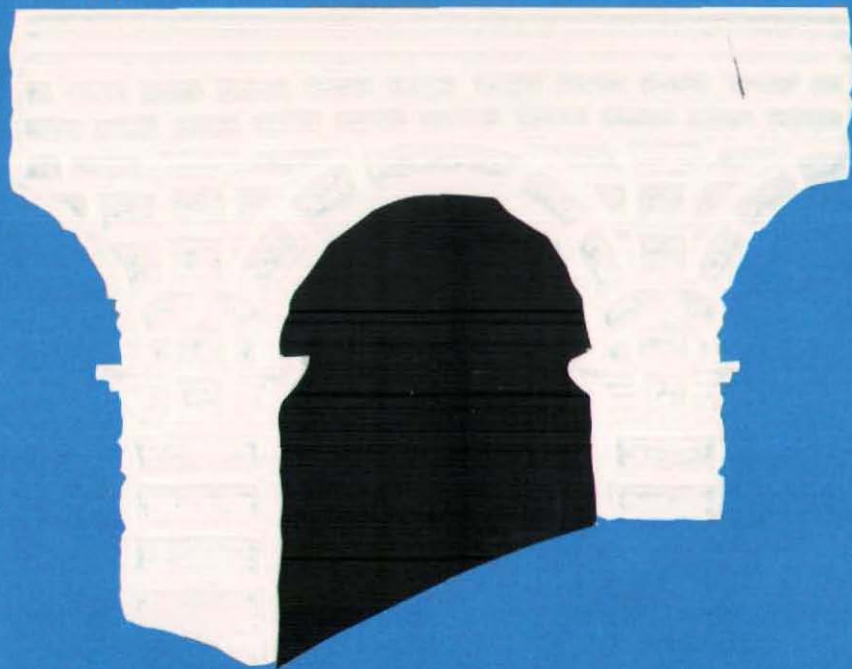


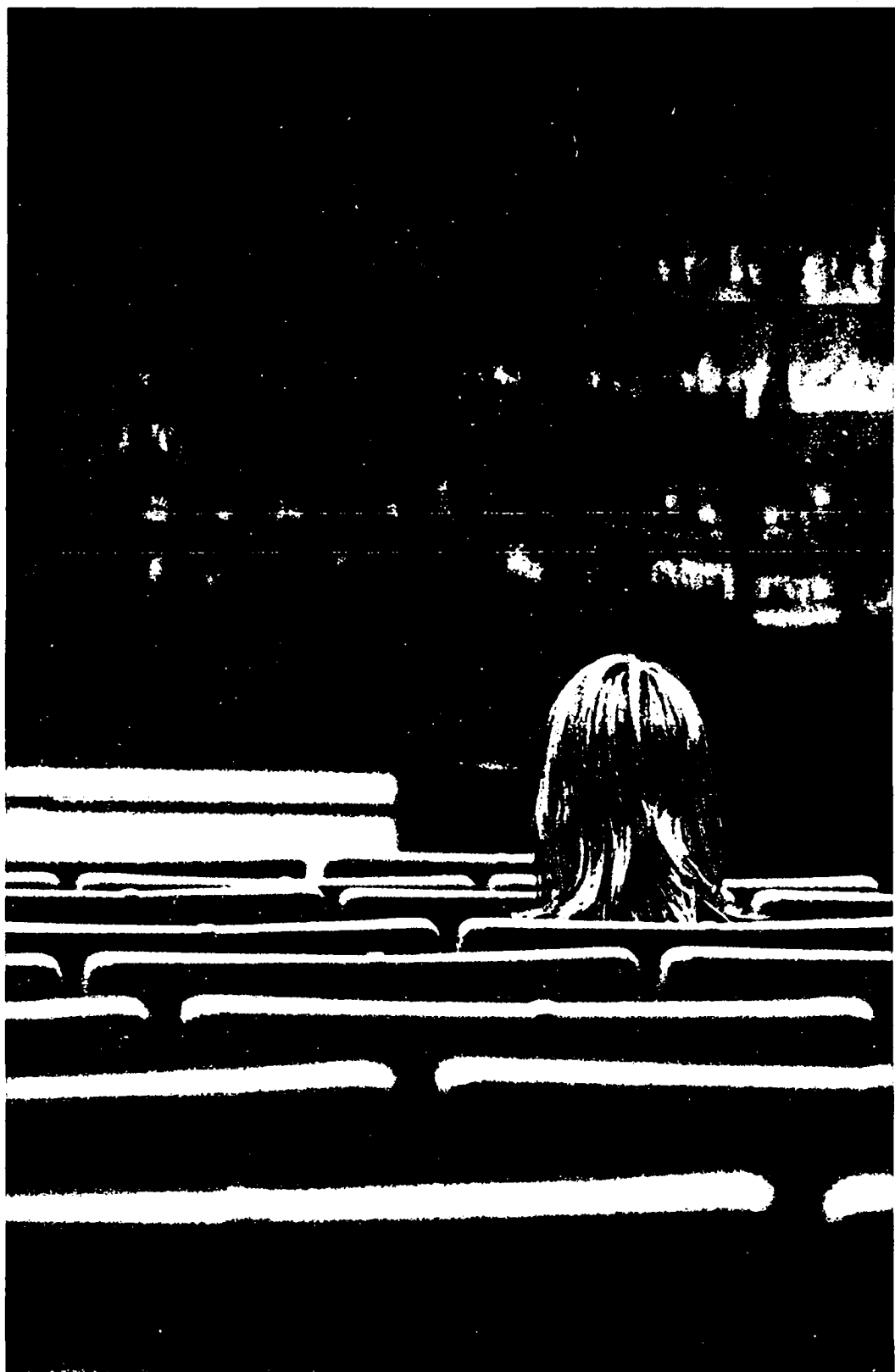
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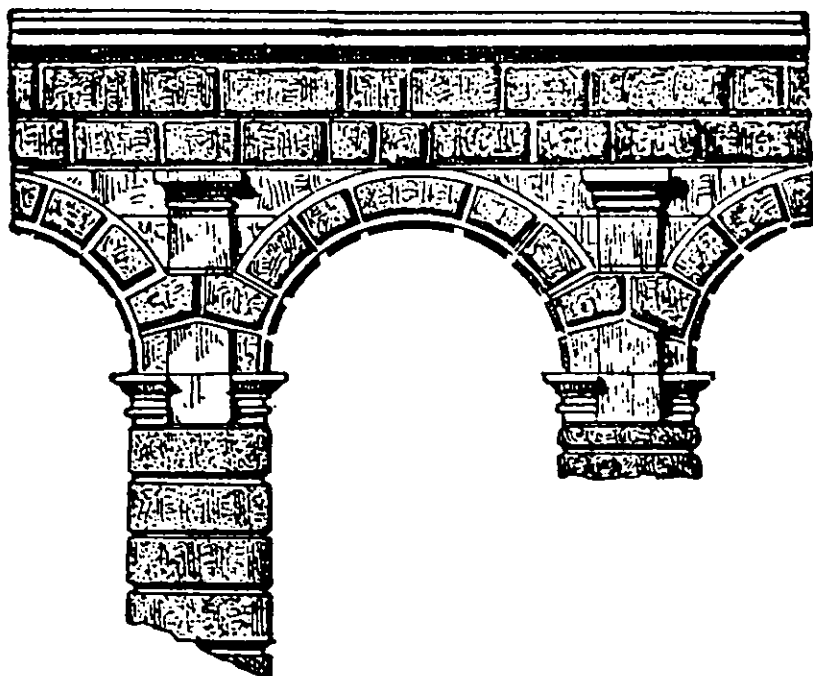


EL CENTRO COLLEGE

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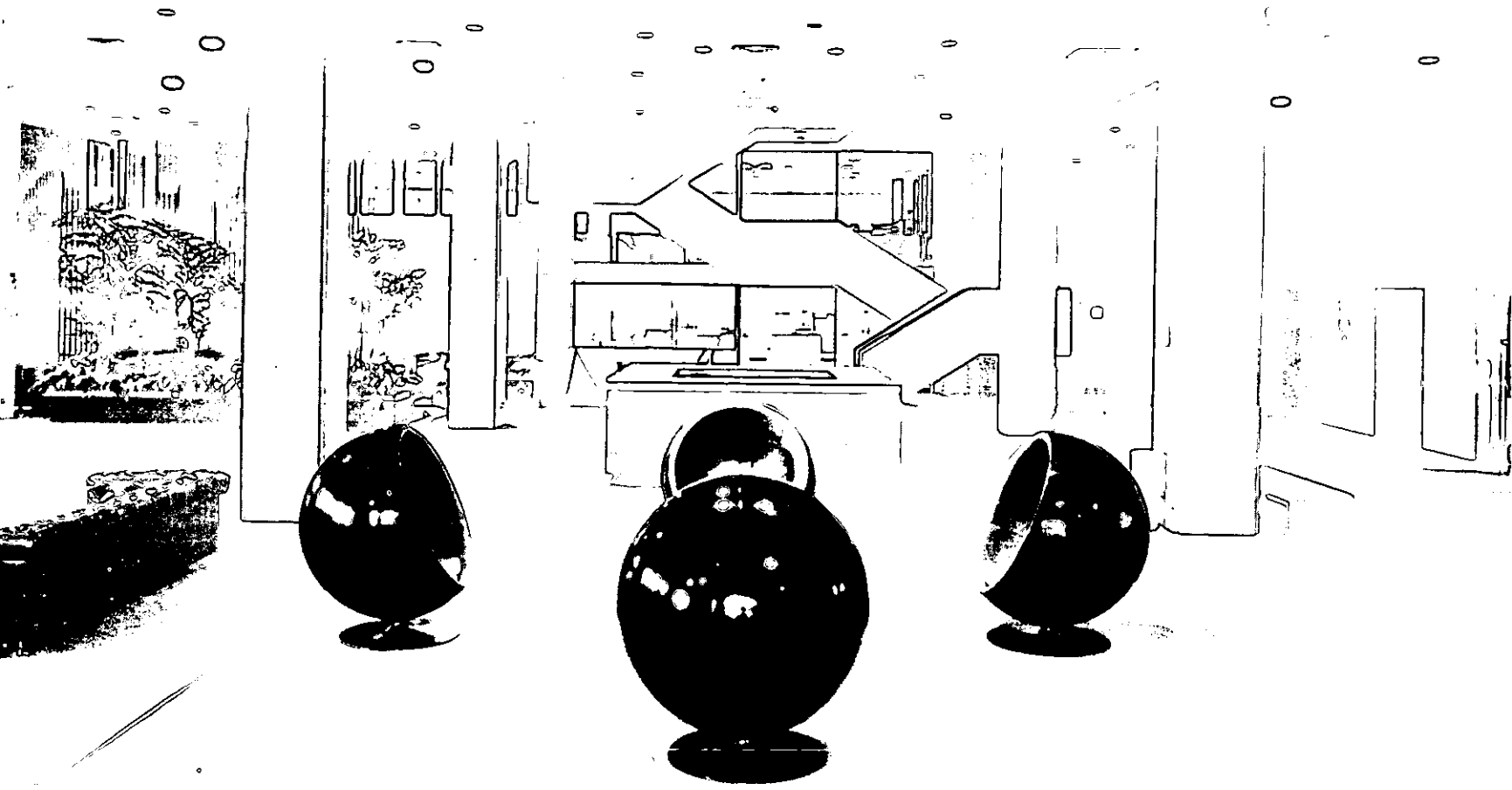




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THERE IS ONLY ONE THING WRONG WITH THE THEORY THAT ALL SCHOOLS SINCE THE LYCEUM ARE ABOUT THE SAME AND TREAT STU- DENTS ABOUT ALIKE.

It just isn't true. El Centro College believes that we are here for one reason — to serve our students and in so doing serve our community. That's the important difference. And 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.

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, not subject matter. Learning is a personal thing at El Centro — an exchange of ideas and not an indoctrination, 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. And its teachers are a select group 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 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 good friend as well as a guiding influence and source of help



... Humanized instruction is a vital part of learning at El Centro College.



on any problem and not on forcing you into some program or course outside your interest.

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

For 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. Joe College, the promising 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 "student-type" which might be considered "typical." 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 sixteen students last year were sixteen or under. Thirty-one were sixty or over. Fifty students were forty-one years old. Ninety-three were thirty-four years old. About 3500 were eighteen to twenty-five. Some had long hair. Some had short hair. Some were businessmen trying to further their education, finish a degree, or learn a new job entirely. Some majored in English and studied the poetry of Keats who 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 than the 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 as 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 have left the ivory tower. We have said that learning is our business. And our teachers get down to business with students, both inside the classroom and out. First in their approach, they hold the view that students are the only reason they are here and not the other way around. Secondly with their ability. They are the cream of the crop, the finest teachers that could be hired, for they have an important job to do.

And administrators at El Centro deal with problems such as how do people learn things, when should courses be scheduled to accommodate the most students, how successful are the new programs we have tried, and how well are the old ones doing now. In short, they too, though not as directly as our instructors, work for the students. And more importantly, they are 'real people' who can talk about problems or ideas and "relate" well to see both sides of the question, and not the sides only as your and theirs. Don Rippey, the President of El Centro is as likely to be seen milling through the lines of students at registration or on the griddle before the monthly "town meeting" of the ECC Community as in his office doing whatever it is that presidents do. He is a man who finds the business of learning at El Centro to be an exciting one. Most of all, he holds the academic qualifications to stay on top of this business of learning, to guide and motivate the faculty and administrators toward higher achievement, and he combines these qualities with a warm, personal approach and an understanding way.





Students wait in line to register . . .

El Centro College, downtown Dallas' very own college, is exciting.

Not the rah-rah excitement of a football game. The excitement of being right in the middle of a big-busy city. The excitement of being right where things are happening. The dead serious excitement of learning.

The college's campus is a nine-story building at Main and Lamar Streets and is easily reached by freeway from all portions of the metropolitan community and public transportation from all portions of the city.

This ready assessability combined with El Centro's innovative approach to education creates a student body that closely represents a cross section of the community.

Students of varied backgrounds are brought together with a common goal: securing a brighter, more meaningful future by taking advantage of El Centro College's educational offerings.

There's a no nonsense atmosphere about El Centro's student body and traditional college institutions are critically evaluated by the "now" generation of students at the downtown school. For example, student government in its traditional form simply wouldn't fill the bill at El Centro and a "town meeting" student government was set up with administrators meeting monthly with the entire student body for a problem solving session.

El Centro, the first college of the Dallas County Community College District, opened its doors in 1966 and has served about 90,000 students since that date.

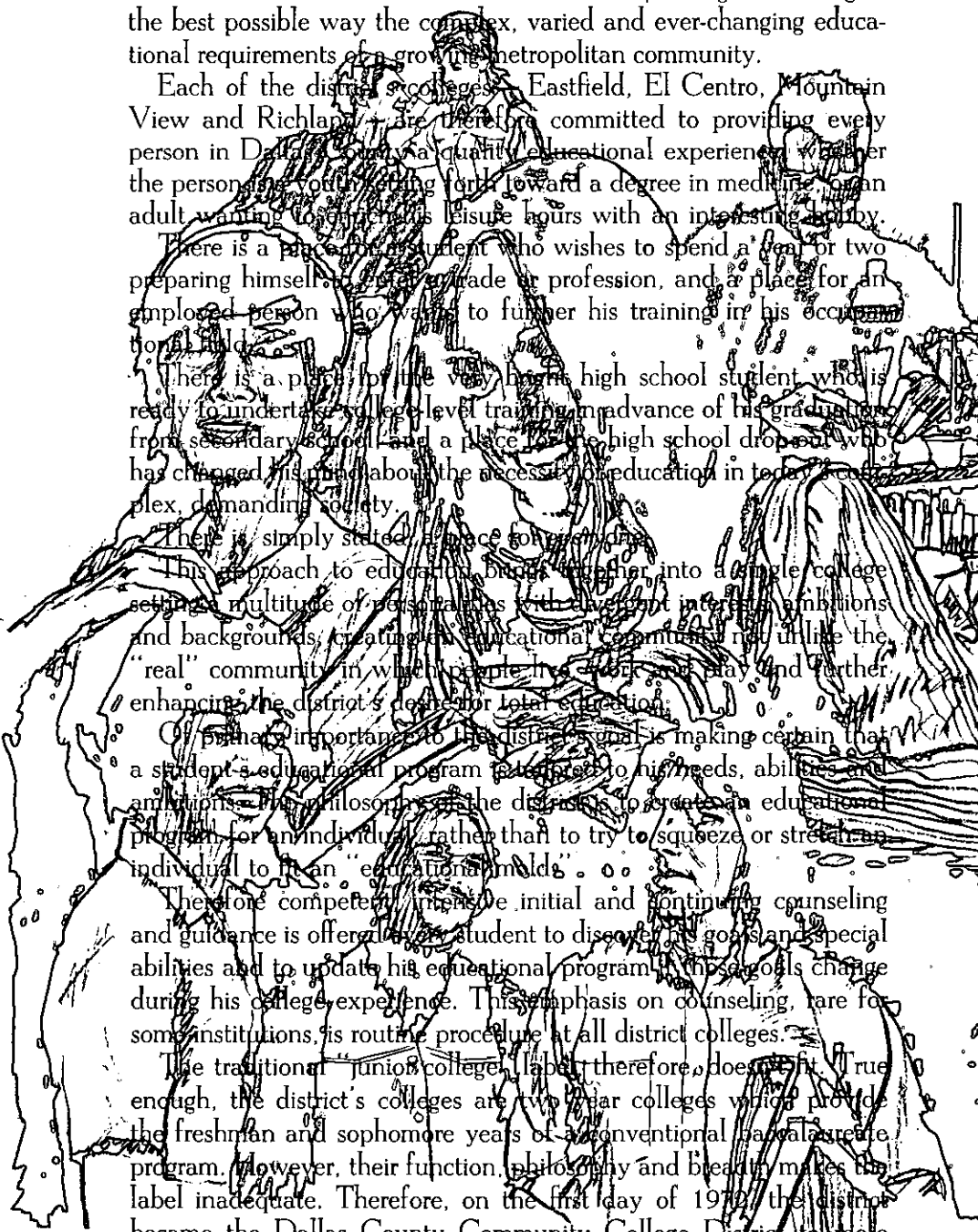
The downtown campus was the proving ground for the district's open door policy, total education concept and the innovative educational approach now in use on other district campuses.



... A student studies in the individual listening center.

History, Philosophy & Objectives





The Dallas County Community College District's four 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 colleges — Eastfield, El Centro, Mountain View and Richland — are therefore committed to providing every person in Dallas County a quality educational experience, whether the person is youth setting forth toward a degree in medicine, or an adult wanting to enrich his leisure hours with an interesting hobby.

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

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

There is, simply stated, a place for everybody.

This approach to education brings together into a single college setting a multitude of personalities with divergent interests, ambitions and backgrounds, creating an educational community not unlike the "real" community in which people live, work and play, and further enhancing the district's dedication to total education.

Of primary importance to the district's goal is making certain that a student's educational program is tailored to his 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".

Therefore competent, intensive initial and continuing counseling and guidance is offered every student to discover his goals and special abilities and to update his educational program. These goals change during his college experience. This emphasis on counseling, rare for some institutions, is routine procedure at all district colleges.

The traditional "junior college" label therefore does not fit. True enough, the district's colleges are two-year colleges which provide the freshman and sophomore years of a conventional baccalaureate program. However, their function, philosophy and breadth makes the label inadequate. Therefore, on the first day of 1972, the district became the Dallas County Community College District to more accurately reflect the mission of its colleges, that of meeting the varied educational needs of the entire metropolitan family.

How do the district's colleges serve the educational requirements

of such a complex family? The answer can be 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 long list of courses which are transferable to senior colleges and universities.

— For the student wishing to train for a technical or vocational occupation, career education programs of one and two years are designed to enable a student to enter his chosen field as a skilled employee trained as a professional, and also to enter the community as a well rounded citizen.

— For the employed person wishing to improve his knowledge of his field — or train for a move into a new occupational field — the colleges offer a broad range of Community Service courses.

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

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 with the start of the 1972-1973 school year.

In addition to these four colleges, sites have been purchased for three future colleges, Brookhaven College, Cedar Valley College and North Lake College.

These remarkable facilities and excellent faculties combine with the district's unique but effective philosophy and the strong support of the people and institutions of Dallas County to create four outstanding educational communities within the bustling metropolitan county.

The Dallas County Community College District is a charter member of The League of Innovation in the Community College. A national organization, the League links 16 community college districts composed of 41 colleges and more than 300,000 students.

Membership in the League constitutes a significant recognition of the Dallas County Community College District as a district committed to: (1) a program of experimentation and improvement; (2) a willingness to share the fruits of experimentation; (3) a cooperative program with other districts in the solution of common problems; (4) an evaluation of experimentation and the application of the results of experimentation in the orderly operation of the district's programs.

The League consists of sixteen outstanding districts throughout the nation: Brookdale Community College, Central Piedmont Community College, Chicago City College, Cuyahoga Community College, Dallas County Community College District, Delta College, District of St. Louis and St. Louis County, Foothill Junior College District, Kern Junior College District, Los Angeles City Junior College District, Los Rios Junior College District, Moraine Valley Community College, Orange Coast Junior College District, Peralta Junior College District, Sante Fe Junior College, Tulsa Community College.

Dallas County Community College District

Administrative Staff

Chancellor	Bill J. Priest
Vice-Chancellor of Academic Affairs	R. Jan LeCroy
Vice-Chancellor of Business Affairs	Walter L. Pike
Director of Planning and Research	Gary A. James
Director of Data Processing	James R. Hill
Director of Special Services	Robert J. Leo
Director of Program Development	Dexter L. Betts
District Coordinator of Technical Occupational Education	Claude C. Owens
District Director of Public Information	Sibyl Hamilton
Public Information Assistant	Ben F. Stevens
Coordinator of Research	Douglas Hamilton
Technical Assistant for Faculty Planning	Stanley E. Pritchard
Construction Coordinator and District Coordinator of Maintenance and Operations	George L. Robinson



SEATED LEFT TO RIGHT: MRS. EUGENE McDERMOTT, VICE-CHAIRMAN; R. L. THORNTON, JR., CHAIRMAN OF THE BOARD; BILL J. PRIEST, SECRETARY OF THE BOARD. STANDING LEFT TO RIGHT: DURWOOD A. SUTTON, LONCY L. LEAKE, MILOREN M. MONTGOMERY, CARIE E. WELCH, AND JIM SCOGGINS



HELLO! If, by some odd set of circumstances, you should actually read this page, let me welcome you to El Centro College. If this isn't your first enrollment, then welcome back!

Nobody reads a catalog; they aren't even designed to be read any more than is a dictionary. We do hope, however, that it will be just as useful as a dictionary. Almost any question you have concerning our college can be answered by looking in the catalog.

General information such as how to enroll, how to graduate, how much it costs, etc., is found in the first section. Following this general information, the specific individual courses are listed and described. Remember — if all else fails, try the index!

All of the staff and faculty of El Centro are here to help you; if you succeed, we succeed.

Donald T. Rippey
President



Admissions

General Admission Policy

Applications will be accepted any time prior to registration. Since registration priorities are assigned according to the date an application is received, applicants should plan to submit applications at least three weeks before registration. Applications received after this date will receive a lower priority. 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 may be admitted by the Committee on Admission and Retention.
- 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. In this case, a limited number of high school seniors may be concurrently enrolled for special study.

2. Transfer Students:

- a. College transfer applicants will be considered for admission on the basis of their previous college record. Academic standing will be determined by 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 re-admission 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 campuses.

4. Non-credit Students:

Students seeking enrollment for non-credit courses are directed to contact the Division of Community Service Programs.

Admission Procedures

Full-Time Applicants (12 semester units or more):

1. Application for Admissions:

Each applicant is required to furnish his social security number in the space provided on the application form. This number is required for student identification and to insure the accuracy of student records.

2. Official Transcript from Last School Attended (High School or College):

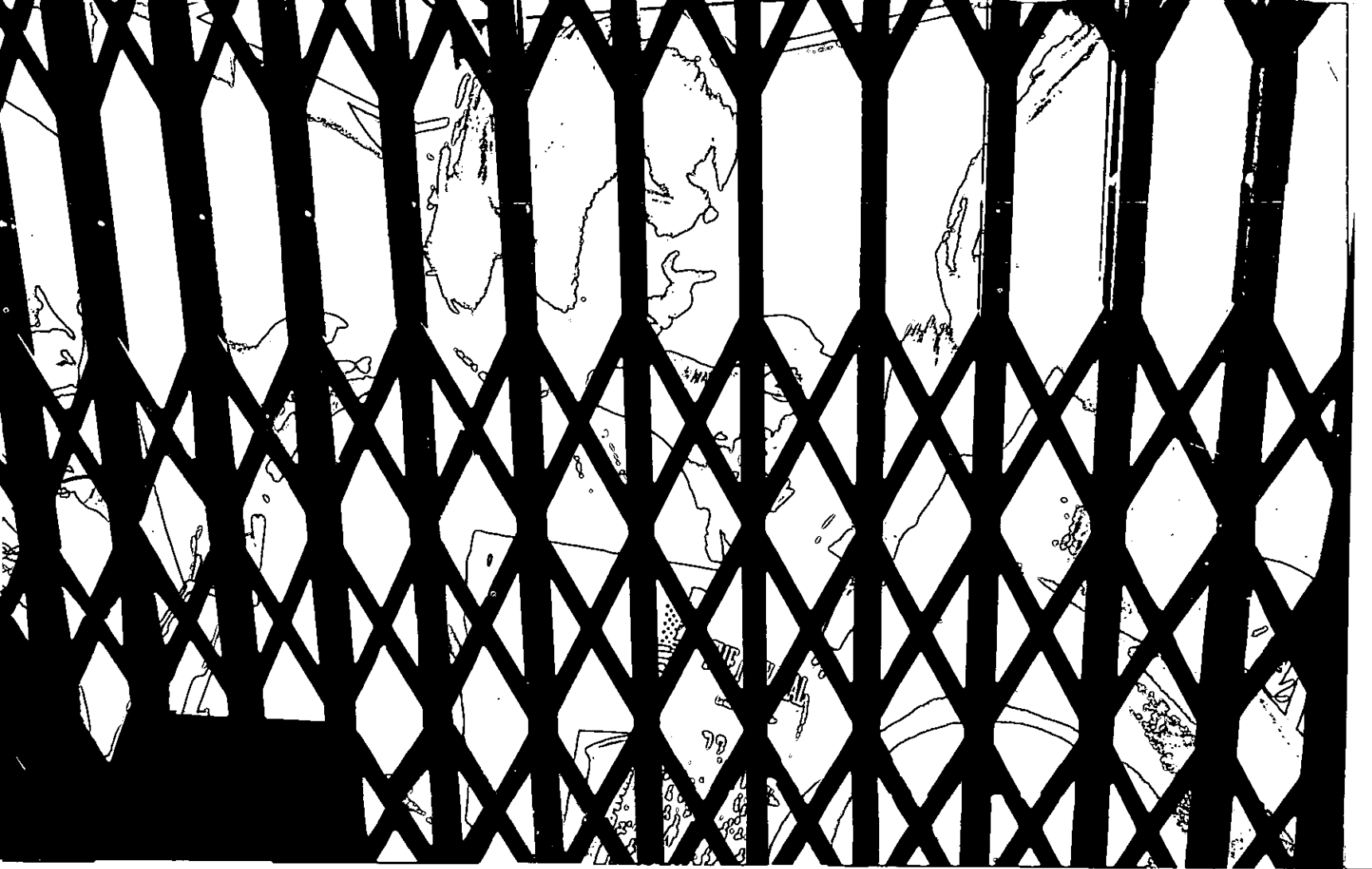
College transfer students are required to submit transcripts of all previous college work prior to the end of the first semester.

3. Results of the American College Testing Program (ACT):

The results of the ACT are used for counseling and placement.

Students talk informally with Dallas Congressman Earle Cabell.





College transfer applicants who have earned at least 6 units of college credit with a grade of "C" are exempt from this requirement. District colleges may substitute other standard testing scores for placement purposes.

Each applicant who has not earned at least 6 semester units of college credit with grades of "C" or better is required to furnish the Director of Admissions with the results of the American College Testing (ACT) program. The results of these tests will be used for counseling and placement.

All students entering with ACT scores of 11 or below are advised to enroll in the Guided Studies Program. Exceptions may be made only upon the recommendation of a counselor.

Information about the ACT testing program may be obtained from your high school counselor or the office of the Director of Counseling. The ACT code for El Centro is 4079.

4. Medical Form:

Full-Time applicants are required to submit the medical form completed on *both* sides. This form is included in the admissions packet and should be returned by mail or in person directly to the Health Center. Written proof of inoculation is required on the following:

- a. A negative tuberculin skin test or chest x-ray.
- b. Polio immunization if applicant is under nineteen years of age.
- c. Diphtheria/Tetanus injection within ten years.

Part-Time Applicants (Less than 12 semester units):

1. Application for Admission:

Each applicant is required to furnish his social security number in the space provided on the application form. This number is required for student identification and to insure the accuracy of student records.

2. Official Transcript from Last School Attended (High School or College):

College transfer students are required to submit transcripts of all previous college work prior to the end of the first semester. Students never having attended college will supply a high school transcript.

3. Medical Form:

Part-time applicants are required to submit the medical form completed on the Health History Report side only. This form is included in the admissions packet and should be returned by mail or in person directly to the Health Center. Written proof of inoculation is required on the following:

- a. A negative tuberculin skin test or chest x-ray.
- b. Polio immunization if applicant is under nineteen years of age.
- c. Diphtheria/Tetanus injection within ten years.

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).

Foreign Students

El Centro College is authorized under Federal Law to enroll non-immigrant alien students. However, under present conditions, no for-

eign students are admitted without the special permission of the President of the College.

Concurrent Enrollment

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.

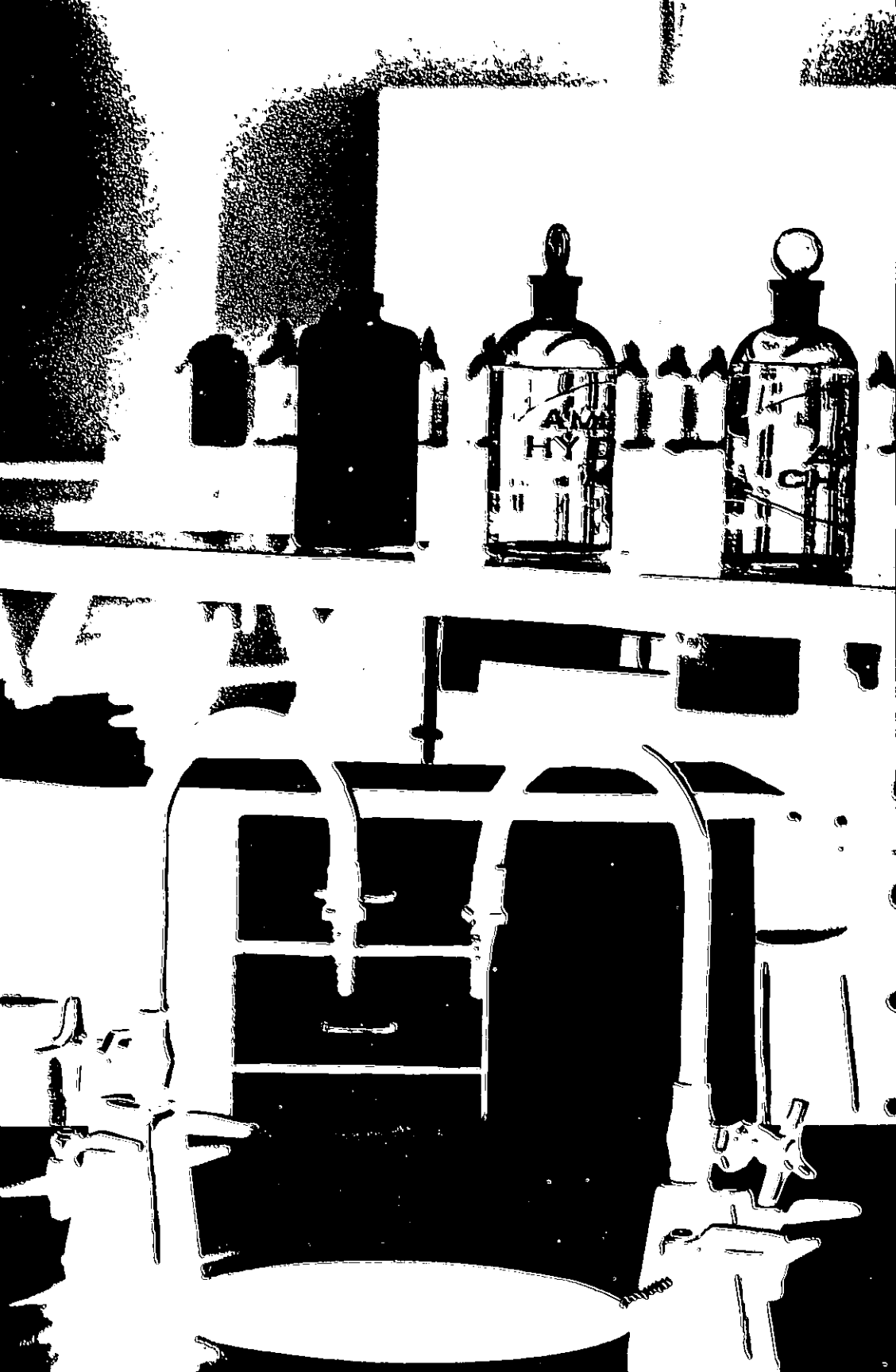
Community Service

Short-term, non-credit Community Service courses are the district's answer to the community's challenge to provide educational opportunity for everyone.

These courses reflect the interests and needs of the community and cover a wide variety of subjects, ranging from occupational training to personal entertainment and cultural enrichment.

Instructors are leading professional men and women, college faculty members and experts in the course subject. There are no entrance requirements and class schedules are set for the convenience of the students.





Fees



Fees

Tuition and Fees *

Tuition fees will be charged according to the following schedule:

Fall or Spring Term

In-District	\$6.00 per credit unit through ten credit units and \$4.00 per credit unit in excess of ten credit units; Minimum of \$25.00
Out-of-District	\$20.00 per credit unit through ten credit units and \$4.00 per credit unit in excess of ten credit units; Minimum of \$25.00
Out-of-State **	\$40.00 per credit unit
Out-of-Country	\$40.00 per credit unit; Minimum of \$200.00
A.D. Nursing Program	\$4.00 per semester credit unit within the minimum and maximum amounts; Minimum of \$20.00 and Maximum of \$50.00

Summer Term

In-District	1-6 Credit Units	\$10.00 per semester credit unit with a minimum of \$25.00
	7- Credit Units	\$4.00 per semester credit unit
Out-of-District	1-6 Credit Units	\$30.00 per semester credit unit
	7- Credit Units	\$4.00 per semester credit unit
Out-of-State **	1-6 Credit Units	\$45.00 per semester credit unit
	7- Credit Units	\$40.00 per semester credit unit
Out-of-Country	1-6 Credit Units	\$45.00 per semester credit unit with a minimum of \$100.00
	7- Credit Units	\$40.00 per semester credit unit
A.D. Nursing Program *		\$10.00 per semester unit with a minimum of \$25.00 and maximum of \$50.00

*Tuition fees (Credit Courses) — to be paid at college of residence which is defined as the college in which the student will take the majority of his credit units.

**A non-resident student is hereby defined to be a student of less than twenty-one (21) years, 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 of twenty-one (21) 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.



An El Centro design student models her latest creation for Dallas manufacturers and ECC students in a spring fashion show.



Special Fees and Charges

Student Services Fee

(12 or more semester credit units) \$7.00 a semester

Student Services Fee

(6-11 semester credit units) \$4.00 a semester

Laboratory fees

(a semester, per lab) \$2.00 to \$8.00

Music fees

\$35.00 for 1 hour per week
(maximum charge for one course)

*(private lessons, a semester)

\$20.00 for 1/2 hour per week

*Available only to students enrolled for 12 units or more.

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 activity fee is not charged.

Credit by Examination

Examination fee of \$12.00 per examination.

ACT (American College Testing Program)

National Test Dates \$6.00

Local Test Dates \$8.00

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.

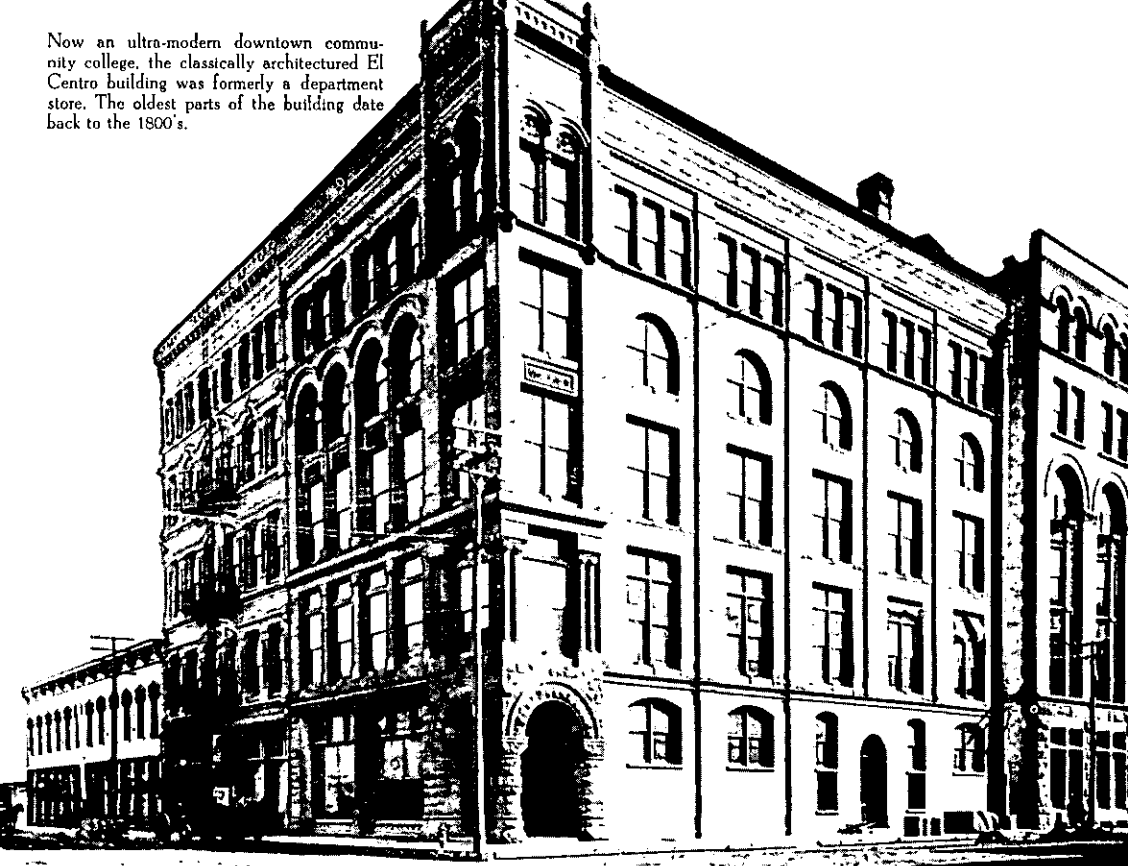
Refund Policy

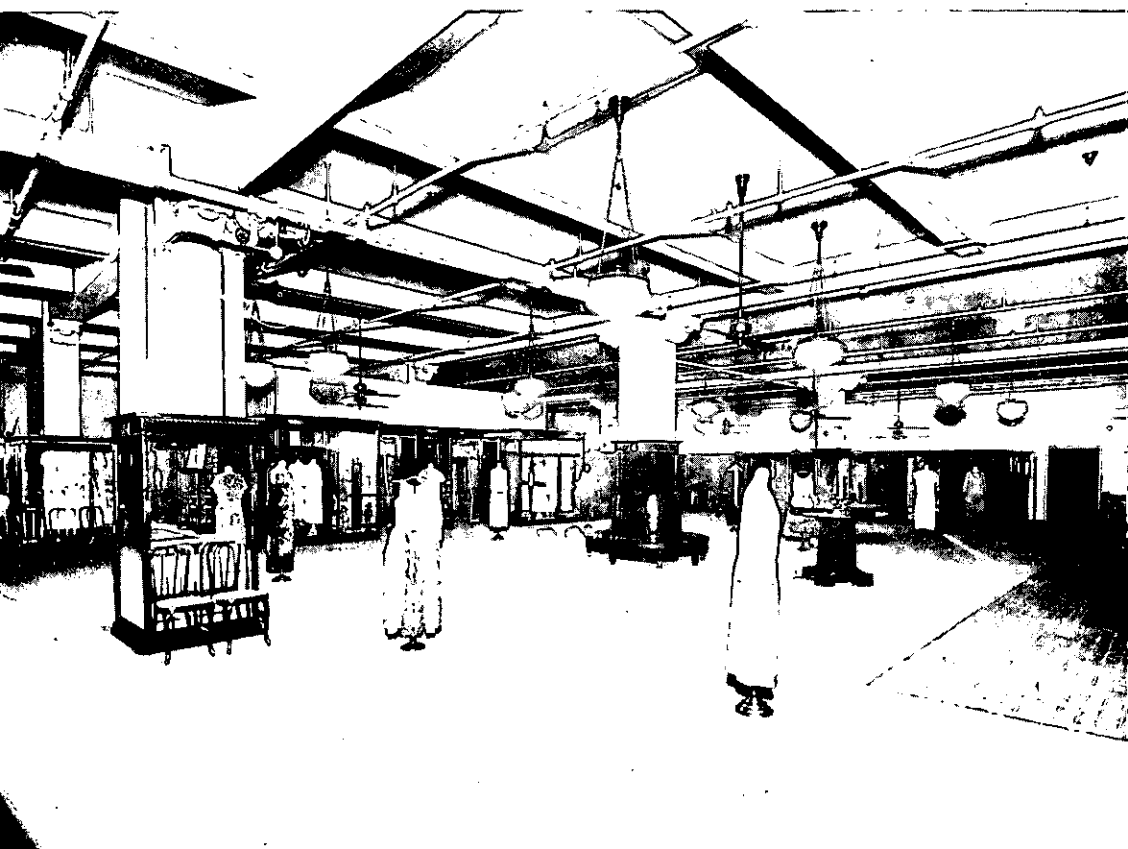
The refund policy for El Centro College is based on the fact that student tuition and fees provide only a fraction of the cost of providing educational opportunities. When a student enrolls in a class, he reserves a place which cannot be made available to another student until he officially drops the class. Also, a student's original enrollment represents a sizeable cost to the district whether or not he continues in that class. Therefore, refunds will be made only under the following conditions:

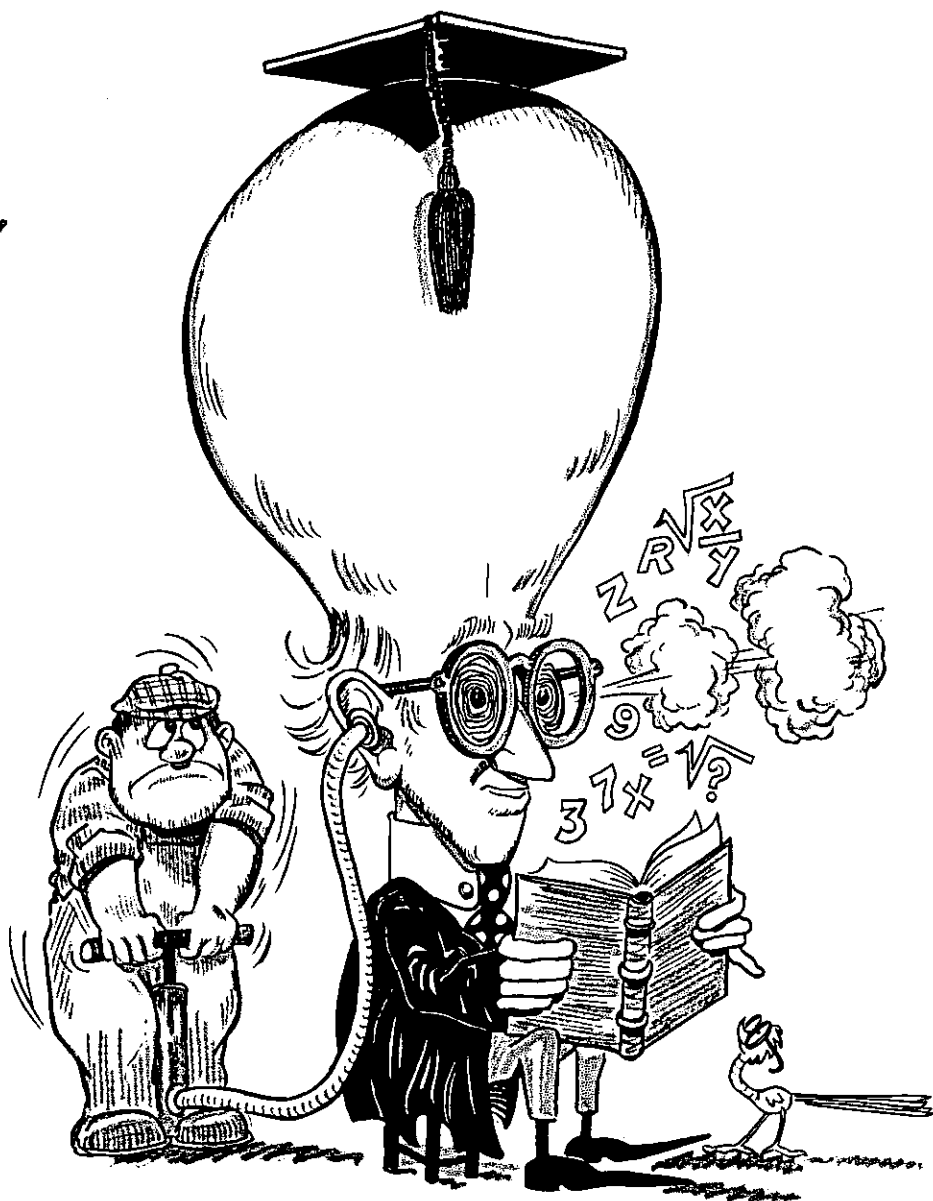
1. No 100% refunds are granted unless college error is involved.
2. 80% refund of tuition and fees if the class is dropped during the first week of classes for each semester. No refund for less than \$4.00 will be made.

3. No refund will be made after the first week of classes. An exception may be made for students inducted into the armed services if a copy of the induction notice is filed with the Registrar's Office.
4. The first two days of a six week summer session are considered to be the equivalent of one week for purposes of this policy.

Now an ultra-modern downtown community college, the classically architected El Centro building was formerly a department store. The oldest parts of the building date back to the 1800's.







Degree Requirements

Degree Requirements

Associate in Arts and Associate in Science Degree Requirements

A total of 60 units exclusive of physical education activity courses must be presented with an average of at least "C" (2.0). Courses numbered 99 and below may not be counted toward the 60 units minimum.

These 60 units 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 units

A minimum of 6 semester units of a laboratory science. 6 units

(Music Majors are exempt from this requirement. Check listings under subject field).

History 101-102 and Government 201-202 (No substitutions allowed) 12 units

Humanities: To be selected from Theatre 101, Art 104, Music 104 or Humanities 101 3 units

In addition to the course requirements, each degree candidate must earn the last 15 units as a resident student in the district colleges or accrue 45 units in residence. The degree will be granted by the college in which the student took the last 15 units or where the majority of units were accrued. No more than 1/4 of the work required for any degree or certificate may be taken by correspondence. Permission must be granted by the Director of Admissions for correspondence work.

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.

The student is urged to consult the catalog of the institution to which he may transfer for their special requirements. These catalogs should be used by the student and his advisor as a basis for the program plan.

Associate in Applied Arts and Associate in Applied Science Degrees

A minimum total of 60 units exclusive of physical education activity courses must be presented with an average grade of at least "C" (2.0). All of the prescribed requirements for the specific technical or occupational program for which the student is enrolled must be completed and for some programs, the semester unit total is over 60.

Procedure for Filing Degree and Certificate Plans

1. The student should request a degree plan from the Admissions Office at the end of his freshman year.
2. A student following a 1-year certificate program should request an official plan during his 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 will be required to attend the

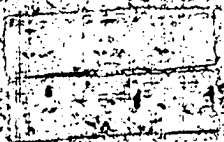
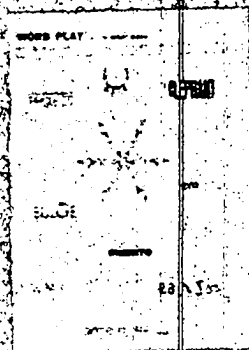


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commencement program unless granted prior permission by the Dean of Students to graduate in absentia.

5. January and August graduates may attend the next commencement if they desire, but are not required to do so. Should the graduating student wish to attend, the Registrar's Office should be notified of his intention.
6. For information concerning graduation fee, see page 34 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 he elects to graduate under the requirements of a later catalog. The candidate must indicate the catalog of his choice when he files his degree plan.

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.

Associate Degree and Certificate Programs

Technical vocational programs are one-year and two-year courses of study designed to enable a student to enter his chosen occupational field as a skilled employee and his community as a culturally aware citizen.

These programs are offered only after studies prove employment opportunities will exist at the time the student completes his program, matching the industrial community's requirements to the ambitions and goals of the student.

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 other academic subjects to enable the student to better understand and participate in his community.

Technical vocational courses are college credit courses and some are transferable in the event a student wishes to continue his studies at a four-year institution.

The curriculum patterns for El Centro's Technical-Occupational Programs do not appear in this catalog. A supplement containing the official 1972-73 curriculum patterns is available in the Office of the Registrar, in the Counseling Center, and in the Division Offices.

The following Associate Degree and Certificate Programs are offered at El Centro College:

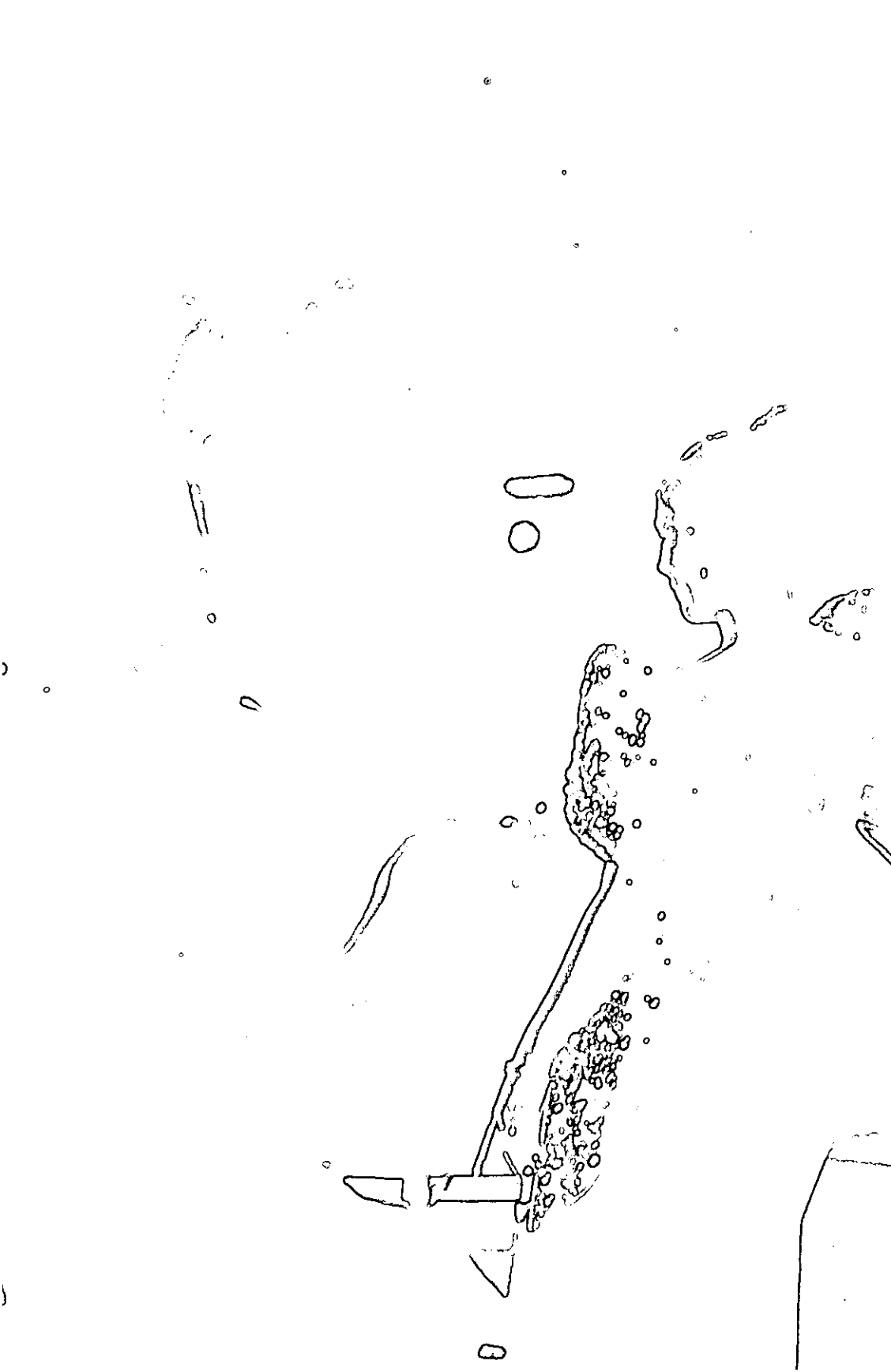
Accounting Technician, Apparel Design, Architectural Technology, Associate Degree Nursing, Data Processing Programmer, Dental Assisting Technology, Drafting and Design Technology, Fire Protection Technology, Food Service — Dietetic Technician, Food Service Operations, Interior Design, Library Technical Assistant, Medical Assisting Technology, Medical Laboratory Technician Program, Medical Transcriptionist, Mid-Management, Office Skills and Systems, Pattern De-

sign, Police Science, Radiologic Technology, Respiratory Therapy Technology, Secretarial Science, Television and Radio Servicing, Vocational Nursing.

Technical-Occupational Programs Offered in the District Colleges:
EASTFIELD COLLEGE: Accounting Technician, Air Conditioning and Refrigeration Technology, Auto Body, Automotive Technology, Child Development, Data Processing Programmer, Diesel Mechanic, Digital Electronics Technology, Drafting and Design Technology, Graphic Arts, Mid-Management, Recreation Leadership Technology, Secretarial Science, Services for the Deaf, Transportation.

MOUNTAIN VIEW COLLEGE: Aviation Administration, Avionics, Bookkeeping, Drafting and Design Technology, Electronics Technology, Machine Shop, Mid-Management, Plastics Management and Technology, Plastics Technology, Pilot Technology, Secretarial Science, Industrial Welding.

RICHLAND COLLEGE: Accounting Technician, Construction Management and Technology, Electro-Mechanical Technology, Fluid Power Technology, Horticulture Technology, Mid-Management, Quality Control Technology, Secretarial Science.







Rules and Regulations

Scholastic Rules and Regulations

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.

Class Attendance

Students are expected to attend regularly all classes in which they are enrolled. Class attendance is the responsibility of the student. It is also the responsibility of the student to consult with his instructors when an absence must be excused. Instructors are given the prerogative of determining the excusability of student absences.

Instructors are required to report students to the Dean of Students for excessive absences. Generally, first excessive absence reports are made when absences have reached 3 consecutive hours or an accumulation of 6 hours. At this point, students are warned that failure to attend class may result in suspension from that class. Second excessive absence reports are filed with the Dean of Students when, in the opinion of the instructor, a student's continued absences warrant his suspension from class.

Students dropped for excessive absence will receive a grade of "W" in the class from which they are dropped.

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 his counselor and follow the procedure outlined by the counselor.
2. Should circumstances prevent a student from appearing in person to withdraw from college, he 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 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.

If a student leaves without officially withdrawing, he will receive "F" in all subjects.

Change of Schedule

Request for change of schedule must be initiated through the student's counselor and will be determined on the basis of whether space



STAMP OUT
HAIR CUTS!

MY PARENTS
ARE JEALOUS
THEY'RE BALD

MY PARENTS
ARE JEALOUS

ONE CAN
OLD SCHOOL SCENT

CHAPARRAL SWEAT

THE FAVORITE FRAGRANCE OF
EL CENTRO COLLEGE

ONE CAN
OLD SCHOOL SCENT

CHAPARRAL SWEAT

THE FAVORITE FRAGRANCE OF
EL CENTRO COLLEGE

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CHAPARRAL SWEAT



"The White Roots of Peace" visit El Centro

is available in the class to which he 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 of age or older may, with the consent of the instructor, enroll in the status of audit. This student may attend classes but not take the examinations or receive credit for the course unless he 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 will be permitted to carry more than 18 semester units of course work or more than 5 classes plus physical education without permission of the Director of Counseling. Employed students are advised to limit their academic loads in accordance with the following recommendation: If a student carries a full college load (12 semester units or more), he should not work more than 20 hours per week. If he must work more hours, his 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 is a 6-week summer session is 6 semester units of credit. A total of 14 semester units of credit is the maximum that may 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 54 "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 re-admission. The conditions for re-admission are established and administered by the Dean of Students.

Waiving of Scholastic Suspension

Any student pursuing an academic transfer program who wishes to transfer to a technical-occupational program may have his earned credits evaluated for the possibility of disregarding any grades of his choice below "C" as long as the student follows 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. The student who wishes to avail himself of this opportunity should state his intentions in writing to the Director of Admission prior to pre-registration and should assume the responsibility of informing his counselor during the pre-registration advisement session.

Transfer of Credits

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.

Transcripts of Credit from El Centro College

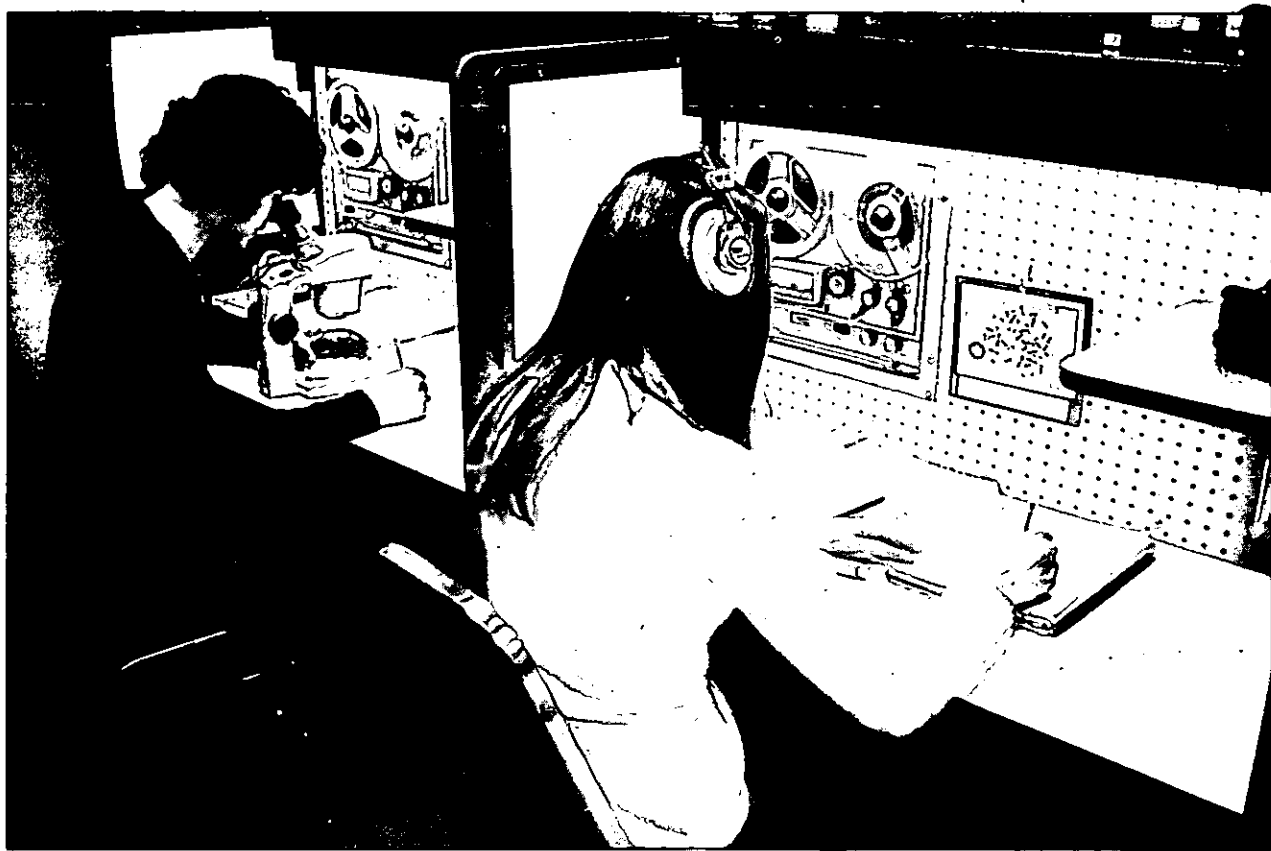
The Registrar's Office will send the student's transcript upon request to any college or agency named. A student's official transcript may be withheld until he has settled all financial obligations to the college.

Settlement of Debts and Grade Reports

Grade reports are issued to each student at the end of each semester.



Students use the automated library.



Audio-tutorial biology is suited to individual pace.

Transcripts will be withheld if the student does not have all required student information on file in the Registrar's Office and 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 values 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 may be given when an unforeseen emergency prevents a student from completing the work in a course. Incomplete grades must be converted to grade point bearing grades within 90 days after the first day of classes in the subsequent regular semester. After 90 days, the "I" grade will be converted to a "W" grade if the student has failed to complete the course requirements.

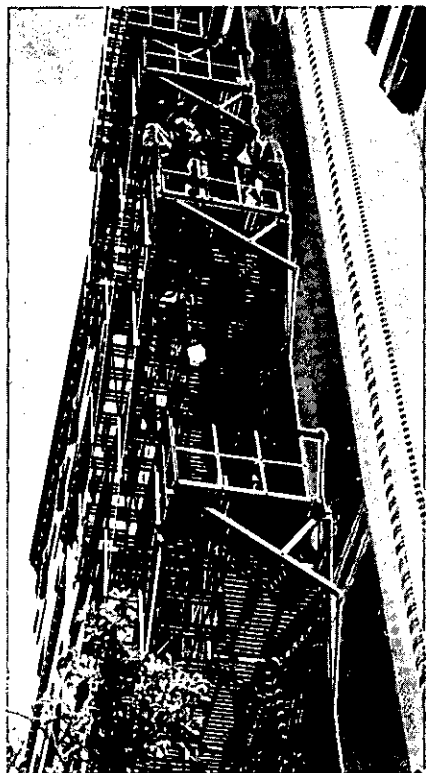
Credit by Examination

Under special circumstances, a student regularly enrolled and in good standing who believes he is qualified by experience or previous training may take a special examination to establish credit in a particular course. Ordinarily, the privilege of taking an examination for credit will be granted only to students who have at least a "B" grade average in all courses attempted at El Centro College.

A maximum of 12 semester units may be earned by examination. The only exception to this rule is when the total number of semester units credit involved in any three specific courses is greater than 12 semester units. Credit by examination may be attempted only one time

in any given course and a grade of "B" or better on the examination is required in order to receive credit. Requests for examinations should be made to a counselor who will provide the necessary petition forms and advise the student of the procedure. A student, whether part time or full time, will pay an examination fee of \$12.00 per examination. There is no refund of this fee in case of failure to establish credit.

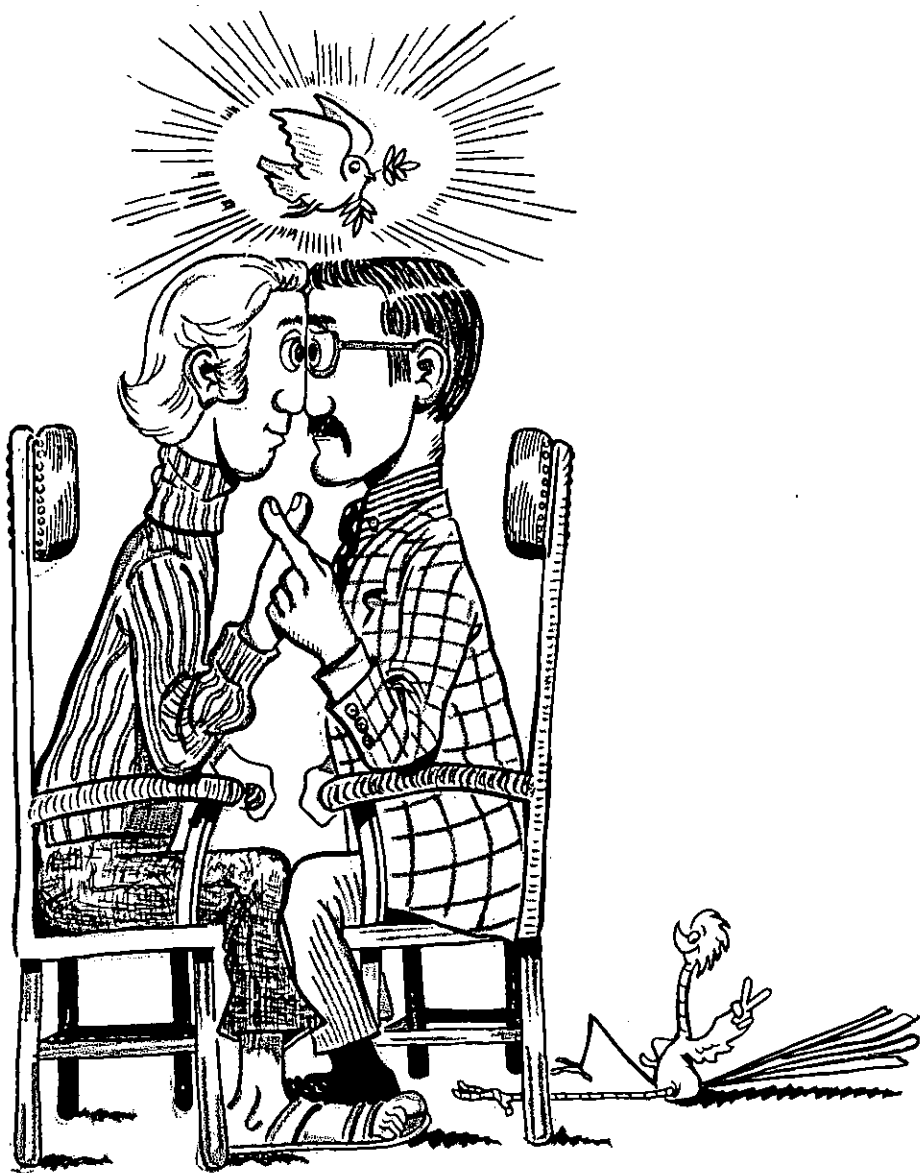
Only after the student has completed or is currently enrolled in 12 semester units credit in residency will the semester units earned through examination become a part of the student's permanent record. Students planning to graduate under minimum residency requirements may not use credit by examination to establish residency. For further information concerning graduation requirements consult the Degree Requirements in this catalog.



... Scenes from the "Egg Drop." Engineering students had to design containers to protect eggs from a five story fall. The event attracted all the area television stations and many news photographers.







Student Development Services

Student Development 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.

All students are assigned a counselor by the Counseling Center. Those who desire services of a counselor should contact their assigned counselor for an appointment. Students are encouraged to express any desire for change in their assigned counselor.

Division of 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 student advisors and by instructors in Guided Studies.

This new series of courses in student development enhances 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

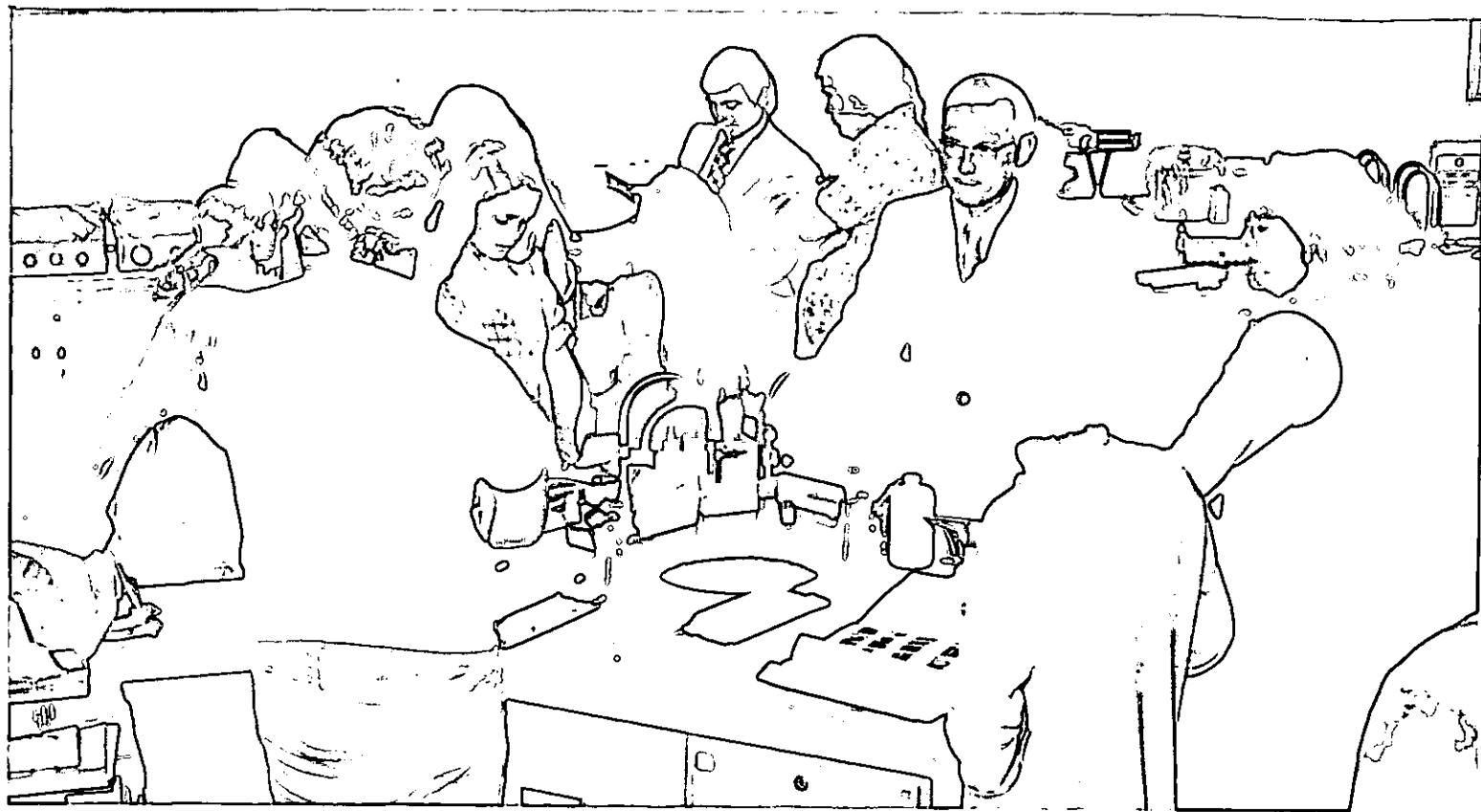
For students who have been admitted to the college, educational planning and advisement is provided. A staff of full-time counselors is available to the students of El Centro College; but faculty members as well, also serve as program advisors to aid students in defining their educational and vocational goals.

Urban Progress with Education — A Mobile Counseling Project

The Mobile Counseling Service is sponsored by the Dallas County Community College District and the Talent Search and Special Services Branch of the U.S. Office of Education. The project is designed to







offer extensive counseling services to persons from economically disadvantaged groups who may profit from further secondary or post-secondary education through the use of a Mobile Counseling Center. The project staff attempts to achieve this objective through activities such as one-to-one counseling, disseminating educational information, acquiring financial aid for needy students, bringing the counseling service to the target communities and assisting in the placement of youth either in schools or on-the-job training programs. For further information, contact Mobile Counseling Center, El Centro College.

Health Center

The Health Center, located on the second floor, 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 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 and Placement

The Financial Aid and Placement 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.

Where to Apply. Requests for information should be directed to the Director of Financial Aid and Placement, 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 4 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.

Student Employment

Part-Time Employment. Typically, 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 program
3. Off campus placement

Efforts are made by the Office of Financial Aid and Placement for students to gain employment in clerical work, library work, laboratories, custodial work, selling, etc.

Terminal Placement

Each student who files an application for graduation from a one or two year certificate or technical program at El Centro should complete a placement resume form for the Office of Financial Aid and Placement. Through the cooperation of this office and the technical-occupational divisions, students may be helped in finding full-time employment in the community.

Federal and State Programs

Veteran's Benefits. The Veteran's Benefits program for eligible students is coordinated by the Office of Admissions and Records. Veterans of the Korean War and Cold War who are interested in more details should contact the person in charge of Veteran's Benefits in the Admissions Office.

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 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.

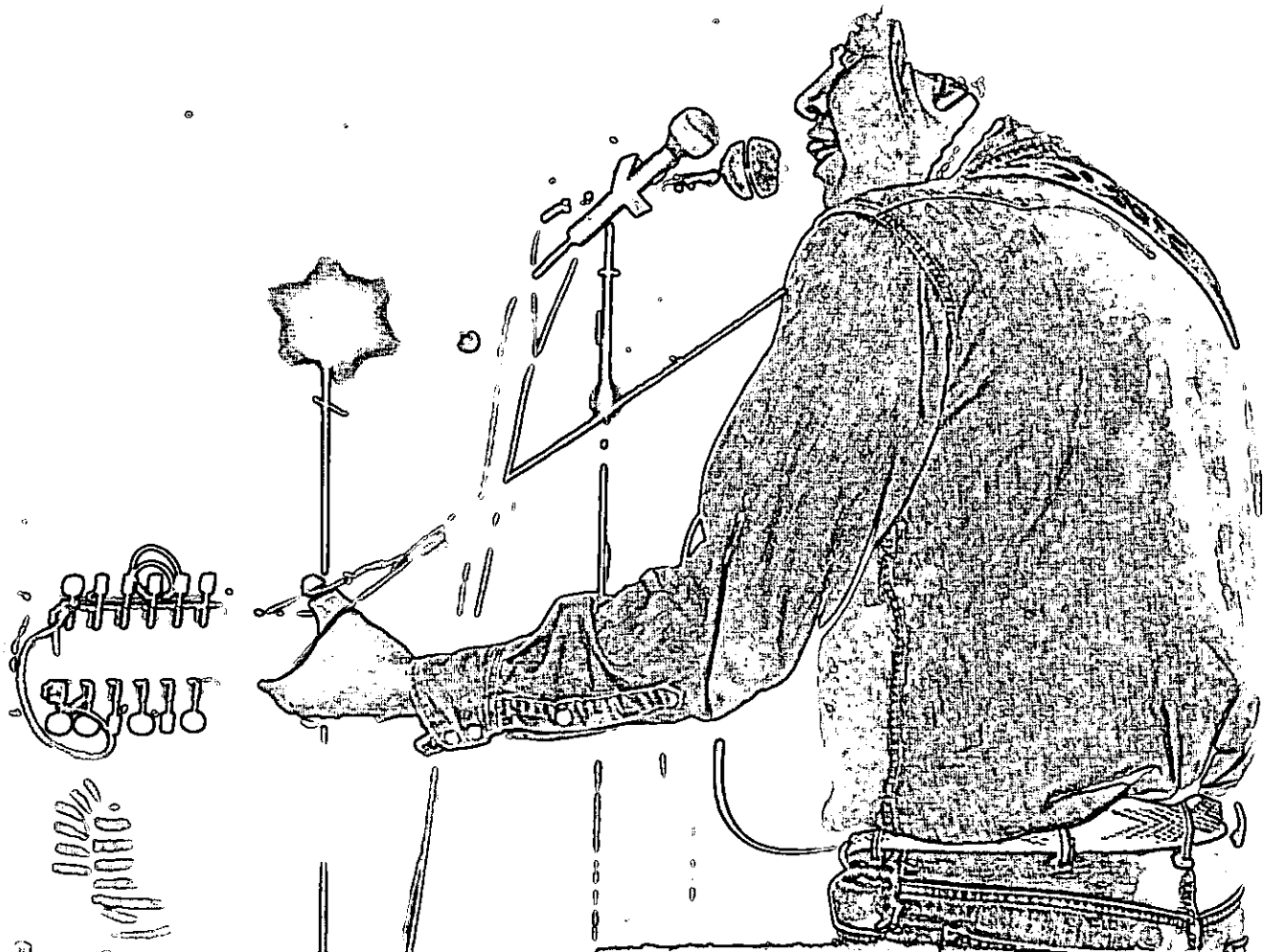
Hazelwood Act. Veterans of World War I, World War II, Korean War and Spanish-American War who have no remaining V.A. educational benefits and who are now residents of Texas and were residents of Texas at the time they entered the armed forces are eligible.

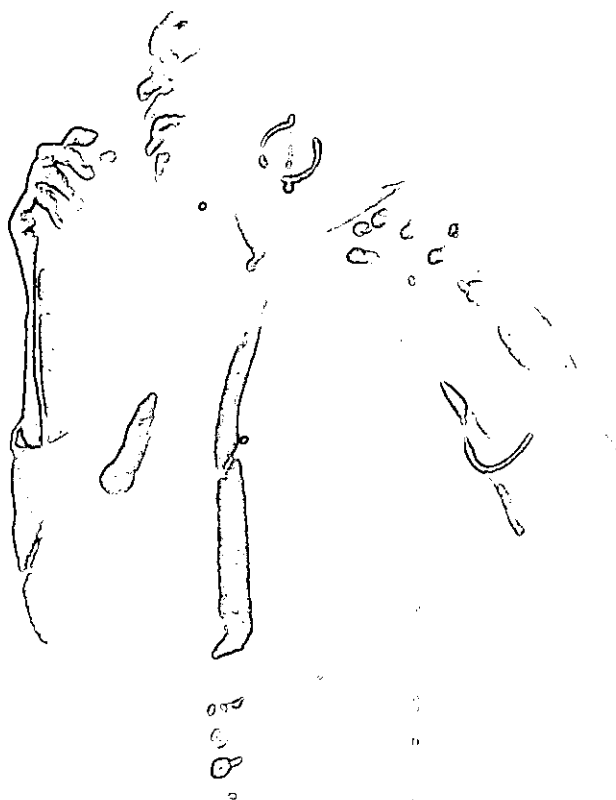
Law Enforcement Education Program. The LEEP Program is designed to aid students who are presently employed or working toward becoming employed in certain law enforcement and correctional agencies. LEEP funds provide aid for direct educational expenses, and are of two types, as follows:

1. ***Loans.*** Loans are available to full-time students only, but either in-service or pre-service law enforcement students may qualify. A LEEP loan to in-service students may be canceled at the rate of 25% for each year of full-time public law enforcement service. In the case of pre-service students, the same cancellation benefit is available if the student is employed in an acceptable law enforcement agency following graduation.

2. ***Grants.*** Potential non-repayable grants are available only to stu-

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...Scenes from the El Centro Musical Extravaganza, an original production.

dents 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 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 and Placement.

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.

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 a student must prove such financial need and make satisfactory progress toward the completion of his educational goal. The amount of an EOG award must be matched by another source, usually an amount earned by the student from a work-study job on campus. EOG amounts vary from \$200.00 to \$800.00 per academic year depending on need, total number of applicants, and funds available. 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 and Placement 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 his 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, with interest at the rate of 6%.

Dye Foundation Loan. A short-term loan designed to assist students with tuition, fees, books, and educational supplies. Repayment is to be made within 60 days or less, with no interest charge.

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.

Smith-Murray Memorial Loan. This is a flexible short-term loan available to deserving students in financial need. It is ordinarily a \$50.00 loan, or for payment of tuition, fees, and books. It bears no interest.

Press Club of Dallas Loan. This loan is available to Journalism majors in the amount of \$100.00 per semester. It carries a nominal 1% interest rate, the repayment of the loan may be postponed until after graduation. Interested students should first contact the head of the Journalism Department and then work through the Director of Financial Aid and Placement.

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

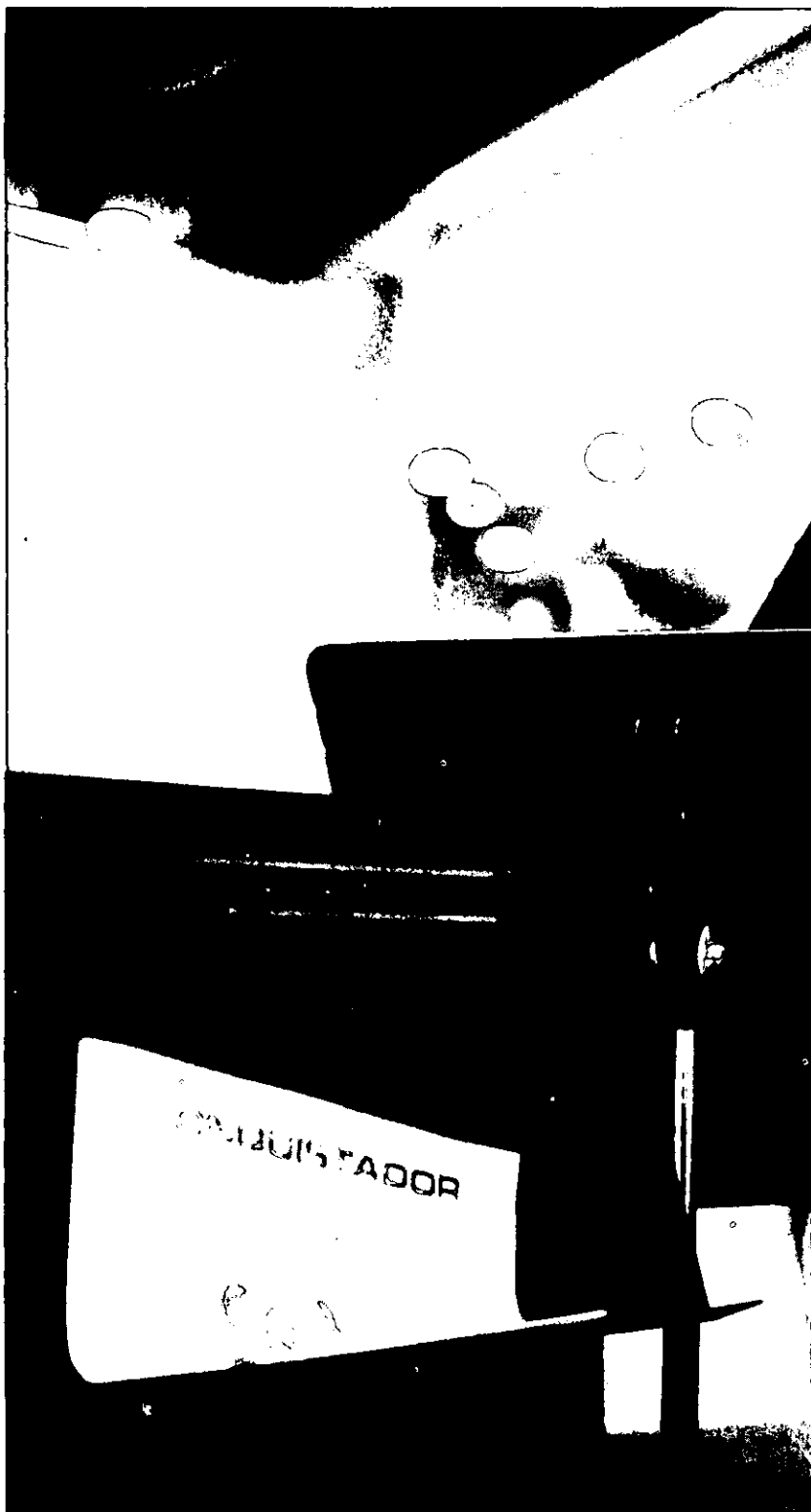
Scholarships at El Centro include three major categories:

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 and Placement Office acts merely as the disbursing agent to serve students and donors. In 1971, scholarships were received from:

American Business Women's Association, Metropolitan Chapter; Bexar Street Baptist Church; Dallas Panhellenic Association, DNA #7, American Nurses Association; Elsie and Stanley C. Pearle Charitable Foundation; Educational Opportunities, Inc.; Ellsinore, Mo., High School; First National Bank in Dallas, Ellen B. Demar Scholarship Trust; Hexter and Hexter Scholarship Fund; Highland Park Presbyterian Church; Junior Woman's Club; KKDA, Republic Broadcasting Corp.; Minnie L. Maffett Scholarship; Mr. and Mrs. Howard O. Shipley; Order of the Eastern Star, Grand Chapter of Texas; Richardson Independent School District; Shiprock High School, Amarillo, Texas; Sigma Gamma Rho Sorority; The Nihewan Foundation; UMW Scottish Rite Grand Lodge; Velta Boulware Scholarship Fund; Wednesday Forum Club; West Dallas Community Center; Y.M.C.A.; '39 Study Club.

Designated for specific fields of study. Professional organizations, and others with specific interests, sometimes provide scholarships which 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 and Placement. Examples of these scholarships are:

American Society of Women Accountants; Big Sisters of Dallas, Inc. (R.N. Nursing); Broadcast Scholarship Fund; Dallas Civitan Club (Special Education or Psychology); Dallas County Dental Assistant Society; Dallas Federation of Music Clubs; Dallas Textile Club



Director gives the word.



(Pattern Drafting); Desk and Derrick Club of Dallas (Interest in the Petroleum Industry); Electronics Club of Dallas; Les Amis de Escaiffier Association (Food Services); National Home Fashion League (Interior Design); The Statler Foundation Scholarship (Food Service); Texas Library Association; Texas Restaurant Association (Food Service).

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. Examples of these scholarships are:

American Business Women's Association, Dal-Ten Chapter; Dallas Charity Horse Show Scholarship; Delta Rho Delta National Sorority, Zeta Chapter; Institutional Scholarship; Mobil Foundation, Inc.; Oak Cliff Lions Club Auxiliary; Town North Lions Club; Travelers Girls Club Scholarship.

For further information concerning scholarships and other types of financial aid, students should contact the Office of Financial Aid and Placement.

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 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 co-ordinated programs of a number of organizations, each of which offers opportunities for the student to explore his interests. Members of the Activities staff assist in administering these activities.

Community Association

All registered students of El Centro College are members of the Community Association and are entitled to participate in all activities sponsored by the Student Activities Program.

Student Organizations

Information about participating in any organization may be obtained through the Student Activities Office located on the mezzanine. Most 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 Inter-organization Board.

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 field.
 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 or students.

The Student Center

The El Centro College Student Center complex occupies a major portion of two floors in the El Centro building. The student may choose to make use of the facilities and services which are provided for his comfort and recreation or he may participate fully in the program of the Student Center.

The Student Center Office on the lower floor is the focal point for activities in the Student Center. The lower level also contains conference rooms, recreational facilities, a television area, and a snack bar. The ground level floor houses the cafeteria and bookstore, as well as the central lobby. The office of the Director of Student Activities is on the mezzanine.

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 of 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".



Scenes from El Centro's
first annual original musical.



Course Descriptions

In the following list of courses, the credit value of each course in semester units is indicated. The number in parentheses after the title gives the unit value for that course.

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 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 Dean of Instruction.

Courses preceded by an asterisk (*) will not be offered during 1971-72.

Anthropology — Apparel Design — Architecture

ANTHROPOLOGY

ANT 100 INTRODUCTION TO ANTHROPOLOGY (3)

3 hrs. Lec.

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

ANT 101 CULTURAL ANTHROPOLOGY (3)

3 hrs. 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. Consent of instructor recommended.

APPAREL DESIGN

APP 232 DESIGN DEVELOPMENT (3)

2 hrs. Lec.
4 hrs. Lab.

Prerequisite: PDD 131, DES 136; concurrent enrollment in APP 237 and PDD 230. The principles of design for apparel are studied through each instructional unit. Fabric selection and trimming are considered each assignment. Lab Fee \$2.00.

APP 233 DESIGN DEVELOPMENT (3)

2 hrs. Lec.
4 hrs. Lab.

Prerequisite: APP 232; concurrent enrollment in APP 238 and PDD 231. A continuation of developing design principles. The garment cost and construction techniques are emphasized along with selection of fabric and trimming. Lab Fee \$2.00.

APP 237 STYLE TRENDS AND RESEARCH (2)

2 hrs. Lec.

Prerequisite: PDD 131, DES 136; concurrent enrollment in APP 232 and PDD 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.

APP 238 STYLE TRENDS AND RESEARCH (2)

2 hrs. Lec.

Prerequisite: APP 237; concurrent enrollment in APP 233 and PDD 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

ARC 125 FREEHAND DRAWING I (2)

6 hrs. Lab.

Representational drawing in pencil, with emphasis upon graphic communication as used for form, space, volume, and proportion.

ARC 132 ARCHITECTURAL GRAPHICS (3)

1 hr. Lec.
6 hrs. Lab.

The study of orthographic projection, three dimensional isometric and perspective drawing, and shade and shadows.

ARC 138 INTRODUCTION TO ARCHITECTURE I (3)

1 hr. Lec.
6 hrs. Lab.

The study of man and his awareness to his environment as translated into Architecture through basic design principles.

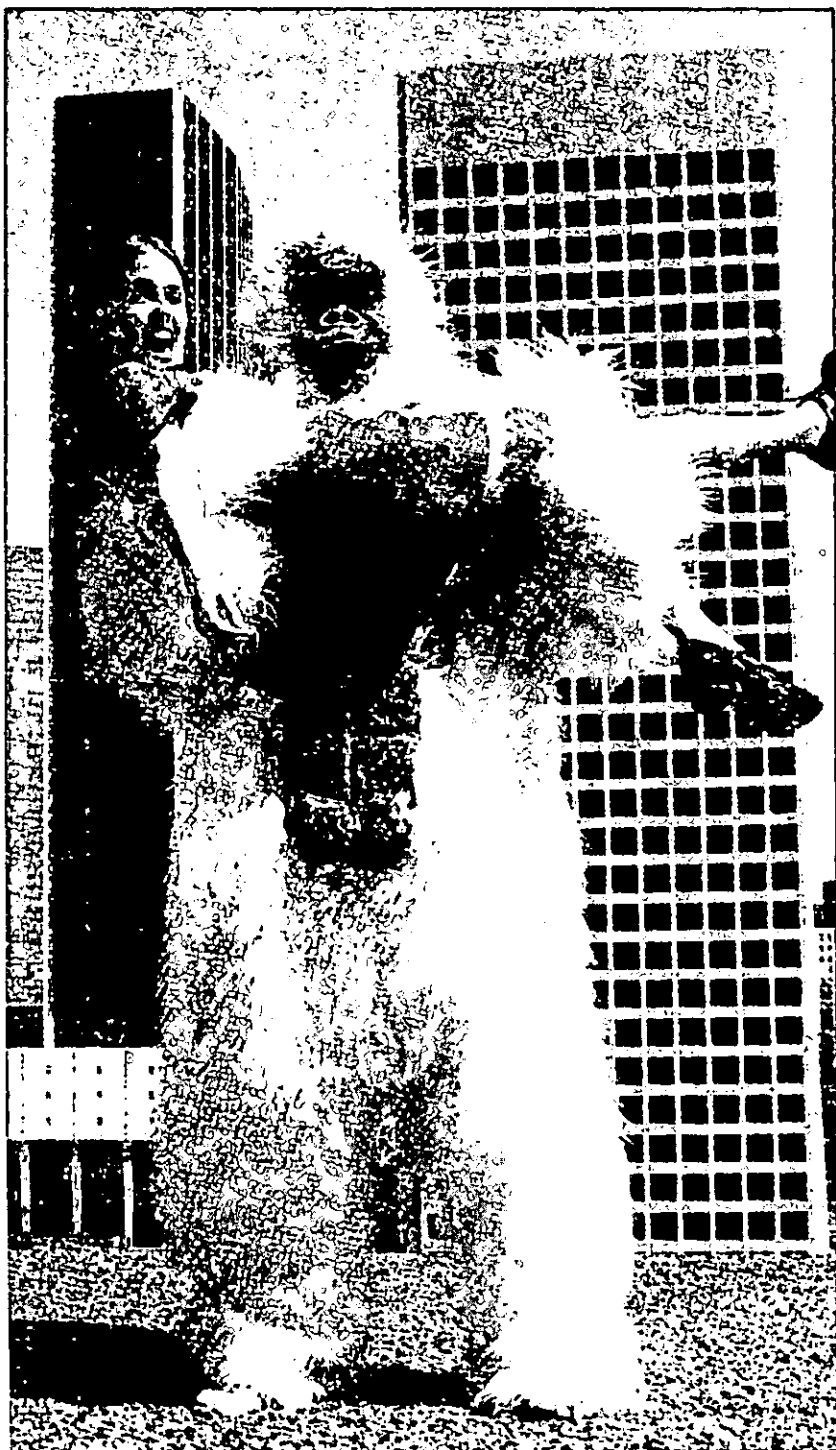
ARC 139 INTRODUCTION TO ARCHITECTURE & PROGRAMMING II (3)

1 hr. Lec.
6 hrs. Lab.

Prerequisite: ARC 138. Continuation of ARC 138 with emphasis upon methods by which information is assembled



Faculty members took part.



A publicity photo on the roof.

Architecture — Art

and basis or decision making for the formulation of architectural objectives. Laboratory projects to include an application of programming research and analysis.

ARC 224 FREEHAND DRAWING II (2) 6 hrs. Lab.

Prerequisite: ARC 125 (*Freehand Drawing I*). Continuation of ARC 125 with drawing in ink. Work primarily involves perspective analysis.

ARC 225 FREEHAND DRAWING III (2) 6 hrs. Lab.

Prerequisite: ARC 224 (*Freehand Drawing II*). Exploration of the student's abilities in freehand communication. Mixed media with emphasis upon observation and architectural presentation.

ARC 228 TECHNICAL COMMUNICATIONS I (2) 6 hrs. Lab.

Prerequisite: ARC 132 and ARC 234. An introduction to construction drawings and their interrelationship with design and specifications. Emphasis upon total concept of construction documents and detailing.

ARC 229 TECHNICAL COMMUNICATIONS II (2) 6 hrs. Lab.

Prerequisite: ARC 228 or one year of architectural drafting experience. Continuation of ARC 228 with concentration upon more complex structures.

ARC 230 HISTORY OF MODERN ARCHITECTURE (3) 3 hrs. Lec.

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

ARC 231 CONSTRUCTION ESTIMATING (3) AND FIELD INSPECTION 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: MTH 132 and ARC 228;

ARC 228 may be taken concurrently with ARC 231. Interpretation of working drawings. Preparation of material and labor quantity surveys from plans and specifications.

ARC 232 BASIC ARCHITECTURAL PHOTOGRAPHY (3) 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: ARC 139 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.

ARC 234 BUILDING TECHNOLOGY-MATERIALS AND METHODS (3) 3 hrs. Lec.

Prerequisite: ARC 228; ARC 234 may be taken concurrently with ARC 228. An analysis of architectural materials and their uses. Introduction to specifications and codes. Investigation of structural systems.

ARC 235 BUILDING TECHNOLOGY- MECHANICAL EQUIPMENT (3) 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: ARC 228; ARC 235 to be taken concurrently with ARC 229. A study of heating, air conditioning, plumbing and electrical equipment, materials and symbols.

ARC 238 ARCHITECTURAL DESIGN, GRADE II (3) 9 hrs. Lab.

Prerequisite: ARC 125, 132, 139. Research into design theory for the solution of Architectural problems. Emphasis upon functional and aesthetic values through three dimensional problem solving studies.

ARC 239 ARCHITECTURAL DESIGN, GRADE II (3) 9 hrs. Lab.

Prerequisite: ARC 238. Continuation of ARC 238.

ART

ART 104 ART APPRECIATION (3) 3 hrs. Lec.

Films, lectures, slides, and discussion 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 105-106 SURVEY OF ART HISTORY (3) (3) 3 hrs. Lec.

These courses give attention to the chronological sequence of the major styles of art. (ART 105 — cave periods through the Baroque; ART 106 — academic through present). Relates the thoughts behind each historical period to the visual concepts embodied in individual works of art of that specific period. Proposes to give the art major a broader range of ideas which will enable him to better relate the past to his own work and to offer him stimuli for his future works of art.

ART 110 BASIC DESIGN I (3) 2 hrs. Lec.
4 hrs. Lab.

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

ART 111 BASIC DESIGN II (3) 2 hrs. Lec.
4 hrs. 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.

ART 114-115 BASIC DRAWING I, II (3) (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisite: ART 114 is prerequisite to ART 115. A study of drawing, both as a major medium and as a flexible research tool with emphasis on structure and the illusions of space, volume and movement. Required of all art majors. Open to others who are interested.

ART 114 concentrates on materials; ART 115 concentrates on concepts.

ART 201 LIFE DRAWING I (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisites: ART 110, 114, sophomore standing and/or permission of the Humanities Chairman. Analytic and expressive drawing of the human figure, stressing study of movement and volume.

ART 202 LIFE DRAWING II (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisites: ART 110, 114, 201, sophomore standing and/or permission

of Humanities Chairman. Analytic and expressive drawing of the human figure, stressing study of movement and volume.

ART 205 PAINTING I (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisites: ART 110, 114, 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 PAINTING II (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisites: ART 110, 114, 205 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 imagination.

ART 208 SCULPTURE I (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisites: ART 110, 111, 114 or permission of the instructor. A studio course designed as a means of original expression in three dimensional media.

ART 209 SCULPTURE II (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisites: ART 110, 111, 114, 208 or permission of the instructor. A studio course designed as a means of original expression in three dimensional media.

ART 210 COMMERCIAL ART I (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisites: ART 110, 111, 115. 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.

ART 211 COMMERCIAL ART II (3) 2 hrs. Lec.
4 hrs. 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.

The crowd loved it.





Art — Biology

ART 212 ADVERTISING ILLUSTRATION (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisite: ART 210. Problems of

the illustrator are investigated while exploring the elements he uses. Projects involving basic solutions to contemporary illustration are developed.

BIOLOGY

BIO 101-102 GENERAL BIOLOGY (4) (4) 3 hrs. Lec.
3 hrs. Lab.

A two semester course surveying in depth the principal concepts of biology, including a study of the cell, levels of organization, an introduction to metabolism, and evolutionary relationships. An introductory survey of the plant and animal kingdoms is included which emphasizes the classification and basic structure and function of the more important groups. Recommended for science majors. \$5.00 Laboratory fee payable during registration.

BIO 115 BIOLOGICAL SCIENCE (4) 3 hrs. Lec.
3 hrs. 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. \$5.00 Laboratory fee payable during registration.

BIO 116 BIOLOGICAL SCIENCE (4) 3 hrs. Lec.
3 hrs. Lab.

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. \$5.00 Laboratory fee payable during registration.

BIO 120-121 INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY (4) (4) 3 hrs. Lec.
2 hrs. Lab.

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 Paramedical 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 chem-

istry of life processes, cell theory, genetics, embryology and anatomy and physiology will be provided. Coordination of body systems for integral functioning will be stressed. \$5.00 Laboratory fee payable during registration.

BIO 203 INTERMEDIATE BOTANY (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: BIO 101 and 102 or equivalent preparation. A survey of the major plant groups with emphasis placed on morphology, physiology, classification, life cycles, evolutionary relationships, and economic importance to man. Recommended for science majors. \$5.00 Laboratory fee payable during registration.

BIO 211 INVERTEBRATE ZOOLOGY (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: Two semesters of Biological Science. An intermediate level course surveying the major groups of animals below the level of the chordates. Consideration is given to the phylogeny, taxonomy, morphology, physiology, and biology of the groups involved. Relationships and importance to higher animals and man are stressed. Recommended for science majors. \$5.00 Laboratory fee payable during registration.

BIO 214 FIELD BIOLOGY (SUMMER ONLY) (6) 3 hrs. Lec.
5 hrs. Lab.

Prerequisite: Six hours of Biological Sciences. Survey of local plant and animal life in relationship to their environment. Aquatic and terrestrial communities will be studied with reference to basic ecological principles and techniques. Emphasis will be placed upon classification, identification, and collecting specimens in the field. Special travel fee required.

BIO 216 GENERAL MICROBIOLOGY (4) 3 hrs. Lec.
4 hrs. Lab.

Prerequisite: BIO 101-102 or BIO 120-121. A study of microbes with emphasis on classification, growth, nutrition, metabolism, reproduction, and the genetics of micro organisms. Recom-

Biology — Business

mended for science majors and science related programs. \$5.00 Laboratory fee payable during registration.

BIO 221-222 ANATOMY AND PHYSIOLOGY 3 hrs. Lec.
3 hrs. Lab.
(4) (4)

Prerequisite: BIO 102. Structure and

function as related to the human skeletal, muscular, nervous, cardiovascular, digestive, respiratory, reproductive and endocrine systems. Emphasis placed on the inter-relationships between these systems as well as basic principles of disease transmission and detection. \$5.00 Laboratory fee payable during registration.

BUSINESS

BUS 105 INTRODUCTION TO BUSINESS (3) 3 hrs. Lec.

Provides over-all picture of business operation; includes analysis of specialized fields within business organizations; identifies role of business in modern society.

BUS 130 KEYPUNCH (2) 1 hr. Lec.
2 hrs. Lab.

Prerequisite: One year typing in high school or satisfactory completion of BUS 173. A course designed to train students in the proper operation of key-punch machines. Keypunch procedures and the role of the keypunch operator in modern data processing are stressed.

BUS 131 BOOKKEEPING (3) 3 hrs. 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.

BUS 132 BOOKKEEPING (3) 3 hrs. Lec.

Prerequisite: BUS 131. Attention will be given to Data Processing systems, receivables, inventories, current liabilities and depreciation. A practice set covering the entire business cycle will be completed.

BUS 135 CUSTOMER RELATIONS (3) 3 hrs. Lec.

Prerequisite: Enrollment in the Television and Radio Electronics Program. This course consists of techniques and practices used for successful customer relations. Includes role playing and class demonstrations of various methods of meeting and selling to the public.

BUS 136 PRINCIPLES OF MANAGEMENT (3) 3 hrs. 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.

BUS 150-151 MANAGEMENT TRAINING (4) (4) 20 hrs. 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. BUS 150 will be offered first semester; BUS 151 will be offered second semester.

BUS 154 MANAGEMENT SEMINAR — THE ROLE OF SUPERVISION (2) 2 hrs. Lec.

Prerequisite: Concurrent enrollment in BUS 150 and preliminary interview by Mid-Management faculty. Problem students majoring in Mid-Management. analysis and project development for 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.

BUS 155 MANAGEMENT SEMINAR — PERSONNEL MANAGEMENT (2) 2 hrs. Lec.

Prerequisite: BUS 150, 154 and concurrent enrollment in BUS 151. A study of principles, policies, and practices relating to the personnel functions of business.





Business

BUS 160 MACHINE TRANSCRIPTION (3) 3 hrs. Lec.

Prerequisite: Satisfactory completion of BUS 173 or one year of typing in high school. Intensive course in transcribing from recording machines using predicted business letters and other forms of business communication from a variety of professions, industries, and Government agencies. Training in use of major dictating-transcribing machines with electric typewriters. Goal is development of employable skill. Familiarization with typewriter related equipment.

BUS 161 OFFICE MACHINES (2) 1 hrs. Lec. 2 hrs. Lab.

Training for familiarization and competence on those machines common to most business offices, such as adding machines and calculators.

BUS 162 SECRETARIAL TRAINING (3) 3 hrs. Lec.

Prerequisite: Satisfactory completion of BUS 173 or one year of typing in high school. Special emphasis is given to the most frequently performed secretarial duties. Units of work include filing; skill in the use of duplicating machines; mail, telegraph, postal and shipping service; handling travel details and meeting arrangements. Duties of the receptionist and development of a desirable secretarial appearance and personality are studied.

BUS 163 BEGINNING SHORTHAND (3) 2 hrs. Lec. 3 hrs. Lab.

Prerequisite: Satisfactory completion of or concurrent enrollment in BUS 173 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.

BUS 164 INTERMEDI- ATE SHORTHAND (3) 2 hrs. Lec. 3 hrs. Lab.

Prerequisite: Satisfactory completion of BUS 163 or one year of shorthand in high school; satisfactory completion of BUS 173 or one year of typing in high school. Application of principles of Gregg shorthand to develop the ability to take and accurately transcribe short-

hand notes at increased dictation speeds. Includes oral reading and short-hand outlines, speed building dictation and timed mailable transcripts. Training to strengthen knowledge of English mechanics and reinforce typing skills.

BUS 173 BEGINNING TYPING (2) 1 hr. Lec. 2 hrs. 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.

BUS 174 INTERMEDIATE TYPING (2) 1 hr. Lec. 2 hrs. Lab.

Prerequisite: Satisfactory completion of BUS 173 or one year of typing in high school. Further development of techniques. Emphasis will be placed on increasing speed and accuracy with practice in typing business forms, correspondence and manuscripts.

BUS 180 VOCATIONAL — 1 hr. Lec. WORK EXPERIENCE 10 hrs. Lab. (2)

Prerequisite: Concurrent enrollment in a minimum of 8 units. Supervised employment in student's chosen field of vocational interest.

BUS 181 VOCATIONAL — 1 hr. Lec. WORK EXPERIENCE 20 hrs. Lab. (4)

Prerequisite: Concurrent enrollment in a minimum of 8 units. Supervised employment in student's chosen field of vocational interest.

BUS 201 PRINCIPLES OF ACCOUNTING (3) 3 hrs. 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.

BUS 202 PRINCIPLES OF ACCOUNTING (3) 3 hrs. Lec.

Prerequisite: BUS 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.

BUS 203 INTERMEDIATE ACCOUNTING (3) 3 hrs. Lec.

Prerequisite: BUS 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.

BUS 206 PRINCIPLES OF MARKETING (3) 3 hrs. 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.

BUS 230 SALESMANSHIP (3) 3 hrs. 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.

BUS 231 BUSINESS CORRESPONDENCE (3) 3 hrs. Lec.

Prerequisite: Satisfactory completion of BUS 173 or one year of typing in high school; satisfactory completion of COM 131 or ENG 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.

BUS 233 ADVERTISING AND SALES PROMOTION (3) 3 hrs. Lec.

Introduces the fundamental principles, practices and common media used in persuasive communications. Includes an insight into buyer behavior, use of advertising media to motivate consumer, 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.

BUS 234 BUSINESS LAW (3) 3 hrs. 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.

BUS 237 INCOME TAX ACCOUNTING (3) 3 hrs. Lec.

Prerequisite: BUS 201 and BUS 202. Provides an understanding of basic income tax laws applicable to individuals, partnerships and corporations. 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.

BUS 238 COST ACCOUNTING (3) 3 hrs. Lec.

Prerequisite: BUS 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 byproducts costing will be discussed.

BUS 250-251 MANAGEMENT TRAINING (4) (4) 20 hrs. Lab.

Prerequisite: BUS 150-151: Concurrent enrollment in BUS 254-255. Continuation of supervised employment in the student's chosen field. Intended to provide increased supervisory responsibility for students preparing for careers in business management. BUS 250 will be offered first semester; BUS 251 will be offered second semester.

BUS 254 MANAGEMENT SEMINAR — ORGANIZATIONAL DEVELOPMENT (2) 2 hrs. Lec.

Prerequisite: BUS 151, BUS 155 and concurrent enrollment in BUS 250. A study of the organizational objectives and management of human resources including the various approaches to organizational theory.

BUS 255 MANAGEMENT SEMINAR — BUSINESS STRATEGY, THE DECISION PROCESS AND PROBLEM SOLVING (2) 2 hrs. Lec.

Prerequisite: BUS 250, BUS 254 and





El Centro students and programs are diverse. Here, in the Culinary Arts Institute, future Dallas chefs create delights.

Business — Chemistry

concurrent enrollment in BUS 251. Business strategy and the decision making process applied to the first line supervisor and middle-management positions. Special emphasis is placed on application of the student's knowledge as related to his work experience.

BUS 263 ADVANCED SHORTHAND (3) 2 hrs. Lec.
3 hrs. Lab.

Prerequisite: Satisfactory completion of BUS 164 or two years of shorthand in high school; satisfactory completion of BUS 174 or two years of typing in high school. Further development of shorthand skills to attain proficiency required for stenographic work. Emphasis on speed building dictation, timed typewritten transcription of shorthand notes for mailable letters.

BUS 264 SHORTHAND TRANSCRIPTION (3) 2 hrs. Lec.
3 hrs. Lab.

Prerequisite: Satisfactory completion of BUS 263; satisfactory completion of BUS 273. Emphasis upon specialized dictation, mailable transcriptions, and vocabulary building. Development of high-level skill in production work meeting office standards.

BUS 273 ADVANCED TYPING (2) 1 hr. Lec.
2 hrs. Lab.

Prerequisite: Satisfactory completion of BUS 174 or two years of typing in high school. Timed production of all types of business material is emphasized. A continuation of skill development and a review of typing techniques are also stressed. This course will demand accuracy at advanced speeds.

CHEMISTRY

CHM 101 GENERAL CHEMISTRY (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: MTH 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. \$5.00 Laboratory fee payable during registration.

CHM 102 GENERAL CHEMISTRY (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: CHM 101. Designed for science and science-related majors, this course is a continuation of CHM 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. \$5.00 Laboratory fee payable during registration.

CHM 115 GENERAL CHEMISTRY (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: GSM 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, solutions, electrochemistry and nuclear chemistry. The descriptive chemistry of some common elements and inorganic compounds is included. \$5.00 Laboratory fee payable during registration.

CHM 116 GENERAL CHEMISTRY (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: CHM 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. \$5.00 Laboratory fee payable during registration.

CHM 170 CHEMISTRY OF FLAMMABLE MATERIALS (3) 3 hrs. Lec.

Enrollment is restricted to Fire Technology students. A survey of the chemical nature of matter with particular emphasis on volatile substances, pyrophoric materials, heat transfer reactions, spontaneous combustion, basic thermodynamics and related subjects. No laboratory fee.

Chemistry — Communications — Computing Sciences

CHM 201 ORGANIC CHEMISTRY (4)

3 hrs. Lec.
4 hrs. Lab.

Prerequisite: CHM 101 and 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. \$5.00 Laboratory fee payable during registration.

CHM 202 ORGANIC CHEMISTRY (4)

3 hrs. Lec.
4 hrs. Lab.

Prerequisite: CHM 201. Designed for science and science-related majors, this course is a continuation of CHM 201. Emphasis will be given to the further development of aliphatic and aromatic systems, poly-functional compounds including amino acids, proteins, carbohydrates, sugars, heterocyclic and related compounds. Instrumental techniques will be used to identify organic com-

pounds. \$5.00 Laboratory fee payable during registration.

CHM 203 QUANTITATIVE ANALYSIS (4)

2 hrs. Lec.
6 hrs. Lab.

Prerequisite: CHM 101, 102, and MTH 101. 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. \$5.00 Laboratory fee payable during registration.

CHM 234 INTRUMENTAL ANALYSIS (4)

2 hrs. Lec.
6 hrs. Lab.

Prerequisite: CHM 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. \$5.00 Laboratory fee payable during registration.

COMMUNICATIONS

COM 131 APPLIED COMPOSITION AND SPEECH (3)

3 hrs. Lec.

A linguistic approach to the study of English as a practical means of preparing for successful performance in the student's chosen vocation. Emphasis placed upon assembling, organizing, and evaluating materials for the composition of letters, applications, resumes, and short reports. Practice in oral expression.

COM 132 APPLIED COMPOSITION AND SPEECH (3)

3 hrs. Lec.

Prerequisite: COM 131. Enrichment of communication process through the practice of oral and written persuasion directly related to vocational training and work experience. Expository techniques of business letters and documented reports. Wide periodical reading required.

COMPUTING SCIENCES

CS 101 INTRODUCTION TO COMPUTING SCIENCE (3)

3 hrs. Lec.

Provides a basic understanding of the computer and how it is used in a variety of applications. Covers the history of computer development, vocabulary and broad concepts of design and function. Intended for non-programmers who need a familiarization with computers and its effect on their career.

CS 102 FORTRAN PROGRAMMING (3)

2 hrs. Lec.
2 hrs. Lab.

Prerequisite: MTH 101 or DP 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. Lab fee \$4.00.

... A production by the ECC drama department.





Computing Sciences — Data Processing

CS 131 RPG 2 hrs. Lec.

PROGRAMMING (3) 2 hrs. Lab.
Prerequisite: DP 133. 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. Lab fee \$4.00.

CS 132 FIELD 2 hrs. Lec.
EXPERIENCE- 20 hrs. Lab.
OPERATIONS (4)

Prerequisite: DP 139 and DP 140 or concurrent enrollment in DP 140. Supervised employment in operations. Problem analysis in operations and current practices in operations are discussed. The course is intended to provide practical experience for students preparing for careers in operations.

CS 230 ADVANCED 3 hrs. Lec.
ASSEMBLY LANGAUGE 3 hrs. Lab.
CODING (4)

Prerequisite: DP 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. \$7.00 Laboratory fee payable during registration.

CS 240 TELECOM- 3 hrs. Lec.
MUNICATIONS I (4) 2 hrs. Lab.

Introduction to telecommunications concepts including systems configuration of a teleprocessing network on a third generation computer, telecommunication vocabulary. MODEMS, basic line control programs, terminal configuration, polling simulation. Laboratory fee \$4.00 payable during registration.

CS 241 TELECOM- 3 hrs. Lec.
MUNICATIONS II (4) 3 hrs. Lab.

Prerequisite: CS 240. Continuation of CS 240. Included concepts: basic telecommunications programming, terminal configurations, line configurations, synchronous transmission, asynchronous transmission and polling techniques at the central unit. \$7.00 Laboratory fee payable during registration.

DATA PROCESSING

DP 133 BEGINNING 3 hrs. Lec.
PROGRAMMING (4) 4 hrs. Lab.

Prerequisite: Successful completion of or concurrent enrollment in DP 137 or MTH 101. 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, tape, and disk in a sequential processing mode. Lab Fee \$7.00.

DP 136 INTERMEDIATE 3 hrs. Lec.
PROGRAMMING (4) 4 hrs. Lab.

Prerequisite: DP 133, DP 137 or MTH 101. Further development of skills and proficiency using COBOL in a more complex programming environment. Special emphasis is given to random processing techniques, multiple input-

output files, and the development of advanced program concepts of the language. Advise concurrent enrollment in DP 138. Lab fee \$7.00.

DP 137 DATA PROCESS- 3 hrs. Lec.
ING MATHEMATICS (3)

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.

DP 138 DATA 3 hrs. Lec.
PROCESSING LOGIC (3)

Prerequisite: DP 133. This course is designed to develop and explore the basic logic necessary for problem solving utilizing the computer. Areas to be covered flowcharting techniques, decision tables, truth tables and table search techniques.

Data Processing — Dental Assisting Technology

DP 139 TECHNICIAN (3) 2 hrs. Lec.
4 hrs. Lab.

Prerequisite: Completion of or concurrent enrollment in DP 137. Training in physical data handling techniques. Concepts that will include: integrity of data, organization of a data processing department, system data flow, and job data flow. Machines to be used: sorter, reproducer, interpreter, burster, decolator, and computer input/output devices. Lab fee \$7.00.

DP 140 OPERATIONS — 3 hrs. Lec.
CONSOLE (4) 3 hrs. Lab.

Prerequisite: DP 137 and DP 139. Computer operation from a console in a batched mode on a multiprogramming 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. Lab fee \$4.00.

DP 231 ADVANCED 3 hrs. Lec.
PROGRAMMING (4) 4 hrs. Lab.

Prerequisite: DP 136. Provides additional language capabilities and third-generation hardware concepts using the Assembly Language instruction set of the IBM 360. 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. Lab fee \$7.00.

DP 232 APPLIED 3 hrs. Lec.
SYSTEMS (4) 3 hrs. Lab.

Prerequisite: DP 136, satisfactory completion of or concurrent enrollment in BUS 238. 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. Lab fee \$3.00.

DP 233 OPERATING 3 hrs. Lec.
SYSTEMS AND 4 hrs. Lab.
COMMUNICATIONS (4)

Prerequisite: DP 231. The objective of this course is to acquaint the student with concepts of an operating system, 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 creation, operation, and maintenance of the system. Students will continue to develop programming techniques using the language of their choice in more sophisticated systems. Lab fee \$7.00.

DP 237 FIELD EXPER- 2 hrs. Lec.
IENCE-PROGRAM- 20 hrs. Lab.
MING (4)

Prerequisite: DP 232 or DP 233. Supervised employment in programming or special problems at discretion of the instructor. Problem analysis, project development and current uses of computers are discussed. The course is intended to provide practical experience for students preparing for careers in programming.

DENTAL ASSISTING TECHNOLOGY

DAT 130 DENTAL 3 hrs. Lec.
SCIENCE (4) 3 hrs. Lab.

A study of dentistry as it has evolved to a profession. The growth and development of the dental association and the auxiliary association and the education backgrounds of each. An introduction to dental terminology, ethics and jurisprudence governing the profession, life science with complete study of the skull and neck, histology of dental tissue, eruption of the teeth and oral pathology. \$2.00 material fee, payable during registration.

DAT 131 DENTAL 3 hrs. Lec.
MATERIALS (4) 3 hrs. Lab.

A study of general chemistry and its relationship to the physical properties of all dental materials. Methods and techniques in preparing gypsum products, pouring, trimming and finishing study casts, all types of impression materials, (rigid, plastic, and elastic) custom trays, denture bases, bite rims, dental cements, cavity liners, thermal bases, restorative materials, dental waxes, abrasives and polishing agents. A study of sterilization and its application in the dental office. \$7.00 materials fee payable during registration.

MOORE

Effective Writing



Dental Assisting Technology

DAT 132 DENTAL SEM- 1 hrs. Lec. INAR (1)

The study of living organisms that are individually too small to be seen by the naked eye. It will include the study of bacteria, viruses, yeasts, molds, protozoa and other forms of life that do not fit into one of these categories and their relationship to the dental office and sterilization of instruments.

DAT 133 DENTAL OPERATORY PROCEDURES (3) 3 hrs. Lec. 1 hr. Lab.

Prerequisite: "C" average in DAT 130, 131, 132. A study of patient care in the dental operatories, how to take patient histories, blood pressure, pulse, temperature and respiration. A study of general and local anesthetics and the application of topical anesthetics. Preliminary inspection of the oral cavity and teeth and charting these findings. Learning the names of dental instruments, their purpose, when they are used and how they are cared for in dental operator nursing. First aid as it applies to the dental office. \$2.00 material fee, payable during registration.

DAT 134 DENTAL ROENTGENOLOGY (3) 3 hrs. Lec. 1 hr. Lab.

Prerequisite: "C" average in DAT 130, 131, 132. A study of the history, terminology, theory of the roentgen ray, care and safety measures of x-ray equipment, radiation hazards and safety precautions of patient and operator. Use of open and closed cone techniques, types of dental film, exposing, processing and mounting x-rays. How to prevent faulty roentgenograms. \$7.00 material fee payable during registration.

DAT 135 DENTAL SEM-INAR (1) 1 hr. Lec.

Prerequisite: "C" average in DAT 130, 131, 132. A study of dental plaque smears using the phase microscope, learning and being able to teach the control program on oral hygiene, the proper use of hand instruments for the removal of cement from dental restorations and appliances.

DAT 230 DENTAL OFFICE PRACTICE & BOOKKEEPING (3) 3 hrs. Lec.

Prerequisites: "C" average in DAT 133, 134, 135. A study in detail of general

office routine, dental health team responsibilities, receptionist and secretarial duties, bookkeeping, pegboard, insurance, bank plan, income tax forms, prepaid and postpaid dental plans, filing, clinical records, appointment control, inventory and supplies, office policies, laboratory prescriptions and letter writing. \$2.00 material fee payable during registration.

DAT 231 ADVANCED DENTAL ROENTGENOLOGY (2) 1 hr. Lec. 2 hrs. Lab.

Prerequisite: "C" average in DAT 133, 134, 135. An in-depth study of physics as it applies to roentgenology, advanced techniques in intra-oral films, edentulous mouths, extra-oral films and panoramic procedures. \$7.00 material fee payable during registration.

DAT 232 DENTAL ODONTOGRAPHY (2) 2 hrs. Lec. 1 hr. Lab.

Prerequisite: "C" average in DAT 133, 134, 135. A study of gross anatomy of the human teeth, terminology, the use of full dentition plaster casts, larger plaster teeth, drawings and wax block carvings so the student becomes familiar with each tooth, the relationship to each other, their function and place in the dental arch. The development, time of eruption of the deciduous and secondary dentition. Advanced charting and case presentation. \$2.00 material fee payable during registration.

DAT 233 DENTAL INTERNSHIP (6) 18 hrs. Lab.

Prerequisite: "C" average in DAT 133, 134, 135. Students receive practical experience in dental clinics, dental school, and other health agencies in the community. Students rotate in clinics to give as much work experience as possible.

DAT 234 DENTAL PROSTHETICS (2) 1 hr. Lec. 2 hrs. Lab.

Prerequisite: "C" average in DAT 230, 231, 232, 233. A study of the duties in dental laboratory procedures, care and safety measures of all laboratory equipment. Properties and manipulation of die stone, waxes, investment and rubber base materials, spruing inlays, investing inlays, use of the burn out oven and blow torch and casting machine. Construction of a gold MOD inlay, temporary acrylic jackets and dentures, clean-

Dental Assisting Technology & Assisting Certificate

ing and repairing prosthesis, removal of cement from dental restorations and appliances. \$7.00 material fee payable during registration.

DAT 235 DENTAL OFFICE MANAGEMENT (3) 3 hrs. Lec.

Prerequisite: "C" average in DAT 230, 231, 232, 233. A study of the responsibilities of the dental health team, the patient and office staff, building a practice, telephone techniques, collection and delinquent management, psychology of patient relationship, nutrition and pharmacology and how drugs relate to dentistry.

DAT 236 DENTAL OPERATORY PRACTICE (2) 2 hrs. Lec. 1 hr. Lab.

Prerequisite: "C" average in DAT 230, 231, 232, 233. A study of specialized

dental practices, terminology and instrumentation, removal of ligature ties, sutures, socket dressings, periodontal packs, temporary medicinal fillings, placing and removal of celluloid or plastic strips, rubber dam removal, instrumentation for general dentistry, sit down dentistry, four and six handed dentistry, and practice and proficiency on instrument identification and passing. \$2.00 material fee payable during registration.

DAT 237 DENTAL INTERNSHIP (6) 18 hrs. Lab.

Prerequisite: "C" average in DAT 230, 231, 232, 233. Students receive practical experience in dental clinics, dental school, and other health agencies in the community. Students rotate in clinics to give as much work experience as possible.

DENTAL ASSISTING CERTIFICATE

Night Program

DENTAL ASSISTING CERTIFICATE 130 3 hrs. Lec. 3 hrs. Lab.
BASIC SCIENCES FOR DENTAL ASSISTING (4)

Prerequisite: Employed assistants only and admission to the Dental Assistant Program. This course is designed to give the assistant a broader knowledge on history of the profession, ethics, jurisprudence, professional organizations, general anatomy with emphasis on the head, face and neck, histology, microbiology, pathology, bacteriology, and sterilization. Lecture 3 hours a week, laboratory 3 hours a week.

DENTAL ASSISTING CERTIFICATE 131 3 hrs. Lec. 3 hrs. Lab.
PHYSICAL SCIENCE (4)

Prerequisite: Employed assistants only and admission to the Dental Assistant Program. This course is designed to give the assistant a broader knowledge in chemistry and physical properties of all dental materials used in the dental office, a refresher course in bookkeeping, a study of nutrition and pharmacology. Lecture 3 hours a week, laboratory 3 hours a week.

DENTAL ASSISTING CERTIFICATE 230 2 hrs. Lec. 5 hrs. Lab.
CLINICAL PROCEDURES (4)

Prerequisite: Employed assistants only and admission to the Dental Assistant Program. This course is designed to broaden the knowledge of the assistant into specialty fields with emphasis on chairside procedures, instrument care, oral hygiene, roentgenology and first aid. Lecture 2 hours a week, laboratory 5 hours a week.

DENTAL ASSISTING CERTIFICATE 231 3 hrs. Lec. 3 hrs. Lab.
CLINICAL SCIENCE (4)

Prerequisite: Employed assistants only and admission to the Dental Assistant Program. This course is designed to give the assistant a broader knowledge of dental morphology, psychology, charting and rubber dam application. Lecture 3 hours a week, laboratory 3 hours a week.

DENTAL ASSISTING CERTIFICATE 232-233 18 hrs. Lab.
CLINICAL EXPERIENCE (6) (6)

The assistant will clinic in the office in which she is employed. The clinic will be the two semesters of the last year for 18 hours a week. Laboratory 18 hours a week.

Design — Directed Studies — Drafting

DESIGN

DES 134 INDUSTRIAL GARMENT CONSTRUCTION (3) 2 hrs. Lec. 4 hrs. Lab.

Analysis of the mass production in the apparel industry. The study of equipment, techniques and skills involved in the construction of apparel. Lab Fee \$2.00.

DES 135 TEXTILES (3) 3 hrs. Lec.

A study of fibers, fabrics, and finishing processes, including identification and analysis of all types of weaves and their application in industry. Graphic history of textiles of the traditional styles and comparative analysis with contemporary developments.

DES 136 FASHION SKETCHING (3) 2 hrs. Lec. 4 hrs. Lab.

A study of structure of the fashion fig-

ure. The student learns simple methods for making quick sketches in order to retain ideas and communicate style information.

DES 234 HISTORY OF COSTUME (3) 3 hrs. Lec.

Prerequisite: DES 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.

DES 235 HISTORY OF COSTUME (3) 3 hrs. Lec.

Prerequisite: DES 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 which have affected garment styles and their influence upon the current mode.

DIRECTED STUDIES

DS 901 DIRECTED STUDIES (1) 1 hr. Lec.

Prerequisite: Completion of twelve semester hours in residence and the approval of a division chairman and the Dean of Instruction. Recommended for honor students in a major area offered by a division or for students requesting study in depth in a particular area. The course may include special projects, honors seminars, field study, or independent study. May be repeated for credit.

DS 902 DIRECTED STUDIES (2) 2 hrs. Lec.

Prerequisite: Completion of twelve semester hours in residence and the approval of a division chairman and the Dean of Instruction. Recommended for

honor students in a major area offered by a division or for students requesting study in depth in a particular area. The course may include special projects, honors seminars, field study, or independent study. May be repeated for credit.

DS 903 DIRECTED STUDIES (3) 3 hrs. Lec.

Prerequisite: Completion of twelve semester hours in residence and the approval of a division chairman and the Dean of Instruction. Recommended for honor students in a major area offered by a division or for students requesting study in depth in a particular area. The course may include special projects, honors seminars, field study, or independent study. May be repeated for credit.

DRAFTING

DFT 130 TECHNICIAN DRAFTING (2) 1 hr. Lec. 3 hrs. Lab.

A beginning drafting course to enable students to read and interpret engineer-

ing drawings. Topics covered include multiview drawings, pictorial drawings, dimensioning, measurement with scales, schematic diagrams and printed circuit boards.

Drafting

DFT 132 BASIC DRAFTING (4) 2 hrs. Lec. 6 hrs. 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.

DFT 133 INTERMEDIATE DRAFTING (3) 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: DFT 132. The instructional units provide additional understanding of drafting problems, places emphasis on the design function and introduces several specialized drafting areas. 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.

DFT 135 REPRODUCTION PROCESSES (2) 1 hr. Lec. 3 hrs. 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, engraving, 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.

DFT 136 GEOLOGICAL AND LAND DRAFTING (3) 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: DFT 133 and MTH 132. Involves study of symbols, abbreviations, classifications, scales, types of maps, cartographic and topographic maps, petroleum geophysics maps, and application of drawing techniques to

land surveying, including boundaries, roads, buildings, elevations, plan and profile sheets, cross sections, plotting surveyor's notes, traverses, plot plans and plats.

DFT 230 STRUCTURAL DRAFTING (3) 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: DFT 132 and MTH 132. 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.

DFT 231 ELECTRONIC DRAFTING (3) 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: DFT 132. Develops skill in drawing and understanding of drawings used in the electronics industry. Topics include logic diagrams, schematic diagrams, interconnecting wiring diagrams, printed wiring boards, integrated circuits, component packaging, chassis design and current practices.

DFT 232 TECHNICAL ILLUSTRATION (3) 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: DFT 132. 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 equipments 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.

DFT 234 ADVANCED TECHNICAL ILLUSTRATION (4) 2 hrs. Lec. 6 hrs. Lab.

Prerequisite: DFT 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 isometric, perspective renderings, design of commercial displays, and art for slide presentations.

Economics — Electronics

ECONOMICS

ECO 201 PRINCIPLES OF ECONOMICS (3) 3 hrs. 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.

ECO 202 PRINCIPLES OF ECONOMICS (3) 3 hrs. Lec.

Prerequisite: ECO 201. 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.

ELECTRONICS

ET 120 D. C. CIRCUITS AND ELECTRICAL MEASUREMENTS (4) 3 hrs. Lec. 3 hrs. Lab.

Prerequisite: Credit or concurrent enrollment in MTH 131 or equivalent. Combines mathematical theory and laboratory fundamentals in direct current circuits. Elementary principles of magnetism, electrical concepts and units, diagrams, resistance, series of parallel circuits, simple meter circuits, conductors and insulators will be emphasized.

ET 131 A.C. CIRCUIT (4) 3 hrs. Lec. 3 hrs. Lab.

Prerequisite: ET 120. This course is directed to the study of fundamental theories of alternating current and their application in various circuits. Laboratory experiments will include power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism and resistance. \$3.00 Laboratory fee payable during registration.

ET 133 ACTIVE DEVICES (4) 3 hrs. Lec. 4 hrs. Lab.

Prerequisite: ET 120. This is a course in semiconductor "Active Devices". This course will cover topics as physical make up, parameters, linear and non-linear characteristics in circuit action; amplifier, rectifiers, and electronic switching. \$3.00 Laboratory fee payable during registration.

ET 134 INSTRUMENTATION (3) 2 hrs. Lec. 3 hrs. Lab.

Prerequisite: ET 120. A study of electrical measurement and instrumentation devices, and how they apply to work situations. Specific devices and measur-

ing instruments or classes of measuring devices including basic AC and DC measurement meters, impedance bridge, oscilloscopes, signal generators, signal tracers, tube and transistor testers; concluded with a study of audio frequency and radio frequency test methods and equipment. \$3.00 Laboratory fee payable during registration.

ET 234 ELECTRONIC CIRCUITS AND SYSTEMS (3) 6 hrs. Lab.

Prerequisite: ET 241 and ET 243. A supervised course consisting of design, layout construction and calibrating of an electronics project. Students will utilize all tools and equipment available. The student will be required to prepare a term paper which incorporates such material as functions of components, operating specifications, and schematics. The student must develop a project independently through conferences and activities directed by the instructor. Students should take ET 245 and ET 249 before or concurrently with ET 234. \$3.00 Laboratory fee payable during registration.

ET 241 BASIC COMMUNICATIONS CIRCUIT (4) 3 hrs. Lec. 3 hrs. Lab.

Prerequisite: ET 133. Basic communication devices and systems will be discussed. Such items as power supplies, voltage regulators, harmonic analysis, natural and forced responses. AF amplifiers, curve graphing, decibels, transducers, oscillators, mixers, RF amplifiers, IF amplifiers, AM demodulation, FM demodulation, AM transmitters, FM transmitters radio wave transmission, transmission lines and antennas are covered as they apply to Communications. \$3.00 Laboratory fee payable during registration.

Electronics — Engineering

ET 243 INDUSTRIAL CIRCUITS AND (4) ROTATING MACHINES

3 hrs. Lec.
3 hrs. Lab.

Prerequisite: ET 133. The effect that electronics is having upon the manufacturing industry will be explained. The units to be covered are nonsinusoidal waveshape generation and analysis timing circuits, pulse modulation, time division multiplexing, multivibrators, integrators, differentiators, multipliers, operational amplifiers, limiters, pulse stretchers, television transmission, television reception, DC generators, AC generators, DC motors, AC motors, single phase power, polyphase power, Synchro control systems, Servo control systems, inverters and converters. \$3.00 Laboratory fee payable during registration.

ET 245 HIGH FREQUENCY TECHNIQUES (4)

3 hrs. Lec.
3 hrs. Lab.

Prerequisite: ET 241. The microwave portion of this course includes the study

of microwave transmission, oscillators, mixers, combiners, amplifiers, modulation, demodulation, noise problems up-down converters, transmission links, and microwave multiplexing. An introduction to radar, includes a study of radar frequencies, types of radar, pulse generation, reflection, and radar reception. UHF topics includes UHF receivers and transmitters, noise problems, and construction techniques. \$3.00 Laboratory fee payable during registration.

ET 249 LOGIC AND DIGITAL CIRCUITS (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: ET 133. An overview of the circuits and concepts involved in digital electronics. The main topics are logic operations, types of logic flip-flops, gates, registers, displays, medium scale integration, large scale integration, computer organization, software, memory functions, arithmetic unit, control functions, remote terminals, peripheral equipment. \$3.00 Laboratory fee payable during registration.

ENGINEERING

EGR 101 ENGINEERING ANALYSIS (2)

2 hrs. Lec.
10 hrs. Lab.

Prerequisite: MTH 093 or equivalent. The past, present, and future role of the engineer in society; branches and specialties in engineering; introduction to engineering analysis affording practice in analyzing and solving engineering problems; computational methods and devices, to include slide rule theory and techniques, and introduction to numerical methods and computer programming.

EGR 105 ENGINEERING GRAPHICS (3)

2 hrs. Lec.
4 hrs. 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.

EGR 106 DESCRIPTIVE GEOMETRY (3)

2 hrs. Lec.
4 hrs. Lab.

Prerequisite: EGR 105 or DFT 132. 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 and developments. The major theme is the correlation and integration of theory with practice.

EGR 107 ENGINEERING MECHANICS I (3)

3 hrs. Lec.

Prerequisite: MTH 126 or registration therein. A study of the statistics of particles and rigid bodies with vector mathematics in three dimensional space. Principles of the equilibrium of forces and force systems, resultants, free body diagrams, friction, centroids and moments of inertia, virtual work, and potential energy are used. Distributed forces, centers of gravity, analysis of structures, beams, and cables are treated.

EGR 201 ENGINEERING MECHANICS II (3)

3 hrs. Lec.

Prerequisites: EGR 107 and credit or concurrent registration in MTH 227. Dynamics — the study of linear and

Engineering — English

angular motions of particles and rigid bodies resulting from applied forces; time; mass; velocity; acceleration, work and energy; impulse and momentum; kinematics.

EGR 202 ENGINEERING 3 hrs. Lec. MECHANICS OF MATERIALS (3)

Prerequisite: EGR 107 and MTH 227 or registration therein. A study of forces, deformation, and material properties of simple structural elements. Concepts of stress, strain and elastic properties are presented. Analyses of thin walled vessels, members loaded in tension, torsion, bending and shear, combined loadings and stability conditions are included. Behavioral phenomena such as fracture, fatigue, and creep are introduced.

EGR 203 ENGINEERING 1 hr. Lec. PRODUCTION TECH- 5 hrs. Lab. NIQUES (3)

Prerequisite: EGR 105 or consent of instructor. Standard machining of metals, layout, turning, boring, shaping, drilling, threading, milling, and grinding. Manufacturing of interchangeable parts, fixtures and jigs with theoretical applications.

EGR 204 ELECTRICAL 3 hrs. Lec. SYSTEMS ANALYSIS (3)

Prerequisite: MTH 227 or registration therein. Introduction to electrical science; fundamental electrical systems and signals; basic concepts of electricity and magnetism with mathematical representation and computation.

EGR 240 ENGINEERING 3 hrs. Lec. STATICS (3)

Prerequisite: MTH 132 or MTH 102. A study of forces and force systems, resultants and components of forces, friction, conditions of equilibrium, forces acting on members of trusses and frame structures applying both analytical and graphical methods of the solution of problems.

EGR 241 ENGINEERING 3 hrs. Lec. CHARACTERISTICS AND STRENGTHS OF MATERIALS (3)

Prerequisite: EGR 240 and DFT 133. A study of the characteristics and strengths of materials as they relate to loads, stresses, and deformations within the elastic range.

ENGLISH

ENG 101 COMPOSITION 3 hrs. Lec. AND EXPOSITORY WRITING (3)

Writing and reading activities designed to help the student to write more clearly and effectively and to read more enjoyably and efficiently.

ENG 102 COMPOSITION 3 hrs. Lec. AND LITERATURE (3)

Prerequisite: ENG 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.

ENGLISH IN THE SOPHOMORE YEAR

(ENG 201, 202, 203, 204, 205, and 206 are independent units of three credit units each from which 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 sophomore ENG courses.)

ENG 201 MASTER- 3 hrs. Lec. PIECES OF ENGLISH LITERATURE (3)

Prerequisites: ENG 101 and ENG 102. Considerations of significant poetry from the fourteenth through the eighteenth centuries.

ENG 202 MASTER- 3 hrs. Lec. PIECES OF ENGLISH LITERATURE (3)

Prerequisite: ENG 101 and ENG 102. Study of important works from the Romantic Period to the present.

ENG 203 LITERARY 3 hrs. Lec. CLASSICS OF THE WESTERN WORLD (3)

Prerequisite: ENG 101 and ENG 102. Reading and analysis of significant Continental European works from the Greek Classical Period through the Renaissance.

English — Environmental Technology — Fire Protection

ENG 204 LITERARY CLASSICS OF THE WESTERN WORLD (3) 3 hrs. Lec.

Prerequisite: ENG 101 and ENG 102.
Study of ten to twelve important post-Renaissance works of continental Europe, England, and America.

ENG 205 MAJOR AMERICAN WRITERS (3) 3 hrs. Lec.
Prerequisite: ENG 101 and ENG 102.

Study of the works of important writers before Whitman in the context of their times.

ENG 206 MAJOR AMERICAN WRITERS (3) 3 hrs. Lec.

Prerequisite: ENG 101 and ENG 102.
Reading and analysis of representative works by the chief literary figures of the past century.

ENG 207 CREATIVE WRITING (3) 3 hrs. Lec.

Prerequisite: ENG 101 and ENG 102.
Writing of fiction: short story, poetry and short drama.

ENG 208 CONTEMPORARY LITERATURE (3) 3 hrs. Lec.

Prerequisite: ENG 101 and ENG 102.
Study of important contemporary writers in the twentieth century.

ENG 209 LIFE AND LITERATURE IN THE SOUTHWEST (3) 3 hrs. Lec.

Prerequisite: ENG 101 and ENG 102.
Fiction, travels, poetry, memoirs, art, and music to acquaint students with the social and cultural heritage of Texas and neighboring states.

ENVIRONMENTAL TECHNOLOGY

ENV 101 ENVIRONMENT AND MAN (3) 3 hrs. Lec.

A one semester course dealing with topics relating to man and his environmental role. Subjects will be treated through discussions, guest speakers, films, and field studies. Recognized authorities and specialists from many disciplines will be used as guest lecturers and resource persons. The thesis of the course will be man's responsibility to the environment and will be interdisciplinary. The course is designed for all students interested in the environmental problems of today.

ENV 103 ENVIRONMENTAL GEOLOGY (3) 2 hrs. Lec. 2 hrs. Lab.

A survey of Geologic materials and processes from an environmental viewpoint. Studies include man's adaptations and adjustments to the limits of the Geologic environment. Environmental relationships are explored in laboratory and field studies. \$5.00 Laboratory fee payable during registration.

ENV 105 ATMOSPHERIC AND WATER ENVIRONMENTS (3) 2 hrs. Lec. 2 hrs. Lab.

A survey of the atmosphere and hydrosphere from the environmental viewpoint. A description of normal conditions and studies of variations includes consideration of effects upon man and man's effects upon this portion of the total environment. Environmental relationships are explored in laboratory and field studies. \$5.00 Laboratory fee payable during registration.

ENV 201 SEMINAR IN ENVIRONMENTAL SCIENCE 1 hr. Lec. 20 hr. Lab.

Prerequisite: ENV 101 and 103 or 105.
The course is designed to provide students with supervised field experience. Students will be placed in local industries, treatment plants, and laboratories in order to use current equipment and experience common procedures.

FIRE PROTECTION

FPT 131 INTRODUCTION TO FIRE PROTECTION (3) 3 hrs. Lec.

A course in the history and development of fire protection; the role of the

fire service in the development of civilization; personnel in fire protection; introduction to general fire hazards; and a discussion of the problems and pos-

Fire Protection — Food Service

sible solutions for current and future fire protection.

FPT 132 FIRE PREVENTION THEORY AND APPLICATION (3) 3 hrs. Lec.

Prerequisite: FPT 131. The development of fire prevention laws and ordinances for elimination of fire hazards; inspection organization, practices and procedures; theory and application of laws and ordinances in modern concepts of fire prevention.

FPT 133 FIRE OPERATIONS STRATEGY (3) 3 hrs. Lec.

The aspects of tactics and strategy in extinguishing fires; pre-fire plans; organization of the fire ground, including techniques of using available equipment and manpower; a study of conflagrations and techniques of prediction fire severity. Emphasis will be placed on the development of thinking skills in relation to crises.

FPT 135 INTRODUCTION TO FIRE ADMINISTRATION (3) 3 hrs. Lec.

A course in the practical application of records, reports and training; the municipal fire problem; organization for fire protection to include manpower, equipment and facilities, principles of organization; methods of supervision and discipline; relations with the public and other city departments; the budget and purchasing practices; a study of rating systems and their application to the fire service; discussion of the proper ways to handle personnel problems, grievances and employee suggestions.

FPT 136 FIRE INVESTIGATION AND ARSON (3) 3 hrs. Lec.

The fireman's role in arson investigation; the method and mechanics of protecting, searching and controlling the fire scene; determining the point of origin, path of fire travel and fire causes; interviews and interrogations; recognizing and preserving evidence; Texas arson laws, alibis, motives, and proving the corpus delicti; preparation of the case, court testimony and reports and records; juvenile fire setters.

FPT 231 FIRE PROTECTION THROUGH BUILDING CONSTRUCTION 3 hrs. Lec.

Prerequisite: Sophomore standing. Building codes and their necessity to fire protection; common concepts in building construction; elimination of the fire problems on the drawing board; relationship between building department and fire protection agencies; modern concepts of ordinances and laws for adequate regulation of building construction.

FPT 232 PROTECTION SYSTEMS IN INDUSTRY (3) 3 hrs. Lec.

Prerequisite: Sophomore standing. Attitudes prevalent in industry toward fire protection; development of fire and safety organizations in industry; relationship between private and public fire protection organizations; industrial obligations to communities in regard to fire and safety; current trends, deficiencies and possible solutions for fire protection problems facing industry today.

FOOD SERVICE

FS 090 FIRST YEAR ORIENTATION (1) 1 hr. Lec.

A study of the factors which influence the organization of a food service department in various types of group care institutions. Ethical responsibilities related to food service supervision are introduced. The functions of a good food service department are studied emphasizing the need for planning and administration of meals; food purchase, storage, preparation, and distribution, sanitation, and safety.

FS 130 BASIC FOOD PREPARATION (4) 2 hrs. Lec.
7 hrs. 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. Lab fee \$5.00.

Food Service

FS 131 ADVANCED FOOD PREPARATION (4) 2 hrs. Lec.
7 hrs. Lab.

Prerequisite: FS 130. Continuation of FS 130 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 techniques. Lab fee \$5.00.

FS 132 FOOD PURCHASING, HANDLING AND STORAGE (3) 3 hrs. 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.

FS 134 FOOD SERVICE SANITATION AND SAFETY (2) 2 hrs. 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.

FS 135 NUTRITION AND MENU PLANNING (3) 3 hrs. 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.

FS 136 SUPERVISORY TECHNIQUES FOR FOOD SERVICE (3) 3 hrs. 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.

FS 138 FOOD SERVICE COST CONTROL (3) 3 hrs. Lec.

Prerequisite: FS 132 and MTH 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.

FS 140 ELEMENTARY BAKERY TRAINING (3) 2 hrs. Lec.
4 hrs. Lab.

This course covers the operation of the bakery. 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. \$5.00 Laboratory fee payable during registration.

FS 230 QUANTITY FOOD PREPARATION AND SERVICE (6) 3 hrs. Lec.
12 hrs. Lec.

Prerequisite: FS 131. 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. Lab Fee \$5.00.

FS 231 ADVANCED QUANTITY FOOD PREPARATION AND SERVICE (6) 3 hrs. Lec.
12 hrs. Lab.

Prerequisite: FS 230. Continuation of FS 230 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

Food Service — French

of food preparation equipment. Lab Fee \$5.00.

FS 233 FOOD MARKET- 3 hrs. Lec. ING (3)

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.

FS 236 BEVERAGE 2 hrs. Lec. OPERATIONS AND SERVICE (2)

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. Upon completion of this course a student may qualify for the Certificate of Achievement from the Wine Advisory Board of California.

FS 237 ORGANIZATION 3 hrs Lec. AND MANAGEMENT (3)

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.

FS 238 GARDE 2 hrs. Lec. MANGER TRAINING (3) 4 hrs. Lec.

Prerequisite: FS 131. 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 the accurate and proper set-up of the Garde Manger Station. Lab Fee \$5.00.

FS 239 SAUCIER TRAINING (3)

2 hrs. Lec.
4 hrs. Lab.

Prerequisite: FS 131. 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. Lab Fee \$5.00.

FS 242 NUTRITION CARE I (4)

3 hrs. Lec.
3 hrs. Lab.

Prerequisite: FS 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. \$5.00 Laboratory fee payable during registration.

FS 243 NUTRITION CARE II (4)

3 hrs. Lec.
4 hrs. Lab.

Prerequisite: FS 242. 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. \$5.00 Laboratory fee payable during registration.

FS 245 ADVANCED PASTRY SHOP TRAINING (3)

2 hrs. Lec.
4 hrs. Lab.

Prerequisite: FS 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 advance techniques in continental pastries. \$5.00 Laboratory fee payable during registration.

FRENCH

FR 101 BEGINNING FRENCH (5)

5 hrs. Lec.
2 hrs. Lab.

Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression.

FR 102 BEGINNING FRENCH (5)

5 hrs. Lec.
2 hrs. Lab.

Prerequisite: FR 101 or equivalent. Continuation of FR 101 with emphasis on idiomatic language and complicated syntax.

French — Geography — Geology — German

FR 201 INTERMEDIATE FRENCH (3)

3 hrs. Lec.

Prerequisite: FR 102 or equivalent. Reading, composition, grammar review and intense oral practice.

FR 202 INTERMEDIATE FRENCH (3)

3 hrs. Lec.

Prerequisite: FR 201 or equivalent. Continuation of FR 201 with reading selections drawn more directly from contemporary literary sources. Composition.

GEOGRAPHY

GPY 101 GEOGRAPHY (PHYSICAL) (3)

3 hrs. 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.

GPY 102 WORLD GEOGRAPHY (ECONOMIC) (3)

3 hrs. Lec.

A study of the relation of man to his environment and his utilization of nat-

ural 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.

GPY 103 WORLD GEOGRAPHY (CULTURAL) (3)

3 hrs. Lec.

Development of areal variations of culture, including the distribution of races, religions, languages, and aspects of material culture, with emphasis on origins and diffusion.

GEOLOGY

GEO 101 GENERAL GEOLOGY (PHYSICAL) (4)

3 hrs. Lec.

Study of earth materials and processes for science and non-science majors. Includes examination of the earth's interior, magnetism, gravity, setting in space, minerals, rocks, structure and geologic processes. \$5.00 Laboratory fee payable during registration.

GEO 102 GENERAL GEOLOGY (HISTORICAL) (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: GEO 101. 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. \$5.00 Laboratory fee payable during registration.

GERMAN

GER 101 BEGINNING GERMAN (5)

5 hrs. Lec.

2 hrs. Lab.

Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression.

GER 102 BEGINNING GERMAN (5)

5 hrs. Lec.

2 hrs. Lab.

Prerequisite: GER 101 or equivalent. Continuation of GER 101 with emphasis on idiomatic language and complicated syntax.

GER 201 INTERMEDIATE GERMAN (3)

3 hrs. Lec.

Prerequisite: GER 102 or equivalent. Reading, composition, grammar review and intense oral practice.

GER 202 INTERMEDIATE GERMAN (3)

3 hrs. Lec.

Prerequisite: GER 201 or equivalent. Continuation of GER 201 with reading selections drawn more directly from contemporary literary sources. Composition.

Government — Guided Studies

GOVERNMENT

GVT 201 AMERICAN GOVERNMENT (3)

3 hrs. Lec.

An introduction to the study of political science; origin and development of constitutional democracy (United States and Texas); federalism and intergovernmental relations; civil rights and liberties, local government; parties, politics and political behavior. Either GVT 201 or 202 satisfies requirement for Texas State Teacher Certification.

GVT 202 AMERICAN GOVERNMENT (3)

3 hrs. Lec.

Prerequisite: GVT 201. A study of the United States and Texas legislative process, the executive and bureau structure, the judicial process, and domestic policies. Other topics include foreign relations and national defense. Either GVT 201 or 202 satisfies requirement for Texas State Teacher Certification.

GUIDED STUDIES

GSD 092 A GROUP APPROACH TO SELF-UNDERSTANDING (3)

3 hrs. Lec.

GSD 092 is designed to establish a relationship with the entering college student, his peers and instructors which enables him to communicate his needs, explore his feelings and to develop self direction in setting and moving toward the achievement of realistic goals. The personal and social growth of students is improved and behavioral changes effected through opportunities to react and interact with others. Activities are planned to increase the students awareness of his own abilities, skills, limitations, personality and needs.

GSG 121 BASIC FOUNDATIONS SURVEY OF CONTENT AREAS (0)

3 hrs. Lec.

GSG 121 is designed for those students who need a short review in the content areas of English, History, Science, and Mathematics. Useful techniques for taking tests are also included. Successful completion of the course should prepare interested students for the G.E.D. examination.

GSM 090 GUIDED STUDIES MATHEMATICS (3)

3 hrs. Lec.

GSM 090 is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals and percents 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 math sequence and includes an introduction to algebra. Programmed materials will

be utilized so that students can progress at their own rate of speed.

GSM 091 GUIDED STUDIES MATHEMATICS (3)

3 hrs. Lec.

Prerequisite: GSM 090 or equivalent. GSM 091 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. Programmed materials will be utilized so that students can progress at their own rate of speed.

GSO 120 ORAL COMMUNICATIONS (3)

3 hrs. Lec.

GSO 120 is designed for students with significant problems in language development. Small group sessions are supplemented with individual participation in listening, comprehension and oral expression of language using programmed materials in a language lab. Materials have been developed to enable the individual student to acquire increasing skills in the use of the sounds, structure, and meanings of standard English. Emphasis is also placed on understanding the importance of the processes of oral communication in social and vocational situations.

GSR 090 GUIDED STUDIES READING (3)

3 hrs. Lec.

GSR 090 is concerned with the improvement of comprehension skills, vocabulary building, and study skills. The course is designed for students who wish to strengthen the basic reading skills necessary for success in vocational, terminal, and transfer educational programs. The course provides

Guided Studies — History

instruction on an individual basis so that students may progress at their own rate of achievement.

GSR 091 GUIDED STUDIES READING (3) 3 hrs. Lec.

GSR 091 is designed to increase proficiency in reading comprehension and rate, word recognition and vocabulary development, and study skills and reading in the content areas. It also includes reading experiences which have been developed to broaden the general reading background of the student. Guided Studies Reading is offered in a laboratory setting with individualized instruction.

GSR 101 ADVANCED READING (3) 3 hrs. Lec.

Prerequisite: Successful completion of GSR 091 or reading level equivalent. GSR 101 emphasizes the development of advanced techniques in reading for pleasure as well as for information. Improved reading comprehension, vocabulary development, and flexibility of reading rate are stressed. In addition, advanced techniques for note-taking, exam-taking, studying, and reading for specialized content areas are developed.

GSW 090 GUIDED STUDIES WRITING (3) 3 hrs. Lec.

GSW 090 emphasizes the diagnosis and

correction of deficiencies in basic writing skills. Mechanics of writing include spelling, comprehension techniques, vocabulary improvement, principles of sentence and paragraph structure and various types of paragraph development. The course provides experience in finding ideas and materials for written compositions with an introduction to essay writing. It is offered in a laboratory setting with individualized instruction.

GSW 091 GUIDED STUDIES WRITING (3) 3 hrs. Lec.

Prerequisite: GSW 090 or equivalent. Guided Studies Writing 091 is a course in composition and English usage for those students who need or desire a second semester of basic writing skills. It includes daily writing assignments that are based on situations that students are likely to meet in college, on the job, and in their personal lives,

GSW 093 GUIDED STUDIES WRITING (3) 3 hrs. Lec.

GSW 093 is a course for foreign students who speak English as a second language. It is designed to help students express ideas clearly and correctly in English writing. The basic rules of spelling, sentence structure, word order, and punctuation are included. Transformation practice in vocabulary and usage is offered as needed.

HISTORY

HST 101 HISTORY OF THE UNITED STATES (3) 3 hrs. 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.

HST 102 HISTORY OF THE UNITED STATES (3) 3 hrs. Lec.

A survey of the unfolding of the United States History from the Reconstruction Era. The study includes social, economic and political aspects of American life and follows the development of the United States as a world power. History 101 recommended.

HST 105 WESTERN CIVILIZATION (3) 3 hrs. 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.

HST 106 WESTERN CIVILIZATION (3) 3 hrs. 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 beginnings

History — Home Economics — Human Development

of industrialism; the nineteenth century and the social, economic, and political factors of recent world history.

HST 110 THE HERITAGE OF MEXICO (3) 3 hrs. Lec.

This course presents major historical developments and personalities which have shaped the Mexican nation, with emphasis on the culture and customs of the people throughout their history, plus important events in the relationships between Mexico and the United

States. A significant portion of the course deals with the role of the Mexican and Mexican-American in contemporary USA.

HST 120 AFRO-AMERICAN HISTORY (3) 3 hrs. 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.

HOME ECONOMICS

HE 101 BASIC DESIGN (3) 2 hrs. Lec. 4 hrs. Lab.

A study of the fundamental principles of art, design, and color as a 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.

HE 102 FOOD SELECTION AND PREPARATION (3) 2 hrs. Lec. 4 hrs. 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. \$3.00 Laboratory fee payable during registration.

HE 110 CLOTHING AND HOME DESIGN (3) 2 hrs. Lec. 4 hrs. Lab.

Prerequisite: HE 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.

HUMAN DEVELOPMENT

HD 101 DEVELOPING LEARNING AND STUDY SKILLS (2) 2 hrs. Lec.

A course designed to aid students in improving their study habits. Special emphasis is placed upon the time schedule, the discovery of the nature and extent of reading difficulties, outlining the lecture and reading assignments, the efficient use of the facilities for study, developing skill in note-taking, and preparing for and taking examinations. Ample opportunity is provided for the consideration of individual study problems and for the practice of suggested procedures.

HD 105 BASIC PROCESSES OF INTERPERSONAL RELATIONSHIPS (3) 3 hrs. 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 are planned, partly by each class, designed to meet certain specific human needs of the students in the class. Open to freshmen and sophomores.

Human Development — Humanities — Interior Design

HD 106 PERSONAL 3 hrs. Lec. AND SOCIAL GROWTH (3)

A course in human development dealing with the process of personal and social growth emphasizing the human dynamics of relating to influences largely outside one's own sphere of control. Class activities will focus on developing a realistic and accepting understanding of self, developing an adequate understanding of the societal influences which have developed the self, and developing an attitude necessary for proper adjustment in family, school, and society. Open to freshmen and sophomores.

HD 107 DEVELOPING 3 hrs. Lec. LEADERSHIP BEHAVIOR (3)

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. Permission of the instructor required.

HUMANITIES

HUM 101 INTRODUCT- 3 hrs. Lec. TION TO THE HUMANITIES (3)

Through an examination of interrelated examples of man's creative achieve-

ments, the Humanities course attempts to enlarge awareness and increase understanding of the nature of man and the values of human life.

INTERIOR DESIGN

INT 130 BASIC 2 hrs. Lec. PLANNING (3) 4 hrs. Lab.

Prerequisite: Enrollment in Design Institute. The student learns to use drawing instruments in drawing two-dimensional forms, drafting basic architectural plans and symbols, use of architectural lettering, and electrical plan overlay.

INT 131 BASIC WATER- 6 hrs. Lab. COLOR AND GOUACHE (2)

Prerequisite: Successful completion of or concurrent enrollment in INT 130. 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 INT 130 projects.

INT 132 ADVANCED 6 hrs. Lab. WATERCOLOR AND GOUACHE (2)

Prerequisite: INT 131, successful completion of or concurrent enrollment in INT 133. Interpretive rendering of materials and textures. Theory and technique to be applied to elevation and perspective projects from INT 133. Color scheme applied to total space concept.

INT 133 ADVANCED 6 hrs. Lab. ARCHITECTURAL PLANNING (2)

Prerequisite: INT 130. The student learns drawing of floor plans, interior elevations and furniture plan layout and space planning. One and two points perspective to be projected into advanced water color for illustration in color. Orthographic and isometric projections are made of furniture studies.

INT 230 HISTORY OF 3 hrs. Lec. INTERIOR ARTS (4) 3 hrs. Lab.

Prerequisite: INT 132. A study of the evolution of the interior arts and related architectural development from Egyptian through Rococo. The student compiles a notebook of supplementary material. Lectures, slides, field trips, and reports provide research information.

INT 231 HISTORY OF 3 hrs. Lec. INTERIOR ARTS (4) 3 hrs. Lab.

Prerequisite: INT 230. Continuation of study of evolution of interior arts from Neo-Classical through Victorian with related architectural development. The student compiles a notebook of supplementary material. Lectures, field trips, slides and reports provide research information.

Interior Design — Journalism

INT 233 FABRICATIONS (3)

6 hrs. Lab.

and business establishments. Student notebook required.

Prerequisite: INT 133 and INT 132. The study of furniture upholstery, wood refinishing, frame construction, new materials, drapery making and wall covering techniques. The course is geared for general understanding and technical methods rather than for learning of craftsmanship.

INT 234 INTERIOR GRAPHICS AND ILLUSTRATION (2)

6 hrs. Lab.

Prerequisite: INT 132 and INT 133. The study of two-point perspective of interior space in color. Floor plan and furniture layout. Color interior elevations. Free hand color vignettes and interpretive rendering.

INT 235 INNER SPACE COMPOSITION AND PRESENTATION (3)

2 hrs. Lec.

4 hrs. Lab.

Prerequisite: INT 230, INT 132. The organization of all elementary principles of interior design for problem-solving assignments and formal presentation. Emphasis to be on preparation of material for presentation. Traditional residential projects.

INT 236 CONCEPTS OF CONTEMPORARY INTERIOR DESIGN AND LIGHTING (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: INT 231 or consent of instructor and concurrent enrollment in INT 237. Concentration on 20th Century and current developments in furniture design and various materials and arts and their application to interiors of all styles. Relative project assignments are made. A study of the various methods of effective lighting of the interior and exterior for both residential and commercial, and drawing of the electrical plan is included. Field trips to decorative showrooms and area houses

INT 237 ADVANCED PRINCIPLES OF INTERIOR DESIGN (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: INT 235 or consent of instructor and concurrent enrollment in INT 236. 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.

INT 238 CLIENT PSYCHOLOGY SURVEY AND BUSINESS PROCEDURES (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: INT 236 or consent of instructor and concurrent enrollment in INT 239. 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 of 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.

INT 239 ADVANCED PRINCIPLES OF INTERIOR DESIGN (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: INT 237 or consent of instructor. Continuation of INT 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.

JOURNALISM

JN 101 INTRODUCTION TO MASS COMMUNICATIONS (3)

3 hrs. 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 — Library Technology — Mathematics

JN 102 NEWS GATHER- 2 hrs. Lec.
ING AND WRITING (3) 3 hrs. 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. Journalism 101 is not a prerequisite for JN 102. Required for all journalism majors.

JN 103 NEWS GATHER- 2 hrs. Lec.
ING AND WRITING (3) 3 hrs. Lab.

Prerequisite: *JN 102.* A continuation of JN 102. The writing of more complex types of news stories. Specialized writing in the field of sports, police news, markets, finance, society, amusement, government and news of interest to women: Additional laboratory work on the student newspaper. Required for all journalism majors.

JN 104, 105 (FRESH- 3 hrs. Lab.
MAN) 202, 203 (SOPHOMORE)
STUDENT PUBLICATIONS (1)

Individual staff assignments on the student newspaper in one of the following journalistic fields: writing, advertising, photography, cartooning, editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may not be taken for credit concurrently with JN 102 or 103. Credit limited to one unit per semester. May be repeated for a total of three units credit.

JN 204 NEWS EDITING 3 hrs. Lec.
AND COPYREADING (3)

Prerequisite: *JN 102.* A detailed course in editing news for presentation in the newspaper and on radio and television. Special emphasis on writing headlines and laying out pages.

LIBRARY TECHNOLOGY

LT 131 INTRODUCTION 3 hrs. Lec.
TO LIBRARIES I (3)

Prerequisite: *Open to all students.* A general introduction to library activities and operations, as they relate to various types of libraries and services.

LT 132 INTRODUCTION 1 hr. Lec.
TO MEDIA II (3) 4 hrs. Lab.

Prerequisite: *Open to all students.* An introduction to basic skills associated with the preparation of graphic and projected materials and the operation of selected audiovisual equipment.

LT 231 TECHNICAL 2 hrs. Lec.
SERVICES IN 2 hrs. Lab.
LIBRARIES I (3)

Prerequisite: *LT 131 and LT 132.* Study and practice of basic skills and operations associated with the acqui-

sition, organization, preparation and preservation of library materials.

LT 232 PUBLIC SER- 2 hrs. Lec.
VICES IN LIBRARIES 2 hrs. Lab.
I (3)

Prerequisite: *LT 131 and LT 132.* Study and practice of basic skills and operations in areas of public assistance, including circulation and informational services.

LT 233 CO-OPERATIVE 6 hrs. Lab.
FIELD SERVICE IN
LIBRARIES II (3)

Prerequisite: *LT 231 and LT 232.* Supervised on-the-job training in appropriate work situations related to the student's individual aptitudes and interests. To be arranged, subject to the approval of the Division Chairman.

MATHEMATICS

MTH 093 INTERMEDI- 3 hrs. Lec.
ATE ALGEBRA (3)

Prerequisite: *GSM 091 or one year of high school algebra and satisfactory score on proficiency examination.* (Stu-

dents registering for MTH 093 will be counseled individually by their instructors on the basis of background and the results of a proficiency examination given at the beginning of the semester. Every effort will be made to register

Mathematics

the student in the mathematics course commensurate with his background, ability, and educational goals.)

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.

MTH 101 COLLEGE ALGEBRA (3) 3 hrs. Lec.

Prerequisite: MTH 093 or two years of high school algebra and satisfactory score on proficiency examination. (Students registering for MTH 101 will be counseled individually by their instructors on the basis of background and the results of a proficiency examination given at the beginning of the semester. Every effort will be made to register the student in a mathematics course commensurate with his background, ability, and educational goals.)

Introduction to set operations, real and complex numbers, and operations on them. A study of the functions and relations most commonly needed, especially absolute value, polynomial functions, and rational functions, together with equations obtained from these functions. Includes linear, quadratic, and higher degree equations, and systems of equations. Accompanying these will be appropriate auxiliary topics such as determinants, Cramer's rule, some elementary aspects of the theory of equations, progressions, the binomial theorem, and algebraic proof.

MTH 102 PLANE TRIGONOMETRY (3) 3 hrs. Lec.

Prerequisite: MTH 101. Angular measure, functions of angles, derivation of formulae, identities, solution of triangles, equations, inverse trigonometric functions, logarithms, and complex numbers.

MTH 106 ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY (5) 5 hrs. Lec.

Prerequisite: Two years of high school algebra and one semester of trigonometry. A study of the algebra functions and coordinate geometry to include the following: polynomial and rational, exponential, logarithmic, trigonometric, and functions of two variables.

MTH 111 MATH FOR BUSINESS AND ECONOMICS I (3) 3 hrs. Lec.

Prerequisite: Two years of high school algebra or Math 093. Study of equations and inequalities; functions to include: linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and linear programming. Applications to business and economics problems are emphasized.

MTH 112 MATH FOR BUSINESS AND ECONOMICS II (3) 3 hrs. Lec.

Prerequisite: Math 111. Study of sequences and limits, differential calculus, optimization, and appropriate applications.

MTH 115-116 COLLEGE MATHEMATICS (3) (3) 3 hrs. Lec.

Prerequisite: Mathematics 093 or 1 year of high school algebra and 1 year of high school geometry or 2 years of high school algebra. A comprehensive modern treatment of the elements of mathematics for the liberal art student. Emphasis is placed on mathematics as a deductive science. The cultural effects of mathematics on our civilization, historical aspects and the role of mathematics in communication are also major themes of the course.

MTH 121 ANALYTIC GEOMETRY (3) 3 hrs. Lec.

Prerequisite: MTH 102. Introduction to real numbers, distance, the straight line, the circle, conics, transformation of coordinates, polar coordinates, parametric equations and three-dimensional space. The sequence Mth 121-222-223-224 is equivalent to the sequence Mth 126-227-228.

MTH 126 INTRODUCTORY CALCULUS (5) 5 hrs. Lec.

Prerequisite: MTH 106 or equivalent. A study of slopes, some aspects of analytic geometry, tangents, limits, derivatives, continuity, interpretations and applications, chain rule, implicit differentiation, higher derivatives, differentials, and integration.

MTH 130 BUSINESS MATHEMATICS (3) 3 hrs. Lec.

Prerequisite: One year of high school algebra or GSM 091. Common application of percent to business problems,

Mathematics — Medical Assisting Technology

simple and compound interest, bank discount, payrolls, taxes, purchase discounts, periodic payment plans, depreciation, overhead, business statements, markup and markdown, various problems in retailing.

MTH 131 TECHNICAL MATHEMATICS (3) 3 hrs. Lec.

Prerequisite: Two years of high school algebra or MTH 093. A course designed for technical students covering a general review of arithmetic, a treatment of the basic concepts and the fundamental facts of plane geometry, computations with slide rule, units and dimensions, a treatment of the terminology and concepts of elementary algebra: functions, coordinate system and systems of equations, stated problems, determinants, progressions, and the binomial theorem.

MTH 132 TECHNICAL MATHEMATICS (3) 3 hrs. Lec.

Prerequisite: MTH 131. 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.

MTH 139 APPLIED MATHEMATICS (3) 3 hrs. Lec.

Prerequisite: One year of high school algebra or GSM 091. Commercial, technical and more simple scientific uses of arithmetic, algebra, geometry and trigonometry. An effort will be made to tailor the course to fit the needs of the students enrolled in each section.

MTH 202 INTRODUCTORY STATISTICS (3) 3 hrs. Lec.

Prerequisite: Two years of high school algebra, or MTH 101. A study of collection and tabulation of data, bar charts, graphs, sampling, averages, dispersion, correlation, index numbers, the normal

curve, probability, and applications to various fields.

MTH 222 CALCULUS I (3) 3 hrs. Lec.

Prerequisite: MTH 121. Limits, continuity, differentiation of algebraic and transcendental functions, and applications, maxima and minima, antiderivatives and indeterminate forms.

MTH 223 CALCULUS II (3) 3 hrs. Lec.

Prerequisite: MTH 222. The indefinite integral, definite integral, and applications, techniques of integration, improper integrals, and infinite series.

MTH 224 ADVANCED CALCULUS (3) 3 hrs. Lec.

Prerequisite: MTH 223. Multiple integrals, partial differentiation, vector analysis, series, and hyperbolic functions.

MTH 227 MATHEMATICAL ANALYSIS I (4) 4 hrs. Lec.

Prerequisite: MTH 126 or MTH 222. Study of techniques of differentiation and integration, limits, vectors, and multivariate calculus.

MTH 228 MATHEMATICAL ANALYSIS II (3) 3 hrs. Lec.

Prerequisite: MTH 223 or MTH 227. A continuation of MTH 227, introduction to differential equations, sequences and series.

MTH 230 DIFFERENTIAL EQUATIONS (3) 3 hrs. Lec.

Prerequisite: MTH 224 or MTH 228. A course in ordinary differential equations concerned with first order equations, singular solutions, and miscellaneous methods of solving and analyzing differential equations of first and higher order.

MEDICAL ASSISTING TECHNOLOGY

MA 131 MEDICAL TERMINOLOGY (4) 4 hrs. Lec.

Prerequisite: Admission to Medical Assisting, Medical Transcriptionist programs. A study of the basic structure of

medical words including prefixes, suffixes, roots, combining forms and plurals; pronunciation, spelling, and definition of medical terms; emphasis on building a professional vocabulary required for working in the medical field.

Medical Assisting Technology & Laboratory Technology

MA 132 CLINICAL PROCEDURES (4)

3 hrs. Lec.
3 hrs. Lab.

Prerequisite: MA 131 and MA 133. Lectures and laboratory experiences in which the student is introduced to the role of the medical office assistant in examining room techniques; practice and technique of sterilization procedures; care of equipment and supplies; a basic knowledge of the purpose and technique of the most frequent laboratory procedures performed in the physician's office.

MA 133 MEDICAL LAW, ETHICS and ECONOMICS (3)

3 hrs. Lec.

Prerequisite: Admission to Medical Assisting program. An introduction to medical law including the legal relationship of physician and patient, creation and termination of a contract, professional liability, malpractice, tort liability, breach of contract, and Medical Practice Acts. A knowledge of professional attitudes and behavior and fundamentals of meeting the special needs of patients. A general knowledge of the types of medical practice, types of medical care, prepaid health insurance plans. An introduction to the history of medicine; great men of medicine and their discoveries.

MA 134, 135 SEMINAR APPLIED ANATOMY AND PHYSIOLOGY (1) (1)

2 hrs. Lec.

Prerequisite: Concurrent enrollment in BIO 120-121. This course is designed to relate BIO 120-121 to the specific needs of students enrolled in Medical Assisting or Medical Transcriptionist programs.

MA 230 MEDICAL TRANSCRIPTION (3)

1 hr. Lec.
6 hrs. Lab.

Prerequisite: MA 131; BUS 174 or equivalent. This course is designed to develop speed and accuracy in typing, skill in the use of transcribing equipment and the expansion of medical terminology. Practice transcribing medical reports and correspondence is emphasized.

MA 231 ADMINISTRATIVE PROCEDURES (4)

3 hrs. Lec.
3 hrs. Lab.

Prerequisite: MA 132. Lectures and laboratory experiences in patient reception, appointment scheduling, proper telephone techniques; handling mail, medical records, business correspondence, insurance forms; office management practices; record keeping and financial records; practices given in entering daily transactions, using standard accounting records, and preparing financial statement.

MA 232 DIRECTED PRACTICE (4)

16 hrs. Lab.

Prerequisite: MA 230 and 231. Practical experience in offices of selected physicians and hospitals to give the student insight, understanding and skill in medical office assisting.

MA 233 SEMINAR AND JOURNAL CLUB (3)

3 hrs. Lec.

Prerequisite: Concurrent enrollment in MA 232. Problem solving and correlation of classroom theory and practice with work experience in a conference course. Presentation and interpretation of articles in current professional journals.

MEDICAL LABORATORY TECHNOLOGY

MLT 133 HEMATOLOGY (4)

3 hrs. Lec.
3 hrs. 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 MLT 135. The theory and basic techniques utilized in the hematological examination of blood will be presented.

MLT 135 URINALYSIS (3)

2 hrs. Lec.
3 hrs. 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 MLT 133. This course serves to orientate the student to the medical laboratory in addition to presenting the theory and laboratory procedures used in the analysis of urine.

Medical Laboratory Technology — Music

MLT 138 IMMUNOLOGY 3 hrs. Lec.
(4) 3 hrs. Lab.

Prerequisite: "C" average in **MLT 133** and **135**. The basic theory and principles of immunology will be presented. Building upon this background, the laboratory procedures utilized in the serological and immuno-hematological examination of blood and serum shall be considered.

MLT 139 CLINICAL PRACTICE I (8) 2 hrs. Lec.
33 hrs. Lab.

Prerequisite: "C" average in **MLT 134** and an overall "C" average in nontechnical 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.

MLT 229 MEDICAL MICROBIOLOGY I (4) 3 hrs. Lec.
4 hrs. Lab.

Prerequisite: Satisfactory completion of the first year of the *Medical Laboratory Technician* program. The fundamentals of microbial life shall be presented and building upon this background the methods and procedures used in diagnostic microbiology will be covered. These shall include the principal of aseptic technique, susceptibility testing of bacteria, quantitation of bacteria in body fluids, and the isolation and identifica-

tion 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.

MLT 231 CLINICAL CHEMISTRY (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: "C" average in **MLT 229** and successful completion of **CHM 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.

MLT 236 MEDICAL MICROBIOLOGY II (4) 3 hrs. Lec.
4 hrs. Lab.

Prerequisite: **MLT 229**. A continuation of **MLT 229** which will include the study of the isolation and identification procedures for selected bacteria of medical importance, fungi, and parasites.

MLT 238 CLINICAL PRACTICE II (8) 2 hrs. Lec.
33 hrs. Lab.

Prerequisite: "C" average in **MLT 229** and **231** with an overall "C" average in nontechnical course work. The student will be assigned to a clinical laboratory for supervised experience in diagnostic microbiology and clinical chemistry.

MUSIC

MUS 101 FRESHMAN THEORY (4) 3 hrs. Lec.
4 hrs. 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.

MUS 102 FRESHMAN THEORY (4) 3 hrs. Lec.
4 hrs. Lab.

Prerequisite: **MUS 101** or consent of instructor. Introduction to part-writing and harmonization with triads and their inversions; classification of chords; seventh chords, sight-singing, dictation, and keyboard harmony.

MUS 104 MUSIC APPRECIATION (3) 3 hrs. 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.

MUS 110 MUSIC LITERATURE (3) 3 hrs. 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 history. Special emphasis is given to the music of late Gothic, Renaissance, and Baroque era.

Music

MUS 111 MUSIC LITERATURE (3)

3 hrs. Lec.

Prerequisite: MUS 110. A continuation of the studies introduced in MUS 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.

MUS 113 FOUNDATIONS IN MUSIC I (3)

3 hrs. 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). Course designed specifically for the non-music major.

MUS 114 FOUNDATIONS IN MUSIC II (3)

3 hrs. Lec.

Prerequisite: MUS 113. A continuation of MUS 113 including a functional approach to music methods and materials needed for teaching in the elementary school.

MUS 117 PIANO CLASS I (1)

2 hrs. 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.

MUS 118 PIANO CLASS II (1)

2 hrs. Lab.

Prerequisite: MUS 117 or equivalent. Continuation of MUS 117 including technique skills, harmonization, transposition, improvisation, accompanying, sight-reading and performing various styles of repertoire.

MUS 119 GUITAR CLASS I (1)

2 hrs. 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.

MUS 121-140 APPLIED MUSIC — Minor (1)

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.

MUS 221-240 APPLIED MUSIC — CONCENTRATION (2)

Private instruction in the area of student's concentration. Two half-hour lessons a week. Open to students registered in music theory, ensembles, and other music major or minor courses.

MUS 251-270 APPLIED MUSIC — MAJOR (3)

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.

MUS 150 CHORUS (1) 3 hrs. Lab.

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.

MUS 151 VOICE CLASS I (1)

2 hrs. 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.

MUS 152 VOICE CLASS II (1)

2 hrs. Lab.

A continuation of MUS 151 with emphasis on solo singing, appearance in studio recital, stage development, personality development. Open to all non-voice majors. Two group lessons a week.

MUS 155 VOCAL ENSEMBLE (1)

3 hrs. Lab

A select group of mixed voices concentrating upon excellence of performance. Membership is open only to members of the chorus through an audition with the director.

MUS 160 BAND (1)

3 hrs. Lab.

The band studies and performs a wide variety of music in all areas of band literature. Required of all wind instru-

Music — Nursing

ment majors. Open to all other students upon consent of instructor. May be repeated for credit.

MUS 173 PERCUSSION 3 hrs. Lab. ENSEMBLE (1)

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

MUS 175 STRING 3 hrs. Lab. ENSEMBLE(1)

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

MUS 177 CHAMBER 3 hrs. Lab. ENSEMBLE (1)

Select groups of instrumentalists or vocalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director.

MUS 185 STAGE 3 hrs. Lab. BAND (1)

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.

MUS 199 RECITAL (1) 2 hrs. Lab.

One period per week designed to allow students of private lessons an opportunity to perform before an audience. Required for all music students and open to all other students.

MUS 201 SOPHOMORE 3 hrs. Lec. THEORY (4) 4 hrs. Lab.

Prerequisite: MUS 101-102 or by 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.

MUS 202 SOPHOMORE 3 hrs. Lec. THEORY (4) 3 hrs. Lab.

Prerequisite: MUS 201 or equivalent or by consent of instructor. A continuation of MUS 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.

NURSING

NUR 132 FUNDA- 3 hrs. Lec. MENTALS OF 9 hrs. Lab. NURSING (6)

Prerequisite: Admission to program. The study and practice of basic nursing skills with emphasis on safety, comfort, body mechanics, nutrition, pharmacology, and historical and current trends. Lab fee \$10.00.

NUR 120 NURSING 3 hrs. Lec. CARE IN PHYSICAL 9 hrs. Lab. AND MENTAL HEALTH (6)

Prerequisites: NUR 132 and concurrent enrollment in BIO 121 and PSY 201. A study of the family as it is influenced by pregnancy, delivery and postpartum, as well as the growth and development of the child.

NUR 121 NURSING 3 hrs. Lec. CARE OF PHYSICALLY 9 hrs. Lab. AND MENTALLY ILL (6)

Prerequisites: NUR 132 and concurrent enrollment in BIO 121 and PSY 201. The study of the impact of illness both physical and mental and injury upon selected patients and their families and the role of the nurse in meeting the physical and emotional needs associated with selected disorders.

NUR 220 NURSING 4 hrs. Lec. CARE OF PHYSICALLY 15 hrs. Lab. AND MENTALLY ILL-II (9)

Prerequisites: NUR 120 and NUR 121. A continuation of Nursing 121 with increasing implementation of supportive and therapeutic nursing care to more

Nursing — Pattern Design

complex patient needs including chronic mental and physical disorders and the teaching required of these patients and their families.

NUR 221 NURSING CARE OF THE PHYSICALLY AND MENTALLY ILL-III (4) 2½ hrs. Lec. 23½ hrs. Lab.

Prerequisites: **NUR 220.** A continuation of organizing and providing total care for persons and their families with complex physical and mental health problems with emphasis on the refinement of skills as well as continued investigation of professional responsibilities and limitations. (Summer session, 1974, only)

NUR 133 MATERNAL AND CHILD HEALTH (8) 3 hrs. Lec. 15 hrs. Lab.

Prerequisite: **NUR 132.** The study of family members as the progress through the stages of childbearing and childrearing. One section of the course will deal with pregnancy, delivery, postpartum, and the newborn infant. The other section will deal with the care of the healthy and ill child.

NUR 138 MATERNITY NURSING (4) 5½ hrs. Lec. 16 hrs. Lab.

Prerequisites: **NUR 132 and NUR 231.** The study of family members as they progress through the stages of childbearing dealing with pregnancy, delivery, postpartum, and the newborn infant. (Summer session, 1972, only)

NUR 231 PSYCHIATRIC NURSING (5) 2 hrs. Lec. 9 hrs. Lab.

Prerequisite: **NUR 133.** An eight week study of mental health and mental illness stressing the nurse-patient relationship and theories of treatment. Emphasis is placed upon communication, knowledge of self and observations of human behavior.

NUR 232 MEDICAL-SURGICAL NURSING (5) 2 hrs. Lec. 9 hrs. Lab.

Prerequisite: **NUR 133.** An eight week study of the response of the body to illness and injury and a beginning understanding of the physical and mental impact of illness upon the patient, family and society. The course will center around the body systems, progressing from the health system to the system under stress of illness, employing the problem solving technique and emphasizing the nursing role.

NUR 233 MEDICAL-SURGICAL NURSING (9) 4 hrs. Lec. 15 hrs. Lab.

Prerequisite: **NUR 231 and NUR 232 (a continuation of NUR 232).** An eight week study of the response of the body to illness and injury and a beginning understanding of the physical and mental impact of illness upon the patient, family and society. The course will center around the body systems, progressing from the health system to the system under stress of illness, employing the problem solving technique and emphasizing the nursing role.

NUR 234 MEDICAL-SURGICAL NURSING (5) 6½ hrs. Lec. 22 hrs. Lab.

Prerequisite: **NUR 233.** A study of the more complex problems of patient care and the nursing role with emphasis on student pursuit of individual studies of interest in nursing. Offered in summer session.

NUR 236 PEDIATRIC NURSING (4) 5½ hrs. Lec. 16 hrs. Lab.

Prerequisite: **NUR 132, NUR 231, NUR 138, NUR 232 and NUR 233.** The study of family members as they progress through the childbearing phase, dealing with the care of the healthy and ill infant, toddler, pre-schooler, schoolage child, and adolescent. (Summer session, 1973, only)

PATTERN DESIGN

PDD 125 PATTERN DRAFTING AND DRAPING (3) 2 hrs. Lec. 4 hrs. Lab.

Student learns the fundamental principles to draft and drape basic patterns.

Basic techniques are developed in pattern grading and pattern work by using the latest apparel industry equipment. PDD 125 and 126 are equivalent to PDD 130. Lab Fee \$2.00.

Pattern Design — Philosophy

PDD 126 PATTERN DRAFTING AND DRAPING (2)

1 hr. Lec.
3 hrs. Lab.

Prerequisite: PDD 125. Student learns to draft and drape basic patterns in collars, skirts, sleeves and dresses. PDD 125 and 126 are equivalent to PDD 130. Lab Fee \$2.00.

PDD 130 PATTERN DRAFTING AND DRAPING (5)

3 hrs. Lec.
9 hrs. 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. Lab Fee \$4.00.

PDD 131 PATTERN DRAFTING AND DRAPING (5)

3 hrs. Lec.
9 hrs. Lab.

Prerequisite: PDD 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. Lab Fee \$4.00.

PDD 230 CREATIVE PATTERN DESIGN (5)

3 hrs. Lec.
9 hrs. Lab.

Prerequisite: PDD 131. Student learns techniques to develop patterns for children, junior petite, junior, active sportswear, misses, and suits. Special assignments for Apparel Design Students. Lab Fee \$4.00.

PDD 231 CREATIVE PATTERN DESIGN (5)

3 hrs. Lec.
9 hrs. Lab.

Prerequisite: PDD 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. Lab Fee \$4.00.

PHILOSOPHY

PHI 102 INTRODUC- TION TO PHILOSOPHY (3)

3 hrs. 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.

PHI 105 LOGIC (3)

3 hrs. 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.

PHI 203 ETHICS (3)

3 hrs. Lec.

Prerequisite: Three hours of philosophy. 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 vivify 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.

PHI 207 HISTORY OF ANCIENT PHILOSOPHY (3)

3 hrs. Lec.

Prerequisite: Sophomore standing. This course is an historical examination of philosophy from Presocratic times to the Renaissance. Connections between the Presocratics, Plato, and Aristotle will be drawn. Stoicism, Epicureanism, and Scholasticism will be considered.

PHI 208 HISTORY OF MODERN PHILOSOPHY (3)

3 hrs. Lec.

Prerequisite: Sophomore standing. A continuation of PHI 207. Starting with the Renaissance, it examines western philosophic thought through the 19th century. Special emphasis will be given Continental Rationalism, British Empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it is related to 20th century philosophies. Emphasis will be placed on the historical relationships existing between these schools of thought.

Physical Education — Physical Science

PHYSICAL EDUCATION

PEH 101 FUNDAMENTALS OF HEALTH (3) 3 hrs. Lec.

A study of personal and community health. Emphasis is placed on causative factors of various diseases, means of transmission, and prevention. For majors and non-majors.

PEH 118 BEGINNING GOLF (1) 2 hrs. Lab.

A co-educational class in beginning golf. Equipment furnished. No uniform required. \$5.00 laboratory fee required.

PEH 119 BEGINNING TENNIS (1) 2 hrs. Lab.

A course designed for the beginner. Basic tennis fundamentals will be stressed. Uniform required. \$5.00 laboratory fee required.

PEH 120 BOWLING (1) 2 hrs. Lab.

An activity course that will provide the student an opportunity to participate and improve skills in one of our more popular recreational activities. \$10.00 laboratory fee required.

PEH 124 SOCIAL DANCE (1) 2 hrs. 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.

PEH 144 INTRODUCTION TO PHYSICAL EDUCATION (3) 3 hrs. Lec.

Designed for professional orientation in the area of physical education. Brief history, philosophy, modern trends in physical education, teacher qualifications, vocational opportunities, expected competences and skill testing are included within scope of the course. For majors and minors and students with specific interest.

PEH 218 INTERMEDIATE AND ADVANCED GOLF (1) 2 hrs. Lab.

A course designed to develop skills and techniques beyond the "beginner's" stage. \$5.00 laboratory fee required.

PEH 219 INTERMEDIATE ADVANCED TENNIS (1) 2 hrs. Lab.

A course designed to develop skills and techniques beyond the "beginner's" stage. \$5.00 laboratory fee required.

PEH 257 STANDARD AND ADVANCED FIRST AID AND SAFETY EDUCATION (3) 3 hrs. Lec.

Theory and practice in the standard and advanced courses of the American National Red Cross in First Aid, home and farm safety. For physical education, health and recreation majors and minors and students with specific interest.

PHYSICAL SCIENCE

PSC 115 PHYSICAL SCIENCE (4) 3 hrs. Lec. 2 hrs. 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. \$5.00 Laboratory fee payable during registration.

PSC 116 PHYSICAL SCIENCE (4) 3 hrs. Lec. 2 hrs. 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. \$5.00 Laboratory fee payable during registration.

Physics — Police Science

PHYSICS

PHY 111-112 GENERAL PHYSICS (4) (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: Working knowledge of Algebra. For pre-med, pre-dental, pre-nursing, pre-aviation, pharmacy, architecture and all other students who require a two-semester course in Physics but do not intend to take additional courses in Physics. The first half (PHY 111) is a study of mechanics and heat; vectors, force, momentum, energy, linear and angular motion, kinetic theory, colorimetry and change of state. Second half (PHY 112) is a study of electricity, magnetism light and sound. Courses must be taken in sequence. \$5.00 Laboratory fee (for each course) payable during registration.

PHY 131-132 APPLIED PHYSICS (4) (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: High School algebra and trigonometry or equivalent. A one year course designed to explain the basic concepts of the properties of matter and mechanics, heat, sound, light, magnetism, and electricity, with emphasis on applications and problem solving. Designed primarily for technical programs. \$5.00 Laboratory fee payable during registration.

PHY 201 GENERAL PHYSICS (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: Credit or current registration in MTH 126 or MTH 222. 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. \$5.00 Laboratory fee payable during registration.

PHY 202 GENERAL PHYSICS (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: PHY 201 and credit or concurrent enrollment in MTH 227. Principles and applications of heat, electricity, magnetism and optics, emphasizing fundamentals, concepts, problem solving, notation and units. \$5.00 Laboratory fee payable during registration.

PHY 203 GENERAL PHYSICS (4) 3 hrs. Lec.
3 hrs. Lab.

Prerequisite: PHY 201 and concurrent enrollment in PHY 202. Principles and applications of light and atomic and nuclear physics. Designed for science majors. \$5.00 Laboratory fee payable during registration.

POLICE SCIENCE

POL 130 INTRODUCTION TO CRIMINOLOGY (3) 3 hrs. Lec.

A survey of law enforcement; the role, history, development, and constitutional aspects of law enforcement and public safety; a study of criminal and delinquent behavior in the United States, including its variations, ramifications, explanations and measures of prevention, control and treatment; a review of agencies involved in the processes of the administration of criminal justice.

POL 131 POLICE ADMINISTRATION (3) 3 hrs. Lec.

Prerequisite: POL 130. An analysis of the principles of organization and administration in law enforcement; staff functions and activities; planning and research; personnel and training; policy formation.

POL 132 CRIMINAL LAW (3) 3 hrs. Lec.

Prerequisite: POL 130 or division approval. A survey of substantive criminal law; the laws of arrest, search and seizure; interrogation, confessions and signed statements; the nature of due process.

POL 133 POLICE OPERATIONS (3) 3 hrs. Lec.

Prerequisite: POL 130. The role of the supervisor in a police department and his relationships with other levels. The basic principles of supervision, with special emphasis on their application to police service. The human relations factor with consideration of selected problems and approaches.

Police Science — Psychology

POL 134 CRIMINAL EVIDENCE AND PROCEDURE (3) 3 hrs. Lec.

Prerequisite: POL 130 and 132. A study of trial and courtroom procedure; parties in the case; the rules of evidence; decision and punishment; due process re-emphasized.

POL 136 PATROL AND TRAFFIC FUNCTIONS (3) 3 hrs. Lec.

Prerequisite: POL 130. A broad study of police patrol and traffic duties and responsibilities, including policies and procedures.

POL 137 POLICE COMMUNITY RELATIONS (3) 3 hrs. Lec.

The role of the individual officer in achieving and maintaining public support; human relations, public information; relationships with violators and complainants.

POL 231 CRIMINAL INVESTIGATION (3) 3 hrs. Lec.

Prerequisite: POL 130. An introduction

to criminal investigation procedures including investigative theory, conduct at the crime scene, collection and preservation of physical evidence, and transporting of evidence to the crime laboratory.

POL 233 INTRODUCTION TO CRIMINALISTICS (3) 3 hrs. Lec.

Prerequisite: POL 231. 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.

POL 238 POLICE ROLE IN CRIME AND DELINQUENCY (3) 3 hrs. Lec.

Prerequisite: POL 130 or concurrent enrollment. Problems of juvenile delinquency, theories of causation, the structure of the family, deterrent programs. The role of police in prevention, juvenile courts, institutional treatment, community resources for prevention, federal and state programs.

PSYCHOLOGY

PSY 105 INTRODUCTION TO PSYCHOLOGY (3) 3 hrs. 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.

PSY 106 GENERAL PSYCHOLOGY (3) 3 hrs. Lec.

Prerequisite: PSY 105. A continuation of PSY 105. Consideration is given the individual both as a social and biological organism.

PSY 131 HUMAN RELATIONS (3) 3 hrs. 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.

PSY 201 HUMAN GROWTH AND DEVELOPMENT (3) 3 hrs. Lec.

Prerequisite: PSY 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 and treated in an integrated manner. Due attention is given to aging and its place in the developmental sequence.

PSY 205 PSYCHOLOGY OF PERSONALITY (3) 3 hrs. Lec.

Prerequisite: PSY 105. A consideration of the important factors involved is 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 — Radiologic Technology

PSY 206 PSYCHOLOGY OF ADJUSTMENT (3) 3 hrs. Lec.

Prerequisite: PSY 105. A study of the adjustive process of the individual to his

environment. Emphasis will be placed upon motivation, attitudes, defenses, and the role of learning in adaptive and on maladaptive behavior.

RADIOLOGIC TECHNOLOGY

RAD 120 APPLIED ANATOMY AND PHYSIOLOGY (1) 1 hr. Lec.

Prerequisite: Admission to program and concurrent enrollment in BIO 120 or equivalency. Osteology of the upper and lower extremities, pectoral and pelvic girdles, thorax, and vertebral column.

RAD 121 APPLIED ANATOMY AND PHYSIOLOGY (1) 1 hr. Lec.

Prerequisite: "C" average in RAD 120, 130, 131 and concurrent enrollment in BIO 121 or equivalency. Osteology of the skull, topographic anatomy of the body and location of organs in the body systems.

RAD 130 RADIOLOGIC FUNDAMENTALS (3) 1 hr. Lec. 5 hrs. 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.

RAD 131 RADIOLOGIC ORIENTATION AND PRACTICUM I (3) 12 hrs. Lab.

Prerequisite: Concurrent enrollment in RAD 120 and 130. The first seven weeks will consist of a study of office procedures, elementary radiation protection, history of x-ray, professional ethics, darkroom chemistry and film critique. For the remaining nine 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 examinations.

RAD 132 RADIOLOGIC PRINCIPLES (3) 1 hr. Lec. 5 hrs. Lab.

Prerequisite: "C" average in RAD 120, 130 and 131. Continuing study of radiologic technology. The principle

objectives in this course are a better understanding of principles of radiographic exposure, routine radiographic procedures and pediatric radiography, physics, nursing procedures pertinent to radiography, common radiographic procedures using contrast media, and film critique.

RAD 133 RADIOLOGIC PRACTICUM II AND FILM CRITIQUE (6) 24 hrs. Lab.

Prerequisite: "C" average in RAD 120, 130, and 131. Students receive practical experience in a hospital radiology department.

RAD 134 RADIOLOGIC PRINCIPLES (1) 1 hr. Lec. 2 hrs. Lab.

Prerequisite: "C" average in RAD 121, 132, and 133. Continuing study of radiologic technology with emphasis on radiologic physics, surgical techniques as applied to radiology and the use and maintenance of Portable x-ray equipment.

RAD 135 RADIOLOGIC PRACTICUM III AND FILM CRITIQUE (9) 36 hrs. Lab.

Prerequisite: "C" average in RAD 121, 132, and 133. Students receive practical experience in a hospital radiology department for eleven weeks.

RAD 230 ADVANCED RADIOLOGIC PRINCIPLES (4) 2 hrs. Lec. 6 hrs. Lab.

Prerequisite: "C" average in RAD 134 and 135. Continuing study of radiologic technology. This course is a study of: principles of radiographic exposure II, radiographic positioning II, and intra-oral radiography, special procedures, journal club, and film critique.

RAD 231 RADIOLOGIC PRACTICUM IV AND FILM CRITIQUE (6) 24 hrs. Lab.

Prerequisite: "C" average in RAD 134

Radiologic Technology—Religion—Respiratory Therapy

and 135. Students receive practical experience in a hospital radiology department.

RAD 232 ADVANCED RADIOLOGY TECHNIQUES (2) 1 hr. Lec.
3 hrs. Lab.

Prerequisite: "C" average in RAD 230 and 231. This course is concerned with a study of: a survey of medical and surgical diseases, radiation therapy, medical use of isotopes, radiation protection, equipment maintenance, journal club and film critique.

RAD 233 RADIOLOGIC PRACTICUM V AND FILM CRITIQUE (7) 28 hrs. Lab.

Prerequisite: "C" average in RAD 230 and 231. Students receive practical ex-

perience in a hospital radiology department.

RAD 234 GENERAL REVIEW (1) 1 hr. Lec.
2 hrs. Lab.

Prerequisite: "C" average in RAD 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.

RAD 235 RADIOLOGIC PRACTICUM VI AND FILM CRITIQUE (9) 37 hrs. Lab.

Prerequisite: "C" average in RAD 230 and 231. Students receive practical experience in a hospital radiology department for eleven weeks.

RELIGION

REL 101 INTRODUCTION TO RELIGION I (3) 3 hrs. Lec.

A systematic examination of religion in American culture. Emphasis will be placed upon the interaction of religion with politics, economics, the military, education, the arts and other cultural phenomena. Approximately one-fourth of the course will be devoted to a study of contemporary movement such as ecumenism and the influx of Eastern religions.

REL 102 CONTEMPORARY RELIGIOUS PROBLEMS (3) 3 hrs. Lec.

An analysis of the background and present expression of basic problems in

religion, e.g. the problem of belief, the nature of religious literature, the existence of God, evil, human destiny and the relation of religion to society and the arts. Both Western and Eastern traditions will be considered.

REL 201 MAJOR WORLD RELIGIONS (3) 3 hrs. Lec.

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. Sophomore standing recommended.

RESPIRATORY THERAPY

RES 120 APPLIED ANATOMY AND PHYSIOLOGY (1) 1 hr. Lec.

Prerequisite: Concurrent enrollment in BIO 120. A one hour seminar designed to assist the student in making practical application of the principles of anatomy and physiology to the area of respiratory therapy.

RES 121 APPLIED ANATOMY AND PHYSIOLOGY (1) 1 hr. Lec.

Prerequisite: RES 120 and concurrent

enrollment in BIO 121. A continuation of RES 120.

RES 130 ORIENTATION (3) 3 hrs. Lec.

Prerequisite: Admission to the program. This course is designed to acquaint the student with the field of respiratory therapy and the responsibilities of the technician as a member of the health team.

Respiratory Therapy — Social Science

RES 131 CLINICAL LABORATORY I (1)

4 hrs. Lab.

gas analysis and lung volumes. Practice in an intensive care unit.

Prerequisite: RES 130. Supervised observation and practice in a respiratory therapy department. Designed to introduce the student to the hospital atmosphere.

RES 132 BASIC TECHNOLOGY (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: RES 130. The basic principles of respiratory therapy techniques and basic operation of equipment. \$7.00 laboratory fee payable during registration.

RES 133 CLINICAL PRACTICE I (3)

12 hrs. Lab.

Prerequisite: RES 132. Students perform standard respiratory therapy procedures in a clinical setting under supervision.

RES 134 THERAPY RELATED TO DISEASE (4)

4 hrs. Lec.

Prerequisite: RES 132. Lecture series given by physicians and therapists on general techniques, physiology, and pathophysiology of cardiopulmonary failure, respiratory pediatric care, obstructive airways diseases and pre- and post-operative problems.

RES 230 TECHNICAL CORRELATION (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: RES 132, 133, and 134. The student is given ample opportunity to correlate previous instruction with experiences in clinical practice. Discussion of intimate mechanics and its relationship to physiology. \$7.00 laboratory fee payable during registration.

RES 231 CLINICAL PRACTICE II (3)

12 hrs. Lab.

Prerequisite: Res 133 and 134. Practice in the cardiopulmonary laboratory doing such procedures as Spirometry, blood-

RES 232 SEMINAR (3)

3 hrs. Lec.

Prerequisite: RES 230 and 231. Under the supervision of physicians the student will present selected cardiopulmonary cases once a week.

RES 233 ADVANCED TECHNOLOGY (3)

3 hrs. Lec.

Prerequisite: RES 230 and 231. The student will review and evaluate recently written literature on Respiratory Therapy.

RES 234 CLINICAL LABORATORY II (1)

4 hrs. Lab.

Prerequisite: RES 132 and 134. The student performs as an assistant clinical instructor.

RES 235 CLINICAL PRACTICE III (5)

20 hrs. Lab.

Prerequisite: RES 134, 230, and 231. Advanced training under the direction of a physician in relationship to medical application respiratory therapy technology.

RES 236 CLINICAL PRACTICE IV (3)

12 hrs. Lab.

Prerequisite: Res 234 and 235. Training in supervision, teaching, and emergency situations.

RES 239 PEDIATRIC RESPIRATORY THERAPY (4)

3 hrs. Lec.

3 hrs. Lab.

Prerequisite: RES 134 or be an R.N. or an LVN. An in-depth study of advanced pediatric respiratory therapy. Emphasis will be placed upon distinguishing between adult therapy and the generally accepted pediatric approach to respiratory therapy. Respiratory care of infants in the nursery.

SOCIAL SCIENCE

SS 131-132 AMERICAN CIVILIZATION (3) (3)

3 hrs. Lec.

A course designed to provide the student with some historical perspective for understanding the economic, political,

and social institutions of modern society. In this context, emphasis will be placed upon U.S. and Texas history and constitutional development. It is advised that these courses be taken in order: 131, 132.

Sociology — Spanish — Speech

SOCIOLOGY

SOC 101 AN INTRODUCTION TO SOCIOLOGY (3) 3 hrs. 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.

SOC 102 SOCIAL PROBLEMS (3) 3 hrs. Lec.

Prerequisite: SOC 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.

SOC 203 MARRIAGE AND FAMILY (3) 3 hrs. Lec.

An analysis of courtship patterns, marriage and family forms; relationships, functions and socio-cultural differences in family behavior.

SOC 204 AMERICAN MINORITIES (3) 3 hrs. Lec.

The principle minority groups in Amer-

ican society; their sociological significance and historic contributions. An emphasis will be placed on problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene.

SOC 206 INTRODUCTION TO SOCIAL WORK (3) 3 hrs. 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.

SOC 210 FIELD STUDIES IN AMERICAN MINORITIES (3) 3 hrs. Lec.

Prerequisite: SOC 101 or SOC 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

SPA 101 BEGINNING SPANISH (5) 5 hrs. Lec. 2 hrs. Lab.

Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression.

SPA 102 BEGINNING SPANISH (5) 5 hrs. Lec. 2 hrs. Lab.

Prerequisite: SPA 101 or equivalent. Continuation of SPA 101 with emphasis on idiomatic language and complicated syntax.

SPA 201 INTERMEDIATE SPANISH (3) 3 hrs. Lec.

Prerequisite: SPA 102 or equivalent. Reading, composition, grammar review and intense oral practice.

SPA 202 INTERMEDIATE SPANISH (3) 3 hrs. Lec.

Prerequisite: SPA 201 or equivalent. Continuation of SPA 201 with reading selections drawn more directly from contemporary literary sources. Composition.

SPEECH

SPE 105 FUNDAMENTALS OF PUBLIC SPEAKING (3) 3 hrs. 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 — Television and Radio Electronics

SPE 109 VOICE AND ARTICULATION (3) 3 hrs. Lec.

Prerequisite: **SPE 105.** A study of the mechanics of speech applied to improvement of the individual's voice and pronunciation.

SPE 110 READER'S THEATER WORKSHOP (1) 2 hrs. Lab.

A laboratory course for the preparation and presentation of scripts, readings, and book reviews, collecting and arranging all types of literature for group interpretation and performance. May be repeated once for credit.

SPE 201 FORENSIC WORKSHOP (1) 2 hrs. Lab.

A laboratory course for the preparation of speeches, readings, and debate propositions which will be presented in competition and before select audiences. **MAY BE REPEATED FOR ONE ADDITIONAL UNIT OF CREDIT.**

SPE 205 DISCUSSION AND DEBATE (3) 3 hrs. Lec.

Prerequisite: **SPE 105.** A study of the-

ories 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.

SPE 206 ORAL INTERPRETATION (3) 3 hrs. Lec.

Prerequisite: **SPE 105.** A study of fundamental techniques of analyzing various types of literature, and practice in preparing and presenting selections orally. Emphasis on individual improvement.

SPE 207 ADVANCED ORAL INTERPRETATION (3) 3 hrs. Lec.

Prerequisite: **SPE 105 and 206.** Application of basic principles of interpretation to longer selections of literature; more detailed analysis and arranging of poetry and prose for various types of multiple reading situations including choral speaking and reader's theatre. Investigation of all types of literature which are situated to group interpretation work.

TELEVISION AND RADIO ELECTRONICS

TRE 132 TELEVISION AND RADIO ELECTRONICS (5) 3 hrs. Lec. 6 hrs. Lab.

An introduction to basic electronic circuits. Studies will cover A.C. and D.C. theory, tubes and solid state devices pertaining to Radio and Television. \$3.00 Laboratory fee payable during registration.

TRE 133 TELEVISION AND RADIO ELECTRONICS (5) 3 hrs. Lec. 6 hrs. Lab.

Prerequisite: **TRE 132 or concurrent enrollment in TRE 132.** Understanding and application of methods for trouble shooting; servicing of elementary problems found in Radios and Televisions; use of modern test equipment will be studied. \$3.00 Laboratory fee payable during registration.

TRE 134 TELEVISION AND RADIO ELECTRONICS (6) 3 hrs. Lec. 9 hrs. Lab.

Prerequisite: **TRE 133.** Presents the methods of trouble shooting, antenna systems, CATV, MATV, home installations of antennas, color and black/white televisions. \$3.00 Laboratory fee payable during registration.

TRE 136 TELEVISION AND RADIO ELECTRONICS (6) 3 hrs. Lec. 9 hrs. Lab.

Prerequisite: **TRE 134 or concurrent enrollment in TRE 134.** The student is directed toward more complex problems and malfunctions of Television/Radio Servicing. Special attention is given to the use of techniques and equipment for the most economical solutions to difficult problems. \$3.00 Laboratory fee payable during registration.

Theatre — Vocational Nursing

THEATRE

THE 100 REHEARSAL AND PERFORMANCE (1)

Prerequisite: Acceptance as a member of the cast or crew of a major production. Participation in the class includes the rehearsal and performance of the current theatrical presentation of the Division. Students will be enrolled by the director upon being accepted for participation in a major production. May be repeated for credit.

THE 101 INTRODUCTION TO THE THEATRE (3)

A general survey designed to acquaint the students with the various aspects of theatre, plays and playwrights, directing and acting, theatres, artists, and technicians.

THE 102 CONTEMPORARY THEATRE (3)

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.

THE 103 STAGE-CRAFT I (3)

A study of the technical aspects of play production including set design and construction, stage lighting, make-up, costuming, and related areas.

THE 104 STAGE-CRAFT II (3)

Prerequisite: THE 103. A continuation of THE 103 with emphasis on individual projects in set and lighting design and construction, including further exploration of the technical aspects of play production.

THE 106 ACTING I (3)

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.

THE 107 ACTING II (3)

Prerequisite: THE 106. Continuation of THE 106 with emphasis on problems of complex characterization, ensemble acting, stylized acting and acting in period plays.

THE 109 VOICE AND ARTICULATION (3)

SPE 105 is recommended before taking THE 109. A study of the mechanics of speech applied to improvement of the individual's voice and pronunciation.

THE 115 MIME (2)

Prerequisite: Stage Movement, THE 106. Exploration of the expressive significance and techniques of mime.

VOCATIONAL NURSING

VN 120 HUMAN RELATIONS IN VOCATIONAL NURSING (3)

Prerequisite: Admission to the program. A study of personal and vocational adjustments necessary for the vocational nurse including legal and nursing ethics; aspects of normal growth and development, related studies of geriatric need, and basic concepts of mental health and illness.

VN 130 PHYSICAL FOUNDATIONS (3)

Prerequisite: Admission to the program. A study of body structure and function, basic microbiology, disease control and prevention. A background for nursing skills, and understanding the importance of maintaining cleanliness.

Vocational Nursing

VN 141 ORIENTATION TO PATIENT CARE (6)

6 hrs. Lec.

Prerequisite: Admission to the program.
A study of basic nutritional needs required in health and illness, the classification, calculation and administration of drugs, related studies applicable to the care of medical, surgical patients: the administration of first aid.

VN 143 BASIC SKILLS (9)

5 hrs. Lec.
16 hrs. Lab.

Prerequisite: Admission to the program.
The basic principles and practices necessary to the practitioner of vocational nursing. Theory and practice are afforded the student. After the first six weeks, the campus laboratory practice terminates and the following laboratory experience is in selected hospitals in the Dallas area.

VN 146 CLINICAL PRACTICE (8)

35 hrs. Lab.

Prerequisite: VN 130, 120, 141, 143. The applications of theory in relation to supportive care including the physical, emotional and spiritual needs of the individual patient.

VN 147 MEDICAL- SURGICAL NURSING (6)

6 hrs. Lec.

Prerequisite: VN 130, 120, 141, 143. A study of conditions requiring medical and/or surgical treatment with the incorporation of specific drug and diet therapy.

VN 148 MATERNAL AND CHILD NURSING (5)

5 hrs. Lec.

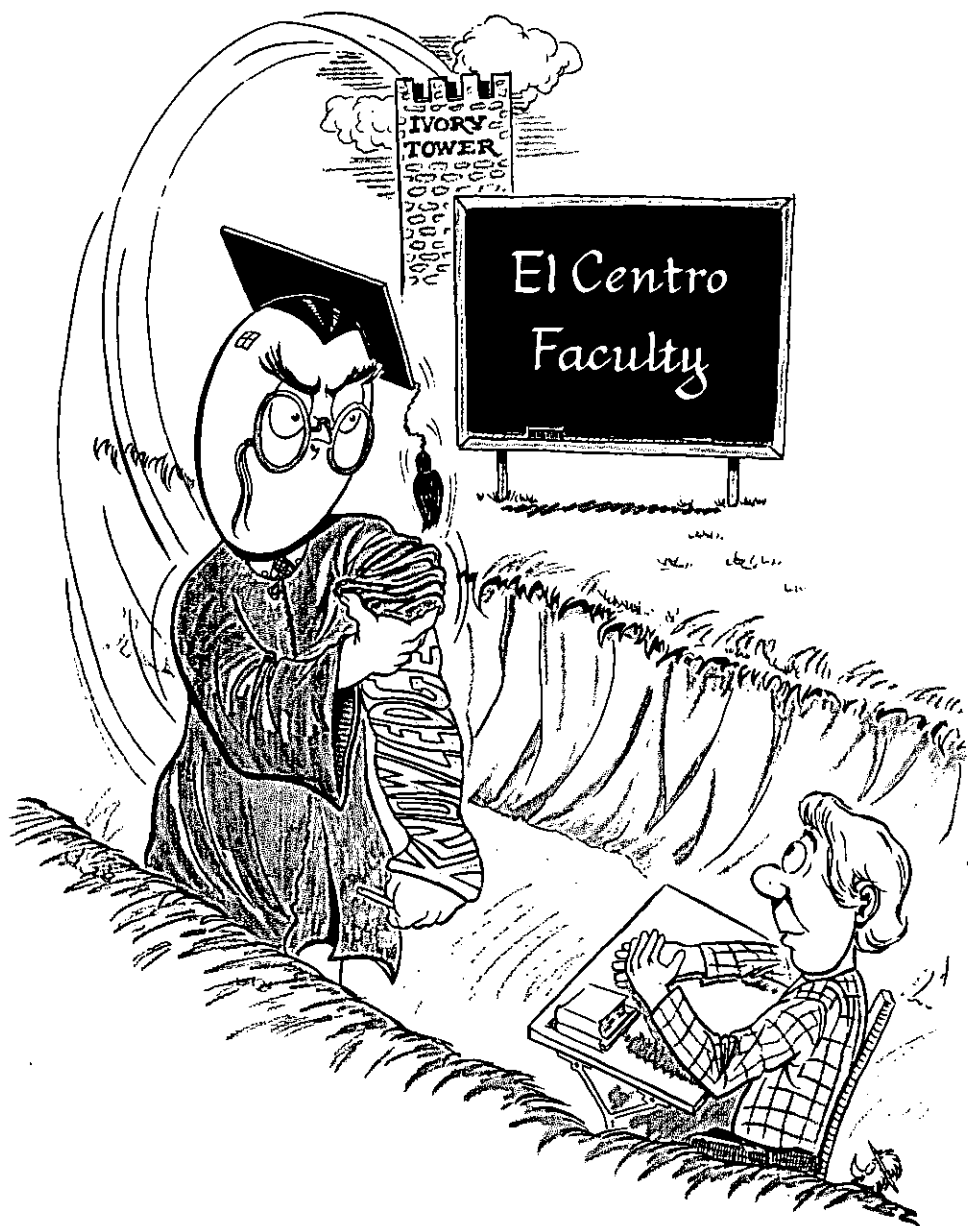
Prerequisite: VN 130, 120, 141, 143. A study of conditions requiring medical and/or surgical treatment with the incorporation of specific drug and diet therapy.

VN 149 CLINICAL PRACTICE (8)

34 hrs. Lab.

Prerequisite: VN 130, 120, 141, 143. The applications of theory in relation to supportive care including the physical, emotional and spiritual needs of the individual medical-surgical patient. Correlation of mental hygienic principles in the care of the emotionally disturbed patients.





Offices of El Centro College

Instructional Division Chairmen

Business	Harold Grimes
Communications	Jack Gilbert
Guided Studies	Gary Verett
Human Development	Jerry Wesson
Humanities	Arlin Peltier
Instructional Resources	Ted Carley
Mathematics and Engineering	Larry Kerbel
Associate Degree Nursing	Gerry White
Paramedics	William Givens
Science	Carlos Gonzalez
Social Science	Alvin Bean

Administrative Staff

President	Donald T. Rippey
Dean of Instruction	Chester H. Palmer
Dean of Students	Don G. Creamer
Associate Dean of Instruction and Research	Carl M. Nelson
Associate Dean of Instruction	Ruby H. Herd
Associate Dean of Instruction, Evening Administration	Kenneth L. Permenter
Associate Dean for Business Services	Robert L. Ware
Assistant Dean for Counseling and Guidance	Gwen L. Hall
Director of Community Service	Ray Witherspoon
Assistant Dean for Student Activities	Ric Abbott
Director of Admissions and Registrar	John Williamson
Director of Financial Aid	William W. Wilmeth
Director of Health Center	Jean B. Wyckoff
Assistant Director of Community Service	Sue Pfaffinger
Director of Placement and Research	Bill Coy

Faculty

ABBOTT, RICHARD W.	Dir. of Student Center <i>Sam Houston State College, B.S.</i>
ABERNATHY, MARSHALL M.	Mathematics <i>University of Texas, B.A.; M.A.</i>
AGNEW, ROBERT L.	Biology <i>North Texas State Univ., B.A.; M.A.</i>
ALDERS, JOHNYCE	Counselor <i>Oklahoma State University, B.A.; M.A.</i>
ALFORD, MARSHALL E.	Counselor <i>Baylor University, B.A.; East Texas State University, M.Ed.</i>
ALLEN, FLOYD A.	English <i>Univ. of Michigan, B.A.; M.A.</i>
ALLEY, KATHRYN G.	Sociology <i>Texas Christian Univ., B.A.; University Texas, M.S.W.</i>
ALLRED, RAYMOND C.	Psychology <i>North Texas State University, B.A.; M.A.; Ed.D.</i>

- ANDERSON, SHARON J. Counselor
North Texas State University, B.S.; M.Ed.; Ed.D.
- APPERSON, JAMES L. Biology
University of Texas, B.A.; M.A.
- BALDWIN, ALFRED R. Data Processing
Southeastern Louisiana University, B.A.
- BARNHART, WILLIAM G. Business
Lamar Tech., B.B.A.; Western State College of Colorado, M.A.
- BEACH, SUZANNE A.D. Nursing
Texas Women Univ., R.N.; B.S.
- BEAN, ALVIN T. Chairman, Div. of Social Science
Baylor Univ., B.A.; S.M.U., M.Ed.; N.T.S.U., Ed.D.
- BELL, MILDRED J. Counselor
Huston-Tillotson College, B.A.; T.S.U., M.Ed.; Washington State Univ., Professional
Counseling Certificate
- BENNETT, ROBERT C. Philosophy
University of Colorado, B.A.; University of Toronto, M.A.
- BLACKERBY, ROBERT A. Mathematics
Hardin-Simmons Univ., B.A.; N.T.S.U., M.Ed.; Univ. of Illinois, M.A.
- BLACKSHEAR, REBA D. Law and Accounting
Troy State University, B.S.; Samford University, M.S.
- BOOTH, DOROTHY J. Psychology
T.W.U., B.A.; North Texas State University, M.A.; Ed.D.
- BROCK, DOROTHY F. English
North Texas State University, B.A.; M.A.
- BROUGHER, PATRICIA Respiratory Therapy
University Texas, B.A.
- BURNS, BARBARA A. Communications and Speech
Texas Woman's University, B.S.; M.A.
- CAMPBELL, VICKI A.D. Nursing
Texas Christian Univ., B.S.N.
- CARLEY, W. TED Dir., Division of Learning Resources
North Texas State University, B.S.; M.S.
- CAUTHRON, LINNIE E. A.D. Nursing
Tyler Jr. College, A.D.; Texas Woman's University, B.S.N.
- CHAMBERLAIN, ENRIQUE A. LTA Co-ordinator and Instructor
N.T.S.U., B.A.; East Texas State University, M.L.S.
- CHENEY, BOBBY W. History
Southern Methodist University, B.A.; M.A.
- CHILDERS, EVA A.D. Nursing
Baylor University, B.S. Nursing
- CLIFTON, JOHN E. Guided Studies Math
North Texas State University, B.S.; M.Ed.
- COLDWELL, PATRICIA C. English
Southwestern College, B.A.; Yale University, M.A.
- COLEMAN, JULIETTE Medical Office Assisting
Four "C" Business College, C.M.A.
- CONATSER, CHERYL A.D. Nursing
Baylor University, B.S.N.
- COX, JOHN M. Counselor, Co-ordinator of Testing Center
Howard Payne College, B.S.; Southwestern Theol. Sem., M.R.E.; University of Houston,
M.A.

- COY, WILLIAM N.Dir. of Placement & Research
Eastern New Mexico Univ., B.A.; M.A., Univ. of Missouri, Ed.Sp.
- CREAMER, DON G.Dean of Students
E.T.S.U., B.A.; M.Ed.; Indiana University, Ed.D.
- CROCKETT, DAVID A.Data Processing
Southwest Missouri State College, B.S.
- CROM, BOYD W.Radiologic Technology
Advanced Radiology Tech. School of Aviation Medicine, R.R.T.
- CURRAN, FERN A.A.D. Nursing
Texas Christian Univ., B.S.N.; Texas Women's Univ., Masters, Nursing
- DEASON, KAYE J.Social Science
Kilgore Jr. College, A.A.; Stephen F. Austin College, B.A.; M.A.
- DENMON, CARLGuided Studies Reading
Wiley College, B.A.; North Texas State University, M.E.
- DOLANCE, JOHNSpanish
Colorado State Univ., B.A.; University of Colorado, M.A.
- DOUGHTY, GEORGE E.Dir. of Campus Security, Human Dev.
Florida State Univ., B.S.; Certificate in Law Enforcement; S.M.U.; M.L.A.
- DRAKE, JESSE H.English
East Texas Baptist College, B.S.; Hardin-Simmons Univ., M.A.
- DUNN, FREDERICA H.Counselor
Hardin-Simmons Univ., B.S.; Bowie State College, M.Ed.; S.M.U., M.L.A.
- ELLIOTT, S. C.Mathematics & Engineering
University of Texas, B.S.; M.S.
- ERICKSON, HOBART L.Police Science
San Diego Evening Jr. College, Police Science Assoc.
- FALLEN, ANDREW THOMASEnglish
U.T.A., B.A.
- FAULEY, CARLOTTAVocational Nursing
Washington Univ. School of Nursing, Nursing Diploma
- FERGUSON, DOROTHYA.D. Nursing
George Peabody College, B.S.; N.Ed.; North Texas State Univ., M.Ed.; Catholic Univ. of America, M.Sc.N.; St. Joseph's School of Nrsng., Diploma Nrsng.
- FINCH, MILDRED N.Mathematics
Wiley College, B.S.; Reed College, M.A.T.
- FLEMING, WALTER LEE, IIIMid-Management
University of Notre Dame, B.B.A.; S.M.U., M.B.A.
- FOWLER, WILTON R.Counselor
Stephen F. Austin State Univ., B.S.; M.A.; Baylor Univ., Ed.D.
- GAMMAGE, JUDIE K.Data Processing
Southern Methodist University, B.A.
- GILBERT, JACK P.Chairman, Div. of Communications
The University of Texas at Austin, B.F.A.; N.T.S.U., M.Ed.
- GILLET, GROVERBusiness
Texas Tech. Univ., B.B.A.; The University of Texas, M.B.A.; C.P.A.
- GLENN, MARY L.Secretarial Science
Southeastern State College of Okla., B.S.; Univ. of Oklahoma, M.B.E.
- GONNET, KATHERINE A.Guided Studies Reading
T.W.U., B.S.; Southern Methodist University, M.Ed.
- GONZALEZ, CARLOSChairman, Div. of Science
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- GRISSOM, ANNE Speech, Debate
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- HALL, GWEN L. Assoc. Dean, Admissions, Guidance and Counseling
Sul Ross State Univ., B.B.A.; M.Ed.; E.T.S.U., Ph.D.
- HAMM, ROBERT D. Dir., Urban Progress with Education Project
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- HAMMOND, JAY M. History
Southwest Missouri State College, B.A.; Univ. of Missouri, M.A.
- HAND, JACQUELINE P. Journalism
St. Mary's College, Notre Dame, B.A.; Medill School of Journalism Northwestern University, M.S.J.
- HANKERSON, JAMES A. Government
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North Texas State University, B.S.; M.Ed.; Ed.D.
- HERRON, DAVID E. M. Music
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- HITT, FRANCES Nutrition/Dietetics
Auburn Univ., B.S.; Univ. of Alabama, M.S.; Texas Womens Univ., Ph.D.
- HOGARTH, BRUCE M. Mid-Management
Univ. of Omaha, B.A.; North Texas State Univ., M.B.A.
- HUBLEY, ROBERT G. Food Service
Culinary Institute of America, Basic Rest. Trades Adv. Chef Training
- JACKMAN, PHILIP H. Theatre
Nebraska Wesleyan Univ., B.A.; Univ. of Texas, M.F.A.; S.M.U., B.D.
- JAMES, JIMMIE R. Counselor
Southwestern State, B.A. Ed.; Central State College, M.A. Administration
- JIMENEZ, HECTOR Counselor
East Texas State University, B.S.; M.Ed.
- KATSIGRIS, COSTAS Dir. of Food Services
Columbia College, A.B.; Columbia Univ. Graduate School of Business, M.S.
- KELSO, GENELL O. Speech
University of Oklahoma, B.A.; M.A.
- KENNEDY, LAVERNE PAT A. D. Nursing
Prairie View A&M College, Diploma Nrsng. Ed.; B.S.N.
- KENNER, CORNELIA V. A.D. Nursing
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- KERBEL, LARRY D. Chairman, Div. of Math & Engineering
Colorado State Univ., B.S.; Univ. of Northern Colorado, M.A.; N.T.S.U., Ed.D.

- LAMBERT, JAMES W. Learning Resource Consultant — Media
Northwestern State College, B.A.; Indiana Univ., M.S.
- LAUTZ, VENITA Medical Lab. Tech.
East Texas State Univ., B.A.; Baylor University, Med. Tech.
- LOONEY, CYANN English
Texas Woman's University, B.A.; M.A.
- LUTTRELL, LYDIA A.D. Nursing
Univ. of Tennessee, B.S.; Univ. of Tennessee College of Nursing, B.S.
- MACA, SUANNE Guided Studies Writing
North Texas State University, B.A.; M.A.
- MADDOX, ROY LEE Interior Design
North Texas State Univ., B.A.
- MANUPPELLO, MATTHEW A.D. Nursing
University of Pennsylvania, B.S.
- MAYS, BENITA B. Medical Laboratory Technology
Parkland School of Medical Tech., M.T.; Univ. of Texas at Arlington, B.S.; Univ. of
Texas Southwestern Medical School of Dallas, M.A.
- McCULLOUGH, MARION W. Dental Assistant
Success Business College, Nat. Board of the Am. Dental Asst. Assoc., C.D.A.
- McGOWN, CAROLINE English
T.C.U., B.A.; Texas Woman's University, M.A.
- MENCHACA, RICHARD V. Guided Studies, Reading
North Texas State University, B.S.; M.Ed.
- MOORE, PATSY A.D. Nursing
Boston Univ., B.S.
- MOORE, H. PAXTON, II English
University of Texas, B.A.; T.C.U., M.A.
- MORAN, BETTY WYLIE Home Economics
North Texas State Univ., B.S.; Texas Tech. University, M.Ed.
- MOSBY, LARRY E. Mid-Management
Prairie View A & M College, B.S.; N.T.S.U., M.S.
- MURRAY, DARREL Interior Design
Univ. of Okla., B.A.; Parsons School of Design, N.Y. City Academy Certificate
- MUSGRAVE, A. C., Jr. Biology
East Texas State University, B.S.; M.S.
- MYERS, H. WAYNE Biology
Kansas State Teachers College, B.A.; M.S.
- NAAB, CAROL J. Communications and English
Southern Methodist University, B.A.; M.A.
- NELSON, CARL M. Assoc. Dean of Instruction & Research
University of Arkansas, B.S.; M.Ed.; Ed.D.
- NELSON, EILEEN MARIE French
University of Dallas, B.A.; Tulane University, M.A.
- NORTHCUT, MARY N. English
Univ. of Texas at Arlington, B.A.; S.M.U., M.A.; T.C.U., Ph.D.
- O'BRIEN, RICHARD EUGENE Chemistry
Southern Methodist University, B.S.; M.S.
- OSENTOWSKI, FRANCIS E. Music Theory and Band
Kearney State College, B.M.; N.T.S.U., M.M.E.
- PAGE, JEAN Counselor
North Texas State Univ., B.S.; M.Ed.; Ed.D.

- PALMER, CHESTER H. Dean of Instruction
University of Arizona, B.A.; M.A.
- PATTERSON, DOROTHY Guided Studies Writing
Southwestern Univ., B.A.; S.M.U., M.A.
- PATTERSON, RUTH W. A.D. Nursing
Baylor University, B.S.N.
- PAYNE, JAMES T. Radio and Television Repair
20th Century Trade School Cert.; R.C.A. Tech. Training Cert.
- PEARCE, SCOTT CHARLES English
Whitworth College, B.A.; Washington State Univ., M.A.
- PELTIER, ARLIN G. Chairman, Div. of Humanities
*L.S.U., B.Mu.Ed.; M.Mu.Ed.; Fulbright Scholar, Die Hochschule fuer Musik,
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- PFÄFFINGER, SUE Asst. Director, Community Service
Ursuline College, B.A.
- PHILLIPS, ARBRA M. Guided Studies Math
Paul Quinn College, B.S.; East Texas State Univ., M.S.
- PIERSON, WILL U.P.E.P. Counselor
Bishop College, B.S.; East Texas State Univ. M.Ed.
- PLOCEK, PAT Business
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- PLOG, CLAUDIA E. Data Processing
Texas A & I Univ., B.Mu.; M.S.; Cert. of Data Processing, E.C.P.I.
- POTTER, FRANCES M. Pattern Drafting
Certificate in Costume Designing, S.M.U.
- RANEY, CAROL A. Advisor, Div. of Student Activities
Simpson College, B.A.
- RECTOR, CAREY L. Data Processing
University of Houston, B.S.
- REDING, DIANA L. A.D. Nursing
Hartwick College, B.S.; R.N.
- RIPPETOE, WILLIAM Mathematics
East Central State College, B.S.
- RIPPEY, DONALD T. President
University of New Mexico, B.A.; M.A.; University of Northern Colorado, Ed.D.
- ROBINSON, EMILY B. Secretarial Science
Abilene Christian College, B.S.E.; N.T.S.U., M.B.E.
- ROHAN, SHELIA M. Counselor
Fordham University, B.S. Ed.; Texas Christian Univ. M.Ed.
- ROUNTREE, RHUWAN C. Government
East Texas State University, B.A.; M.A.
- SCARDINA, PATRICIA G. Data Processing
Baton Rouge Business School
- SCHRUP, JOHN E. Art
University of Wisconsin, B.S.; M.S.; M.F.A.
- SCHUSTER, STEVE History
T.C.U., B.A.; M.A.; University of Utah, M.S.
- SHIRLEY, JANIE Mid-Management
Oklahoma State Univ. B.S.; Univ. of Texas at Arlington, M.B.A.

- SILVERMAN, PINCUS English
Denver Univ., B.A.; S.M.U., M.Ed.; N.T.S.U., Ed.D.
- SMITH, DANA F. Art
Stephens College, A.A.; Univ. of Texas, B.S.; N.T.S.U., M.A.
- SMITH, LAURA V. Vocational Nursing
Oak Park Hospital School of Nursing, R.N.
- SMITH, ROGER MAE Learning Resource Consultant — Library Collections
Mary Hardin-Baylor, B.A.; N.T.S.U., M.A.; T.W.U., M.L.S.
- SPARKMAN, MICKEY M. Learning Resource Consultant — Library Ref. Services
Univ. of Texas, B.S.; N.T.S.U., M.S.; Univ. of Texas, M.L.S.
- STAMPER, GERALD C. A.D. Nursing
Texas Christian Univ., B.S.N.; Miami Valley Hospital School of Nursing, R.N. Diploma
- STIRMAN, NAN E. Dental Assistant
Board of the American Dental Asst. Assoc., C.D.A.
- SWANSON, PEGGY Social Science
N.T.S.U., B.B.A., M.B.E.; S.M.U., M.S.
- THOMAS, CHARLES EDWARD Speech
West Texas State University, B.S.; M.A.
- THOMASSON, RUBY E. Guided Studies Reading
Centenary College, B.A.; Southern Methodist Univ., M.Ed.
- THOMPSON, JEAN Philosophy
N.T.S.U., B.A.; Texas Christian Univ., M.A.
- THORSON, MARCELYN M. Dir., Design Institute
Pratt Institute, B.S.
- TONN, JAMES W. Electronics
East Texas State University, B.S.; M.Ed.
- TROTTER, ROBERT S., JR. Government
Univ. of Texas, B.A.; North Texas State Univ., M.Ed.; Ed.D.
- TROY, ROBERT D. Architecture
Texas Tech. Univ., B. of Arch.; Columbia Univ., M.S. Arch.; N.C.A.R.B. Certificate; Registered Architect, Texas
- TUNNELL, WILLIAM K. History
University of Texas, B.A.; M.A.; Ph.D.
- VAN SELM, ARIE WILLY Culinary Arts
School of Commerce, Zurich, Switzerland; CA Degree, Restaurant School, Utrecht, Holland; Chef's Degree, Hotel Restaurant School, Stockholm, Sweden
- VENZA, JANE S. English
Lamar Univ., B.A.; University of Texas, M.A.
- VERETT, GARY D. Chairman, Div. of Guided Studies
Abilene Christian College, B.A.; M.Ed.; N.T.S.U., Ph.D.
- WARE, ROBERT L. Asst. Dean of Business Affairs
Oklahoma State Univ., B.S.; University of Dallas, M.A.
- WASHINGTON, BILLIE D. U.P.E.P. Counselor
Occupational Counseling, Testing and Evaluation, E.T.S.U.
- WATSON, BILLY W. Speech
Bob Jones University, B.A.; M.A.
- WATTS, MARY GRACE Radiologic Technology
Spohn Hospital of Corpus Christi, R.T.
- WEHRLE, BETTY Counselor and Instructor in Guided Studies
Baylor Univ., B.A.; North Texas State Univ., M.Ed.
- WEINER, JOEL Advisor, Div. of Student Activities
Queens College, B.A.; Springfield College, M.Ed.

- WESSON, JERRY W.Chairman, Div. of Human Development
East Texas State University, B.S.; M.S.
- WHITE, GERRYDir. Allied Health Career Institute, Chairman, A.D. Nursing Division
*The Johns Hopkins Hospital School of Nursing, R.N.; Western Reserve Univ., B.S.N.;
 Univ. of Washington, M.N.Ed.*
- WILLIAMS, BRADLEYRespiratory Therapy
Springfield Memorial Hospital School of Inhalation Therapy; Graduate Therapist
- WILLIAMSON, JOHN W.Director of Admissions and Registrar
East Texas State University, B.S.; M.S.
- WILMETH, WILLIAM W.Director of Financial Aid
Southwestern State College, B.S.; Central State College, M.A.
- WINSTON, KATHERINE R.Government
Univ. of Texas, B.A.; Stanford Univ., M.A.
- WITHERSPOON, JOSEPH RAYDirector, Community Service
North Texas State University, B.B.A.
- WYCKOFF, JEAN B.Director, Health Center
*Riverside General, R.N.; Univ. of Pittsburgh, B.S.N.Ed.; M.L.; Royal Institute Public
 Health & Hygiene, M.R.I.P.H.H.*
- YATES, KATHRYN DELLGovernment
Midwestern University, B.A.; M.A.
- ZAMORANO, E. HECTORU.P.E.P. Counselor
Texas Christian University, B.A.; M.A.

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1972-73 Academic Calendar

Fall Semester

Aug. 28	Mon.	Faculty reports	Dec. 8	Fri.	Last day to withdraw with a grade of "W" 8:00 p.m.
Aug. 29-31	Tues.-Thurs.	Registration			
Sept. 4	Mon.	Labor Day			
		Holiday			
Sept. 5	Tues.	Classes begin 8:00 a.m.	Dec. 15	Fri.	Last day of classes
Nov. 22	Wed.	Thanksgiving	Dec. 18-22	Mon.-Fri.	Final examinations
		Holiday begins 10:00 p.m.	Dec. 22	Fri.	Semester closes 5:00 p.m.
Nov. 27	Mon.	Classes resume 8:00 a.m.			

Spring Semester

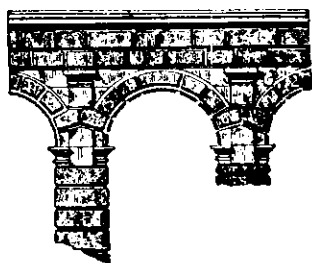
Jan. 3	Wed.	Faculty reports	May 4	Fri.	Last day to withdraw with a grade of "W" 8:00 p.m.
Jan. 9-11	Tues.-Thurs.	Registration			
Jan. 15	Mon.	Classes begin 8:00 a.m.			
Apr. 13	Fri.	Spring break	May 14-18	Mon.-Fri.	Final examinations
		begins 5:00 p.m.	May 18	Fri.	Semester closes 5:00 p.m.
Apr. 23	Mon.	Classes resume 8:00 a.m.			

Schedule of Examinations

CLASS MEETING TIME		Fall Semester 1972	TIME OF EXAM
		Day College	
MWF	8:00- 8:50		8:00- 9:50
TR	9:30-10:50		10:00-11:50
MWF	11:00-11:50		12:00- 1:50
TR	1:30- 2:50		2:00- 3:50
TR	8:00- 9:20	December 18 Monday	8:00- 9:50
MWF	10:00-10:50		10:00-11:50
MWF	1:00- 1:50	December 19 Tuesday	2:00- 3:50
MWF	9:00- 9:50		8:00- 9:50
MWF	3:00- 3:50	December 20 Wednesday	10:00-11:50
TR	12:00- 1:20		12:00- 1:50
MWF	2:00- 2:50	December 21 Thursday	2:00- 3:50
MWF	12:00-12:50		8:00- 9:50
MWF	4:00- 4:50		10:00-11:50
TR	3:00- 5:20		12:00- 1:50
CLASS MEETING TIME		Spring Semester 1973	TIME OF EXAM
		Day College	
MWF	8:00- 8:50		8:00- 9:50
TR	9:30-10:50		10:00-11:50
MWF	11:00-11:50		12:00- 1:50
TR	1:30- 2:50		2:00- 3:50
TR	8:00- 9:20	May 14 Monday	8:00- 9:50
MWF	10:00-10:50		10:00-11:50
MWF	1:00- 1:50	May 15 Tuesday	2:00- 3:50
MWF	9:00- 9:50		8:00- 9:50
MWF	3:00- 3:50	May 16 Wednesday	10:00-11:50
TR	12:00- 1:20		12:00- 1:50
MWF	2:00- 2:50	May 17 Thursday	2:00- 3:50
MWF	12:00-12:50		8:00- 9:50
MWF	4:00- 4:50		10:00-11:50
TR	3:00- 4:20		12:00- 1:50

Applicable to Fall and Spring semesters:

The final examination period for each class which meets at 5:30 or any hour thereafter will begin at the usual class time during Examination Week, with these exceptions: Classes which meet T. R. should have the final examination on Tuesday at the usual class time during Examination Week; after-five-thirty classes which meet MW should have the final examination on Monday at the usual time during Examination Week.



This arch from the amphitheater in Pola symbolizes Etruscan genius in bridging the stream between the abstractions of Greece and the applications of Rome. The arch is also the symbol of El Centro College bridging the abstractions of the arts and humanities and the applications of practical training. Some scholars believe the Etruscans built the first arch.