUIRED OF ALL STUDENTS INCLUDING CURRENT DATE

Chest x-ray Neg. \_\_\_\_ Pos. \_\_\_\_ Date \_\_\_\_  
or  
T.B. skin test Neg. \_\_\_\_ Pos. \_\_\_\_ Date \_\_\_\_

PHYSICIAN'S SIGNATURE \_\_\_\_\_

ADDRESS \_\_\_\_\_

PRINT LAST NAME \_\_\_\_\_ DATE \_\_\_\_\_

Return all information to:  
DIRECTOR, HEALTH CENTER  
El Centro College  
Dallas, Texas 75202

tion of the patrol operation and to relate these problems to current operational activities. The course offers in-depth study into operational analyses so that students may have an overview of the role of the patrol function in today's society. Patrol administration problems are studied and an analysis of alternate solutions is made. The objectives of the course are analysis of present patrol operations, attempt to establish new rationale and increase the capabilities of the patrol function.

**Police Science 233** 3 Cr.  
**Introduction Criminalistics** 3 Lec.

*Prerequisite: Police Science 140 and 240.* Physical evidence in criminal investigation relative to recognition, collection, preservation and laboratory processing; overview of instrumental methods, development of identification and comparison techniques through examination of photographs of evidence from actual laboratory cases.

**Police Science 240** 3 Cr.  
**Criminal Investigation** 3 Lec.

*Prerequisite: Police Science 140.* The course will present: (1) the basic theories of investigation, including criminalistics and the crime scene search, (2) common techniques of modern criminal investigation, and (3) patterns of legal, scientifically oriented methodology in criminal investigation. This is a comprehensive course designed to provide the theory and practical techniques necessary to conduct a complex investigation. The course includes an examination of investigative techniques, legal procedures, and basic scientific analysis.

**Police Science 241** 3 Cr.  
**Police Role in Crime and Delinquency** 3 Lec.

*Prerequisite: Police Science 140.* This course presents basic philosophies of law enforcement in the prevention and control of delinquency, to observe trends in police services for delinquent, neglected and special-problem juveniles, and to study patterns of law enforcement organization in dealing with delinquent behavior. This is a basic course designed to provide an introduction to more advanced courses in criminology and rehabilitation. The course includes a review of social and psychological studies dealing with causal factors in delinquency cases. Sociological, psychological and biological factors are discussed as they relate to criminal activity, legal concepts in the treatment of juvenile offenders are reviewed.

**Police Science 242** 3 Cr.  
**Juvenile Procedures** 3 Lec.

*Prerequisite: Police Science 140.* The course is designed to integrate and synthesize the significant contributions resulting from recent research in the field of juvenile procedures and to present new materials in the field. An attempt is made to discuss major responsibilities of police work with children and youth in developing the student's understanding and appreciation of the intricacy of the police function and modern police philosophy in working with juveniles.

**Police Science 243** 3 Cr.  
**Probation and Parole** 3 Lec.

*Prerequisite: Police Science 140.* This course is an elective course, designed as an introduction to the many faceted subject of criminal corrections. Through this survey course the student will be exposed to the historical development of this integral part of today's Criminal Justice System.

**Police Science 244** 3 Cr.  
**Traffic Planning and Administration** 3 Lec.

*Prerequisite: Police Science 140.* This course is designed to provide the student with an understanding of the magnitude and complexities of the traffic problem. On successful completion he will have a working knowledge of the methods and techniques used by the various agencies to eliminate or to control these problems. This course will enable the student to evaluate any program with which he may come in contact and will also put him in a position to offer constructive criticism and remedies.

**Police Science 245** 3 Cr.  
**Traffic Law** 3 Lec.

*Prerequisite: Police Science 140.* Course is designed to provide the student an opportunity to acquire a knowledge of the basic principles of traffic control, traffic law enforcement and traffic court procedures in the context of Texas traffic laws. Emphasis is placed upon the need for a professional approach in dealing with traffic law violators, the police role in accident prevention and investigation, and the principles of education, enforcement and engineering. The objectives of the course having been met by the student, he will function as a more knowledgeable officer in the field of traffic supervision.

**Police Science 246** 3 Cr.  
**Penology (Jail Operation and Management)** 3 Lec.

*Prerequisite: Police Science 140.* The purpose of this elective course is to afford the student the opportunity to acquaint himself with the basic concepts of penology as they apply to today's criminal justice official. An overview of the operation and management of a penal institution is presented along with the rationale for the existence of the penal institution.

## Psychology

**Psychology 103** 3 Cr.  
**Sex Roles in American Society** 3 Lec.

A study of the physiological, psychological and sociological aspects of human sexuality. The student may register for either Psychology 103 or Sociology 103, but may receive credit in only one of the two.

**Psychology 105** 3 Cr.  
**Introduction to Psychology** 3 Lec.

A study of basic problems and principles of human experience and behavior: heredity and environment, the nervous system, motivation, learning, emotions, thinking and intelligence. (This course is offered on campus and via television.)

**Psychology 131** 3 Cr.  
**Human Relations** 3 Lec.

A study involving the direct application of psychological principles to human relations problems in business and industry. Consideration is given to group dynamics and adjustment factors related to employment and advancement. The presentation will be tailored to fit the needs of the students enrolled in each section.

**Psychology 201** 3 Cr.  
**Developmental Psychology** 3 Lec.

*Prerequisite: Psychology 105.* A study of human growth, development and behavior, emphasizing the psychological changes which occur during the life pattern. The processes of life from prenatal beginnings to adulthood are treated in an integrated manner. Due attention is given to aging and its place in the developmental sequence. (This course is offered on campus or via television.)

**Psychology 202** 3 Cr.  
**Applied Psychology** 3 Lec.

*Prerequisite: Psychology 105.* A course designed for the application of psychological facts and principles to problems and activities of life. Special emphasis will be placed on observing, recording, and modifying human behavior. Some off-campus work may be required.

**Psychology 205** 3 Cr.  
**Psychology of Personality** 3 Lec.

*Prerequisite: Psychology 105.* A consideration of the important factors involved in successful human adjustment including child-parent relationships, adolescence, anxiety states, mechanisms of defense and psychoanalytic concepts. The course includes a survey of methods of personality measurement.

**Psychology 207** 3 Cr.  
**Social Psychology** 3 Lec.

*Prerequisite: Psychology 105 and/or Sociology 101.* A survey of the research and theories dealing with individual behavior in the social environment. Topics include sociopsychological process, attitude formation and change, interpersonal relations, and group processes. The student may register for either Psychology 207 or Sociology 207, but may receive credit in only one of the two.

## Radiologic Technology

**Radiologic Technology 120** 1 Cr.  
**Applied Anatomy and Physiology** 1 Lec., 1 Lab.

*Prerequisite: Admission to program and concurrent enrollment in Biology 120 or equivalency.* Osteology of the upper and lower extremities, pectoral and pelvic girdles. Laboratory fee required.

**Radiologic Technology 121** 1 Cr.  
**Applied Anatomy and Physiology** 1 Lec., 1 Lab.

*Prerequisite: "C" average in Radiologic Technology 120, 130, 141 and concurrent enrollment in Biology 121 or equivalency.* Osteology of the thoracic cage, vertebral column and skull. Laboratory fee required.

**Radiologic Technology 130** 3 Cr.  
**Radiologic Fundamentals** 1 Lec., 5 Lab.

*Prerequisite: Admission to program, high school biology or Biology 115 and Biology 116.* A study of medical terminology, radiographic positioning, radiographic exposure and physics, and nursing procedures. Laboratory fee required.

**Radiologic Technology 133** 6 Cr.  
**Clinical Education II and Film Critique** 24 Lab.

*Prerequisite: "C" average in Radiologic Technology 120, 130 and 141.* Students receive practical experience in a hospital radiology department.

**Radiologic Technology 134** 1 Cr.  
**Radiologic Principles** 1 Lec., 2 Lab.

*Prerequisite: "C" average in Radiologic Technology 121, 133, and 142, Biology 121 and concurrent enrollment in Radiologic Technology 135.* Continuing study of radiographic positioning, radiographic exposure, physics, nursing procedures and surgical procedures anatomy of the digestive and urinary systems will be emphasized. Thirteen week course.

**Radiologic Technology 135** 9 Cr.  
**Clinical Education III and Film Critique** 36 Lab.

*Prerequisite: "C" average in Radiologic Technology 121, 142, and 133.* Students receive practical experience in a hospital radiology department for thirteen weeks.

**Radiologic Technology 141** 4 Cr.  
**Orientation and Clinical Education I** 16 Lab.

*Prerequisite: Concurrent enrollment in radiologic technology 120 and 130.* The first seven weeks will consist of a study of elementary radiation protection, history of X-ray, professional ethics, darkroom chemistry, film critique, basic positioning, and a seminar session. For the remaining weeks, the students will be assigned to a Dallas area hospital for supervised practice in a radiology department in which an adequate variety and number of experiences are available. Students will work closely with experienced technologists, where they will observe and assist in handling patients as they undergo radiologic examination.

**Radiologic Technology 142** 4 Cr.  
**Radiologic Principles** 2 Lec., 5 Lab.

*Prerequisite: "C" average in Radiologic Technology 120, 130, 141, Biology 120 and concurrent enrollment in Radiologic Technology 121, and 133.* Continuing study of medical terminology, radiographic positioning, radiographic exposure, physics, and nursing procedures. Laboratory fee required.

**Radiologic Technology 230** 4 Cr.  
**Advanced Radiologic Principles** 2 Lec., 6 Lab.

*Prerequisite: "C" average in Radiologic Technology 134, 135.* A study of Radiographic Positioning II, Radiographic Exposure II, survey of medical and surgical diseases, special procedures, special techniques and radiotherapy. Laboratory fee required.

**Radiologic Technology 232** 2 Cr.  
**Advanced Radiologic Techniques** 1 Lec., 3 Lab.

*Prerequisite: "C" average in Radiologic Technology 230 and 241.* Continuing study of Radiographic Positioning II, Radiographic Exposure II. Radiation protection, radiobiology and nuclear medicine will be emphasized. Laboratory fee required.

**Radiologic Technology 234** 1 Cr.  
**General Review** 1 Lec., 2 Lab.

*Prerequisite: "C" average in Radiologic Technology 230 and 231.* This course is designed to review all subjects in radiology technology in order to fully prepare the student for the American Registry of Radiologic Technologists.



**Radiologic Technology 235** 9 Cr.  
**Clinical Education VI and Film Critique** 36 Lab.

*Prerequisite: "C" average in Radiologic Technology 230 and 241.* Students receive practical experience in a hospital radiology department for thirteen weeks.

**Radiologic Technology 241** 5 Cr.  
**Clinical Education IV and Film Critique** 20 Lab.

*Prerequisite: "C" average in Radiologic Technology 134 and 135.* Students receive practical experience in a hospital radiology department.

**Radiologic Technology 243** 8 Cr.  
**Clinical Education V and Film Critique** 32 Lab.

*Prerequisite: "C" average in Radiologic Technology 230 and 241.* Students receive practical experience in a hospital radiology department.

# Reading

**Reading 101** 3 Cr.  
**Effective College Reading** 3 Lec.  
 Reading 101 emphasizes comprehension techniques in reading fiction and non-fiction. Improved critical reading skills including analysis, critique and evaluation of written material are explored. Reading comprehension and flexibility of reading rate are stressed. In addition, advanced learning techniques in listening, note-taking, underlining, concentration, and reading in specialized academic areas are developed.

# Religion

**Religion 101** 3 Cr.  
**Religion in American Culture** 3 Lec.  
 A systematic examination of religion in American culture. Emphasis upon the characteristics of American religion, an objective study of various religious groups, and an examination of the relation of religion to the arts and other cultural phenomena.

**Religion 103** 3 Cr.  
**Introduction to Philosophy of Religion** 3 Lec.  
 Investigation of basic problems in philosophy of religion: faith and reason, the existence of God, the nature of religious language and literature, evil and human destiny. Analysis of the effect of religious belief and practice upon social and moral life in both eastern and western traditions.

**Religion 201** 3 Cr.  
**Major World Religions** 3 Lec.  
*Prerequisite:* Sophomore standing or consent of instructor recommended. A survey of major world faiths, the course will concentrate on the basic texts of Eastern and Western religions and on the creative personalities of their founders. There will be some consideration of the problems of 'objective' study of religions, of primitive religions, and of alternatives to major world religions such as astrology and atheism.

# Respiratory Therapy

**Respiratory Therapy 137** 4 Cr.  
**Basic Respiratory Therapy Skills and Practice I** 3 Lec., 6 Lab.  
 Provides Orientation to the field of Respiratory Therapy and to Hospital environment and also instruction, observation and practice in the laboratory and in the hospital of patient care and respiratory therapy techniques. Laboratory fee required.

**Respiratory Therapy 138** 4 Cr.  
**Clinical Practice II** 16 Lab.  
*Prerequisite:* A grade of "C" or better on all Respiratory Therapy courses. Provides practice in procedures related to peri-

odic positive pressure therapy, chest physiotherapy, special pediatric assemblies and introduction to volume ventilators.

**Respiratory Therapy 139** 2 Cr.  
**Clinical Practice III** 16 Lab.  
*Prerequisite:* "C" or better in all previous Respiratory Therapy courses. Provides practice in periodic positive pressure therapy with critical patients in critical care areas.

**Respiratory 140** 2 Cr.  
**Clinical Practice IV** 16 Lab.  
*Prerequisite:* A grade of "C" or better in all Respiratory Therapy courses. Continued practice at Respiratory Therapy procedures in critical care areas with emphasis on continuous ventilation and blood gases.

**Respiratory Therapy 141** 2 Cr.  
**Medications** 2 Lec.  
*Prerequisite:* Completion of first semester courses of Certification Training Program with a G.P.A. of 2.0 or better. Provides instruction in the identification, classification, dosage and dilution calculation, principal and side effects of inhalational medications. Identification of other medications in common use and their possible effect on cardio-respiratory function is included.

**Respiratory Therapy 144** 2 Cr.  
**Pathology and Treatment Rationale I** 2 Lec.  
*Prerequisite:* Completion of first semester requirements of either program with a G.P.A. of 2.0 or better. Provides a description of the normal conditions and the deviation from normal in specific disease states with an assessment of reversibility and an expression of the intent of therapy.

**Respiratory Therapy 145** 4 Cr.  
**Basic Technology I** 3 Lec., 4 Lab.  
*Prerequisite:* Fulfillment of first semester requirements with a G.P.A. of 2.0 or better. Provides instruction in specific details of design and function of respiratory therapy equipment, routine maintenance procedures, detection and correction of malfunction. Provides practice in adapting, applying and modifying equipment in the patient care situation. Laboratory fee required.

**Respiratory Therapy 146** 1 Cr.  
**Pharmacology I** 1 Lec.  
*Prerequisite:* Completion of first semester requirements for Associate Degree Program with a G.P.A. of 2.0 or better. Covers rapidly the material included in Medications and then provides for the student with a foundation in physiology and chemistry, the detail of the mode of action, interaction and indications for respiratory, cardiovascular, central nervous system, renal and antimicrobial medication.

**Respiratory Therapy 147** 2 Cr.  
**Clinical Practice II** 8.8 Lab.  
*Prerequisite:* Completion of Respiratory Therapy 143 with a grade of "C" or better. Provides practice in procedures related to periodic positive pressure therapy, chest physiotherapy, tent therapy.

**Respiratory Therapy 148** 3 Cr.  
**Basic Technology II** 6 Lec., 7 Lab.  
*Prerequisite:* A grade of "C" or better in Basic Technology I. Fulfillment of second semester requirements with an overall G.P.A. of 2.0 or better. A continuation of Basic Technology I. Summer only.

**Respiratory Therapy 149** 2 Cr.  
**Pathology and Treatment Rationale II** 2 Lec.  
*Prerequisite:* Completion of Pathology and Treatment Rationale I with a grade of "C" or better. A continuation of Pathology and Treatment Rationale I to include the spectrum of commonly encountered disease states and associated gas exchange and ventilatory defects and their potential reversibility with therapy.

**Respiratory Therapy 150** 2 Cr.  
**Clinical Practice III** 23 Lab.  
*Prerequisite:* Completion of Respiratory Therapy 147 with a grade of "C" or better. Overall "C" average in respiratory therapy courses. Provides continuing practice in patient care procedure plus cardiopulmonary resuscitation techniques, checking and testing CPR equipment, systems assembly for gas mixtures, special pediatric assemblies.

**Respiratory Therapy 240** 1 Cr.  
**Pharmacology II** 1 Lec.  
*Prerequisite:* A grade of "C" or better in Pharmacology I. Fulfillment of all first year requirements with a G.P.A. of 2.0 or better. A continuation of Pharmacology I.

**Respiratory Therapy 242** 2 Cr.  
**Advanced Physiology and Pathology** 2 Lec.  
*Prerequisite:* Completion of all first year Associate Degree requirements with a G.P.A. of 2.0 or better. Provides study, in depth, of disease states related to cardiorespiratory function and the application and interpretation of related diagnostic, evaluative and therapeutic procedures.

**Respiratory Therapy 243** 3 Cr.  
**Advanced Technology and Instrumentation I** 2 Lec., 3 Lab.  
*Prerequisite:* Completion of all first year Associate Degree Program requirements with a G.P.A. of 2.0 or better. Provides instruction in basic electricity, electronics, mechanics and fluidics and their application and utilization in the design and function of volume ventilators and other equipment.

**Respiratory Therapy 244** 2 Cr.  
**Clinical Practice IV** 8.8 Lab.  
*Prerequisite:* Completion of Respiratory Therapy 150 with a grade of "C" or better. Overall "C" average in respiratory therapy courses. Provides practice in periodic positive pressure therapy with critical patients and in the emergency and recovery room.

**Respiratory Therapy 245** 2 Cr.  
**Clinical Practice V** 8.8 Lab.  
*Prerequisite:* Completion of Clinical Practice IV with a grade of "C" or better. Overall "C" average in respiratory therapy courses. Provides practice in the care of continuous ventilator patients including monitoring and equipment change, observation and assistance in airway care and weaning procedures.

**Respiratory Therapy 246** 3 Cr.  
**Advanced Technology and Instrumentation II** 2 Lec., 3 Lab.  
*Prerequisite:* Completion of Respiratory Therapy 243 with a grade of "C" or better. A continuation of Respiratory Therapy 243 including instruction, discussion and practice related laboratory and monitoring equipment and use test evaluation of new equipment.

**Respiratory Therapy 248** 3 Cr.  
**Survey and Critique of Current Literature** 3 Lec.  
*Prerequisite:* Overall "C" average in respiratory therapy courses. Provides instruction in use of medical school library facilities, research techniques, elementary statistical and experimental method and opportunity for discussion of current articles related to respiratory therapy and cardiorespiratory medicine.

**Respiratory Therapy 249** 3 Cr.  
**Seminar and Case Presentation** 3 Lec.  
*Prerequisite:* Summer graduation scheduled. G.P.A. of 2.0 or better. Provides physician directed in-depth study, presentation and discussion of case histories involving cardiorespiratory problems.

**Respiratory Therapy 254** 1 Cr.  
**Instructional and Management Methods I** 1 Lec., 1 Lab.  
 Designed to give the potential Therapist direction and practice in education of co-workers and physicians and instructing patients, families and trainees. Also designed to provide instruction, discussion and practice in problem solving related to Respiratory Therapy Department operations.

**Respiratory Therapy 260** 4 Cr.  
**Clinical Procedures IV** 16 Lab.  
*Prerequisite:* A grade of "C" or better in all respiratory therapy courses. Provides practice in periodic positive pressure therapy with critical patients and in the emergency and recovery room. Also, provides practice in the care of continuous ventilator patients including monitoring and equipment change, observation and assistance in airway care and weaning procedures.

**Respiratory Therapy 261** 4 Cr.  
**Clinical Procedures V** 16 Lab.  
*Prerequisite:* A grade of "C" or better in all respiratory therapy courses. Provides practice in assuming total responsibility for continuous ventilator patients including monitoring, airway care and weaning. The content of clinical procedures V is arranged to assure each student's participation in the





preoperative evaluation, observation of surgery, post-operative management of thoracic surgery patients, pediatric intensive care, acute and chronic disease management and cardiopulmonary rehabilitation.

**Respiratory Therapy 262** 2 Cr.  
**Clinical Procedures VI** 16 Lab.

*Prerequisite:* A grade of "C" or better in all respiratory therapy courses. Provides students with final exposure to critical care procedures and validation of all respiratory therapy procedures previously learned. Last clinical before graduation.

## Salesmanship

(See Business 230)

## Science

**Science 100** 3 Cr.  
**History of Science** 3 Lec.

A study of the development of scientific knowledge, including biology, genetics, chemistry, mathematics, astronomy, architecture, industrial technology, and ethical considerations relating to the use of scientific knowledge. (This course is offered via television.)

## Secretarial Training

(See Business 162)

## Shorthand

(See Business 159, 166 266)

## Sociology

**Sociology 101** 3 Cr.  
**Introduction to Sociology** 3 Lec.

An inquiry into the nature of society and the foundations of group life, including institutions, with a broad presentation of the bases of social change, processes and problems.

**Sociology 102** 3 Cr.  
**Social Problems** 3 Lec.

*Prerequisite:* Sociology 101. A study of the background, emergence and scope of current group relationships in our society, emphasizing topics as they apply to social adjustment in the family and the total community environment.

**Sociology 103** 3 Cr.  
**Sex roles in American Society** 3 Lec.

A study of the physiological, psychological and sociological aspects of human sexuality. The student may register for either Sociology 103 or Psychology 103, but may receive credit in only one of the two.

**Sociology 203** 3 Cr.  
**Marriage and Family** 3 Lec.

*Prerequisite:* Sociology 101 recommended. An analysis of courtship patterns, marriage and family forms, relationships and functions, and sociocultural differences in family behavior.

**Sociology 204** 3 Cr.  
**American Minorities** 3 Lec.

*Prerequisite:* Sociology 101 and/or six hours of U.S. History recommended. The principal minority groups in American society; their sociological significance and historic contributions. An emphasis will be placed on problems of inter-group relations, social movements and related social changes occurring on the contemporary American scene. The student may register for either History 204 or Sociology 204.

**Sociology 206** 3 Cr.  
**Introduction to Social Work** 3 Lec.

*Prerequisite:* Consent of instructor required. Development of the philosophy and practice of social work in the United States; survey of the fields and techniques of social work; attention given to requirements for training in social work.

**Sociology 207** 3 Cr.  
**Social Psychology** 3 Lec.

*Prerequisite:* Psychology 105 and/or Sociology 101. A survey of the research and theories dealing with individual behavior in the social environment. Topics include socio-psychological process, attitude formation and change, interpersonal relations, and group processes. The student may register for either Psychology 207 or Sociology 207, but may receive credit in only one of the two.

**Sociology 210** 3 Cr.  
**Field Studies in American Minorities** 3 Lec.

*Prerequisite:* Sociology 101 or Sociology 204. Assignment on a rotating basis to Indian, Black, and Mexican-American community centers to work under professional supervision in a task-oriented setting.

## Spanish

**Spanish 101** 4 Cr.  
**Beginning Spanish** 3 Lec., 2 Lab.

Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression. Laboratory fee required.

**Spanish 102** 4 Cr.  
**Beginning Spanish** 3 Lec., 2 Lab.

*Prerequisite:* Spanish 101 or equivalent. Continuation of Spanish 101 with emphasis on idiomatic language and complicated syntax. Laboratory fee required.

**Spanish 201** 3 Cr.  
**Intermediate Spanish** 3 Lec.

*Prerequisite:* Spanish 102 or equivalent or consent of the instructor. Reading, composition, grammar review and intense oral practice.

**Spanish 202** 3 Cr.  
**Intermediate Spanish** 3 Lec.

*Prerequisite:* Spanish 201 or equivalent. Continuation of Spanish 201 with reading selections drawn more directly from contemporary literary sources. Composition.

## Speech

**Speech 105** 3 Cr.  
**Fundamentals of Public Speaking** 3 Lec.

An introductory course in public speaking. Principles of reasoning. Emphasis upon the delivery of carefully prepared speeches. Special attention to audience analysis, collection of materials, and outlining.

**Speech 109** 3 Cr.  
**Voice and Articulation** 3 Lec.

A study of the mechanics of speech applied to the improvement of the individual's voice and pronunciation.

**Speech 205** 3 Cr.  
**Discussion and Debate** 3 Lec.

A study of theories and application of techniques of public discussion and argumentation. Special emphasis on development of ability to evaluate, analyze, and think logically, through application to current problems.

## T.V. and Radio Electronics

**Television and Radio Electronics 141** 3 Cr.  
**Resistive and Reactive Circuits** 6 Lab.

This is an introductory course that covers the basic concepts of Ohm's Law, and reactances. These concepts will be introduced with the associated components of resistors, capacitors and inductors. No prior knowledge of electronics is required to take this course. All day students must be concurrently enrolled in Television and Radio Electronics 141, 142, 143 and 144. All night student should enroll in Television and Radio Electronics 141 and 142. Laboratory fee required.

**Television and Radio Electronics 142** 3 Cr.  
**Meters and Test Equipment** 6 Lab.

This course builds upon the concepts of resistance and reactance. The student will learn preliminary troubleshooting techniques of elementary circuits through the use of meters and other various electronic test equipment. All day students must be concurrently enrolled in Television and Radio Electronics 141, 142, 143 and 144. All night students should enroll in Television and Radio Electronics 141 and 142. Laboratory fee required.

**Television and Radio Electronics 143** 3 Cr.  
**Tube Circuits** 6 Lab.

This course covers the topics of diodes, triodes, pentodes, beam power and cathode-ray tubes. These various tubes will be taught in view of radio and television circuitry. All day students must be concurrently enrolled in Television and Radio Electronics 141, 142, 143 and 144. All night students should enroll in Television and Radio Electronics 143 and 144. Laboratory fee required.

**Television and Radio Electronics 144** 3 Cr.  
**Solid State Circuitry** 6 Lab.

This course covers the topics of solid state devices such as diodes, transistors, SCR's FET's Zeniors and IC's. These devices will be taught in view of radio and television circuitry. All day students must be concurrently enrolled in Television and Radio Electronics 141, 142, 143 and 144. All night students should be enrolled in Television and Radio Electronics 143 and 144. Laboratory fee required.

**Television and Radio Electronics 146** 3 Cr.  
**Radio and Television Techniques I** 6 Lab.

This course covers the presentation of radio and television standards for transmission and receiving of black and white and color signals. These standards include video band pass

requirements, sweep and synchronization, color vectors, and audio band pass. It will also bring into focus some problems that may be encountered in troubleshooting these circuits. All day students should enroll concurrently in Television and Radio Electronics 146, 147, 148 and 149. All night students should enroll in Television and Radio Electronics 146 and 147. Laboratory fee required.

**Television and Radio Electronics 147** 3 Cr.  
**Radio and Television Techniques II** 6 Lab.

This course directs the student to specific television fundamentals, such as circuit types (amplifiers, oscillators, rectifiers) and their relation to the television signal, and basic servicing factors as applied to black and white television. All day students must be concurrently enrolled in Television and Radio Electronics 146, 147, 148 and 149. All night students should be enrolled in Television and Radio Electronics 146 and 147. Laboratory fee required.

**Television and Radio Electronics 148** 3 Cr.  
**Radio and Television Techniques III** 6 Lab.

This course is an advanced study of servicing fundamentals and alignment of black and white and color television. The servicing fundamentals include proper use of test equipment such as, a volt ohm meter, vacuum tube or transistor volt meter, oscilloscope, RF and audio oscillators, and sweep generators, field strength meter, and CRT testers. The topics of TV antenna and antenna systems will be stressed. All day students should enroll concurrently in Television and Radio Electronics 146, 147, 148 and 149. All night students should enroll in Television and Radio Electronics 148 and 149. Laboratory fee required.

**Television and Radio Electronics 149** 3 Cr.  
**Radio and Television Techniques IV** 6 Lab.

Servicing fundamentals and skills taught in this course are those used trouble-shooting the latest model black and white and color television receivers, including solid state and tube television. All day students should enroll concurrently in Television and Radio Electronics 146, 147, 148 and 149. All night students should enroll in Television and Radio Electronics 148 and 149. Laboratory fee required.

**Television and Radio Electronics 151** 3 Cr.  
**Television and Radio Mathematics** 3 Lec.

The mathematical concepts presented in this course will be sequenced in such a manner as to reinforce the students' knowledge of mathematics prior to their implementation in television and radio electronics courses.

**Television and Radio Electronics 152** 3 Cr.  
**Customer Relations** 3 Lec.

This course will acquaint the student with some of the techniques used in discussing such problems as bill collection, implementation of servicing problems, and how to soothe an irate customer. The instructional approach used in this course will be primarily role-playing.

**Television and Radio Electronics 154** 3 Cr.  
**Technical Logic** 3 Lec.

In this course the student will learn to translate printed material into motion that will result in the accomplishment of a physical objective.

## Theatre

**Theatre 100** 1 Cr.  
**Rehearsal and Performance** 4 Lab.

*Prerequisite:* Acceptance as a member of the cast or crew of a major production. Participation in the class includes the rehearsal and performances of the current theatrical presentation of the Division. May be repeated for credit. Credit limited to one hour per semester.

**Theatre 101** 3 Cr.  
**Introduction to the Theatre** 3 Lec.

A general survey designed to acquaint the student with the various aspects of theatre, plays and playwrights, directing and acting, theatres, artists, and technicians.

**Theatre 102** 3 Cr.  
**Contemporary Theatre** 3 Lec.

A study of the modern theatre and cinema as art forms, with attention to the historical background and traditions of each. Emphasis is placed on a better understanding of the social, cultural, and aesthetic significance of these media in today's life. Includes the reading of a number of modern plays and the viewing of specially selected films.

**Theatre 103** 3 Cr.  
**Stagecraft I** 2 Lec., 3 Lab.

A study of the technical aspects of play production including set design and construction, stage lighting, make-up, costuming, and related areas.

**Theatre 104** 3 Cr.  
**Stagecraft II** 2 Lec., 3 Lab.

*Prerequisite:* Theatre 103 or consent of instructor. A continuation of Theatre 103 with emphasis on individual projects in set and lighting design and construction, including further exploration of the technical aspects of play production.



**Theatre 105** 3 Cr.  
**Make-up for the Stage** 3 Lec.  
 Theory and practice of the craft of make-up. Laboratory fee required.

**Theatre 106** 3 Cr.  
**Acting I** 2 Lec., 3 Lab.  
 Individual and group activity with theory and exercises in bodily control, voice, pantomime, interpretation, characterization, and stage movement. Analysis and study of specific roles for stage presentation.

**Theatre 107** 3 Cr.  
**Acting II** 2 Lec., 3 Lab.  
*Prerequisite:* Theatre 106 or consent of instructor. Continuation of Theatre 106 with emphasis on problems of complex characterization, ensemble acting, stylized acting and acting in period days.

**Theatre 108** 3 Cr.  
**Movement for the Stage** 2 Lec., 3 Lab.  
 A study of movement as both a pure form as well as its relation and integration with the Theatre Arts. The course will include movement as a technique to control balance, rhythm, strength, and flexibility. Movement will be explored as it is used in all the theatrical forms and in development of characterization. May be repeated for credit.

**Theatre 109** 3 Cr.  
**Voice and Articulation** 3 Lec.  
 Same as Speech 109. The student may not receive credit for both Theatre 109 and Speech 109.

**Theatre 110** 3 Cr.  
**History of Theatre I** 3 Lec.  
 Survey of theatre from its beginning through the sixteenth century. Study of the theatre in each period as a part of the total culture of the period.

**Theatre 111** 3 Cr.  
**History of Theatre II** 3 Lec.  
 Development of the theatre from the seventeenth century through the twentieth century.

**Theatre 112** 3 Cr.  
**Beginning Dance Technique in Theatre** 2 Lec., 3 Lab.  
 Course designed to promote body balance, improve manipulation of trunk and limbs, and facilitate the rhythmic flow of physical energy. Exploration of basic movements of the dance with emphasis on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements.

**Theatre 115** 2 Cr.  
**Mime** 1 Lec., 2 Lab.  
*Prerequisite:* Stage Movement, Theatre 106. Exploration of the expressive significance and techniques of mime.

**Theatre 205** 3 Cr.  
**Scene Study (Theatre)** 2 Lec., 3 Lab.  
*Prerequisite:* Theatre 106, 107. Continuation of Acting II with emphasis on developing character through detailed study of the play script. Students will deal with the stylistic problems presented by the staging of period plays, concentrating primarily on Ibsen, Chekov, and the development of early realism.

**Theatre 206** 3 Cr.  
**Intermediate Dance Technique in Theatre** 2 Lec., 3 Lab.  
*Prerequisite:* Theatre 105 or permission of instructor. A general survey to acquaint the student with the various aspects of dance and its role in total theatre, including the evolution of dance styles. Exploration of jazz style emphasizing flow

movement, body placement, dynamic intensity, level, focus, and direction.

**Theatre 207** 3 Cr.  
**Scene Study II** 2 Lec., 3 Lab.  
*Prerequisites:* Theatre 205. Continuation and intensification of theatre 205 with concentration upon individual needs of the performer. Conference and scheduled rehearsals in preparation for scene work.

**Theatre 209** 3 Cr.  
**Lighting Design** 2 Lec., 3 Lab.  
*Prerequisite:* Theatre 103 and 104. A study of design and techniques of lighting in the theatre. Practical experience in departmental productions required for one semester.

**Theatre 235** 3 Cr.  
**Costume History** 3 Lec.  
*Prerequisite:* Theatre 110 or 111. The study of costumes and their use on the stage from the earliest times to the present.

## Typing

(See Business 172, 174, 273)

## Vocational Nursing

**Vocational Nursing 130** 3 Cr.  
**Anatomy and Physiology** 4 Lec.  
*Prerequisite:* Admission to program. Basic theory on structure and function of the body and its systems. An 11 week course, 42 clock hours.

**Vocational Nursing 131** 3 Cr.  
**Pharmacology** 4 Lec.  
*Prerequisite:* Admission to program. Studies the classification, calculation and administration technique of drugs with emphasis placed on effects of drugs. An 11 week course, 46 clock hours.

**Vocational Nursing 132** 2 Cr.  
**Nutrition** 2 Lec.  
*Prerequisite:* Admission to program. Stresses the importance of proper nutrition for good health — includes diet therapy. A 15 week course, 30 clock hours.

**Vocational Nursing 133** 1 Cr.  
**Geriatrics** 2 Lec.  
*Prerequisite:* Admission to the program. Study geared to the physiological, psychological, social and emotional conditions peculiar to the older individual. A six week course, 12 clock hours.

**Vocational Nursing 134** 1 Cr.  
**Professional Vocational Adjustment** 2 Lec.  
*Prerequisite:* Admission to program. An introduction to the meaning of "Vocational Nurse"; the requirements, expectations and opportunities which are ever present in this nursing field. An 8 week course: 15 clock hours.

**Vocational Nursing 135** 2 Cr.  
**Mental Health and Mental Illness** 2 Lec.  
*Prerequisite:* Admission to program. The significance of good mental health is stressed as it relates to individual's needs;

and effects. treatment and nursing care of mental illness is also included in this subject area. A 15 week course: 30 clock hours.

**Vocational Nursing 136** 1 Cr.  
**Disease Prevention and Control** 2 Lec.  
*Prerequisite:* Admission to program. Exposes the student to causes of illness and the importance of maintaining cleanliness as related to disease control. An 8 week course: 15 clock hours.

**Vocational Nursing 137** 7 Cr.  
**Nursing Skills** 4 Lec., 14 Lab.  
*Prerequisite:* Admission to program. The basic theory and practice of skills necessary to the vocational nurse are combined in a classroom-lab-hospital setting. A 17 week course: 303 clock hours. Laboratory fee required.

**Vocational Nursing 138** 1 Cr.  
**Introduction to Maternity Nursing** 2 Lec.  
*Prerequisite:* Admission to program. An introduction to obstetrics in theory. An 8 week course: 15 clock hours.

**Vocational Nursing 139** 2 Cr.  
**Maternity and Newborn** 5 Lec.  
*Prerequisite:* Successful completion of all spring semester courses in Vocational Nursing. Introduces the student to a study of the family through related subjects as human development with emphasis on pregnancy, childbirth, post-natal care and the newborn. A 7 week course: 35 clock hours. Students not completing this course successfully will be dropped from the program.

**Vocational Nursing 140** 2 Cr.  
**Pediatrics** 5 Lec.  
*Prerequisite:* Successful completion of all Vocational Nursing spring courses. This course includes health, growth periods and disease conditions during childhood. A 6 week course: 30 clock hours. Students not completing this course successfully will be dropped from the program.

**Vocational Nursing 141** 8 Cr.  
**Clinical Experience** 33 Lab.  
*Prerequisite:* Successful completion of all spring Vocational Nursing courses. The application of theory and skills in relation to nursing care including the physical, emotional and spiritual needs of the patient. A 16 week course: 525 clock hours. Students not meeting the clinical requirements will be dropped from the program.

**Vocational Nursing 142** 6 Cr.  
**Medical and Surgical Nursing** 6 Lec.  
*Prerequisite:* Successful completion of all Vocational Nursing spring and summer courses. A study of medical and surgical conditions involving the body systems with emphasis placed on nursing care-observations, reporting and recording. A 17 week course: 96 clock hours. Students not completing this course successfully will be dropped from the program.

**Vocational Nursing 143** 9 Cr.  
**Clinical Experience** 34 Lab.  
*Prerequisite:* Successful completion of all previous Vocational Nursing courses. The application of theory and skills with hospital experience in giving safe, competent nursing care. A 17 week course: 589 clock hours. Students who do not meet the requirements of this course will be dropped from the program.

## Word Processing

(See Business 165 and 265)





# Faculty

**Abbott, Richard W.** VICE PRESIDENT OF STUDENT SERVICES; Sam Houston State College, B.S.; Southern Methodist University, M.L.A.

**Agnew, Robert L.** CHAIRMAN, DIV. OF SCIENCE AND MATHEMATICS, North Texas State University, B.A.; M.A.

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**Alders, Johnnyce** COUNSELOR, Oklahoma State University, B.A.; M.A.

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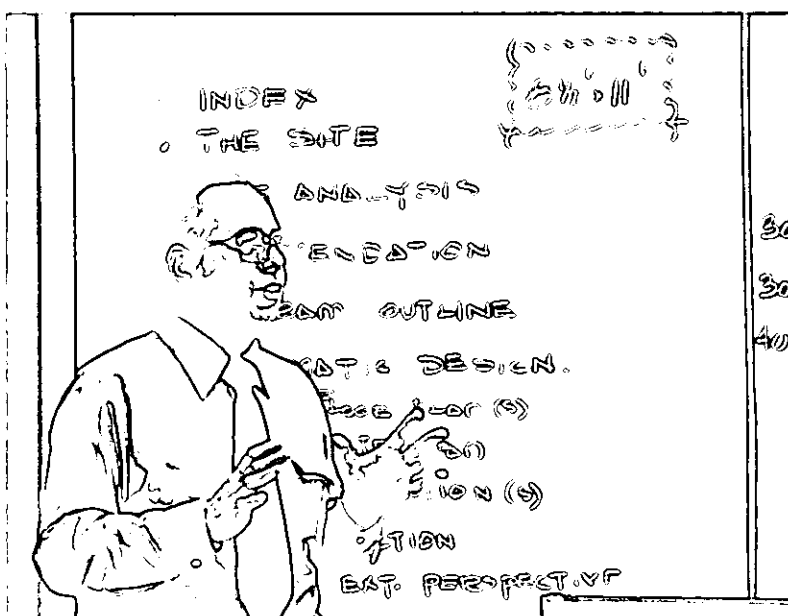
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# Technical-Occupational Programs

**E**L CENTRO COLLEGE will offer courses during the 1978-79 school year in which students can work toward an associate degree or certificate in any of the 38 technical-occupation programs.

Included in this section are curriculum patterns of the various programs. The patterns indicate the official course requirements for earning an associate degree in applied arts and sciences and for earning a certificate. Changing trends in health care delivery systems may require curriculum changes in the Health Occupation programs.

Additional information about the programs may be obtained by calling the counseling center (746-2173), the office of the associate dean of instruction in charge of technical-occupational programs (746-2252), or the division office for the particular program. Course descriptions of all courses are included in another section of this catalog.

Students who are changing majors and now are entering a technical-occupational program may wish to petition the Director of Admissions to waive all previous grades below "C." Refer to Scholastic Rules and Regulations section of this catalog.

## Accounting Associate

(Associate Degree in Applied Arts and Sciences)

### REQUIRED ACCOUNTING ASSOCIATE AND RELATED COURSES

#### FIRST YEAR

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BUS 201—Principles of Accounting I	3	0	3
BUS 105—Introduction to Business	3	0	3
BUS 160—Office Machines	3	0	3
COM 131—Applied Composition and Speech or ENG 101—Composition and Expository Reading	3	0	3
MTH 130—Business Mathematics or MTH 111—Mathematics for Business and Economics I	3	0	3

#### SPRING SEMESTER

BUS 202—Principles of Accounting II	3	0	3
BUS 136—Principles of Management	3	0	3
CS 175—Introduction to Computing Science	3	0	3
COM 132—Applied Composition and Speech or ENG 102—Composition and Literature	3	0	3
BUS 172—Beginning Typing or BUS 703 or BUS 713—Work Experience	2 0	3 15	3

#### SECOND YEAR

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BUS 203—Intermediate Accounting	3	0	3
BUS 238—Cost Accounting or BUS 239—Income Tax Accounting	3	0	3
GVT 201—American Government	3	0	3
ECO 201—Principles of Economics	3	0	3
BUS 803 or BUS 804—Work Experience or *Elective	0	15 or 20	3 or 4

#### SPRING SEMESTER

BUS 204—Managerial Accounting	3	0	3
BUS 234—Business Law	3	0	3
BUS 231—Business Correspondence	3	0	3
ECO 202—Principles of Economics	3	0	3
BUS 813 or BUS 814—Work Experience or *Elective	0	15 or 20	3 or 4

### \*RECOMMENDED ELECTIVES

BUS 238—Cost Accounting  
BUS 239—Income Tax Accounting  
BUS 206—Principles of Marketing  
PSY 105—Introduction to Psychology  
BUS 143—Personal Finance or BUS 205—Business Finance  
PSY 131—Human Relations  
BUS 703—Cooperative Work Experience  
BUS 704—Cooperative Work Experience  
BUS 803—Cooperative Work Experience  
BUS 804—Cooperative Work Experience  
BUS 813—Cooperative Work Experience  
BUS 814—Cooperative Work Experience

Total Credit Hours Required 60-62

### General Information and Objectives

This program provides the student with a basic background for the many varied jobs in accounting. Graduates of this program should be able to keep a small set of books, assist in developing a set of books, make accounting entries in the accounting department of larger companies, and perform other duties required of junior accountants.

### Admission to the Program

Fulfill all requirements for admission to El Centro College.

## Accounting Technician

(One-year Certificate Program)

### REQUIRED ACCOUNTING TECHNICIAN AND RELATED COURSES

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
Communications and English	3	0	3
BUS 105—Introduction to Business	3	0	3
BUS 131—Bookkeeping I	3	0	3
BUS 160—Office Machines	3	0	3
MTH 130—Business Mathematics	3	0	3

#### SPRING SEMESTER

Communications or English	3	0	3
BUS 132—Bookkeeping II	3	0	3
BUS 172—Beginning Typing or BUS 174—Intermediate Typing	2 1	3 2	3 2
CS 175—Introduction to Computing Science Elective	3 0	0 0	3 3

Total Credit Hours Required 29-30

## General Information and Objectives

This program provides the student with a basic background for completing the accounting cycle which is the basic work of an accountant's assistant. The training a student receives is in the form of journalizing, posting, making a work sheet, preparing financial statements, adjusting and closing the books, and taking an afterclosing trial balance. This program is available for both day and evening students.

## Admission to the Program

Fulfill all requirements for admission to El Centro College.

# Apparel Design

(Associate Degree in Applied Arts and Sciences)

## REQUIRED APPAREL DESIGN AND RELATED COURSES

### FIRST YEAR

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>FALL SEMESTER</b>			
PDD 130—Pattern Drafting & Draping	3	9	5
DES 128—Introduction to Mass Production and Apparel	2	0	2
DES 129—Industrial Garment Construction	0	3	1
DES 135—Textiles	2	2	3
DES 234—History of Costume	3	0	3

### SPRING SEMESTER

PDD 131—Pattern Drafting & Draping	3	9	5
DES 136—Fashion Sketching	2	4	3
DES 235—History of Costume	3	0	3

### SECOND YEAR

### FALL SEMESTER

PDD 230—Creative Pattern Design	3	9	5
APP 232—Design Development	2	4	3
APP 237—Style Trends & Research	2	0	2

### SPRING SEMESTER

PDD 231—Creative Pattern Design	3	9	5
APP 233—Design Development	2	4	3
APP 238—Style Trends & Research	2	0	2

## REQUIRED SUPPORT COURSES

Communications or English	6
Psychology or HD 105	3
BUS 105—Intro. to Business	3
HUM 101—Intro. to Humanities	3

Total Credit Hours Required 60

## General Information and Objectives

The apparel designer converts the design idea into an industrial paper pattern used in the mass production of clothing. New style trends each season demand individual creative thinking to develop salable designs. Upon successful completion of the two-year Associate Degree Program the student enters a woman's wear or children's wear manufacturing company as an assistant in the Design Department. The following courses in the program are sometimes offered in the evening: DES 135, DES 136, PDD 125, and PDD 126.

## Admission to the Program

1. Contact the Division of Fine and Applied Arts for a Design Institute Information Form and for the schedule showing when indicator tests are given.
2. Fulfill all requirements for admission to El Centro College.

# Architectural Drafting

(One-year Certificate Program)

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>FALL SEMESTER</b>			
ARC 130—Arch. Graphics I	2	4	3
ARC 134—Freehand Drawing I	2	4	3
ARC 136—Introduction to Arch. I	2	4	3
ARC 233—Hst. of Arch.—Survey to 1850	3	0	3
ARC 234—Building Technology—Materials and Methods	3	0	3

## SPRING SEMESTER

ARC 133—Arch. Graphics II	2	4	3
ARC 135—Freehand Drawing II	2	4	3
ARC 137—Introduction to Arch II	2	4	3
ARC 230—Hist. of Modern Arch.	3	0	3
ARC 236—Construction Drawings	2	4	3

Total Credit Hours Required 30

## General Information and Objectives

This program is designed to prepare the student for employment as a draftsman or technician within an Architect's office, or related office such as Engineer, Contractor or Material Supplier.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Counsel with an adviser before entering the program.

# Architectural Technology

(Associate Degree in Applied Arts and Sciences)

## REQUIRED ARCHITECTURAL AND RELATED COURSES

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
<b>FALL SEMESTER</b>			
ARC 130—Architectural Graphics I	2	4	3
ARC 134—Freehand Drawing I	2	4	3
ARC 136—Introduction to Architecture I	2	4	3
ARC 233—History of Architecture—Survey to 1850	3	0	3
ARC 234—Materials and Methods of Construction	3	0	3

## SPRING SEMESTER

ARC 133—Architectural Graphics II	2	4	3
ARC 135—Freehand Drawing	2	4	3
ARC 137—Introduction to Architecture II	2	4	3
ARC 230—History of Modern Architecture	3	0	3
ARC 236—Construction Drawings	2	4	3

(Upon completion of the architectural courses listed above the student will be issued a Certificate in Architectural Drafting from El Centro.)

## FALL SEMESTER

Algebra or Technical Math	3	0	3
ARC 240—Media Skills I	2	4	3
English or Communications	3	0	3
Physics 111, 131 or 201	3	3	4
ARC 248—Architectural Design Grade II	2	6	4

## SPRING SEMESTER

Trigonometry or Technical Math	3	0	3
English or Communications	3	0	3
Physics 112, 132 or 202	3	3	4
ARC 241—Media Skills II	2	4	5
ARC 249—Architectural Design Grade II	2	6	4

Total Credit Hours Required 64

## General Information and Objectives

This program is designed to prepare the graduate for employment within the construction industry — Architect's office, Engineer or Contractor's office or Material Supplier.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Counsel with an advisor before entering the program.



# Associate Degree Nursing

(Associate Degree in Applied Arts and Sciences)

## FIRST YEAR

### FIRST SUMMER SESSION

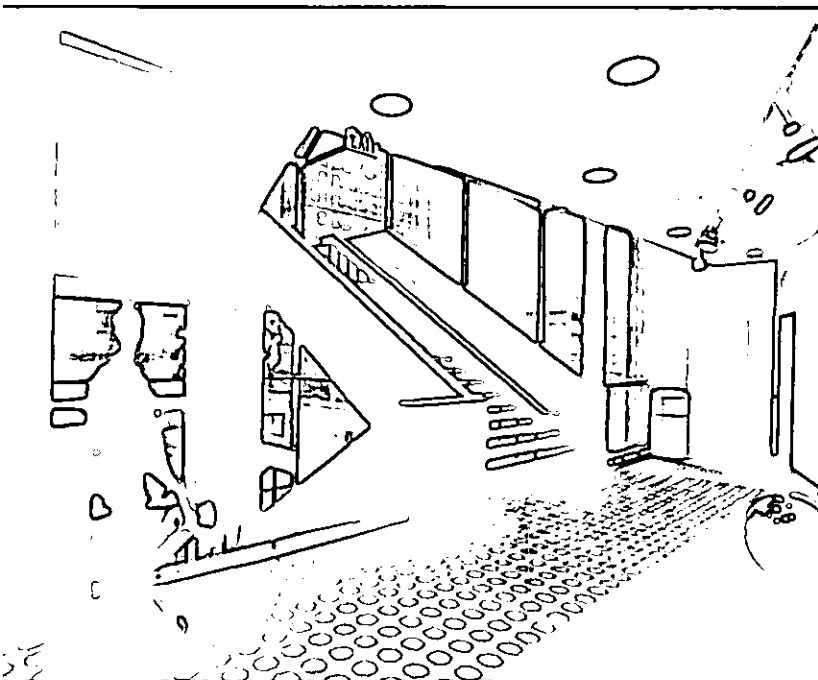
\*PHY SCI 118—Physical Science

Lec. Hrs.	Lab. Hrs.	Credit Hrs.
3	2	4

### FALL SEMESTER

NUR 141—Nursing I  
 BIO 120—Human Anatomy and Physiology  
 \*PSY 105—Introduction to Psychology  
 \*ENG 101—Composition and Expository Writing

4	9	7
3	2	4
3	0	3
3	0	3



### SPRING SEMESTER

NUR 142—Nursing II  
 BIO 121—Human Anatomy and Physiology  
 \*PSY 201—Developmental Psychology  
 \*ENG 102—Composition and Literature

4	9	7
3	2	4
3	0	3
3	0	3

### SUMMER SESSION

NUR 240—Nursing III

7	15	4
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## SECOND YEAR

### FALL SEMESTER

NUR 243—Nursing IV  
 \*SOC 101—Introduction to Sociology

5	12	9
3	0	3

### SPRING SEMESTER

NUR 242—Nursing V  
 Elective

5	12	9
3	0	3

Total Credit Hours Required 66

\*May be taken during the initial summer session or prior to enrolling in the first Nursing Course.

## General Information and Objectives

This program requires two calendar years of study. Students who previously have not been enrolled in college must enroll the first summer session as indicated in the above curricular pattern. Upon completion of the program, the student is awarded an Associate in Applied Arts and Sciences Degree. In order to be certified by the college as eligible to write the State Board Test Pool Examination for qualification as a registered nurse, a student must, in addition to satisfying degree requirements, comply with the minimum standards for testing prescribed by the Board of Nursing Examiners for the State of Texas. Students are required to be covered by professional liability insurance.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Contact counseling office for admission packet.

# Banking and Finance

## BANKING OPTION

### FALL SEMESTER I

BF 103—Introduction to Banking<sup>3</sup>  
 BUS 136—Principles of Management  
 COM 131—Applied Composition and Speech  
 ECO 201—Principles of Economics I  
 \*Elective (Select from general electives)

Lec. Hrs.	Lab. Hrs.	Credit Hrs.
3	0	3
3	0	3
3	0	3
3	0	3
3	0	3
15	0	15

### SPRING SEMESTER I

BF 104—Money and Banking<sup>1</sup>  
 BF 105—Comparative Financial Institutions  
 BUS 201—Principles of Accounting I  
 ECO 202—Principles of Economics II  
 GVT 201—American Government  
 \*Elective (Select from general electives)

3	0	3
3	0	3
3	0	3
3	0	3
3	0	3
3	0	3
18	0	18

### FALL SEMESTER II

BUS 237—Organizational Behavior  
 CS 175—Introduction to Computer Science  
 \*Elective (Select from Banking Functions electives)  
 BUS 202—Principles of Accounting II

3	0	3
3	0	3
9	0	9
3	0	3
18	0	18

### SPRING SEMESTER II

BF 204—Federal Regulations of Banking<sup>1</sup>  
 OR  
 BF 205—Analyzing Financial Statements<sup>1</sup>  
 OR  
 BF 206—Negotiable Instruments and the Payments Mechanism<sup>1</sup>  
 BF 203—Public Relations & Marketing of Financial Services  
 BUS 231—Business Correspondence  
 \*Elective (Select from General Electives)  
 \*Elective (Select from Banking Functions electives)

3	0	3
3	0	3
3	0	3
3	0	3
3	0	3
3	0	3
15	0	15

Total Credit Hours Required 66

### \*\*BANKING FUNCTIONS ELECTIVES<sup>1</sup>

BF 110—The Federal Reserve System  
 BF 111—Trust Functions and Services  
 BF 112—Installment Credit  
 BF 113—Credit Card Banking  
 BF 114—Teller Training<sup>2</sup>  
 BF 115—Credit and Collection Principles  
 BF 116—Construction Lending  
 BF 117—Letters of Credit  
 BF 118—Installment Loan Interviews  
 BF 119—New Accounts  
 BF 120—Selling Bank Services  
 BF 121—Loss Prevention  
 BF 122—Safe Deposit  
 BF 123—Loan and Discount  
 BF 124—Stocks and Bonds  
 RE 131—Real Estate Finance

Lec. Hrs.	Lab. Hrs.	Credit Hrs.
3	0	3
3	0	3
3	0	3
3	0	3
2	1	3
3	0	3
1	0	1
2	0	2
1	0	1
1	0	1
1	0	1
1	0	1
1	0	1
1	0	1
1	0	1
3	0	3

### \*GENERAL ELECTIVES

Bus 209—Principles of Insurance  
 Bus 105—Introduction to Business  
 Math 130—Business Math  
 Bus 143—Personal Finance  
 Bus 159—Beginning Shorthand  
 Bus 160—Office Machines  
 Bus 162—Office Procedures  
 Bus 166—Intermediate Shorthand  
 Bus 172—Beginning Typing  
 Bus 174—Intermediate Typing  
 Bus 234—Business Law  
 BF 713, 803, 813—Cooperative Work Experience<sup>2</sup>

3	0	3
3	0	3
3	0	3
3	0	3
3	2	4
3	0	3
3	0	3
3	2	4
2	3	3
1	2	2
3	0	3
0	15	3

<sup>1</sup> Course may be offered through American Institute of Banking (AIB)

<sup>2</sup> Enrollment only with consent of instructor.

<sup>3</sup> Students may substitute *Principles of Bank Operations* (taken through the American Institute of Banking)

## CREDIT AND FINANCIAL MANAGEMENT OPTION

FALL SEMESTER I	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BF 101—Credit Management	3	0	3
COM 131—Applied Composition and Speech	3	0	3
BUS 136—Principles of Management	3	0	3
ECO 201—Principles of Economics I	3	0	3
*Elective	3	0	3
	15	0	15

SPRING SEMESTER I	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BF 115—Credit and Collection Principles	3	0	3
BUS 234—Business Law	3	0	3
ECO 202—Principles of Economics II	3	0	3
CS 175—Introduction to Computer Science	3	0	3
BF 105—Comparative Financial Institutions	3	0	3
	15	0	15

FALL SEMESTER II	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BF 201—Advanced Credit Analysis	3	0	3
BUS 237—Organizational Behavior	3	0	3
BUS 201—Principles of Accounting I	3	0	3
GOV 201—American Government	3	0	3
*Elective	3	0	3
	15	0	15

SPRING SEMESTER II	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BF 202—Credit Law	3	0	3
BF 203—Public Relations and Marketing of Financial Services	3	0	3
BUS 231—Business Correspondence	3	0	3
BUS 202—Principles of Accounting II	3	0	3
*Elective	3	0	3
	15	0	15
Total Credit Hours Required			60

### CREDIT AND FINANCIAL MANAGEMENT OPTION ELECTIVES

(9 Credits Required for Associate Degree)

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
*BF 205—Analyzing Financial Statement	3	0	3
*BF 104—Money and Banking	3	0	3
*Bus 209—Principles of Insurance	3	0	3
Mth 130—Business Math	3	0	3
*Bus 143—Personal Finance	3	0	3
Bus 159—Beginning Shorthand	3	2	4
Bus 160—Office Machines	3	0	3
Bus 162—Office Procedures	3	0	3
Bus 166—Intermediate Shorthand	3	2	4
Bus 172—Beginning Typing	2	3	3
Bus 174—Intermediate Typing	1	2	2
*Bus 238—Cost Accounting	3	0	3
*BF 713, 803, 813—Cooperative Work Experience	0	15	0

\*To qualify as a candidate for National Institute of Credit Fellow Award, students must complete required courses indicated in the 4 semesters plus one course from the Elective component of the curriculum designated by \*.

\*\*Enrollment only with consent of instructor.

## SAVINGS AND LOAN OPTION

FALL SEMESTER I	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BF 106—Introduction to the Savings Association Business	2	0	2
Bus 171—Introduction to Supervision	3	0	3
Com 131—Applied Composition & Speech	3	0	3
CS 175—Introduction to Computer Science	3	0	3
*Elective	3	0	3
			14

## SPRING SEMESTER I

BF 107—Savings Association Operations	2	0	2
Bus 136—Principles of Management	3	0	3
Eco 201—Principles of Economics	3	0	3
Bus 231—Business Correspondence	3	0	3
BF 105—Comparative Financial Institutions	3	0	3
*Elective	3	0	3
			17

## FALL SEMESTER II

BF 207—Savings Account Administration	2	0	2
Bus 201—Principles of Accounting	3	0	3
Eco 202—Principles of Economics II	3	0	3
Bus 237—Organizational Behavior	3	0	3
*Elective	3	0	3
			14

## SPRING SEMESTER II

Bus 202—Principles of Accounting II	3	0	3
BF 203—Public Relations & Marketing of Financial Services	3	0	3
Gvt 201—American Government	3	0	3
RE 130—Real Estate Practices & Principles	3	0	3
*Elective	3	0	3
			15
Total Credit Hours Required			60

### RECOMMENDED ELECTIVES:

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BF 125—Saving Association Lending	3	0	3
BF 205—Analyzing Financial Statements	3	0	3
BF 115—Credit and Collection Principles	3	0	3
**BF 114—Teller Training	2	1	3
Bus 209—Principles of Insurance	3	0	3
Bus 143—Personal Finance	3	0	3
Bus 162—Office Procedures	3	0	3
Bus 234—Business Law	3	0	3
Mth 130—Business Math	3	0	3
RE 131—Real Estate Finance	3	0	3
RE 135—Real Estate Appraisal	3	0	3
*BF 713, 803, 813—Cooperative Work Experience	0	15	3

\*12 Credit Hours Required for Associate Degree and to qualify for IFE Degree of Distinction.

\*\*Enrollment only with consent of instructor.

## Data Processing Operator

(One-year Certificate Program)

### REQUIRED DATA PROCESSING AND RELATED COURSES

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
DP 133—Beginning Programming	3	4	4
CS 175—Introduction Computing Science	3	0	3
DP 137—Data Processing Math	3	0	3
DP 139—Technician	2	4	3

## SPRING SEMESTER

CS 131—RPG Programming	2	2	3
DP 140—Operations-Console	3	3	4
DP 243—Computer Center Management	3	0	3
DP 700 or DP 800 series Co-op Work Experience	0	20	4

Total Credit Hours Required 27

### General Information and Objectives

This program is designed to develop skills and knowledge necessary to meet the demands of computer operations in today's modern business world. The program includes both classroom and laboratory work directed by experienced professionals using large, modern equipment.

### Admission to the Program

Fulfill all requirements for admission to El Centro College.

# Data Processing Programmer

(Associate Degree in Applied Arts and Sciences)

## REQUIRED DATA PROCESSING AND RELATED COURSES

### FIRST YEAR

#### FALL SEMESTER

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
CS 175—Introduction to Computing Science	3	0	3
DP 133—Beginning Programming	3	4	4
DP 137 — D.P. Math or any other Math	3	0	3
BUS 201—Principles of Accounting I or BUS 131 & BUS 132—Bookkeeping I and II	3	0	3

#### SPRING SEMESTER

DP 136—Intermediate Programming	3	4	4
DP 138—Data Processing Logic	3	0	3
BUS 202—Principles of Accounting II	3	0	3
CS 176—FORTRAN Programming or CS 131—RPG Programming	2	2	3

### SECOND YEAR

#### FALL SEMESTER

DP 231—Advanced Programming	3	4	4
DP 232—Applied Systems	3	4	4
BUS 203—Intermediate Accounting or BUS 238—Cost Accounting	3	0	3

#### SPRING SEMESTER

DP 233—Operating Systems & Communications	3	4	4
DP 236—Advanced COBOL Techniques or CS 240—Telecommunications I or DP 242—Computer Hardware and Data Base Systems	3	4	4

#### REQUIRED SUPPORT COURSES

Communications or English	6
*BUS 231—Business Correspondence (May be substituted for last semester of Communications or English)	(3)
BUS 105—Introduction to Business	3
ECO 201—Principles of Economics	3
*Any one of the following courses: Any DP or CS course	3
MTH 202—Business Statistics	
BUS 136—Principles of Management	
BUS 206—Principles of Marketing	
BUS 234—Business Law	
BUS 237—Organizational Behavior	
ECO 202—Principles of Economics	

Total Credit Hours Required 60

## General Information and Objectives

This program is designed to develop programming and related skills and to provide the student with competencies necessary for job entry in a commercial data processing environment. The program includes both classroom and laboratory work directed by experienced professionals using large, modern equipment.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. A Programmer Aptitude Test is available in the counseling center at student's request. It is not required for entry in the program but it is used for counseling.

# Drafting & Design Technology

(Associate Degree in Applied Arts and Sciences)

## REQUIRED DRAFTING AND RELATED COURSES

### FIRST YEAR

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FALL SEMESTER			
DFT 183—Basic Drafting	2	6	4
DFT 160—Manufacturing Fundamentals or EGR 186—Manufacturing Processes	2	0	2
MTH 195—Technical Mathematics	3	0	3

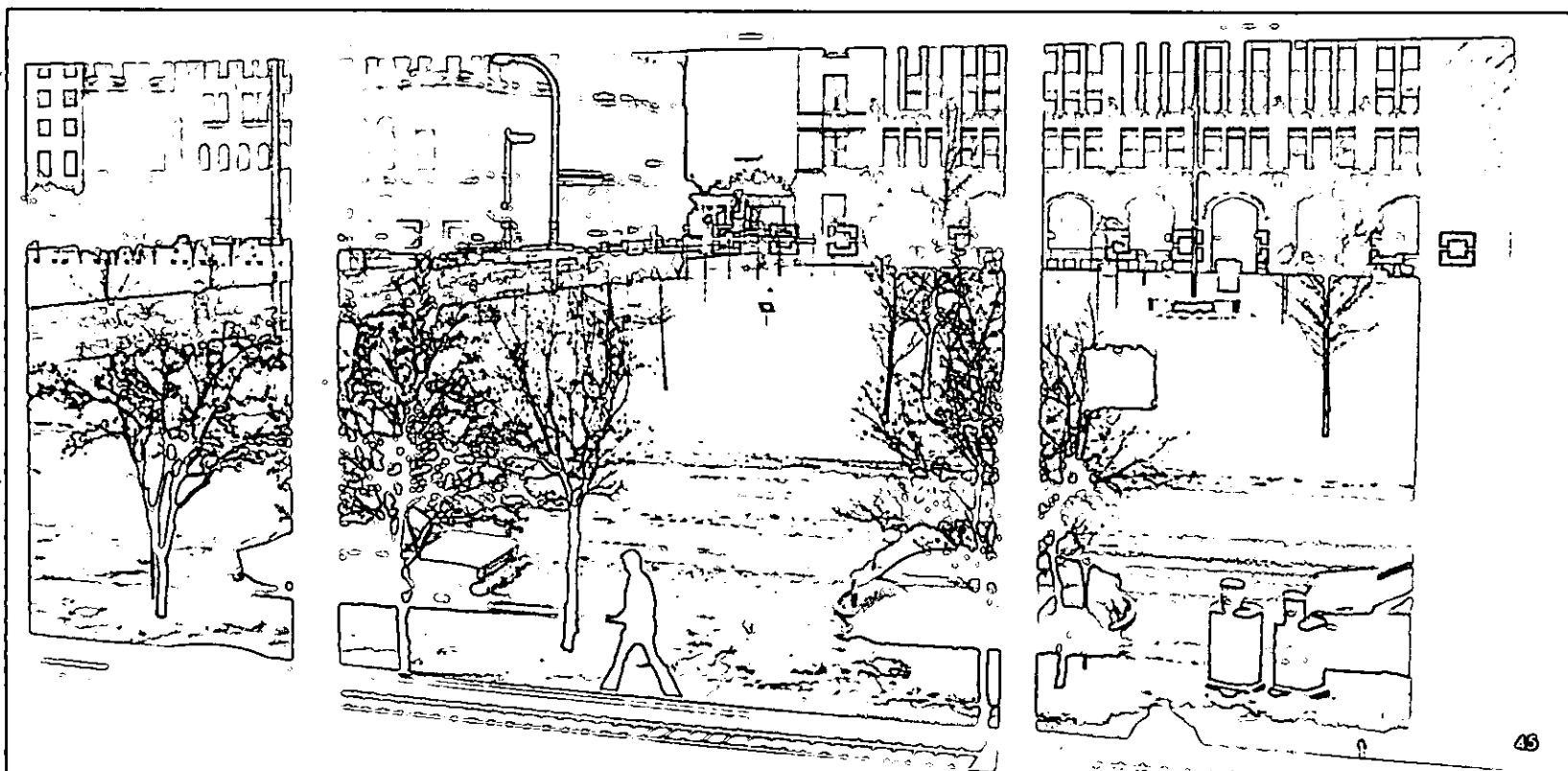
### SPRING SEMESTER

DFT 184—Intermediate Drafting	2	4	3
EGR 106—Descriptive Geometry	2	4	3
MTH 196—Technical Mathematics	3	0	3

### SECOND YEAR

#### FALL SEMESTER

*DFT 231—Electronic Drafting	2	4	3
*DFT 136—Geological and Land Drafting	2	4	3
DFT 135—Reproduction Processes	1	3	2
PHY 131—Applied Physics	3	3	4
Elective or DFT 703—Cooperative Work Experience	3	0	3
	0	15	(3)



## SPRING SEMESTER

*DFT 230—Structural Drafting	2	4	3
DFT Elective or	3	0	3
DFT 803—Cooperative Work Experience	0	15	(3)
*DFT 232—Technical Illustration	2	4	3
PHY 132—Applied Physics	3	3	4

## REQUIRED SUPPORT COURSES

Communications or English	6
Amer. Civ. (Soc. Sci.) Amer. Hist. or American Govt.	6
Psychology or Human Development	3

Total Credit Hours Required 61

\*Other drafting courses including DFT 713 and 813—Cooperative Work Experience, may be substituted upon approval. Cooperative Work Experience courses must have approval of instructor and Cooperative Education Coordinator.

## General Information and Objectives

This two-year program is designed to prepare the student for employment as a draftsman in the fields of electronic, structural, civil, mechanical, general drafting, and technical illustrating. In addition, most, if not all, of the courses may be used for transfer credit to several other institutions that offer the bachelor's degree in technology. The program is offered both day and evening. Many employers in Dallas provide part-time work for students while they are in school.

## Admission to the Program

Fulfill all requirements for admission to El Centro College. No prior knowledge of Drafting is required.

# Dental Assisting Technology

(Associate Degree in Applied Arts and Sciences)

## REQUIRED DENTAL ASSISTING AND RELATED COURSES

### FIRST YEAR

#### FALL SEMESTER

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
DA 140—Introduction to the Dental Profession	1	0	1
DA 141—Dental Anatomy and Physiology	3	3	4
DA 142—Dental Assisting I	2	4	3
DA 143—Dental Microbiology and Pathology	2	1	2
BIO 123—Human Anatomy & Physiology	3	2	4

#### SPRING SEMESTER

DA 144—Dental Materials I	3	3	4
DA 145—Dental Roentgenology I	2	1	2
DA 146—Dental Assisting II	2	1	2
English or Communications	3	0	3

### SECOND YEAR

DA 240—Dental Materials II	2	1	2
DA 241—Dental Roentgenology II	2	1	2
DA 242—Dental Office Administration I	3	0	3
DA 243—Dental Assisting Clinic Seminar I	3	0	3
DA 244—Dental Assisting Internship I	0	18	6

#### SPRING SEMESTER

DA 245—Dental Office Administration II	3	0	3
DA 246—Preventive Dentistry	3	0	3
DA 247—Dental Assisting Clinic Seminar II	3	0	3
DA 248—Dental Assisting Internship II	0	18	6
BUS 172—Beginning Typing	2	3	3
Elective	3	0	3

Total Credit Hours Required 62

## General Information and Objectives

This program prepares the student for area employment in private dental offices and dental clinics. In addition to classroom work, students receive clinical experience in dental clinics, dental schools and other health agencies in the community. Upon completion of the program, the student is awarded an Associate in Applied Arts and Sciences Degree. In order to be certified by the college as eligible to write the national examination of the Certifying Board of the American Dental Assistants, a student must, in addition to satisfying degree requirements, comply with the minimum standards for testing prescribed by the above mentioned Board. Students are required to be covered by professional liability insurance.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Recommended ACT composite score of 15 or higher.
3. Advice and consent of counselor.

All students will be required to purchase liability insurance each year they are in college.

# Dietetic Assistant

(One Year Certificate Program)

## REQUIRED DIETETIC ASSISTANT AND RELATED COURSES

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FS 120—Basic Food Preparation	2	4	3
FS 122—Advanced Food Preparation	2	4	3
FS 124—Food Service Sanitation and Safety	3	0	3
FS 136—Supervisory Techniques	3	0	3
FS 119—Food Service Equipment	3	0	3
FS 132—Food Purchasing, Handling & Storage	3	0	3
FS 135—Nutrition and Menu Planning	3	0	3
FS 240—Food Service Work Experience I	2	20	6

## SUPPORT COURSES

COM 131—Communications (or English)	3	0	3
MTH 130—Business Math	3	0	3

Total Credit Hours Required 33

Note: Before completing this program, the student will be required to work a minimum of 320 hours in an approved work station — equal time to be spent in food preparation and supervision. A weekly seminar enables the student to discuss his work experience in a classroom setting.

## General Information and Objectives

The Dietetic Assistant program trains men and women to assume a responsible position in the institutional field of food service such as hospitals, extended care facilities, nursing homes, school lunch programs, and college dormitories. Courses in nutrition and dietetics, basic and quantity food preparation, and institutional food service management are the core of this curriculum.

## Admission to the Program

Fulfill all requirements for admission to El Centro College.

# Educational Paraprofessional

## EDUCATIONAL ASSISTANT

(1-Year Certificate Program)

#### FALL SEMESTER

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
EP 131—Introduction to Educational Processes	3	0	3
EP 135—Arts and Crafts	3	0	3
Support and Elective Courses as Appropriate			9-10

#### SPRING SEMESTER

EP 129—Communication Skills for Educational Paraprofessionals	3	0	3
EP 132—Introduction to Media	1	4	3
EP 133—Introduction to Educational Processes II	3	0	3
Support and Elective Courses as Appropriate			6-7

Total Credit Hours Required 30-32

NOTE: Students wishing to receive the one-year Educational Assistant Certificate must take the five EP courses listed above (EP 129, 131, 132, 133, 135) plus an additional fifteen credit hours as approved from the overall Educational Paraprofessional program for a total of thirty (30) semester credit hours.

## SUPPORT COURSES

Communications (Twelve hours to be chosen from any of the following: Developmental Studies Reading and/or Writing, Communications 131-132, English 101-102, or Sophomore level English courses).

EP 245, 246, 247—Diversified Studies  
 HD 105—Basic Processes of Interpersonal Relationships  
 DM 090 or 091 or Math Elective  
 BUS 172—Beginning Typing  
 BUS 174—Intermediate Typing  
 BUS 160—Office Machines  
 PSY 105—Introduction to Psychology  
 PSY 201—Developmental Psychology  
 SOC 101—Introduction to Sociology  
 SOC 102—Social Problems  
 PEH 101—Fundamentals of Health  
 PEH 144—Introduction to Physical Education  
 PEH 257—Standard and Advanced First Aid  
 Art or Music (or courses occupationally appropriate and approved by the EP instructor)

## General Information and Objectives

The one-year Educational Assistant option to the Educational Paraprofessional program has basically the same purpose as the Associate Degree program but offers the option of a shorter training period.

## SUPPORT COURSES

Communications (Twelve hours to be chosen from any of the following: Developmental Studies Reading and/or Writing, Communications 131-132, English 101-102, or Sophomore level English courses).

EP 245, 246, 247—Diversified Studies  
 HD 105—Basic Processes of Interpersonal Relationships  
 DM 090 or 091 or Math Elective  
 BUS 172—Beginning Typing  
 BUS 174—Intermediate Typing  
 BUS 160—Office Machines  
 PSY 105—Introduction to Psychology  
 PSY 201—Developmental Psychology  
 SOC 101—Introduction to Sociology  
 SOC 102—Social Problems  
 PEH 101—Fundamentals of Health  
 PEH 144—Introduction to Physical Education  
 PEH 257—Standard and Advanced First Aid  
 Art or Music (or courses occupationally appropriate and approved by the EP instructor)

## General Information and Objectives

This program is designed to prepare educational paraprofessionals in a wide range of competencies needed for effective roles in public and non-public schools. A student can take courses required for the one-year Educational Assistant Certificate and continue in the program to receive the two-year, Educational Associate Degree or may work directly toward the Associate Degree.

Educational Paraprofessionals are employed under job titles such as teacher aide, assistant teacher, library assistant, P.E. aide, study hall teacher, tutor, tutoring coordinator, youth worker, special education aides, etc. Individuals working with handicapped children have found this program to be especially beneficial.

# Fire Protection Technology

(Associate Degree in Applied Arts and Sciences)

## REQUIRED FIRE PROTECTION TECHNOLOGY COURSES

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FPT 131—Introduction to Fire Protection	3	0	3
FPT 132—Fire Prevention Theory & Application	3	0	3
FPT 135—Introduction to Fire Administration	3	0	3
FPT 136—Fire Investigation & Arson	3	0	3
FPT 139—Fire Operations Strategy	3	1	4
FPT 231—Fire Protection Through Bldg. Construction	3	0	3
FPT 232—Protection Systems in Industry	3	0	3
FPT 233—Fire Protection Systems	3	0	3
FPT 234—Industrial Fire Protection II	3	0	3
FPT 235—Fire Administration II	3	0	3

## SUPPORT COURSES

English (required)	3
Mathematics 130 (required)	3
Psychology 105 or HD 105	3
Speech (required)	3
Government (required)	3
Sociology 101	3
Chemistry 115 and 116 (required)	8
CHM 170—Chemistry of Flammable Materials (required)	3
FPT 243—Technical Writing (required)	3
Any two of the following: FPT 138, FPT 236, FPT 237, FPT 240	6

Total Credit Hours Required 69

## General Information and Objectives

The course work in this associate degree program is geared to improve the fireman's professional qualifications in fire prevention, administration, supervision, and fire control techniques. Another objective is to promote an understanding of municipal government with emphasis on the fireman's role in today's society.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Should be currently employed in one of the organized fire departments of Dallas County.

## EDUCATIONAL ASSOCIATE

(2-year program leading to an Associate of Applied Arts and Sciences Degree)

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
EP 131—Introduction to Educational Processes I	3	0	3
EP 135—Arts and Crafts	3	0	3
Support and Elective Courses as Appropriate			9-10

## SPRING SEMESTER

EP 129—Communication Skills for Educational Paraprofessional	3	0	3
EP 132—Introduction to Media	1	4	3
EP 133—Introduction to Educational Processes II	3	0	3
Support and Elective Courses as Appropriate			6-7

## FALL SEMESTER

EP 231—Educational Paraprofessional Seminar I	2	0	2
*EP 232—Educational Paraprofessional Practicum I	0	20	4
Support and Elective Courses as Appropriate			10-11

## SPRING SEMESTER

EP 235—Educational Paraprofessional Seminar II	2	0	2
*EP 236—Educational Paraprofessional Practicum II	0	20	4
Support and Elective Courses as Appropriate			11-12

Total Credit Hours Required 62-66

\*May substitute EP 803, 804, 813, 814



## Food Service Dietetic Technician

(Associate Degree in Applied Arts and Sciences)

### REQUIRED FOOD SERVICE AND RELATED COURSES

#### FIRST YEAR

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FS 119—Food Service Equipment	3	0	3
FS 120—Basic Food Preparation	2	4	3
FS 122—Advanced Food Preparation	2	4	3
FS 124—Food Service Sanitation and Safety	3	0	3
FS 132—Food Purchasing, Handling, and Storage	3	0	3
FS 135—Nutrition and Menu Planning	3	0	3
FS 136—Supervisory Techniques in Food Service	3	0	3
MTH 130—Business Mathematics	3	0	3

#### SECOND YEAR

FS 220—Quantity Food Preparation and Service	3	5	4
FS 222—Advanced Quantity Food Preparation and Service	3	5	4
FS 237—Organization & Management	3	0	3
FS 240—Food Service Work Experience I	2	20	6
FS 241—Food Service Work Experience II	2	20	6
FS 242—Community Nutrition	3	3	4
FS 243—Clinical Nutrition or	3	3	4
FS 244—Child Nutrition			

### REQUIRED SUPPORT COURSES

Com 131 and Com 132, or ENG 101 and ENG 102	6
Hist. 101 and Hist. 102, or Gov. 201 and Gov 202	6
HD 105 or HD 107, or Psy 105 or Soc 101	3

Total Credit Hours Required 70

NOTE: Before completing this program, the student will be required to work a minimum of 640 hours in an approved work station — equal time to be spent in food preparation and in supervision. A weekly seminar enables the student to discuss his work experiences in a classroom setting.

## General Information and Objectives

The Dietetic Technician program trains men and women to assume responsible positions in the institutional field of food service such as hospitals, extended care facilities, nursing homes, and community nutrition programs.

## Admission to the Program

Fulfill all requirements for admission to El Centro College.

## Food Service Operations

(Associate Degree in Applied Arts and Sciences)

### REQUIRED FOOD SERVICE AND RELATED COURSES

#### FIRST YEAR

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FS 119—Food Service Equipment	3	0	3
FS 120—Basic Food Preparation	2	4	3
FS 122—Advanced Food Preparation	2	4	3
FS 124—Food Service Sanitation and Safety	3	0	3
FS 132—Food Purchasing, Handling and Storage	3	0	3
FS 135—Nutrition and Menu Planning	3	0	3
FS 136—Supervisory Techniques for Food Service	3	0	3
FS 138—Food Service Cost Control	3	0	3
MTH 130—Business Math	3	0	3

#### SECOND YEAR

FS 220—Quantity Food Preparation and Service	3	5	4
FS 222—Advanced Quantity Food Preparation and Service	3	5	4
FS 233—Food Service Marketing	3	0	3
FS 240—Food Service Work Experience I	2	20	6
FS 241—Food Service Work Experience II	2	20	6
Any two of the following:			
FS 140—Elementary Bakery Training	2	4	(3)
FS 141—Bakery Production Management	3	5	(4)
FS 142—Baking Technology	2	4	(3)
FS 143—Bakery Merchandising	3	0	(3)
FS 238—Garde Manger Training	2	4	(3)
FS 239—Saucier Training	2	4	(3)
FS 247—Beverage Operations and Service	3	0	(3)
BUS 201—Principles of Accounting I	3	0	(3)
BUS 234—Business Law	3	0	(3)
BUS 237—Organizational Behavior	3	0	(3)
PEH 257—Standard and Advanced First Aid	3	0	(3)

### REQUIRED SUPPORT COURSES

Com 131 and Com 132, or Eng 101 and Eng 102	6
Hist 101 and Hist 102, or Gov 201 and Gov 202	6
HD 105 or HD 107, or Psy 105 or Soc 101	3

Total Credit Hours Required 71

## General Information and Objectives

The Food Service Operations program trains students to assume responsible positions in the commercial sector of the food service industry. Courses are geared to cover the various operational functions of restaurants, hotel food service, cafeterias, coffee shops, and other types of fast food service.

## Admission to the Program

Fulfill all requirements for admission to El Centro College.

## General Office Occupations

(Associate Degree in Applied Arts and Sciences and/or One-Year Certificate)

### REQUIRED SECRETARIAL CAREERS AND RELATED COURSES

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
COM 131—Applied Composition and Speech or			
ENG 101—Composition and Expository Reading	3	0	3
BUS 160—Office Machines	3	0	3
*BUS 172—Beginning Typing	2	3	3
BUS 105—Introduction to Business	3	0	3
MTH 130—Business Mathematics	3	0	3



## SECOND SEMESTER

COM 132—Applied Composition and Speech or ENG 102—Composition and Literature	3	0	3
BUS 131—Bookkeeping I or BUS 201—Principles of Accounting I	3	0	2
BUS 174—Intermediate Typing	1	2	3
BUS 162—Office Procedures	3	0	3
BUS 165—Introduction to Word Processing	3	0	3
			29

**\*\*ONE YEAR CERTIFICATE GIVEN FOR THE ABOVE ONE YEAR CURRICULUM.**

## THIRD SEMESTER

***BUS 132—Bookkeeping II	3	0	3
PSY 131—Human Relations	3	0	3
BUS 231—Business Correspondence	3	0	3
BUS 273—Advanced Typing	1	2	2
Elective			3 or 4

## FOURTH SEMESTER

BUS 256—Office Management	3	0	3
BUS 275—Secretarial Procedures	3	0	3
BUS 265—Word Processing Practices and Procedures	3	0	3
BUS 234—Business Law	3	0	3
BUS 237—Organizational Behavior	3	0	3
Elective			3 or 4

Total Credit Hours Required 61-62

\*Students may go into BUS 174 if speed is 30 wpm.

\*\*Students may be awarded a one-year certificate after completion of the above one-year program.

\*\*\*This course does not have to be taken if BUS 201 has been successfully completed.

## SUGGESTED ELECTIVES

BUS 803, 804, 813, 814—Secretarial Careers Cooperative Education  
BUS 128—Data Entry Concepts  
ECO 201—Principles of Economics  
PSY 105—Introduction to Psychology  
SOC 101—Introduction to Sociology  
BUS 136—Principles of Management

## General Information and Objectives

This program develops the knowledge, skills, and abilities necessary for assuming responsible positions in typing, transcribing, filing, and all general clerical areas.

## Admission to the Program

Fulfill all requirements for admission to El Centro College.

# Hotel-Motel Operations

(Associate Degree in Applied Arts & Science)

## REQUIRED HOTEL-MOTEL OPERATIONS AND RELATED COURSES

### FIRST YEAR

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
HMO 110—Principles of Hotel Administration	3	0	3
HMO 112—Hotel-Motel Housekeeping	3	0	3
HMO 114—Front Office Procedures	2	4	3
HMO 116—Hotel-Motel Engineering	3	0	3
FS 124—Food Service Sanitation	3	0	3
FS 136—Supervisory Techniques in Food Service	3	0	3
MTH 130—Business Math	3	0	3

### SECOND YEAR

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
HMO 210—Hotel-Motel Sales Development	3	0	3
HMO 212—Hotel-Motel Accounting	3	0	3
HMO 214—Hotel-Motel Law	3	0	3
HMO 216—Hotel-Motel Property Management	3	0	3
HMO 240—Hotel-Motel Work Related Experience I	2	20	6
HMO 241—Hotel-Motel Work Related Experience II	2	20	6
FS 247—Beverage Operations and Service	3	0	3

## Any Three of the Following:

FS 119—Food Service Equipment	3	0	3
FS 132—Food Service Purchasing	3	0	3
FS 135—Nutrition and Menu Planning	3	0	3
FS 138—Food Service Cost Control	3	0	3
FS 231—Food Service Financial Management	3	0	3
BUS 131—Bookkeeping I	3	0	3
BUS 136—Principles of Management	3	0	3
BUS 201—Principles of Accounting	3	0	3
BUS 231—Business Correspondence	3	0	3
BUS 234—Business Law	3	0	3
BUS 237—Organizational Behavior	3	0	3
PEH 257—Standard & Advanced First Aid	3	0	3

## REQUIRED SUPPORT COURSES

Com 131 and COM 132, or Eng 101 and Eng 102	6
Hist 101 and Hist 102, or Gov 201 and Gov 202	6
HD 105 or Psy 105 or Soc 101 or Soc 102	3

Total Credit Hours Required 72

NOTE: Before completing this program, the student will be required to work a minimum of 640 hours in an approved work station — of a hotel or motel. A weekly seminar enables the student to discuss his work experience in a classroom setting.

## General Information and Objectives

The Hotel-Motel Operations program trains students to assume responsible positions in hotels and motels of various sizes and types.

## Admission to the Program

Fulfill all requirements to El Centro College.

# Interior Design

(Professional Certificate in Interior Design)  
(Associate Degree in Applied Arts and Sciences)

## REQUIRED INTERIOR DESIGN AND RELATED COURSES

### FIRST YEAR

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FIRST SEMESTER (FALL)			
INT 120—Basic Planning	2	4	3
INT 121—Basic Color Theory for Interior Design	2	4	3
ART 110—Design I	2	4	3
ART 105—Survey of Art History	3	0	3
*One of BUS 131, 201, 234	3	0	
OR			
*DES 135—Textiles	2	2	

### SECOND SEMESTER (SPRING)

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
INT 122—Color Theory and Illustration for Interior Design	2	4	3
INT 123—Advanced Planning and Perspective	2	4	3
INT 225—Architectural Drawing I	2	4	3
ART 106—Survey of Art History	3	0	3
*DES 135—Textiles	2	2	
OR			
*One of Bus 131, 201, 234	3	0	

30

\*DES 135—Textiles and one of the following Business courses: BUS 131—Bookkeeping I, BUS 201—Accounting I, and BUS 234—Business Law can be taken in either the FALL or SPRING semester, for example, BUS 234 and DES 135 in SPRING.)

(All FIRST YEAR COURSES must be successfully completed before student will be admitted into the SECOND YEAR.)

### SECOND YEAR

### THIRD SEMESTER (FALL)

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
INT 220—History of Interior Arts I	2	3	3
INT 226—Architectural Drawing II	2	4	3
INT 233—Fabrications I	2	4	3
COM 132—Applied Composition and Speech	3	0	3
SOC 101—Introduction to Sociology	3	0	3

### FOURTH SEMESTER (SPRING)

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
INT 221—History of Interior Arts II	2	3	3
INT 224—Interior Graphics and Illustration	2	4	3
INT 234—Fabrications II	2	4	3
INT 235—Inner Space Composition and Presentation	2	4	3
BUS 230—Salesmanship	3	0	3

30

(All SECOND YEAR COURSES must be successfully completed before student will be admitted into the THIRD YEAR.)

## THIRD YEAR

### FIFTH SEMESTER (FALL)

INT 237—Advanced Principles of Interior Design	3	3	4
INT 340—Lighting and Acoustics	1	2	2
INT 342—20th Century Designs	3	0	3
*INT 811—Work Experience	0	5	
OR		OR	1
*INT 341—Special Project	1	0	

\*INT 811 and INT 341 are alternates to each other — only one is required. If the student chooses to enroll for the INT 811 Work Experience course offered during the third year, he will be assigned to a local design studio for the semester for an on-the-job training experience. Prerequisites for this course require successful completion of the first two years of the interior design curriculum.

### SIXTH SEMESTER (SPRING)

INT 238—Client Psychology Survey and Business Procedures	3	3	4
INT 239—Principles of Commercial Interior Design	3	3	4
INT 343—Research and Presentation	2	0	2
			20
Total Credit Hours Required			80

### REQUIRED SUPPORT COURSES

DES 135—Textiles  
 BUS 131, BUS 201 or BUS 234  
 BUS 230—Salesmanship  
 COM 132—Applied Composition and Speech  
 ART 110—Design I  
 ART 105—Survey of Art History  
 ART 106—Survey of Art History  
 SOC 101—Introduction to Sociology

### General Information and Objectives

The interior design program qualifies the student to provide solutions for interior spaces of public structures and private residences. The curriculum includes studies in art, architecture, business, communications, sociology, and textiles with major concentration in interior design.

The program consists of three years (six semesters) of study in Interior Design and related courses. However, a student may file for an Associate in Applied Arts and Sciences degree after successful completion of the first two years of the program. A professional certificate is awarded upon successful completion of all courses identified in the three year (6 semester) curriculum. Earning of the certificate is accomplished by the following requirements:

1. successfully completing all courses outlined in the curriculum.
2. successfully completing requirements for INT 343.

The certificate qualifies the graduate to enter the profession of interior design as a beginning professional.

### Admission to the Program

1. Contact the Division of Counseling for application to the Interior Design program and for scheduling a time to take the design indicator test.
2. Fulfill all requirements for admission to El Centro College including the evaluation of transfer of credit from a recognized school.

## Legal Assistant

(Associate Degree in Applied Arts and Sciences)

### FIRST YEAR

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
L.A. 131—Introduction to Legal Technology	3	0	3
L.A. 135—Texas Legal Systems	3	0	3
BUS 234—Business Law	3	0	3
*BUS 172—Beginning Typing	2	3	3
GVT 201—American Government	3	0	3
ENG 101—Composition and Expository Writing			3
OR			
COM 131—Applied Composition and Speech			

### SPRING SEMESTER

L.A. 133—Law of Real Property and Real Estate Transactions	3	0	3
L.A. 134—Principles of Family Law	3	0	3
BUS 231—Business Correspondence	3	0	3
BUS 201—Principles of Accounting I	3	0	3
Support Courses (must be from required support course list)	3	0	3

## SECOND YEAR

### FALL SEMESTER

L.A. 231—Wills, Trusts and Probate Administration	3	0	3
L.A. 232—Tort and Insurance Law and Claims Investigation	3	0	3
L.A. 233—Income Taxation and Legal Accounting	3	0	3
Support Courses	6	0	6

### SPRING SEMESTER

L.A. 234—Personal Property, Sales and Credit Transactions	3	0	3
L.A. 235—Techniques of Legal Practice and Procedure	3	3	4
L.A. 236—Legal Office Management	2	0	2
BUS 202—Principles of Accounting II	3	0	3
Support Courses			3

Total Credit Hours Required 63

\*or equivalent—BUS 172 may be challenged.

### REQUIRED SUPPORT COURSES

(The student will be required to take 4 courses from the courses listed below:)

GVT 202—American Government	3
BUS 237—Organizational Behavior	3
SOC 101—Introduction to Sociology	3
CS 175—Introduction to Computer Science	3
MTH 130—Business Mathematics	3
HD 105—Basic Processes of Interpersonal Relationship	3
ECO 201—Principles of Economics	3

### General Information and Objectives

The Legal Assistant Program is an associate degree program designed to prepare the student to function as a technically qualified assistant to a lawyer. Developed at the request of and in conjunction with the Dallas Bar Association, the program is one of only two of its kind in the state of Texas. The four semester curriculum consists of legal technology courses combined with liberal arts and business courses.

### Admission to the Program

Fulfill all requirements for admission to El Centro College.

## Long Term Health Care Management

(Associate Degree in Applied Arts and Sciences)

### REQUIRED LONG TERM HEALTH CARE MANAGEMENT AND RELATED COURSES

FIRST SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
ENG 101—Composition and Expository Reading	3	0	3
SOC 101—Introduction to Sociology	3	0	3
BUS 231—Business Correspondence	3	0	3
LTH 156—Psychology of Patient Care	3	0	3
LTH 152—Introduction to Nursing Home Administration	3	0	3

### SECOND SEMESTER

GVT 201—American Government	3	0	3
PSY 105—Introduction to Psychology	3	0	3
LTH 157—Technology of Patient Care	3	0	3
LTH 158—Rehabilitation and Recreation	3	0	3
Approved Elective			3

### THIRD SEMESTER

LTH 252—Nursing Home Internship I	2	20	6
BUS 201—Principles of Accounting I	3	0	3
BUS 242—Personnel Administration	3	0	3
Approved Elective			3

### FOURTH SEMESTER

LTH 254—Nursing Home Internship II	2	20	6
LTH 235—Nursing Home Administration Law	3	0	3
LTH 236—Financial Management of the Nursing Home	3	0	3
FS 135—Nutrition and Menu Planning	3	0	3

### APPROVED ELECTIVES

MTH 130—Business Math  
 BUS 136—Principles of Management  
 PSY 201—Developmental Psychology  
 PSY 131—Human Relations

Total Credit Hours Required 60

## General Information and Objectives

The Long Term Health Care Management program is designed to fulfill licensing requirements for Nursing Home Administrators. A full and comprehensive curriculum is designed to fully train perspective nursing home administrators.

## Admission to the Program

Fulfill all requirements for admission to El Centro College.

# Medical Assisting Technology

(Associate Degree in Applied Arts and Sciences or One-Year Certificate in Medical Assisting Technology)

## REQUIRED MEDICAL ASSISTING AND RELATED COURSES

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BIO 123—Human Anatomy and Physiology	3	2	4
*BUS 174—Intermediate Typing	1	2	2
MA 150—Orientation to Medical Office Careers	1	0	1
MA 151—Medical Terminology	4	0	4
MA 152—Medical Law and Ethics	2	0	2
MA 153—Medical Office Microbiology and Sterilization Procedures	2	2	3

## SPRING SEMESTER

MA 160—Medical Transcription	2	6	4
MA 161—Medical Office Administrative and Management Procedures	3	0	3
MA 162—Medical Office Bookkeeping and Insurance Procedures	3	0	3
MA 163—Medical Office Clinical Medical Assisting Procedures	2	2	3
MA 164—Medical Office Pharmacology and Drug Administration	2	2	3

## SUMMER, FIRST SESSION

MA 170—Medical Office X-Ray Orientation and Electromedical Instrumentation	5	5	3
MA 171—Medical Office Laboratory Procedures (Summer Only)	5	5	3

## SUMMER, SECOND SESSION

MA 172—Medical Assisting Externship (A minimum of 180 hours of supervised externship may be offered Fall, Spring or Summer)	2	38	6
Total Credit Hours Required for Medical Assisting Technology Certificate			44

## SUPPORT COURSES FOR MEDICAL ASSISTING TECHNOLOGY ASSOCIATE DEGREE

Oral or Written Communications, ENG 101, 102, or COM 131, 132	6
HUM 101 or HD 105	3
PSY 105—Introduction to Psychology	3
PEH 257—First Aid	3
Elective	3
Total Credit Hours for Medical Assisting Technology Associate Degree	62

\*If typing skills can be demonstrated with a minimum of 50 corrected wpm, BUS 174 will not be required.

## General Information and Objectives

This program provides specialized training in which the student develops basic skills and knowledge necessary to function as a Medical Secretary, Administrative and Clinical Medical-Office Assistant. Employment is available in medical offices, clinics, hospitals and other organizations requiring a background in medical office procedures.

The program is designed so that the student may receive a certificate in one year or may complete a required number of support courses either before or after taking the Medical Assisting courses and receive an Associate Degree in Applied Arts and Sciences.

A student must, in addition to satisfying certificate requirements for the college, comply with the minimum standards for testing prescribed by the Certifying Board of the American Association of Medical Assistants before being able to sit for the National Board Examination.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
  2. Conference with counselor and program coordinator.
- Students are required to be covered by professional liability insurance.

## Accreditation

Our educational program for Medical Assistants has been accredited by the Committee on Allied Health Education and Accreditation in collaboration with the American Association of Medical Assistants.

# Medical Transcription

(One-year Certificate Program)

## REQUIRED MEDICAL ASSISTING AND RELATED COURSES

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BIO 123—Applied Anatomy and Physiology	3	2	4
BUS 172—Beginning Typing or	2	3	3
BUS 174—Intermediate Typing	1	2	2
MA 150—Orientation to Medical Office Careers	1	0	1
MA 151—Medical Terminology	4	0	4
MA 152—Medical Law and Ethics	2	0	2
Oral or Written Communications	3	0	3

## SPRING SEMESTER

BUS 162—Office Procedures	3	0	3
BUS 174—Intermediate Typing or			
BUS 273—Advanced Typing	1	2	2
MA 160—Medical Transcription	2	6	4
MA 161—Medical Office Administrative and Management Procedures	3	0	3
Oral or Written Communications	3	0	3

Total Credit Hours Required 31-32

NOTE: If typing skills can be demonstrated with a minimum of 50 corrected wpm, BUS 174 will not be required. A typing skill of 35 wpm must be attained before enrollment in MA 160.

## General Information and Objective

This one-year Certificate Program prepares the student to function as a medical typist and/or medical transcriptionist. Job opportunities are available in physician's offices, hospitals and clinics, the health insurance industry; public or private health foundations and institutions; medical schools and research centers.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Conference with counselor and program coordinator.

# Medical Laboratory Technician

(Associate Degree in Applied Arts and Sciences)

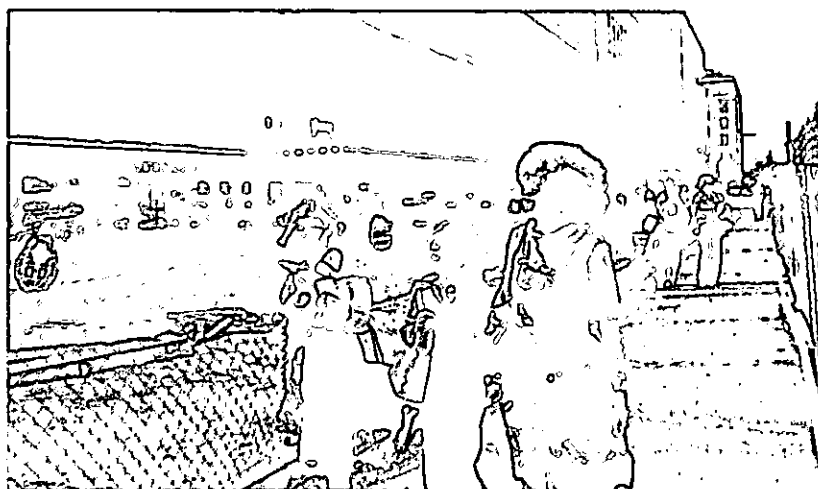
## REQUIRED MEDICAL LABORATORY AND RELATED COURSES

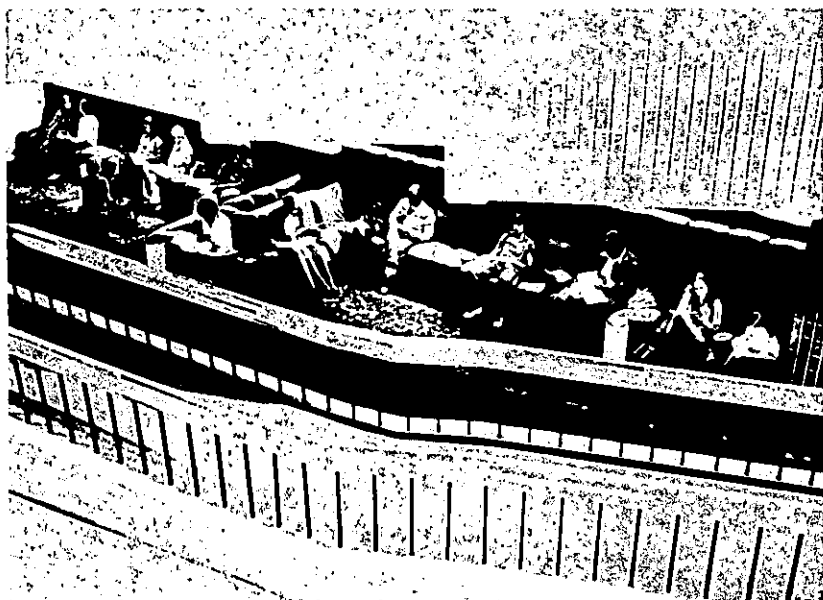
### FIRST YEAR

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BIO 101—General Biology	3	3	4
CHM 101—General Chemistry	3	3	4
MLT 133—Hematology	3	4	4
MLT 135—Urinalysis	2	4	3
*MTH 101—College Algebra	3	0	3

## SPRING SEMESTER

BIO 102—General Biology	3	3	4
CHM 102—General Chemistry	3	3	4
MLT 138—Immunology	3	4	4
PSY 105—Introduction to Psychology	3	0	3





#### SUMMER SEMESTER (12 Weeks)

MLT 139—Clinical Practice I	2	33	8
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#### SECOND YEAR

#### FALL SEMESTER

BIO 221—Anatomy and Physiology	3		4
CHM 203—Quantitative Analysis	2	6	4
ENG 101—Composition and Expository Writing	3	0	3
MLT 229—Medical Microbiology I	3	4	4

#### SPRING SEMESTER

BIO 222—Anatomy and Physiology	3	3	4
ENG 102—Composition and Literature	3	0	3
MLT 231—Clinical Chemistry	3	4	4
MLT 236—Medical Microbiology II	3	4	4

#### SUMMER SEMESTER (12 Weeks)

MLT 238—Clinical Practice II	2	33	8
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Total Credit Hours Required 79

\*Students without 2 years of high school algebra will take MTH 093 and then MTH 101.

### General Information and Objectives

This two-year program prepares the student to perform tests and related duties in a medical laboratory under the supervision of a medical technologist. Upon successful completion of the program, the student is awarded an Associate in Applied Arts and Sciences Degree. In order to be certified by the college as eligible to take the National Certifying Examination for Medical Laboratory Technician, a student must, in addition to satisfying degree requirements, comply with the minimum standards prescribed by the American Society of Clinical Pathologists. Students are required to be covered by professional liability insurance.

### Admission to the Program

1. Fulfill all requirements for admission to the college.
2. Interview with liaison counselor.
3. Interview with MLT faculty member.
4. Fulfill all requirements for admission to the Medical Laboratory Technician Program.
5. High school courses in biology and chemistry strongly recommended.

## Mid-Management

(Associate Degree in Applied Arts and Sciences)

#### FIRST YEAR

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BUS 136—Principles of Management	3	0	3
BUS 150—Management Training	0	20	4
BUS 154—Management Seminar: Role of Supervision	2	0	2

#### SPRING SEMESTER

BUS 151—Management Training	0	20	4
BUS 155—Management Seminar: Personnel Management	2	0	2

#### SECOND YEAR

#### FALL SEMESTER

BUS 250—Management Training	0	20	4
BUS 254—Management Seminar: Organizational Development	2	0	2

#### SPRING SEMESTER

BUS 251—Management Training	0	20	2
BUS 255—Management Seminar: Business Strategy	2	0	2

#### REQUIRED SUPPORT COURSES

COM 131 & 132 or ENG 101 & 102			6
Amer. Hst. or Amer. Govt.			3
Accounting or Bookkeeping			3
Economics			3
HUM 101, ART 104, MUS 104, or THE 101			3
BUS 105—Intro. to Business			3
*Electives			12

Total Credit Hours Required 60

#### RECOMMENDED ELECTIVES

BUS 234—Business Law	3	0	3
BUS 206—Marketing	3	0	3
BUS 230—Salesmanship	3	0	3
BUS 237—Organizational Behavior	3	0	3
CS 175—Introduction to Computing Science	3	0	3
BUS 137—Principles of Retailing	3	0	3

### General Information and Objectives

The Mid-Management program includes a cooperative plan with members of the business community whereby the student attends college classes in business and related courses and concurrently works at a regular, paid, part-time job in a sponsoring business firm. The program is available day and evening.

A Small Business Management option is available under the Mid-Management program. The Small Business Management option will be composed of the following courses: Bus 153 — Small Business Management (alternative to Bus 105); Bus 157 — Small Business Bookkeeping and Accounting (alternative to the Bus 131 or Bus 201 requirement); Bus 210 — Small Business Organization, Acquisition and Finance (replaces an elective); and Bus 211 — Small Business Operations (replaces an elective).

### Admission to the Program

1. Admission is by individual application only.
2. Personal interview with any Mid-Management instructor.
3. Applicants should demonstrate a sincere desire for a management career in business.
4. Fulfill all requirements for admission to El Centro College.

\*Three hours of electives must be chosen from Eco 202, or courses from the Social or Behavioral Sciences.

## Operating Room Technician

(One-year Certificate Program)

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
* COM 131—Applied Composition & Speech	3	0	3
* BIO 123—Applied Anatomy and Physiology	3	2	4
* ORT 141—Operating Room Techniques	6	10	8
* ORT 140—Medical Terminology	2	0	2

#### SPRING SEMESTER

* HD 105—Basic Processes of Interpersonal Relationships	3	0	3
* ORT 152—Operating Room Procedures	4	20	8

#### SUMMER SEMESTER (12 Weeks)

* ORT 154—Seminar	2	0	2
* ORT 153—Clinical Practice	0	35	7

Total Credit Hours Required 37

### General Information and Objectives

The Operating Room Technician Program trains a person to provide services in the operating room under the supervision and responsibility of the operating room supervisor. The technician, as part of the operating room team, aids in providing for the safety, cleanliness, and efficiency necessary for good patient care in the operating room. The operating room technician prepares materials for use at the operating room table and assists in the use of these materials in a variety of operative procedures. Summer semester is twelve weeks in length.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Conference with liaison counselor for the Operating Room Technician Program.

# Pattern Design

(Associate Degree in Applied Arts and Sciences)

## REQUIRED PATTERN DESIGN AND RELATED COURSES

### FIRST YEAR

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
PDD 130—Pattern Drafting & Draping	3	9	5
DES 128—Introduction to Mass Production and Apparel	2	0	2
DES 129—Industrial Garment Construction	0	3	1
DES 135—Textiles	2	2	3
DES 234—History of Costume	3	0	3

### SPRING SEMESTER

PDD 131—Pattern Drafting & Draping	3	9	5
DES 136—Fashion Sketching	2	4	3
DES 235—History of Costume	3	0	3

### SECOND YEAR

#### FALL SEMESTER

PDD 230—Creative Pattern Design	3	9	5
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#### SPRING SEMESTER

PDD 231—Creative Pattern Design	3	9	5
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## REQUIRED SUPPORT COURSES

Communications or English	6
Psychology or HD 105	3
Amer. Civ. (Soc. Sci.), Amer. Hst., or Amer. Govt.	6
HUM 101—Introduction to Humanities	3
<b>Total Credit Hours Required</b>	<b>60</b>

## General Information and Objectives

The pattern designer converts the fashion sketch or original garment into an industrial paper pattern used in the mass production of clothing. Drafting is the skill of developing a flat pattern with measurements. Draping is the skill of developing a pattern by placing cloth over a dress form. Upon completion of the program the student enters a women's wear or children's wear manufacturing company as an assistant in the Pattern Department. The following courses are sometimes offered in the evening: DES 135, DES 136.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Contact the Division of Fine and Applied Arts for a Design Institute Information Form and for the schedule showing when indicator tests are given.

# Police Science

(Associate Degree in Applied Arts and Sciences)

## REQUIRED POLICE SCIENCE COURSES

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
POL 134—Criminal Evidence & Procedure	3	0	3
POL 137—Police Community Relations	3	0	3
POL 140—Introduction to Law Enforcement	3	0	3
POL 141—Police Organization & Administration	3	0	3
POL 142—Legal Aspects of Law Enforcement	3	0	3
POL 240—Criminal Investigation	3	0	3
POL 241—Police Role in Crime & Delinquency	3	0	3

## REQUIRED SUPPORT COURSES

English or Communications	6
American History	6
Government	3
Psychology	3
Sociology	3
*Electives	18

\*It is recommended that 3 courses be elected from the following list:

## RECOMMENDED ELECTIVES

POL 146—Patrol Administration	(3)	(0)	(3)
POL 233—Introduction to Criminalistics	(3)	(0)	(3)
POL 242—Juvenile Procedures	(3)	(0)	(3)
POL 243—Probation & Parole	(3)	(0)	(3)
POL 244—Traffic Planning & Administration	(3)	(0)	(3)
POL 245—Traffic Law	(3)	(0)	(3)
POL 246—Penology	(3)	(0)	(3)
POL 143—Practical Spanish for Public Service Personnel	(3)	(0)	(3)
POL 144—Practical Spanish for Public Service Personnel	(3)	(0)	(3)

Total Credit Hours 60

## General Information and Objectives

The curriculum of this program is designed for those with law enforcement backgrounds as well as for recent high school graduates interested in preparing for an essential field of employment. Courses are offered in both day and evening college.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Those who are not currently in law enforcement should confer with Police Science liaison counselor.

# Radiologic Technology

(Associate Degree in Applied Arts and Sciences)

## REQUIRED TECHNICAL AND RELATED COURSES

### FIRST YEAR

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
RAD 120—Applied Anatomy & Physiology	1	1	1
RAD 130—Radiologic Fundamentals	1	5	3
RAD 141—Orientation & Clinical Education I	0	16	4
BIO 120—Human Anatomy & Physiology	3	2	4

### SPRING SEMESTER

RAD 121—Applied Anatomy & Physiology	1	1	1
RAD 142—Radiologic Principles	2	5	4
RAD 133—Clinical Education II & Film Critique	0	24	6
BIO 121—Human Anatomy & Physiology	3	2	4

### SUMMER SEMESTER

RAD 134—Radiologic Principles	1	2	1
RAD 135—Clinical Education III & Film Critique	0	36	9

### SECOND YEAR

#### FALL SEMESTER

RAD 230—Advanced Radiologic Principles	2	6	4
RAD 241—Clinical Education IV & Film Critique	0	20	5

#### SPRING SEMESTER

RAD 232—Advanced Radiologic Principles	1	3	2
RAD 243—Clinical Education V & Film Critique	0	32	8

#### SUMMER SEMESTER

RAD 234—General Review	1	2	1
RAD 235—Clinical Education VI & Film Critique	0	36	9

## REQUIRED SUPPORT COURSES

Communications or English	6
MTH 093—Intermediate Algebra	3
SOC 101—Introduction to Sociology	3
BUS 136—Principles of Management	3
PSY 105—Introduction to Psychology	3

Total Credit Hours Required 84

## General Information and Objectives

This program is designed to prepare technologists with understanding and skills in the field of x-ray. The student is assigned to a Dallas area hospital for clinical education. Upon successful completion of the program, the student is awarded an Associate in Applied Arts and Sciences Degree. In order to be certified by the college as eligible to write the American Registry of Radiologic Technologists Exam, a student must, in addition to satisfying degree requirements, comply with the minimum standards for testing prescribed by the accrediting agency.

## Admission to the Program

1. Fulfill all requirements for admission to El Centro College.
2. Must have composite ACT score of 15 or higher with heavy slant toward science.
3. High school courses in biology and math suggested.
4. Personal interview with liaison counselor and program coordinator.

# Respiratory Therapy Technician

(One Year Certificate Program)

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
PSC 118—Physical Science	3	2	4
BIO 123—Human Anatomy & Physiology	3	2	4
RES 137—Basic Respiratory Therapy Skills and Practice I	3	6	4
RES 144—Pathology & Treatment Rationale I	2	0	2
			14
SPRING SEMESTER			
RES 145—Basic Technology I	3	4	4
RES 141—Medications	2	0	2
RES 149—Pathology & Treatment Rationale II	2	0	2
RES 138—Clinical Practice II	0	16	4
COM 131—Communications — Applied Composition and Speech	3	0	3
			15

The program has been designed to conform to the “Essentials for an Approved Educational Program for the Respiratory Therapy Technician” approved by the American Medical Association Council on Medical Education and has been fully accredited by the Joint Review Committee for Respiratory Therapy Education, accrediting designate of the AMA-CME. Upon completion of the program, the student is awarded a certificate. In order to be certified by the college as eligible to write the national Technician Certification Exam administered by the NBRT, a student must, in addition to satisfying certificate requirements, comply with the minimum standards for testing as required by the accrediting agency.

## Admission to the Program

1. High School diploma or GED.
2. Completion of testing including ACT, basic math and reading level.
3. Completion of interviews with liaison counselor and program instructors.
4. Completion of “Requirements for Admission” to El Centro College.
5. Students are required to be covered by professional liability insurance.

Equivalency testing for advanced standing is available.

Written requests should be submitted well in advance of enrollment date.

# Respiratory Therapy Technology

(Associate Degree in Applied Arts and Science)

FIRST YEAR			
FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
CHM 101—General Chemistry or CHM 115—General Chemistry	3	3	4
BIO 120—Human Anatomy & Physiology or BIO 221—Anatomy and Physiology I	3	3	4
RES 137—Basic Res. Ther. Skills & Procedures I	3	6	4
RES 144—Pathology & Treatment Rationale I	2	0	2
ENG 101—Composition & Expository Writing	3	0	3
			17



SUMMER I			
RES 148—Basic Technology II	6	7	3
RES 139—Clinical Practice III	0	16	2
SUMMER II			
RES 140—Clinical Practice IV	0	16	2
			7
Total Credit Hours Required			36

## General Information and Objectives

The Respiratory Therapy Technician Program seeks to provide the training necessary to qualify individuals for entrance into the field of skilled in-patient care and technical and therapeutic procedures. For individuals already working in the field, the program serves to broaden and deepen technical and background knowledge and upgrade technical and therapeutic skills.

SPRING SEMESTER			
CHM 102—General Chemistry or CHM 116—General Chemistry	3	3	4
BIO 121—Human Anatomy & Physiology or BIO 222—Anatomy and Physiology I	3	3	4
RES 149—Pathology & Treatment Rationale II	2	0	2
RES 147—Clinical Practice II	0	8.8	2
RES 146—Pharmacology I	1	0	1
RES 145—Basic Technology I	3	4	4
			17

SUMMER SEMESTER			
RES 148—Basic Technology II	6	7	3
RES 150—Clinical Practice III		23	2
ENG 102—Composition and Literature	8	0	3
			8



## FALL SEMESTER

BIO 216—General Microbiology	3	4	4
RES 240—Pharmacology II	1	0	1
RES 254—Instructional & Management Methods I	1	1	1
RES 242—Advanced Physiology & Pathology	2	0	2
RES 243—Advanced Technology & Instrumentation I	2	3	3
RES 260—Clinical Procedures IV	0	16	4
			15

## SPRING SEMESTER

RES 246—Advanced Technology & Instrumentation II	2	3	3
RES 255—Instructional & Management Methods II	1	1	1
RES 248—Survey & Critique of Current Literature	3	0	3
RES 249—Seminar & Case Presentation	3	0	3
RES 261—Clinical Procedures V	0	16	4
			14

## SUMMER SEMESTER

RES 262—Clinical Procedures VI	0	16	2
			2
Total Credit Hours Required			73

## General Information and Objectives

The Associate Degree Program seeks to qualify the individual to perform, upon graduation, at a high level of competence in the areas of specialized patient care, technical expertise, administrative and educational function.

The program is accredited by the American Medical Association Council on Medical Education through the Joint Review Committee for Respiratory Therapy Education. Upon completion of the program, the student is awarded an Associate in Applied Arts and Sciences Degree. In order to be certified by the College as eligible to write the American Registry Exam, a student must, in addition to satisfying degree requirements, comply with the minimum standards for testing prescribed by the above mentioned Committee.

## Admission to the Program

1. High School diploma or GED.
2. Completion of testing including ACT, basic math and reading level.
3. Completion of interviews with liaison counselor and program instructors.
4. Completion of "Requirements for Admission" to El Centro College.
5. Completion of math prerequisite for CHM 101 or 115.
6. Students are required to be covered by professional liability insurance.

Equivalency testing for advanced standing is available.

Written requests should be submitted well in advance of enrollment date.

# Secretarial Careers — General Secretary

(One-year Certificate Program)

## REQUIRED SECRETARIAL CAREERS AND RELATED COURSES

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BUS 105—Introduction to Business	3	0	3
BUS 160—Office Machines	3	0	3
BUS 172—Beginning Typing or BUS 174—Intermediate Typing	2	3	3
BUS 159—Beginning Shorthand or BUS 166—Intermediate Shorthand	3	2	4
COM 131—Applied Composition and Speech or ENG 101—Composition and Expository Reading	3	0	3
MTH 130—Business Mathematics	3	0	3

## SPRING SEMESTER

BUS 174—Intermediate Typing or BUS 273—Advanced Typing	1	2	2
BUS 166—Intermediate Shorthand or BUS 266—Advanced Shorthand	3	2	4
BUS 162—Office Procedures	3	0	3
BUS 131—Bookkeeping I or BUS 201—Principles of Accounting I	3	0	3
BUS 165—Introduction to Word Processing	3	0	3
BUS 231—Business Correspondence	3	0	3

Total Credit Hours Required 36-37

## General Information and Objectives

This program is designed for those who desire to enter the business world as soon as possible in the stenographic field. Intensive training is provided in basic office skills and acquaints the students with the opportunities and responsibilities of a secretarial career. Courses are available in both the day and evening college.

## Admission to the Program

Fulfill all requirements for admission to El Centro College.

# Secretarial Careers — Professional Secretary

(Associate Degree in Applied Arts and Sciences)

## REQUIRED SECRETARIAL CAREERS AND RELATED COURSES

### FIRST YEAR

FALL SEMESTER	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
BUS 105—Introduction to Business	3	0	3
MTH 130—Business Mathematics	3	0	3
BUS 172—Beginning Typing or BUS 174—Intermediate Typing	2	3	3
BUS 159—Beginning Shorthand or BUS 166—Intermediate Shorthand	3	2	4
COM 131—Applied Composition and Speech or ENG 101—Composition and Expository Reading	3	0	3

### SPRING SEMESTER

BUS 174—Intermediate Typing or BUS 273—Advanced Typing	1	2	2
BUS 166—Intermediate Shorthand or BUS 266—Advanced Shorthand	3	2	4
BUS 131—Bookkeeping I or BUS 201—Principles of Accounting I	3	0	3
BUS 162—Office Procedures	3	0	3
BUS 160—Office Machines	3	0	3

### SECOND YEAR

#### FALL SEMESTER

BUS 266—Advanced Shorthand (if necessary)	3	2	4
BUS 273—Advanced Typing (if necessary)	1	2	2
BUS 165—Introduction to Word Processing	3	0	3
CS 175—Introduction to Computing Science	3	0	3
COM 132—Applied Composition and Speech or ENG 102—Composition and Literature	3	0	3
HUM 101, ART 104, MUS 104, or THE 101	3	0	3
Electives or BUS 803 or 804—Cooperative Work Experience	3 or 4	15 or 20	3 or 4

#### SPRING SEMESTER

BUS 265—Word Processing Practices and Procedures	3	0	3
BUS 275—Secretarial Procedures	3	0	3
BUS 231—Business Correspondence	3	0	3
PSY 131—Human Relations	3	0	3
Electives or BUS 813 or 814—Cooperative Work Experience	3	15 or 20	3 or 4

## RECOMMENDED ELECTIVES

BUS 128—Keypunch  
BUS 136—Principles of Management  
BUS 143—Personal Finance  
BUS 234—Business Law  
BUS 274—Legal Secretarial Procedures  
BUS 167—Legal Terminology and Transcription  
BUS 803—Cooperative Work Experience  
BUS 804—Cooperative Work Experience  
BUS 813—Cooperative Work Experience  
BUS 814—Cooperative Work Experience  
PSY 105—Introduction to Psychology  
SPE 105—Fundamentals of Public Speaking  
BUS 237—Organizational Behavior

Total Credit Hours Required 64-67

## General Information and Objectives

The purpose of this program is to prepare students to become alert and responsible secretaries capable of performing the tasks required of them in the modern business office. The program is designed to provide a high level of proficiency in typewriting, shorthand, of-



## Regulations Policy

The regulations in this catalog are based upon present conditions and are subject to change without notice. The college reserves the right to modify any statement in accordance with unforeseen conditions. In the event the application of these rules, regulations and procedures in this catalog causes a hardship on an individual, the case may be reviewed by a committee for action. The procedure is initiated in the counseling center.

## Class Attendance

Instructors are responsible for appropriate notification of attendance policy and procedures to all students enrolled in their classes. In cases where lack of class attendance is jeopardizing a student's grade, it is the responsibility of the instructor to apprise the student of this fact. Such notice shall be given by the issuance of a letter. If the student continues to miss the class, after a notice has been mailed, the instructor will drop the student from the class.

As a general rule, the administrator in charge of the student services shall receive a preliminary notice in cases where absences have become so excessive as to endanger the student's class standing. However, the primary responsibility for handling such cases rests with the instructor.

A student will be reinstated after having been dropped for excessive absences if, in the opinion of the instructor, the student reasonably could expect to complete the course satisfactorily after the attendance pattern is corrected.

## DALLAS COUNTY COMMUNITY COLLEGE DISTRICT STAFF

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Vice Chancellor of Business Affairs	Walter L. Pike
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Director of Technical Occupational Education	John S. Owens
Director of Technical Services	Paul E. Dumont

other academic subjects to enable the student to better understand and participate in their community. A "C" (2.0) grade average is necessary for all courses listed in the requirements of associate degree and certificate programs.

Technical vocational courses are college credit courses and some are transferable in the event students wish to continue their studies at a four-year institution.

## Procedure for Filing Degree and Certificate Plans

1. The student should request a degree plan from the Admissions Office upon completion of 30 semester hours. Transcripts of all previous college work must be on file at the time of the request for a degree plan.

2. Students intending to pursue a 1-year certificate program should request an official plan during their first semester.

3. Application for the granting of the degree or certificate should be filed in the Registrar's Office prior to the college catalog calendar deadline.

4. A candidate for graduation in May is requested to attend the commencement program unless granted prior permission by the Vice President of Student Services to graduate in absentia.

5. January and August graduates may attend the next commencement if they desire, but are not required to do so. Should graduating students wish to attend, the Registrar's office should be

notified of their intention.

6. For information concerning graduation fee, see page 7 under "Additional Fees." Instruction concerning graduation will be mailed to all candidates 30 days prior to commencement.

Candidates for any degree or certificate must meet the requirements as set forth in the catalog for the year of first enrollment unless they elect to graduate under the requirements of a later catalog. The candidates must indicate the catalog of their choice when they file their degree plans.

To qualify for a second degree or certificate a student must fulfill the residence requirement for the second degree and must complete all required courses in the plan for the second degree or certificate.

## Cooperative Work Experience

Students in certain Technical-Occupational Programs may enrich their education by enrolling in Cooperative Work Experience courses, credit being earned by the students while working on jobs that provide experience in their chosen occupation. The college supervises the program and awards credit based on the number of approved hours worked on the job during the semester. College instructor-coordinators are responsible for approving students for enrollment in Work Experience courses.



## Board of Trustees

*Standing left to right:* Robert H. Power, Durwood A. Sutton, Carie E. Welch, and Jerry Gilmore.

*Seated:* Vice-Chairman Mrs. Eugene McDermott, Chairman R. L. Thornton, Jr., Chancellor Bill J. Priest and Mrs. William J. Powell.

fice machines, and other secretarial techniques, as well as a general educational background. Emphasis is also placed on the development of logical thought, human relations, business etiquette and business ethics. Courses are available in both the day and evening college.

### Admission to the Program

Fulfill all requirements for admission to El Centro College.

## School Food Service

(One-year Certificate Program)

### REQUIRED SCHOOL FOOD SERVICE AND RELATED COURSES

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FS 119—Food Service Equipment	3	0	3
FS 120—Basic Food Preparation	2	4	3
FS 124—Food Service Sanitation and Safety	3	0	3
FS 135—Nutrition and Menu Planning	3	0	3
FS 136—Supervisory Techniques for Food Service	3	0	3
FS 138—Food Service Cost Control	3	0	3
FS 220—Quantity Food Preparation and Service	3	5	4
FS 237—Organization and Management	3	0	3
FS 242—Nutrition Care I	3	3	4
HD 105—Basic Processes of Interpersonal Relationships	3	0	3
Total Credit Hours Required			32

### General Information and Objectives

This 32 credit hour certificate program prepares the student to function as a school food service worker and advance to school cafeteria manager. All credits earned in this program may be applied towards the Associate Degree in School Food Service.

### Admission to the Program

Fulfill all requirements for admission to El Centro College.

### Certification

Upon completion of this program student will be awarded a Certificate of Completion by Texas School Food Service Association and a Certificate of Completion by El Centro College.

## School Food Service

(Associate Degree in Applied Arts and Sciences)

### REQUIRED SCHOOL FOOD SERVICE AND RELATED COURSES

FIRST YEAR			
	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FS 120—Basic Food Preparation	2	4	3
FS 119—Food Service Equipment	3	0	3
FS 122—Advanced Food Preparation	2	4	3
FS 132—Food Purchasing, Handling, and Storage	3	0	3
FS 124—Food Service Sanitation and Safety	3	0	3
FS 135—Nutrition and Menu Planning	3	0	3
FS 136—Supervisory Techniques for Food Service	3	0	3
FS 138—Food Service Cost Control	3	0	3
SECOND YEAR			
FS 220—Quantity Food Preparation and Service	3	5	4
FS 222—Advanced Quantity Food Preparation and Service	3	5	4
FS 237—Organization and Management	3	0	3
FS 240—Food Service Work Experience I	2	20	6
FS 241—Food Service Work Experience II	2	20	6
FS 242—Community Nutrition	3	3	4
FS 244—Child Nutrition	3	3	4
REQUIRED SUPPORT COURSES			
Com 131 and Com 132, or Eng 101 and Eng 102			6
Hist 101 and Hist 102, or Gov 201 and Gov 202			6
HD 105 or HD 107, or Psy 105, or Soc 101			3
Total Credit Hours Required			73

NOTE: A "C" (2.0) average is required in major field — all Food Services courses.

Before completing this program, the student will be required to work a minimum of 640 hours in an approved work station in a school food service facility. A weekly seminar enables the student to discuss his work experience in a classroom setting.

### General Information and Objectives

The School Food Service program trains men and women to assume a responsible position in the management of school food service facility in the public or private sector.

Courses in food management, nutrition, basic and quantity food preparation are the core of this curriculum. Afternoon and evening courses are offered during the regular academic semesters. During the months of June, July and August accelerated courses are scheduled for those who desire to participate.

### Admission to the Program

Fulfill all requirements for admission to El Centro College.

## Television & Radio Electronics

(One-year Certificate Program)

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
FALL SEMESTER			
TRE 141—Resistive and Reactive Circuits	0	6	3
TRE 142—Meters and Test Equipment	0	6	3
TRE 143—Tube Circuits	0	6	3
TRE 144—Solid State Circuits	0	6	3
TRE 151—Television and Radio Mathematics	3	0	3
TRE 152—Customer Relations	3	0	3
SPRING SEMESTER			
TRE 146—Radio and Television Techniques I	0	6	3
TRE 147—Radio and Television Techniques II	0	6	3
TRE 148—Radio and Television Techniques III	0	6	3
TRE 149—Radio and Television Techniques IV	0	6	3
BUS 153—Small Business Management	3	0	3
TRE 154—Technical Logic	3	0	3
Total Credit Hours Required			36

### General Information and Objectives

Courses in this program are designed to train the student to isolate and locate malfunctioning circuits in TV's and Radio's, then restore them to manufacturers specifications.

The above courses are presented so as to produce a student confident in his own ability and skills in explaining (conversationally) located malfunctions to his customer to the degree that the student will feel comfortable with his customer.

### Admission to the Program

Fulfill all requirements for admission to El Centro College.

## Vocational Nursing

(One-Year Certificate Program)

### REQUIRED VOCATIONAL NURSING COURSES

	Lec. Hrs.	Lab. Hrs.	Credit Hrs.
*SPRING SEMESTER			
VN 130—Anatomy and Physiology	4	0	3
VN 131—Pharmacology	4	0	3
VN 132—Nutrition	2	0	2
VN 133—Geriatrics	2	0	1
VN 134—Professional Vocational Adjustment	2	0	1
VN 135—Mental Health and Mental Illness	2	0	2
VN 136—Disease Prevention and Control	2	0	1
VN 137—Nursing Skills	4	14	7
VN 138—Introduction to Maternity Nursing	2	0	1
SUMMER SEMESTER			
VN 139—Maternity and Newborn	5	0	2
VN 140—Pediatrics	5	0	2
VN 141—Clinical Experience	0	33	8
**FALL SEMESTER			
VN 142—Medical Surgical Nursing	6	0	6
VN 143—Clinical Experience	0	34	9
Total Credit Hours Required			48

\*American Red Cross-First Aid Required during Spring semester, 15 clock hours.

\*\*American Red Cross-Disaster Nursing included during Fall semester, 12 hours.

### General Information and Objectives

This is a one-year program which meets the accreditation requirements of the State Board of Licensed Vocational Nurse Examiners. In addition to classroom and laboratory work at the college, clinical experience at various hospitals is part of the program. This course is offered only during the day.

### Admission to the Program

1. Fulfill all requirements for admission as a full-time student to El Centro College.
2. Complete an application sheet to the Vocational Nursing program as required by the State Board (this is in addition to the application to El Centro).
3. Contact liaison counselor to the Vocational Nursing program for additional information.

# Degree Requirements

## Associate in Arts and Sciences Degree

A total of 60 hours must be presented with an average grade of at least "C" (2.0). Courses numbered 99 and below and Music Recital 199 may not be counted toward the 60 units minimum. Technical-occupational courses applicable toward the Associate in Applied Arts and Sciences degree are applicable for the Associate in Arts and Sciences degrees.

These 60 hours may be earned at any Dallas County Community College District college and must include:

English 101-102, plus an additional 6 units of English..... 12 hours

A minimum of 8 semester hours of a laboratory science

(Music Majors are exempt from this requirement. Check listings under subject field)..... 8 hours

History 101-102\* and Government 201-202\* (No substitutions allowed)..... 12 hours

Humanities: To be selected from Theatre 101, Art 104, Music 104 or Humanities 101.. 3 hours

In addition to the course requirements, each degree candidate must earn the last 15 hours as a resident student in the district colleges or accrue 45 hours in residence. The degree will be granted by the college in which the student took the last 15 hours or where the majority of hours were accrued. No more than 1/4 of the work required for any degree or certificate may be taken by correspondence. Correspondence work submitted for

graduation credit must be approved by the Director of Admissions.

All students who expect to transfer to a four year institution are urged to complete their four semester requirement in physical education during their freshman and sophomore years. A maximum of two physical education activity hours may be counted as credit toward requirements for graduation.

The student is urged to consult the catalog of the institution to which he or she may transfer for special requirements. These catalogs should be used by students and their advisors as a basis for the program plan.

\*Only 3 hours of History or Government credit may be earned by credit-by-examination. (CLEP credit does not qualify for this requirement.)

## Associate in Applied Arts and Sciences Degree

A minimum of 60 hours exclusive of Music Recital 199 must be presented for the degree with an average grade of at least "C" (2.0). Specific technical or occupational programs may have grade and semester hour requirements in addition to these degree requirements. A student enrolled in a technical/occupational program should consult the program counselor and the specific program description in this catalog.

A maximum of two physical education activity hours may be counted as credit toward graduation. Courses numbered 99 and below cannot be

included to meet degree or certificate requirements, except such courses which are specifically listed in the curriculum pattern of the specific program.

The requirements one must meet to be awarded a certificate are detailed under specific programs listed in the technical-occupational programs section of this catalog. A "C" (2.0) grade average is necessary for all courses listed in the requirements of the certificate program in which the student is enrolled.

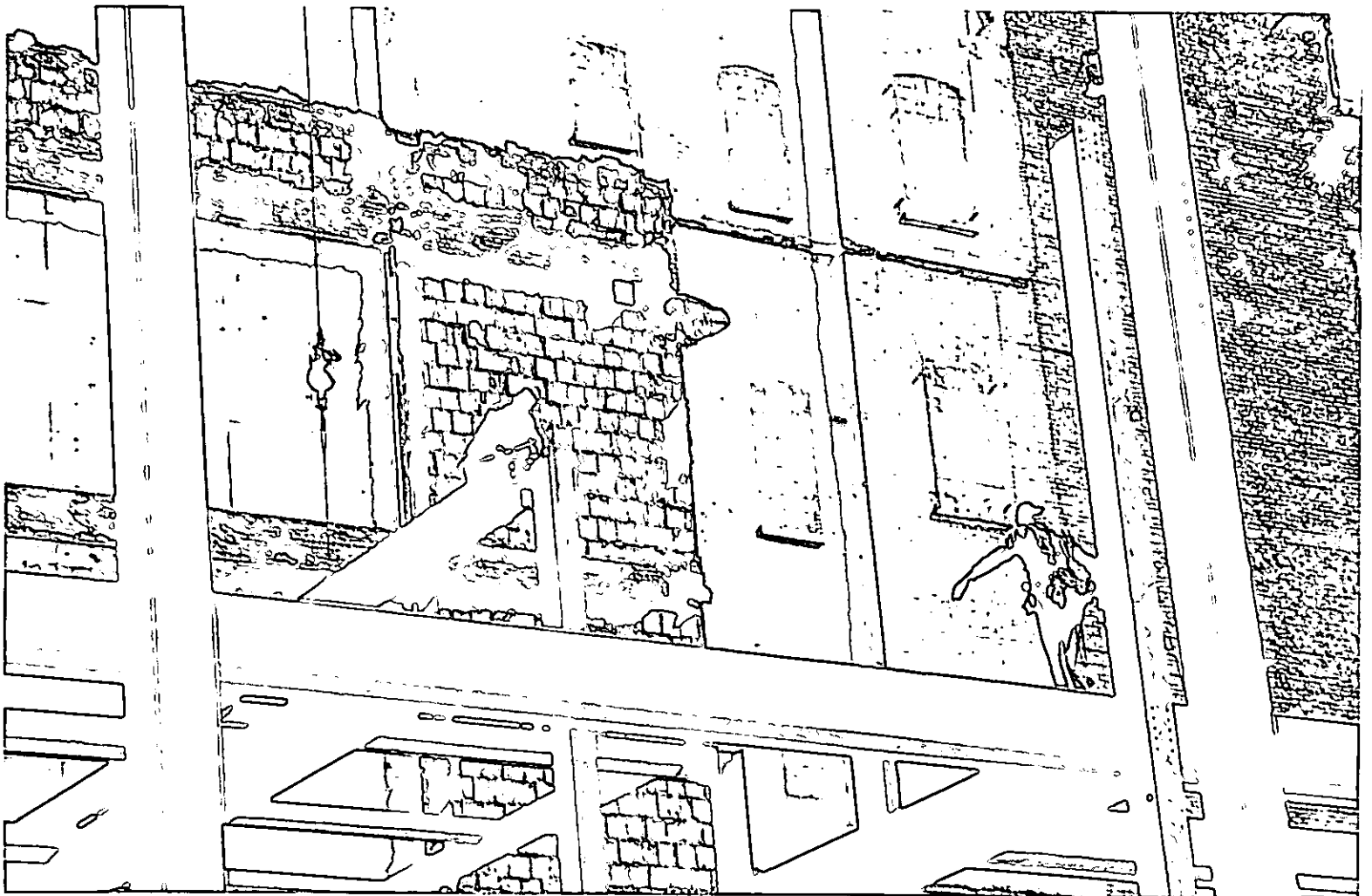
## Associate Degree and Certificate Programs

Technical vocational programs are one-year and two-year courses of study designed to enable students to enter their chosen occupational fields as skilled employees and their community as culturally aware citizens.

These programs are offered only after studies prove employment opportunities will exist at the time the students complete their programs, matching the industrial community's requirements to the ambitions and goals of students.

This realistic approach to vocational education is made possible by the excellent cooperation of local industry, business and institutions who more and more are looking to the district's colleges for skilled personnel.

In addition to training in a specific occupational field, the student's program includes courses in the humanities, English, history, and



# Rules & Regulations

## Classroom Dishonesty

Dishonest work on tests, term papers, and examinations is a serious offense. Plagiarism (the act of using source material of other persons without following the accepted techniques of crediting) is never acceptable behavior in an academic community.

## Dropping a Course or Withdrawal from College

A student must drop a class or withdraw from college in the following manner:

1. Obtain a drop or withdrawal form from a counselor and follow the procedure outlined by the counselor.

2. Should circumstances prevent a student from appearing in person to withdraw from college, the student may withdraw by mail by writing to the Director of Admissions. No drop or withdrawal requests are accepted by telephone.

Students who drop a class or withdraw from college before the deadline will receive a "W" in each class from which they have withdrawn. The

The following Associate Degree and Certificate Programs are offered at Dallas County Community Colleges:

### BROOKHAVEN

Accounting Associate  
Accounting Technician  
Auto Body  
Automotive Technology  
Auto Parts Specialist  
Child Development  
Mid-Management  
Retail Distribution & Marketing  
Office Careers

### CEDAR VALLEY

Accounting Associate  
Accounting Technician  
Air Conditioning & Major  
Appliance Repair  
Commercial  
Residential  
Major Appliance Repair  
Animal Medical Technology  
Automotive Technology  
Commercial Music  
Arranging/Composition/Copying  
Music Retailing  
Performing Musician  
Office Careers  
General Office Careers  
Secretarial Careers  
Mid-Management  
Power Mechanics  
Motorcycle Repair  
Outboard Marine Engine Repair  
Small Engine Repair  
Retail Distribution and Marketing

### EASTFIELD

Accounting Associate  
Accounting Technician  
Air Conditioning & Refrigeration  
Technology  
Auto Body  
Automotive Technology  
Child Development Associate  
Child Development Assistant  
Digital Electronics  
Drafting & Design  
Graphic Arts  
Graphic Communications  
Mid-Management  
Social Work Associate  
Office Careers  
Administrative Secretary  
General Secretary  
Professional Secretary  
Office Skills & Systems  
Training Paraprofessionals for  
the Deaf  
Transportation Technology  
Welding Technology

### EL CENTRO

Accounting Associate  
Accounting Technician  
Apparel Design  
Architecture Technology  
Banking and Finance  
Data Processing Programmer  
Drafting and Design  
Educational Paraprofessional  
Fire Protection Technology  
Food Service  
Dietetic Technology  
Dietetic Assistant  
Food Service Operations  
School Food Service  
Hotel/Motel Operations  
Interior Design  
Legal Assistant  
Medical  
Associate Degree Nursing  
Dental Assistant Technology  
Long Term Health Care  
Medical Assistant Technology  
Medical Lab Technology  
Medical Transcriptionist  
Operating Room Technician  
Radiologic Technology  
Respiratory Therapy Technology  
Respiratory Therapy Assistant  
Vocational Nursing  
Mid-Management  
Pattern Design  
Police Science  
Radio/TV Electronics  
Office Careers  
General Secretary  
Professional Secretary  
General Office Occupations

### MOUNTAIN VIEW

Accounting Associate  
Accounting Technician  
Aviation Administration  
Air Cargo Transport  
Airline Marketing  
Fixed Base Operations  
Avionics Technology  
Drafting and Design Technology  
Educational Paraprofessional  
Electronics Technology  
Horology  
Machine Shop  
Mid-Management  
Office Careers  
General Office Occupations  
General Secretary  
Office Skills and Systems  
Professional Secretary  
Pilot Technology  
Welding Technology

### NORTH LAKE

Accounting Associate  
Accounting Technician  
Air Conditioning and Refrigeration  
Commercial  
Residential  
Banking and Finance  
Building Trades  
Carpentry  
Electrical  
Diesel Mechanics  
Distribution Technology  
Mid-Management  
Office Careers  
Secretarial Careers  
General Office Careers  
Legal Secretary  
Real Estate

### RICHLAND

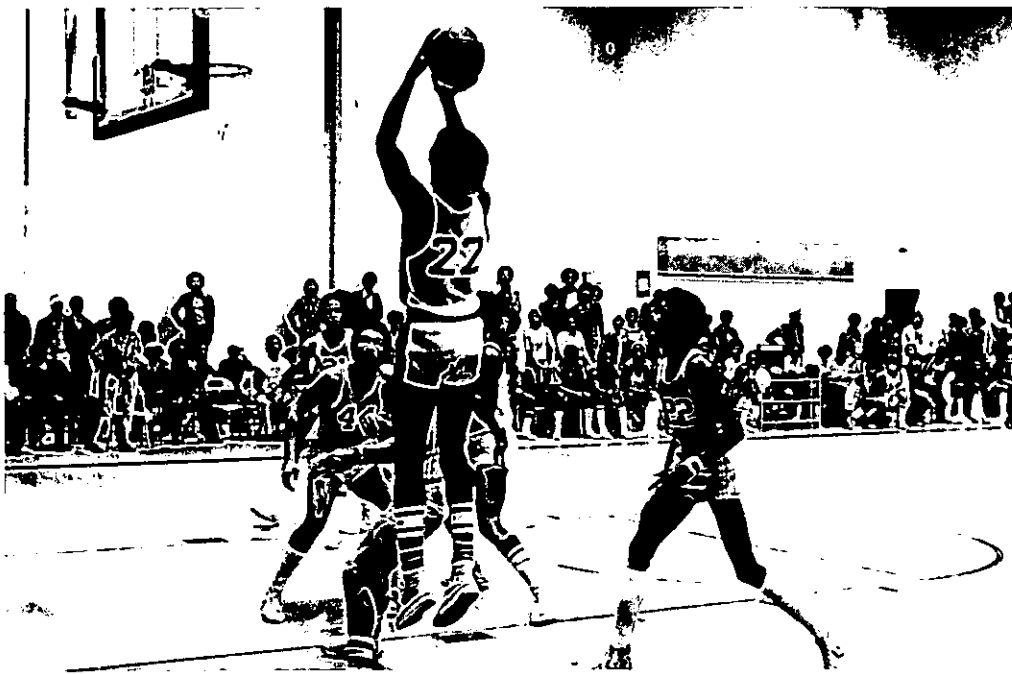
Accounting Associate  
Accounting Technician  
Banking and Finance  
Construction Management & Technology  
Educational Paraprofessional  
Engineering Technology  
Electric Power  
Electro-Mechanical  
Fluid Power  
Quality Control  
Human Services  
Mental Health Assistant  
Social Worker Assistant  
Mid-Management  
Ornamental Horticulture  
Florist  
Landscape Nursery  
Real Estate  
Office Careers  
Administrative Secretary  
Educational Secretary  
Professional Secretary  
Office Skills and Systems  
General

## TECHNICAL/OCCUPATIONAL CAREER

### PROGRAMS OF TARRANT COUNTY

Available to Dallas County Residents

PROGRAMS	CAMPUS
Agribusiness	Northwest Campus
Aviation Maintenance Technician	Northwest Campus
Civil Technology	Northeast Campus
Dental Hygiene	Northeast Campus
Emergency Medical Technician	Northeast Campus
Fashion Merchandising	Northeast Campus
Industrial Supervision	South Campus
Instructional Media	Northeast Campus
Labor Studies	Northeast Campus
Physical Therapy Technology	Northeast Campus
Postal Service Administration	Northwest Campus



John Lundberg

deadline for receiving a "W" is two weeks prior to the end of the semester. After that time a student will receive a performance grade in the course.

### Change of Schedule

Request for change of schedule must be initiated through a counselor and will be determined on the basis of whether space is available in the class to which the student wishes to change. The change action is not completed until it has been received and processed by the Registrar's Office with the instructor being notified of the change. No change action will be accepted by the registrar after the first week of classes.

### Auditing a Course

Any person 18 years or older may, with the consent of the instructor, enroll in the status of audit. The student may attend classes but not take the examinations or receive credit for the course unless the student enrolls in the course again as a regular student. The same fee is charged for auditing as for credit.

Procedures for auditing a course will be administered by the Registrar. No audits will be approved prior to the first day of the second week of classes in any semester. Most lab courses may not be audited. In the case of a student enrolled in collegiate level courses, the combined number of semester units in credit courses and audit shall not exceed eighteen.

### Recommended Academic Load

No student should enroll in more than 18 semester units of course work or more than 5 classes plus physical education without consultation with a counselor. If a student carries a full college load (12 semester units or more), the student should not work more than 20 hours per week. If a student must work more hours, the credit unit load in college should be reduced proportionately. The recommended load limit for day or evening students who are employed full-time is 6 semester units of course work. The recommended load limit in a 6-week summer session is 6 semester units of credit. A total of 14 semester units of credit is the maximum that can be earned in any 12-week summer period.

### Scholastic Probation and Scholastic Suspension

The policies on scholastic probation and scholastic suspension apply to full-time students (12 semester units or more) and to part-time students when they have attempted a total of 12 semester units. These policies are based on a 4.0 grade point scale (see page 60 "Scholastic Standards").

The following criteria will be used to determine academic standing:

1. Students who have completed one or more semesters in a college will be placed on probation if they fail to maintain a 2.0 cumulative grade point average.
2. Students who have been placed on scholastic probation may be removed from probation when they earn a 2.0 cumulative grade point average.
3. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above or a previous semester grade point average of 2.0 or above may continue on scholastic probation.
4. Students on probation who do not meet the requirements of paragraph 3 will be placed on scholastic suspension.

The periods of scholastic suspension are: 1) suspension for the first time — one regular semester and 2) subsequent suspension — two regular semesters.

Students previously enrolled in college who are placed on scholastic probation are expected to enroll in Human Development 106. Under special circumstances a counselor may waive this course for probationary students.

Students who have been suspended must file a petition for readmission. The conditions for readmission are established and administered by the Vice President of Student Services.

### Waiving of Scholastic Deficiency

Students pursuing an academic transfer program who wish to transfer to a technical-occupational program may have their earned credits evaluated for the possibility of disregarding any grades of their choice below "C" as long as the students follow the technical-occupational program. The logic of this procedure is that many students do poorly while pursuing a course of studies for which they are not suited but make rapid improvement when faced with tasks more suited to their interests and aptitudes. This procedure is contingent upon the student remaining in

a technical-occupational program. A change to an academic transfer program places the student under the original conditions of the academic transfer program including the calculation of a cumulative grade point average of all college credits earned. This procedure will apply both to El Centro College students and to students transferring from other institutions. Students who wish to avail themselves of this opportunity should state their intentions in writing to the Director of Admissions prior to pre-registration and should assume the responsibility of informing their counselor during the pre-registration advisement session.

### Transfer of Credit from El Centro College

Transfer credit will be given for all passing work completed at accredited colleges and universities. The Admissions Office will be responsible for the evaluation of all transfer credit.

Students who are admitted with a grade point deficiency will not be graduated from El Centro College until this deficiency has been cleared.

Credits earned in military service-connected schools or through the U.S. Armed Forces Institute will be reviewed by the Director of Admissions and credit granted if applicable.

The Registrar's Office will send the student's transcript upon request to any college or agency named. However, a student's official transcript may be withheld until the student has settled all financial obligations to the college.

### Settlement of Debts and Grade Reports

Grade reports are issued to each student at the end of each semester. Transcripts may be withheld if the student does not have all required student information on file in the Registrar's Office or if any financial obligations to the college have not been paid.

### Library Obligations

Willful damage to library materials (or property) or actions disturbing to the other users of the Library may lead to revocation of library privileges. Cases involving such damage will be referred for further action by the appropriate authorities.

All books and other library materials must be returned before the end of each semester. No grades will be sent to students who have not returned all such materials or who have unpaid library fines. No transcripts of grades may be sent until the library record is cleared.

### Scholastic Standards: Grades and Grade Point Averages

Final grades are reported for each student for every course undertaken according to the following grading system:

Grade	Interpretation	Grade Point Value
A	Excellent	4 points
B	Good	3 points
C	Average	2 points
D	Poor	1 point
P	Progress	Not Computed
F	Failing	0 points
I	Incomplete	Not Computed
W	Withdrawn	Not Computed

Grade Points earned for each course are determined by multiplying the number of points for each grade by the number of credit units the course carries. A student's grade point average is computed by adding the total grade point value for all courses for which grade point values may be computed and dividing by the appropriate number of credit units attempted during the same period.

Incomplete grades are given when an unforeseen emergency prevents a student from completing the work in a course. Division Chairmen must approve all "I" grades. Incomplete grades must be converted to performance grades within 90 calendar days after the first day of classes in the subsequent regular semester. After 90 days if the work has not been completed, the "I" will be converted to a performance grade.

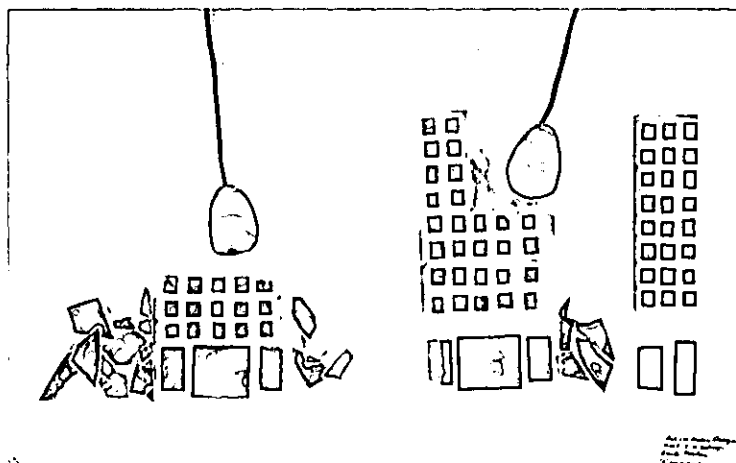
### Repetition of Courses

In computing cumulative grade-point averages, only the latest grade earned in repeated courses will be included. However, transcripts should indicate all work completed in the District. This policy shall apply, even if the latest grade is lower than the preceding grade. In cases where a student withdraws from a course which he or she is repeating, the student's cumulative grade-point average shall be calculated by using the immediate preceding grade in the same course.

### Honors

A full time student who has completed at least 12 hours of credit and who earns a grade point average of 3.00-3.49 will be listed on the college Honor Roll. Full time students who complete at least 12 hours of credit and who average 3.50-4.00 will be placed on the Dean's Honor List. In addition, students who have completed at least 6 and not more than 11 hours of credit in a semester, earning a grade point average of 3.50-4.00, will be placed on an Academic Recognition Roll.

The Honor Roll, Dean's Honor List and Academic Recognition Roll will be published each semester.



### Credit by Examination

A person who believes he or she is qualified by experience or previous training may take a special examination to establish credit in a particular course. Depending upon the course, the test may be a subject examination from the College Level Examination Program or a teacher-made instrument.

Students will be allowed to earn as many credits through the credit-by examination procedure as their needs require and ability permits. However, the last fifteen semester hours required for graduation in any degree or certificate program must be earned in residency and may not be earned through credit by examination.

Credit by examination may be attempted only one time for any given course and a grade of "C" or higher is required in order to receive credit. Grades below "C" will not be transcribed and credit can then be earned only by enrollment in and completion of the course with a minimum grade of "D."

Some courses at El Centro feature experiences that cannot be duplicated through testing and are thus ruled out as credit by examination possibilities. Only 3 credit hours may be earned through credit by examination in satisfying the degree requirement for History and Government. Assistance in choosing appropriate courses for credit by examination is available in the counseling center.

Requests for examination should be made to a counselor who will explain the necessary paper work and procedure. A student, whether part-time or full-time, will pay a non-refundable, \$20 fee prior to each examination.

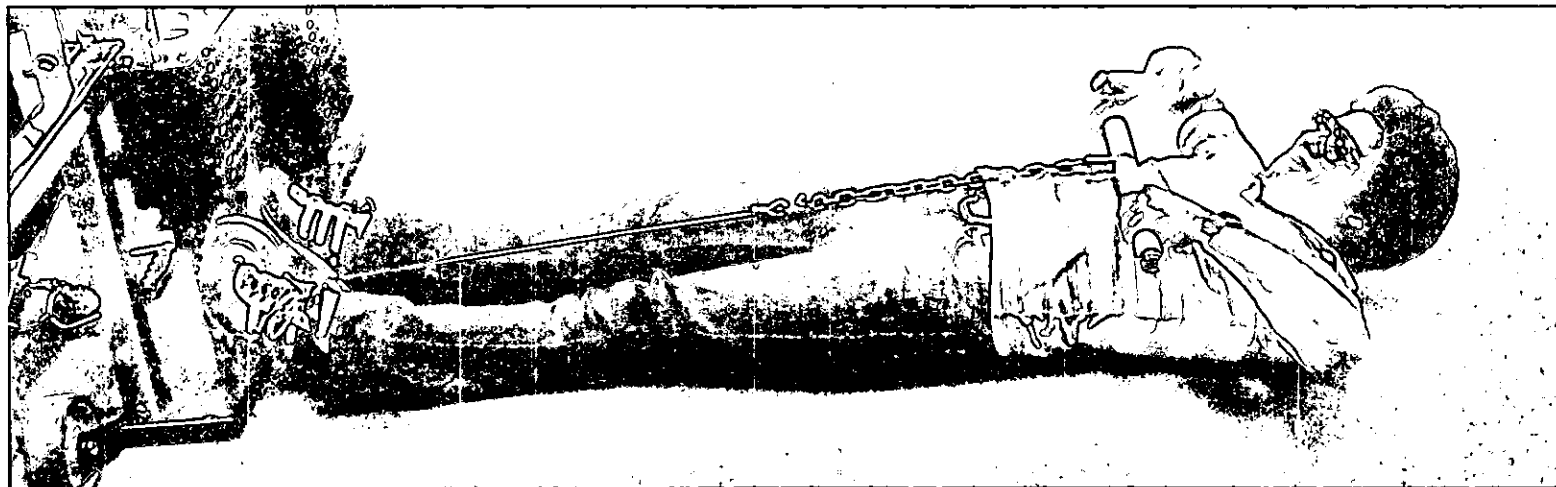
### Credit Granted for CPS Examination

Credit toward the Associate Degree in Applied Arts and Sciences in Secretarial Careers may be granted by the Business Division for the successful completion of all parts of the Certified Professional Secretaries (CPS) Examination. In order to receive credit, the applicant must:

1. Request that direct notification be given to the Registrar by the Institute for Certifying Secretaries that the applicant has passed all sections of the exam;
2. Earn 12 hours of credit for courses at El Centro College before the advanced standing credit is posted on the applicant's record, and
3. Demonstrate that the CPS Exam was passed within the last 10 years.

Bus 172 — Beginning Typing	3
Bus 174 — Intermediate Typing	2
Bus 159 — Beginning Shorthand	4
Bus 166 — Intermediate Shorthand	4
Bus 162 — Office Procedures	3
Bus 234 — Business Law	3
Bus 131 — Bookkeeping I or	3
Bus 201 — Principles of Accounting I	
Bus 231 — Business Correspondence	3
Psy 131 — Human Relations	3

Total Credit Hours 28





# Student Services

## Counseling and Guidance

Students and prospective students who have provided all necessary admissions information to the college will find a staff of professional counselors available to help them resolve questions of career choice, college transfer requirements, study skills, self-understanding and other kinds of personal problems. Group and individual techniques are employed by the counselors to meet student needs. A partial review of additional materials and services available through the counseling center is listed for student information: 1. Psychological tests of personality, vocational interests and aptitudes, 2. Technical and occupational information, 3. Catalogs from a wide selection of colleges and universities, 4. Registration information, 5. Information about the general services offered in other divisions of the college, 6. Tutoring services, 7. Referral for students requiring therapy for psychological problems, 8. Educational planning of courses to meet specific degree requirements. Students may see any counselor of their choice simply by making an appointment at the reception desk in the Counseling Center. The Counseling Center is located on the second floor of the "A" building. Telephone 746-2173.



benefits under VA Laws and Regulations. Veterans are encouraged to contact Vet-Reps on campus at 746-2293 or come by the Admissions' and Registrar's Office when in need of assistance.

## Human Development

The instructional activities in the Human Development courses provide chances for students to explore the relationship between meaningful education and some of the dilemmas or questions commonly brought to college. "Why learn" and "how to learn" is put in a perspective of "who is to learn." These courses are taught by counselors and by instructors in Developmental Studies.

This new series of courses in student development enhance the total curriculum and blends in with the total concept of the community college, and at the same time, offers academic credit which is transferable to most surrounding four-year institutions.

## Advisement

For students who have been admitted to the college, educational planning and advisement is provided. A staff of full-time counselors is available to the students of El Centro College. Faculty members also serve as program advisors to aid students in defining their educational goals.

## Veterans Affairs

Two offices on campus provide assistance to veterans — The Office of Veteran Affairs (VAO) and the Vet Reps Office.

(1) The VAO is established to provide services to veterans including job placement, counseling, financial aid for enrollment, and information services. The VAO sponsors the Inner City Veterans Association on campus and engages in outreach and recruitment. When tutoring or developmental studies are indicated, arrangements can be made through this office which is located in the Student Center, telephone 746-2341 or 746-2342.

(2) The Vet Reps are employed by the Veterans Administration to provide on-campus assistance to veterans. The main areas of assistance are preparation of applications for educational benefits and initiation of pay inquiries in case of non-receipt or questioned amounts in their VA checks. Also Vet-Reps answer questions the veterans may have about their entitlement to other

## Health Center

The Health Center, located on the second floor of the "A" building, is maintained on campus to provide health counseling and education as well as emergency and first aid care. The Health Center is open from 8:00 a.m. until 10:00 p.m. daily Monday through Thursday and from 8:00 a.m. until 5:00 p.m. on Friday.

Confidentiality of all findings is maintained, and no information is ever released without written permission from the student. A major function of the Health Center is the referral of students to the appropriate outside source for the correction of defects. Each student is responsible for his or her own transportation to referred sources. If the illness/injury is of such nature to necessitate an ambulance call, it will be provided at the student's personal expense.

Health education material may be secured from the Health Center. A small library is maintained containing health-related materials not available in the library.

All students are encouraged to complete the health history form as fully as possible so that the Health Center can best serve their needs.

## Financial Aid

The Financial Aid Program at El Centro College is designed to function as a multi-purpose financial assistance service for students. A major objective is to provide assistance to students who, without such aid, would be unable to attend college. Basic to this philosophy is the belief that the educational opportunities of able students should not be controlled by their financial resources.

Financial Aid is usually based on a student's total enrollment, and awards may be increased or decreased to reflect changes in the student's enrollment. Students must reapply each academic year for participation in financial aid programs. Applications should be completed at least six weeks prior to the beginning of each semester.

*Where to Apply.* Requests for information should be directed to the Director of Financial Aid, El Centro College, Main and Lamar, Dallas,

Texas 75202.

*When to Apply.* Students who anticipate the need for financial assistance for college should complete an application well in advance so a realistic determination of their need may be reached.

Previous to a Fall semester, the deadline for completing application and interview is 6 weeks prior to the first day of registration. Previous to a Spring semester, the deadline is 6 weeks prior to the first day of registration.

Information concerning the general provisions of the student Consumer Information Bill No. 178 may be obtained by contacting the Financial Aid Office, 9th Floor, El Centro College.

## Campus Employment

*Part-Time Employment.* Part-time employment is designed as a financial aid to assist students while they are in college through:

1. On-Campus placement
2. Work-study programs.

Efforts are made by the Office of Financial Aid for students to gain employment in clerical work, library work, laboratories, custodial work, selling, etc.

## Federal and State Programs

*Veteran's Benefits.* The Veteran's Benefits Program for eligible students is coordinated by the Office of Admissions and Records located on the second floor of the "A" building and by the Veterans Affairs Office located in the Student Center, in the basement of the college. Veterans



who are interested should contact the person in charge of Veteran's Benefits in the Admissions Office or the coordinator of Veterans Affairs.

**Bureau of Indian Affairs.** For information on educational benefits, an Indian student should contact the nearest BIA Office.

**Social Security Administration.** Benefits under this program are available to students who meet the criteria set up by the Social Security Administration. The Office of Admissions and Records acts as a liaison between El Centro students and the Social Security Administration.

**Vocational Rehabilitation.** The Texas Education Agency, through the Vocational Rehabilitation Division, offers assistance for tuition and fees to students who are vocationally handicapped as a result of a physical or mental disabling condition. For further information, contact Vocational Rehabilitation, 433 N. Central Expressway, Dallas, Texas.

**Hazlewood Act.** Certain veterans who have no remaining V.A. educational benefits and who are now residents of Texas and were residents of Texas at the time they entered the armed forces are eligible. Contact the Financial Aid Office for details.

**Law Enforcement Educational Program.** The LEEP Program is designed to aid students who are presently employed or working toward becoming employed in certain law enforcement and correctional agencies. LEEP funds provide aid for direct educational expenses, and are as follows:

**Grants.** Potential non-repayable grants are available only to students who are employed full-time by a public law enforcement agency. Students enrolled either part-time or full-time may be eligible. Grants cannot cover more than the amount of tuition, fees, and estimated cost of required books.

LEEP awards may be limited by funds made available to the college. For further information and applications, contact the Office of Financial Aid.

**National Nursing Scholarship.** Students who

have been officially accepted and are in at least half-time attendance in the Associate Degree Nursing Program, may apply to the Financial Aid Office. National Nursing Scholarships are awarded on the basis of exceptional financial need and are limited by funds made available to the college.

**Basic Educational Opportunity Grant, (BEOG).** Students who entered college for the first time during or after the summer of 1973 and are enrolling at least half-time may be eligible for this "entitlement grant." Applications are available in the Financial Aid Office, and are mailed directly by the student to a central processing place indicated in the instructions. The student receives a student eligibility requirement report, SER, which he or she brings to the Financial Aid Office for interpretation and determination of grant amount according to an objective table provided to them by the federal government for that purpose.

The following conditions apply to basic grants:

1. SER's should be brought to the Financial Aid Office immediately upon receipt by the student.
2. Grants are increased or decreased to reflect the student's class load during the semester.
3. Grant award payments are made in at least two payments, at the beginning and mid-points of each semester.
4. BEOG's are not carried over for summer school.
5. BEOG's, effective 1977-78 academic year, require "satisfactory progress" on the part of the student.

**Supplemental Educational Opportunity Grant.** This grant is authorized under the Higher Educational Act of 1965 and is designed to help students with exceptional financial need. To be eligible students must prove such financial need

and make satisfactory progress toward the completion of their educational goals. The amount of an SEOG award must be matched by another source, usually an amount earned by the student from a work-study job on campus. Students must apply each academic year to be reinstated.

## Loans

El Centro College has several loan funds for students needing long-term as well as short-term loans. Students interested in making application for loans should apply at the Financial Aid Office.

**Hinson-Hazelwood Loan.** A resident student of the state of Texas who meets the necessary requirements of the state and college may be eligible. Repayment must begin nine months following the termination of enrollment on at least a half-time basis. Minimum payments are \$30 per month and up, depending on total loan. Interest is charged at the rate of 7%, beginning on date of first required payment. A new application is required previous to each academic year, and a separate application is necessary for summer term loans.

Students who wish may apply for a Federally Insured Student Loan from a commercial lender, such as their family bank or credit union.

**El Centro College Loan.** A short-term institutional loan for emergency purposes. Repayment is to be made within 60 days or less.

**Dye Foundation Loan.** A short-term loan designed to assist students with tuition, and fees. Repayment is to be made within 60 days or less.

**Minnie Stevens Piper Foundation Loan.** A loan made available to assist worthy and needy students. Loans up to \$500.00 per semester for undergraduate students (sophomore or above) are available. Interest is a low 4% compounded annually from date of loan. Notes fall due one year after graduation. Interested persons should inquire at Minnie Stevens Piper Foundation, 2700 National Bank of Commerce, San Antonio, Texas 78205.



**Sears-Roebuck Foundation Loan.** This is a short-term loan available to mid-management and business students who are recommended by their instructors. It is a 60-day loan for up to \$100.00, bearing no interest.

**Food Services Loan.** This is a short-term loan available to Food Services students who are recommended by the Director of the Food Services Program. It is a 60-day loan for emergency purposes and bears no interest.

## Scholarships

Scholarships at El Centro include three major categories: *External, designated for specific students.* Many scholarships are awarded by individuals, civic organizations, and schools to high school seniors planning to attend El Centro. Where such awards are concerned, the Financial Aid Office acts merely as the disbursing agent to serve students and donors.

**Designated for specific fields of study.** Professional organizations and others with specific interests, sometimes provide scholarships which

current and former students of El Centro College. Part-time and full-time jobs are posted on the illuminated bulletin board in the main floor lobby. In addition, the Business Division maintains a job board on the fourth floor, while the Division of Math and Science posts related jobs on the sixth floor board. Many of the jobs are located in the downtown area, and are convenient for El Centro students; but some jobs require transportation.

## Student Activities

The Student Activities Program at El Centro College is responsible for providing the campus with a balanced program of cultural, social, and educational activities. Its goal is to offer a wide variety of co-curricular experiences which will assist the student in developing a rich concept of his life's potential. A varied program of activities open to all members of the Community Association is implemented through the coordinated programs of a number of organizations, each of which offers opportunities for the students to explore their interests. Members of the Activities staff assist in administering these activities.

recognized organizations at El Centro College fall within one of the following classifications:

1. **Co-Curricular Organizations** — These co-curricular organizations are integral to the educational goals and purposes of the College. Certain procedures affecting student life are designated as the responsibility of such organizations, and monies from the Student Activities funds are set aside to be used by these organizations in pursuing their responsibilities. Among the agencies are the Community Council, the Center Activities Board, and the Lyceum Committee.

2. **Social Organizations** — Such organizations exist for the purpose of providing fellowship, developing social relationships and promoting a sense of community among students who wish to be involved in group social activities.

3. **Service Organizations** — Service organizations have as their primary function the pursuit of activities which will contribute positively to the school and to the community.

4. **Professional Organizations** — Pre-professional and academic organizations are joined by students wishing to pursue interests which will contribute to the development of career fields.

5. **Scholastic Honorary Organizations** — Scholastic honorary organizations offer membership to students on the basis of academic excellence and performance.

6. **Special Interest Organizations** — Such organizations are organized by students who are intent upon developing or broadening an interest in some particular aspect of their lives as human beings and students.



## Student Center

The El Centro College Student Center complex occupies a major portion of two floors in the El Centro building. The lower level, housing the Student Center Office, is the focal point for activities. It contains recreational facilities, lounge areas, and a snack bar. Students may choose to use these facilities and services which are provided for their comfort and recreation as their leisure time and interests dictate. Those students desiring to become more fully involved in the programming aspects of the Student Center are encouraged to do so.

The main level of the complex houses the cafeteria and bookstore, as well as the central lobby. The office of the Director of Student Development is in the basement.

## Security Division

The department of Campus Security is required by state law to "protect and police buildings and grounds of state institutions of higher learning." Since all the general and criminal laws of the state are in full force and effect within the campus community, specially trained and educated personnel are commissioned to protect not only the physical property of the campus community but also to protect the person and the property of campus citizens. The security officers are responsible for enforcing rules, regulations, and Board policies of the college, including a Code of Conduct for students. The department seeks to operate a student-oriented program which encourages face-to-face contact between students and security officers to facilitate the open exchange of ideas and to develop a tolerance for individual points of view.

The Campus Security Office is located in the Student Activities area. A security officer may be reached any time the campus is open for educational activities by calling the campus operator: "O".

are available only to students majoring in that specific field of study. Applications should be submitted through the appropriate division chairman to the Office of Financial Aid.

**Internal based on financial need.** Several scholarships at El Centro are available only to students who demonstrate a definite financial need related to their educational expenses.

For further information concerning scholarships and other types of financial aid, students should contact the Office of Financial Aid. Financial Aid programs are highly dependent upon the state of the economy, and upon changes in state and federal legislation, and funding levels. Because of this, changes in programs and guidelines occur frequently.

## Off-Campus Job Placement

The Career Development Center maintains a listing of current job openings for the benefit of

## Community Association

The Community Association includes all segments of El Centro College — students, faculty, classified, staff, and administrators. All have a vested interest in the school and are therefore entitled, and urged to, participate in the operation of the college and the activities sponsored by the Student Activities Division.

The Community Association allows the total college population to share in the decision-making process and is composed of the following elements: Town Meeting, Community Council, Ad-Hoc Committees, and permanent organizations.

## Student Organizations

Information about participating in any organization may be obtained through the Student Activities Office located in the basement. Most

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## CREDITS

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# 1978-79 Calendar

## FALL SEMESTER, 1978

August 21 (M)	Faculty Reports
August 22-24 (T-R)	Registration
August 25 (F)	Faculty Professional Development
August 26 (S)	Saturday classes begin
August 28 (M)	Classes begin
September 1 (F)	Last day for tuition refund
September 4 (M)	Labor Day Holiday
September 9 (S)	12th class day
November 10 (F)	Veteran's Day Holiday
November 23 (R)	Thanksgiving Day Holiday begins
November 27 (M)	Classes resume
December 11 (M)	Last day to withdraw "W"
December 16 (S)	Final Exams, Saturday classes
December 18 (M)	Last day of classes
December 19-22 (T-F)	Final Exams

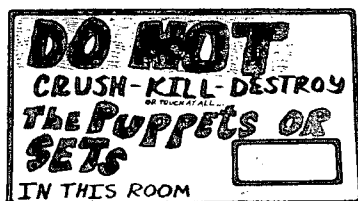
## SPRING SEMESTER, 1979

January 8 (M)	Faculty Reports
January 9-11 (T-R)	Registration
January 12 (F)	Faculty Professional Development
January 13 (S)	Saturday classes begin
January 15 (M)	Classes begin
January 19 (F)	Last day for tuition refund
January 26 (F)	12th class day
February 16 (F)	Faculty Professional Development
March 11 (S)	Spring Break begins
March 19 (M)	Classes resume
April 13 (F)	Easter Holiday begins
April 16 (M)	Classes resume
May 4 (F)	Last day to withdraw "W"
May 8 (T)	Last day of classes, T-R
May 10 (R)	Final Exam, T-R
May 11 (F)	Last day of classes, M-W-F
May 12 (S)	Final Exams, Saturday classes
May 14-16 (M-W)	Final Exams M-W-F
May 16 (W)	Graduation

## \*SUMMER SESSION, 1979

<i>First Session</i>	
May 28 (M)	Memorial Day Holiday
May 29 (T)	Registration
May 31 (R)	Classes begin
June 1 (F)	Last day for tuition refund
June 5 (T)	4th class day
June 28 (R)	Last day to withdraw "W"
July 4 (W)	Independence Day Holiday
July 5 (R)	Final Examinations
<i>Second Session</i>	
July 9 (M)	Registration
July 11 (W)	Classes begin
July 12 (R)	Last day for tuition refund
July 16 (M)	4th class day
August 8 (W)	Last day to withdraw "W"
August 14 (T)	Final examinations

\*BOTH SUMMER SESSIONS MAY NOT BE SCHEDULED DURING THE SUMMER OF 1979



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