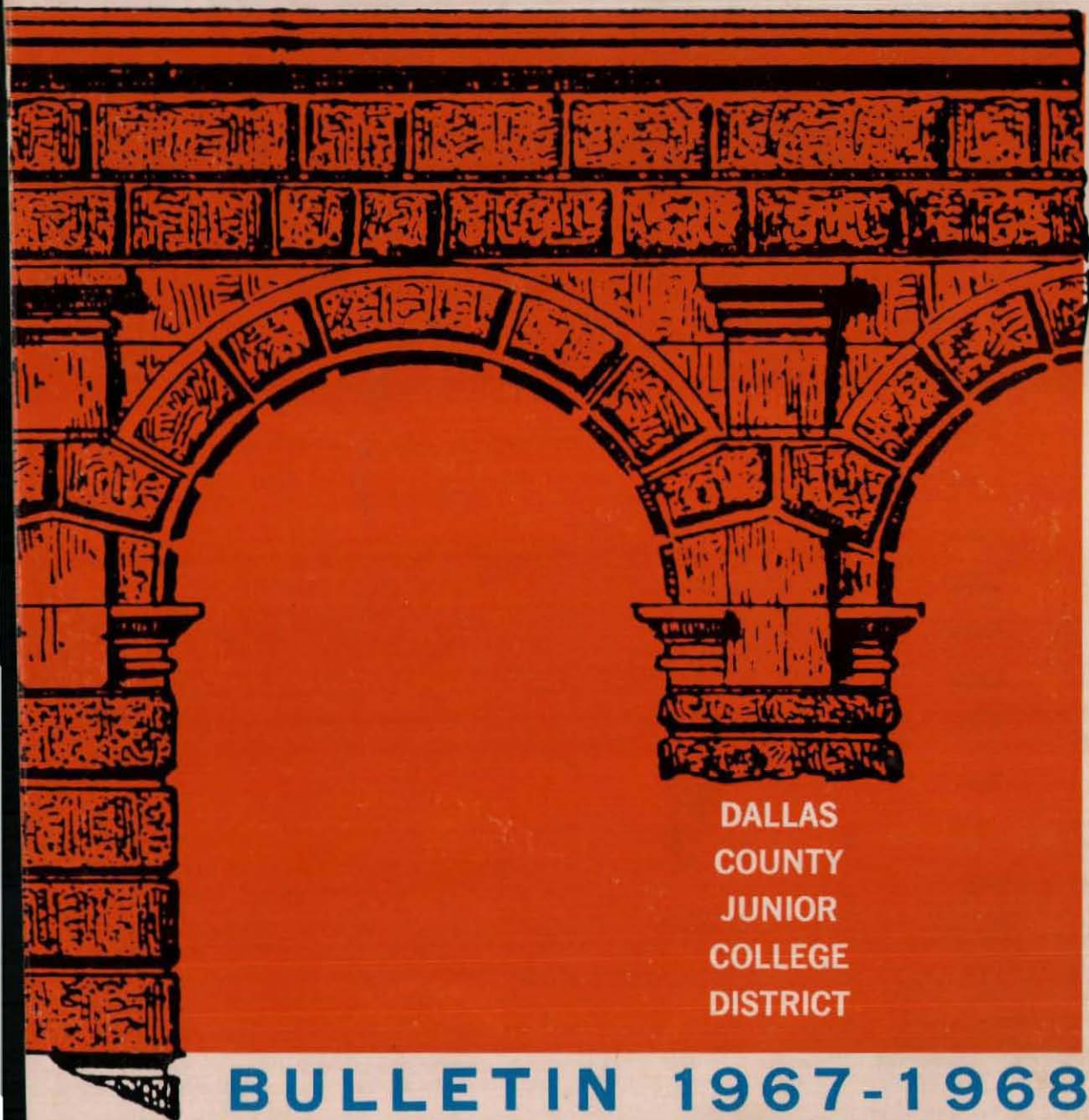


EL CENTRO COLLEGE

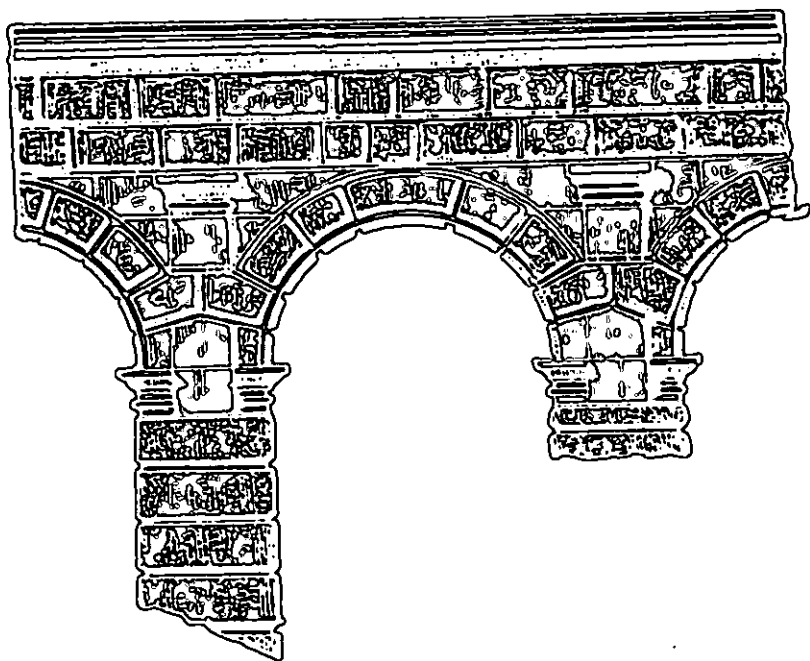


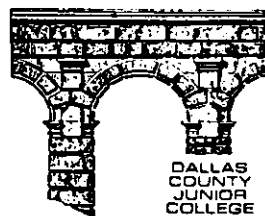
DALLAS
COUNTY
JUNIOR
COLLEGE
DISTRICT

BULLETIN 1967-1968

**All blank
pages
have been
removed
from this
document.**

This arch from the Amphitheatre in Pola symbolizes Etruscan genius in bridging the stream between the abstractions of Greece and the applications of Rome. Some scholars believe the Etruscans built the first arch.





EL CENTRO COLLEGE

BULLETIN • 1967-1968

THE BOARD OF TRUSTEES

R. L. Thornton, Jr., Chairman of the Board

Mrs. Eugene McDermott, Vice Chairman of the Board

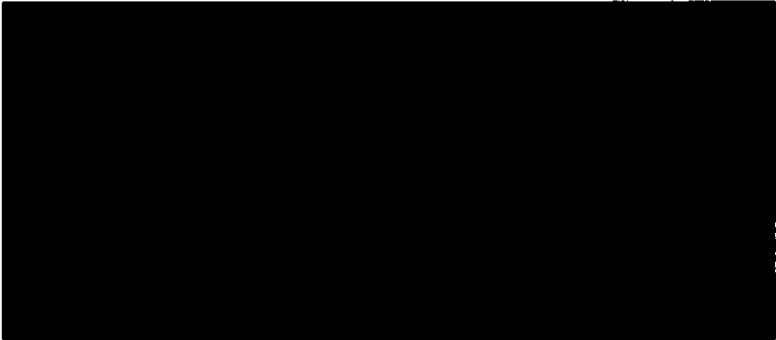
Dr. Frank J. Altick, M.D.

Loncy L. Leake

Franklin E. Spafford

Durwood A. Sutton

Carie E. Welch



IT IS AN AXIOM
IN POLITICAL SCIENCE
THAT UNLESS A PEOPLE
ARE EDUCATED AND ENLIGHTENED
IT IS IDLE TO EXPECT
THE CONTINUANCE OF CIVIL LIBERTY
OR THE CAPACITY FOR SELF GOVERNMENT.

TEXAS DECLARATION OF INDEPENDENCE

March 2, 1836

ADMINISTRATIVE STAFF

DALLAS COUNTY JUNIOR COLLEGE DISTRICT

President	Bill J. Priest
Vice President	Alfred M. Philips
Business Manager	Walter L. Pike
Director of Planning and Research	H. Deon Holt
Coordinator of Technical and Occupational Education	Fulton R. Smith
Director of Data Processing	James R. Hill
Special Assistant for Planning and Research	Frank P. Schroeter
Special Services Assistant	Wanda E. King

EL CENTRO COLLEGE

Dean of the College	Donald T. Rippey
Associate Dean of Instruction	Carol L. Zion
Associate Dean of Students	Don G. Creamer
Associate Dean of Adult Education and Community Services	M. Melvin Plexco

El Centro College is an open door college. The current enrollment is limited only by the physical capacity of the campus. In accordance with this policy, the college assumes the responsibility to provide guidance and counsel to help the student find areas of study best suited to his interests, aptitudes, and abilities. The student assumes the responsibility to make the most of the educational opportunities presented him. This bulletin represents the offerings for the second year of operation. It includes sophomore programs as well as many new technical and applied arts courses. It may well be, however, that additional programs will be added during the year.

FACULTY

- ABERNATHY, MARSHALL M.**
University of Texas, B.A.; M.A.
Division of Science and Mathematics
- ARCHBOLD, C. WESLEY**
Southern Methodist University, B.B.A.; M.B.A.
Director of Food Services
- BEATTY, EARNESTINE B.**
Bishop College, B.A.; University of Oklahoma, M.A.; Ph.D.
Division of Social Science
- BEESLEY, CAROL A.**
University of Dallas, B.A.; University of Kentucky, M.A.
Division of Communications
- BIZZELL, JOHNYCE D.**
Oklahoma State University, B.S.; M.A.
Division of Counseling and Guidance
- BLACKERBY, ROBERT A.**
Hardin-Simmons University, B.A.; North Texas State University, M.Ed.
Division of Science and Mathematics
- BOLDING, JEANNE**
University of Texas, B.A.; M.A.
Division of Counseling and Guidance
- BOOTH, DOROTHY J.**
Texas Woman's University, B.A.; North Texas State University, M.A.
Division of Counseling and Guidance
- ROSWELL, EARLENE JOYCE**
University of Idaho, B.S.; M.Ed.
Division of Communications
- BOYLE, ROBERT B.**
Southern Methodist University, B.A.; M.A.
Chairman, Division of Social Science
- BROCK, DOROTHY F.**
North Texas State University, B.A.; M.A.
Division of Communications
- CARPENTER, ROBERT W.**
North Texas State University, B.B.A.; M.B.A.
Division of Business
- CAUTHRON, LINNIE E.**
Texas Eastern School of Nursing, R.N.; Tyler Junior College, A.S.;
Texas Woman's University, B.S.N.
Division of Paramedics
- CHENEY, BOBBY W.**
Southern Methodist University, B.A.; M.A.
Division of Social Science
- COLDWELL, PATRICIA**
Southwestern College, Memphis, Tennessee, B.A.; Yale University, M.A.
Division of Communications
- COX, JOHN M.**
Howard Payne College, B.S.; Southwestern Theological
Seminary, M.R.E.; University of Houston, M.A.
Division of Counseling and Guidance

FACULTY

- CREAMER, DON G.
East Texas State University, B.A.; M.Ed.; Indiana University, Ed.D.
Associate Dean of Students
- CUTTER, MADOLYN J.
Southern Methodist University, B.A.; Methodist Hospital of
Dallas, R.N.; University of Colorado, M.S.
Division of Nursing
- DILLARD, SUE V.
Harding College, B.A.; M.A.T.
Division of Communications
- DOBBS, VIRGINIA
University of Kentucky, B.S.
Community Service Program Development
- DRAKE, JESSE H.
East Texas Baptist College, B.S.; Hardin-Simmons University, M.A.
Division of Communications
- ELSOM, JACK M.
North Texas State University, B.S.; M.Ed.; Ed.D.
Director of Counseling and Guidance
- EMMERT, OLIVE G.
Jewish Hospital School of Nursing, R.N.
Division of Paramedics
- FINCH, MILDRED N.
Wiley College, B.S.; Reed College, M.A.T.
Division of Science and Mathematics
- GAUNTLETT, WILLIAM H.
University of Arizona, B.A.; Stanford University, M.A.
Division of Communications
- GLENN, MARY L.
Southeastern State College, Oklahoma, B.S.; University of
Oklahoma, M.B.E.
Division of Business
- GONZALEZ, CARLOS
City College of New York, B.S.; Texas Christian University, M.S.
Division of Science and Mathematics
- GRAHAM, PRESTON
Baylor University, B.A.; M.A.; Ph.D.
Division of Counseling and Guidance
- GRAUPMAN, LEE A.
LaCrosse State College, B.S.; Western State College of Colorado, M.A.
Division of Counseling and Guidance
- HAMM, ROBERT D.
East Texas State University, B.S.; M.Ed.
Director of Financial Aid and Placement
- HAMMOND, JAY M.
Southwest Missouri State College, B.A.; University of Missouri, M.A.
Division of Social Science
- HEGAR, EDITH AYLENE
Texas Technological College, B.S.; North Texas State University, M.Ed.
Division of Counseling and Guidance

FACULTY

- JACOBSON, RUTH
Tacoma General Hospital School of Nursing. R.N.
Chairman, Division of Paramedics
- JOHNSON, GENELL O.
University of Oklahoma, B.A.; M.A.
Division of Communications
- JOHNSTON, JENEANNE
University of Oklahoma, B.A.; M.A.
Division of Communications
- KING, CHARLENE M.
East Texas State University, B.S.; M.S.
Division of Counseling and Guidance
- KIRK, DAVID
Stanford University, B.A.; M.A.
Division of Communications
- KIRKPATRICK, JAMES M.
Oklahoma City University, B.I.A.
Division of Science and Mathematics
- KNAPP, JUDY K.
Purdue University, B.A.; University of Washington, M.A.
Division of Communications
- KOCH, ARTHUR R.
The Rhode Island School of Design, B.F.A.;
The University of Washington, M.F.A.
Division of Humanities
- KYLE, JOE E.
Ball State University, B.A.; Indiana University, M.A.
Division of Social Science
- LASATER, MARY B.
University of Texas, B.S.; M.A.
Division of Science and Mathematics
- LEFF, GLADYS R.
New York University, B.A.; M.A.
Division of Social Science
- LINDEMANN, MARY A.
Texas Woman's University, B.S.; M.S.
Division of Science and Mathematics
- LITTLE, MYRA E.
University of Texas, B.A.; Southern Methodist University, M.A.
Division of Science and Mathematics
- LOPEZ, FRANK
Southwest Texas State College, B.S.; University of Texas M.A.
Division of Science and Mathematics
- LUKE, PAUL J.
North Texas State University, B.S.
Division of Science and Mathematics
- MARTIN, MARILYN A.
Marymount School of Nursing. R.N.
Division of Paramedics

FACULTY

MAYALL, MICHAEL M.

Central Washington State College, B.A.; Eastern Washington
State College, M.A.
Division of Communications

McCOY, NOEL H.

Southern Methodist University, B.A.
Director of Admissions and Registrar

McCULLOUGH, MARIAN

Success Business College, National Board Certification.
Dental Assistant
Division of Paramedics

McNUTT, LUTHER E., Jr.

Texas Institute of Technology, A.S.
Supervisor of Building and Grounds

MOORE, HARRIS PAXTON, II

University of Texas, B.A.; Texas Christian University, M.A.
Division of Communications

MOORE, JAMES E.

University of Texas, B.A.; Austin Presbyterian Theological
Seminary, B.R.E.; Texas Western College, M.A.
Division of Business

MOSER, CHALLES

University of Texas, B.A.; University of Chicago, M.A.
Division of Communications

NEWMAN, MAYRELEE F.

Washington State University, B.A.; University of Washington, M.L.S.
Director of Library Services

OWENS, CLAUDE C.

East Texas State University, B.S.; M.S.
Chairman, Division of Business

PARSONS, MARGARET S.

Baylor University, B.B.A.; Texas Woman's University, M.A.
Division of Business

PASSMORE, BILL

University of Texas, B.B.A.; North Texas State University, M.Ed.
Division of Counseling and Guidance

PELTIER, ARLIN G.

Louisiana State University, B.Mu.Ed.; M.Mu.Ed.
Fulbright Scholar, Hamburg, Germany
Chairman, Division of Humanities

PLEXCO, MELVIN M.

North Texas State University, B.S.; University of Houston, M.Ed.
Associate Dean of Adult Education

PLOCEK, PAT

North Texas State University, B.B.A.
Division of Business

PRANGE, EDNA L.

Texas Technological College, B.A.; Texas Woman's University, M.A.
Division of Communications

FACULTY

PRITCHARD, STANLEY E.

Oklahoma City University, B.I.A.; Certification: Oklahoma State
University (Photo Drafting) and Tecnifax Corporation
(Psychology of Visual Communications)
Division of Science and Mathematics

REAKES, JULIANN T.

Memorial Hospital, Albany, New York, R.N.; Texas Woman's
University, B.S.N.
Division of Nursing

REAMY, BARBARA A.

St. Mary Memorial Hospital School of Nursing, R.N.
Division of Paramedics

RECTOR, THOMAS J.

Baylor University, B.A.; Oberlin College, Bookstore
Management Seminars
Manager of Bookstore

RIEDERER, LAHOMA L.

Baylor University, B.B.A. cum laude; Southern Methodist
University, M.B.A.
Division of Business

RIPPEY, DONALD T.

University of New Mexico, B.A.; M.A.; Colorado State College, Ed.D.
Dean of the College

RITTER, SUSAN M.

Washington University, B.A.; M.A.
Division of Social Science

ROBINSON, EMILY BROWN

Abilene Christian College, B.S.E.; North Texas State University, M.B.E.
Division of Business

RUSHING, DOROTHY B.

Sam Houston State Teachers College, B.A.; M.A.;
University of Illinois, Ph.D.
Chairman, Division of Communications

RUSSELL, WILLIAM B.

University of Montana, B.A.; University of Colorado, M.S.
Chairman, Division of Science and Mathematics

SCARDINA, PATRICIA G.

Baton Rouge Business College
Division of Business

SCHOLZ, EWALD

Recklinghausen, Germany, Certificate Master Baking and Pastry
Zurich, Switzerland, Certificate Master Chef
Division of Science and Mathematics

SHERRILL, TED B.

Lamar State College of Technology, B.S.; East Texas
State University, M.S.
Division of Science and Mathematics

SHIREY, CAROLYN M.

East Texas State University, B.A.
Division of the Library

FACULTY

SILVERMAN, PINCUS

Denver University, B.A.; Southern Methodist University, M.Ed.;
North Texas State University, D.Ed.
Division of Communications

SMITH, JANE L.

North Texas State University, B.A.
Supervisor of Student Center

SMITH, RICHARD E.

Harding College, B.A.; University of Texas, M.A.
Instructional Media Specialist

SMITH, ROYAL E.

Baylor University, B.A.; Texas Wesleyan College, M.Ed.
Division of Counseling and Guidance

SOUTHERLAND, ARTHUR R.

East Texas State College, B.M.Ed.; M.Ed.; Ph.D.
Division of Humanities

STEVAN, PETER M.

Southern Methodist University, B.S.
Division of Communications

STEWART, KATHERINE R.

University of Texas, B.A.; Stanford University, M.A.
Division of Social Science

STIMMEL, GENE

North Texas State University, B.S.; M.Ed.
Division of Science and Mathematics

STOVER, JAMES W.

Baylor University, B.F.A.; Columbia University, M.A.
Division of Humanities

THOMASSON, RUBY E.

Centenary College, B.A.; Southern Methodist University, M.Ed.
Division of Communications

THORSON, MARCELYN M.

Pratt Institute, B.S.
Division of Science and Mathematics

TODES, JAY L.

University of Texas, B.A.; M.A.; University of Houston, Ed.D.
Division of Business

TONN, JAMES W.

East Texas State University, B.S.; M.Ed.
Division of Science and Mathematics

TUNNELL, WILLIAM K.

University of Texas, B.A.; M.A.; Ph.D.
Division of Social Science

VANTREASE, DEAN P.

University of Washington, B.A.; M.B.A.
Division of Business

WEAVER, GAYLE M.

East Texas State University, B.S.; M.S.; University of Oklahoma, M.S.
Division of Science and Mathematics

FACULTY

WESSON, JERRY W.

East Texas State College, B.S.; M.S.
Director of Student Activities

WHITE, GERRY

The Johns Hopkins Hospital, R.N.; Western Reserve University,
Cleveland, B.N.Ed.; University of Washington, M.N.Ed.
Chairman, Division of Nursing

WILKINSON, TOM

Southern Methodist University, B.A.; University of Texas, M.A.; M.L.S.
Division of the Library

WILLIAMS, JEROME

East Texas State University, B.S.; M.S.
Division of Science and Mathematics

WILLIAMSON, JOHN W.

East Texas State University, B.S.; M.S.
Assistant Registrar

WYCKOFF, JEAN B.

Riverside Hospital, School of Nursing, R.N.; University of
Pittsburgh, B.S.N.Ed.; M.L.
Director, Health Center

YATES, KATHRYN D.

Midwestern University, B.A.; M.A.
Division of Social Science

ZARKOWSKI, FRANK

Oregon State University, B.S.; M.Ed.
Division of Counseling and Guidance

ZION, CAROL L.

University of Miami, B.A.; M.S.; Florida State University, Ph.D.
Associate Dean of Instruction

GENERAL INFORMATION

To meet the increased need for opportunity in higher education that their expanding economy and growing population demanded, the citizens of Dallas County voted in May, 1965, to establish the Junior College District. By a margin of more than three to one a bond issue of \$41,500,000 was authorized. More than 50,000 citizens signed petitions to call the election. Each section of the county and each chamber of commerce of the county were represented on the steering committee. The Dallas County Junior College bond issue had widespread support from virtually every organized group in the County plus tremendous grass roots support from citizens at large who were convinced the junior college could solve or alleviate their dilemma.

El Centro College enrolled over twenty-four hundred full-time students in its first year of operation. In addition, over four thousand part-time students were served by evening and non-credit classes. Indications are that this enrollment is nearing the physical capacity of the El Centro site. Additional campuses will not be ready for service until 1969 or 1970. At that time, students enrolled in Dallas County Junior Colleges may reach 18,000 to 20,000, with an additional 30,000 part-time students attending late afternoon and evening classes. It is certain that by 1970 the Dallas County Junior College District will be among the largest in the United States.

Campus planning involves a multi-campus design to serve the district, with these campuses located within commuting distance of all sections of Dallas County.

Objectives of the College

The curricula of El Centro College are designed to serve the needs of the community and of students in the following categories:

1. Those who seek the first two years of academic training leading to a bachelor's degree.

2. Those who are preparing for careers in vocational and technical fields.
3. Those adults who need additional training for advancement in their present fields or retraining for employment in new fields.
4. Those who desire special classes in cultural and civic subjects.

Accreditation

Dallas County Junior College District is a full member of the American Association of Junior Colleges. As a new Texas Junior College it has been commended and encouraged by the Association of Texas Colleges and Universities. Dallas County Junior College District is recognized and sanctioned by the Coordinating Board of the Texas Colleges and Universities system and has instituted pre-candidacy procedures for formal recognition by the Southern Association of Colleges and Schools. The academic transfer curriculum is coordinated with senior colleges and universities to facilitate the transfer of credits to these institutions.

A D M I S S I O N S

Policy

It is the responsibility of each applicant to complete his admission file. Applications will be processed until enrollment limitations have been reached. Only those applicants who have fulfilled all admission requirements will be considered for admission.

Applicants residing in Dallas County will be given priority for admission in any semester.

Students who are accepted for admission will be scheduled for appointments with a counselor. The counselor will assist in planning a program of study. Normally, all requirements for registration are completed during this visit to the campus.

Criteria for Entrance

1. Beginning Freshmen:

A. Graduation from an accredited high school with a minimum of fifteen units of high school credit is required.

B. Mature adult applicants who are not graduates of an accredited high school may be accepted for admission on an indi-

vidual approval basis. Such approval may require the applicant to meet examination requirements for entrance into particular programs.

2. *Transfer Students:*

College transfer applicants will be considered for admission based on their previous college record. An applicant who is on scholastic probation or scholastic suspension from another institution may be considered for admission on a conditional basis. Scholastic standing for transfer applicants will be determined by the El Centro College scholastic standards.

Students on disciplinary suspension from another institution normally will not be admitted.

3. *Admission to non-credit courses.*

The college offers non-credit courses for which admission requirements are established by the nature of the particular course. It is not necessary for a student who plans to register only for non-credit courses to apply for regular college admission.

Procedures

Full time applicants (12 semester hours or more) must submit to the Office of Admissions the following items:

1. *Application for Admission Form.*

This form must be carefully completed with all questions being answered. The applicant *must* furnish his social security number at the time he submits the application form.

2. *High School Transcript.*

An official high school transcript with the date of graduation indicated should be sent by an official of the high school to the Office of Admissions. Each applicant must assume the responsibility for seeing that this requirement is met. (The high school transcript is not required of transfer students who have earned a minimum of 15 semester hours.)

3. *College Transcripts.*

Official transcripts are required from each college or university previously attended. Each applicant must assume the responsibility for seeing that this requirement is met.

4. *ACT Scores.*

Each applicant who has less than thirty semester hours of

earned college credit is required to furnish the Director of Admissions with results of the American College Testing Program (ACT). The results of these tests will be used for counseling and placement.

5. Medical Form.

The medical form is to be completed by the applicant's physician and forwarded to the Office of Admissions.

Part-Time Students (less than twelve semester hours) must submit to the Office of Admissions the following items:

1. Application for Admission Form.

This form must be carefully completed with all questions being answered. The applicant *must* furnish his social security number at the time he submits the application form.

2. High School Transcript.

An official high school transcript with the date of graduation indicated should be sent by an official of the high school to the Office of Admissions. Each applicant must assume the responsibility for seeing that this requirement is met. (The high school transcript is not required of transfer students who have earned a minimum of 15 semester hours.)

3. College Transcripts.

Official transcripts are required from each college or university previously attended. Each applicant must assume the responsibility for seeing that this requirement is met.

Housing

El Centro College does not operate dormitories of any kind or maintain listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing on their own responsibility.

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 the student absences.

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

Scholastic Standards: Grades and Grade Point Average

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
F or WF	Failing	0 points
I	Incomplete	Not Computed
W or WP	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 hours the course carries. A student's grade point average is computed by adding the total grade point values for all courses and dividing by the total number of credit hours attempted during the same period.

Incomplete grades are given when an unforeseen emergency prevents a student from completing the work in a course. Division chairman or department heads must approve all "I" grades. Incomplete grades must be removed within 30 calendar days after the first day of classes in the subsequent regular semester or they will be converted to an "F" grade. "I" grades are not computed in the student's grade point average until they have been converted to letter grades.

Scholastic Standards: Semester Hours

College work is measured in terms of semester credit hours. The number of semester hours of credit offered for each course is included with course description in the college catalog.

Dropping a Course

A student may drop a class any time before the last two weeks of a semester. This is done by obtaining a change of schedule form in the Office of the Registrar and following the required procedure. A student who drops a class prior to Friday of the fourth full week after registration will receive a "W" regardless of work accomplished. After this date, the student will receive a "WP" if doing passing work or a "WF" if doing failing work.

Change of Schedule

Request for change of schedule must be initiated through the student's counselor and approved by the Divisional Chairman who is affected by the add or drop action. The change action is not completed until it has been received and processed by the Registrar's Office. *No change action will be accepted by the Registrar after the first week of classes.*

Withdrawal from College

If a student finds it necessary to withdraw from the college, he should report to the Office of the Registrar and complete the necessary form to make his withdrawal official. If a student leaves without officially withdrawing, he will receive "F" in all subjects.

Honors

A full-time student who completes at least 12 degree hours of credit and who earns a grade point average of 3.00-3.49 will be listed on the College Honor Roll. Full-time students who complete at least 12 hours of credit and who average 3.50-4.00 will be placed on the Dean's Honor List. The Honor Roll and Dean's Honor List will be published each semester.

Grade Reports

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

Auditing a Course

Any person 18 years of age or older may, with the consent of the instructor, enroll as an auditor. 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 are approved prior to the first day of class in any semester. Lab sections may not be audited.

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 6 semester hours credit in a single department may be attained in this manner, applicable toward a maximum of 12 semester hours for this type of credit.

Before a student is eligible to take such an examination, he must:

1. *Have completed at El Centro College a minimum of 12 credits of course work with a "B" grade average and not have received credit previously from any college in the course examined.*
2. *Request an examination in a course listed in the current catalog by filling out a petition form secured from his counselor. The counselor will write his recommendations on this petition form and forward it to the division chairman.*
3. *Arrange interview with, first, the division chairman and,*

second, the instructor designated by the division chairman to administer the examination, and request that their approval be written on the petition form. Both may require, at their discretion, samples of work completed or evidence from a responsible agency that credit should be given. The division chairman will forward the petition form to the Associate Dean of Instruction.

- 4. Have the written approval of the Associate Dean of Instruction on the petition form. If the petition is not approved, the student may appeal to the Administrative Advisory Council.*
- 5. Be notified by his counselor of the action taken.*
- 6. Pay an examination fee of \$5.00. The regular tuition fee is charged to part-time students.*

After these steps are satisfactorily completed, an examination will be prepared by the designated instructor, approved by the division chairman and administered, normally, during the instructor's final examination periods; in any event, at the convenience of the instructor.

The grade and grade points received will become a part of the student's permanent record and notation "Credit by Examination" will be used to indicate the manner by which the credit was established. The instructor administering the examination will be responsible for reporting the grade and credits to the division chairman. The division chairman will report the grade to the Office of the Registrar. This grade, either passing or failing, is posted on the student's permanent record. There is no refund of the examination fee in case of failure to establish credit.

A student requesting advanced standing admission to certain special occupational programs may be placed under slightly different procedures. Application under these conditions should be made to the proper division chairman.

Concurrent Enrollment at Another Institution

As a general rule, full-time students are not permitted to enroll concurrently at another collegiate institution. All students who plan to enroll concurrently at another institution must complete a concurrent enrollment form and receive approval from the Associate Dean of Students.

TUITION AND FEES

Tuition Fees (Credit Courses)

Tuition fees will be charged according to the following schedule:

Residents of Dallas County

Full-time student (12 or more semester hours)	\$ 50.00 a semester
Part-time student (less than 12 semester hours)	\$ 5.00 a semester hour (maximum \$50)
Audit student	\$ 5.00 a semester hour

Residents of Other Texas Counties

Full-time student (12 or more semester hours)	\$ 75.00 a semester
Part-time student (less than 12 semester hours)	\$ 8.00 a semester hour (maximum \$75.00)
Audit student	\$ 8.00 a semester hour

Non-Texas Resident*

Full-time student (12 or more semester hours)	\$200.00 a semester
Part-time student (less than 12 semester hours)	\$ 17.00 a semester hour (maximum \$200.00)
Audit student	\$ 17.00 a semester hour

*A non-resident student is hereby defined to be a student of less than twenty-one (21) years of age, living away from his family and whose family resides in another State, or whose family has not resided in Texas for the twelve (12) months immediately preceding the date of registration; or a student of twenty-one (21) years of age or over 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.

Special Fees and Charges

Student Activity Fee (full-time student)	\$ 7.00 a semester
Student Activity Fee (part-time student)	\$ 4.00 a semester
American College Testing Program (ACT) (required of all full-time students)	\$ 4.00
General Education Development Test (may be taken by non-high school graduates to establish high school equivalency score)	Fee determined by institution administering exam.
Laboratory fees, a semester, per lab	\$ 2.50 to \$7.50
Music fees, private lessons, a semester	\$35.00 for 1 hr. per wk. (max. charge for one course) \$20.00 for ½ hr. per wk.

Other Fees

Other special 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.

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 the 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. Therefore, refunds will be made only under the following conditions:

1. 100% of the reduction in tuition and fees if the class is officially dropped by the end of the second day of classes or the class is dropped for the convenience of the college and verified by the Registrar.

2. *50% of the reduction in tuition only (not fees) if the class is officially dropped by the end of the fifth day of classes.*
3. *No refund after the fifth day of classes. An exception may be made for students entering the armed services if a copy of the induction notice is filed with the petitions committee.*

Transcripts of Credit from El Centro College

Upon request by a student, the Registrar's Office will send the student's transcript of record to any college or agency named. Each enrollee shall be entitled to two free copies of such record after which a nominal charge per transcript will be levied.

Transfer of Credits from Accredited Institutions

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

Students who are admitted with a grade point deficiency will be required to earn additional grade points at El Centro College to offset this deficiency. Students will not be graduated from El Centro College until this deficiency has been cleared.

Recommended Academic Load

No student will be permitted to carry more than 18 semester hours of course work or more than five classes plus physical education without permission of the administration. 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 hours or more), he should not work more than 20 hours per week. If he must work more hours, his credit hour load in college should be reduced proportionately.

The recommended load limit for day or evening students who are employed full time is six semester hours of course work.

The recommended load limit in a 6-week summer session is 6 semester hours of credit. A total of 14 semester hours of credit is the maximum that may be earned in any 12-week summer period.

Definition of Acceptable Scholastic Performance

Acceptable scholastic performance is the maintenance of a grade

point average of 2.0 or better. A student may not be graduated unless he has a cumulative grade point average of 2.0 or better. Grade points and hours earned in the Guided Studies Courses are computed when deriving a student's scholastic standing; however, they are not computed for graduation requirements.

Scholastic Probation

A student taking 12 or more semester hours during a fall or spring semester is required to pass a minimum of three-fourths of the work attempted with at least a "C" average. Failure to meet this standard will place the student on scholastic probation.

Any student who accrues a deficiency of 12 or more grade points below the minimum required for a cumulative grade point average of 2.0 will be placed on scholastic probation. All work attempted at El Centro College will be computed. Repeated courses will be added to the total hours attempted.

The scholastic record of a part-time student will not be evaluated until the student has attempted a minimum of twelve semester hours. The scholastic standards required of a full-time student will then be used to determine the scholastic status of the part-time student. The part-time student must meet the minimum standards required of the full-time student in each succeeding semester.

Removal of Scholastic Probation

Students placed on scholastic probation will receive special counseling and will be limited to a minimum course load of 12 semester hours, unless an increased load is approved by the Associate Dean of Students. Courses taken during a semester of probation must meet the approval of the student's counselor. The student on probation will be required to enroll in and pass Guided Studies Planning 091.

In order to be removed from probation, the student must pass all work attempted with at least a 2.0 average and must reduce his grade point deficiency to less than 12.

Any student who is on scholastic probation and does not maintain a 2.0 grade point average will normally be disqualified from continued enrollment. He may petition for permission to

reenroll through procedures prescribed by the Associate Dean of Students. A written explanation providing information concerning extenuating circumstances having a bearing on the student's scholastic performance will be required.

Scholastic Suspension

Students who fail to meet the scholastic standards of probation will be placed on scholastic suspension for the next long semester. Students who are placed on scholastic suspension at the end of the Spring semester may not attend intervening summer sessions.

Students who have been suspended may submit a petition for re-admission. Such petitions will be considered on individual merit by the Associate Dean of Students.

Foreign Students

This school is authorized under Federal law to enroll non-immigrant alien students. Prospective non-immigrant alien students should contact the Director of Admissions for further information.

STUDENT SERVICES

Counseling and Guidance

A staff of professional counselors is available to work with students who seek help in resolving questions of career choice, transferring to a senior college, study skills, self understanding, and other kinds of personal problems. A comprehensive file of information on most occupations is maintained and is available to students. In addition, catalogs for all Texas colleges and most of the other colleges in the United States are available for student use.

Advisement

Guidance and program advisement is a function of Student Services. A staff of full time counselors is available to the students of El Centro College. Faculty members also serve as program advisors to aid students in attaining their educational and vocational goals. Each student will be assigned to a faculty advisor when he chooses a major field of study.

Health Service

A Health Service is maintained on campus to provide health counseling, first aid, emergency care, vision and hearing tests, and a rest area for students.

FINANCIAL AIDS

The financial aid and placement program at El Centro College is designed to function as a multi-purpose financial assistance service for the students. One important objective is to reward outstanding students for past academic accomplishments and those who seem to have outstanding potential. Another 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 the financial resources.

Where to Apply

Requests for information should be directed to the Director of Financial Aid and Placement, El Centro College, Main & Lamar, Dallas, Texas.

When to Apply

Students who anticipate the need for financial assistance for college should complete an application well in advance so they can make a more realistic determination of their need.

Student Employment

Part-time Employment. Typically, part-time employment is designed as a financial aid to assist students while they are in college. At El Centro College there are three types of employment areas: (1) on campus placement; (2) off campus placement, and (3) the work-study program. Arrangements are made by the Director of Financial Aid & Placement for students to gain employment in

clerical work, library work, laboratories, custodial work, selling, food service, etc.

Terminal Placement. This service is designed for students who desire full-time placement in an occupational setting after completing the two year, technical programs at El Centro College. This service is provided cost-free to students and alumni. Graduates will be placed in occupational areas such as business, industry, government, medical, etc.

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 & Placement Office.

Texas Opportunity Loan. This loan was established by the Coordinating Board of Texas in 1966. Any resident of the state of Texas who has financial need and receives recommendations from his high school counselor or principal, and the El Centro Financial Aid Director is eligible. A maximum loan of \$1000 an academic year up to 5 years can be granted with repayment beginning 4 months after termination or completion of studies. Minimum payment is \$15.00 per month (depending on amount borrowed) with 6% interest. The student borrower has a maximum of 5 years to repay loan. Students must apply each year for the reinstatement of loan.

El Centro College Loan. A short term institutional loan is designed to assist students with tuition, fees, books and educational supplies. A 6% interest rate is charged and the student has a maximum of one semester to repay loan. Students desiring this type of loan should apply at the financial aid office before the semester begins in order to have funds prior to registration.

Grants

Educational Opportunity Grant. This grant is authorized under the Higher Education Act of 1965 and is designed to help students with great financial need. To be eligible a student must prove

financial need, make satisfactory progress toward the completion of his educational goal, and must be able to contribute less than \$626 per academic year toward educational expenses. The maximum amount of the grant is \$800 if need is at least \$1600 per academic year. No less than \$200 can be granted. Students must apply each academic year to be reinstated.

Scholarships

Several scholarships are made available by various private industries and groups in Dallas County for students entering El Centro College. Many of these scholarships are awarded on the basis of the student's anticipated professional career, economic need, potential, and scholastic achievement.

The Electronics Club of Dallas Scholarship is awarded annually to five students interested in electronics on the basis of financial need, measured potential, and scholastic achievement. This scholarship pays tuition for four semesters for each student.

The Howard B. Wolf Scholarship is to be awarded to two students interested in pattern drafting and draping. This scholarship was established by Howard B. Wolf, Inc. and will pay tuition two semesters for each recipient.

The Lone Star Gas Scholarship is awarded to two students majoring in culinary arts at El Centro College. Each of the recipients will receive \$150 annually.

The Varo Scholarship is a two year tuition scholarship to be awarded to one student from each of the Dallas County Municipalities. Students are further selected on the basis of economic need, measured potential, and scholastic achievement.

The Texas Fashion Creators Association Scholarship will be awarded to two students interested in pattern drafting and draping. Two \$150 scholarships will be offered annually.

Federal and State Programs

Veterans Benefits. The Office of Financial Aid & Placement coordinates the veterans benefit program for eligible students. Vet-

erans of the Korean War and Cold War who are interested in more details should contact this office for further information.

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

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, 3115 Swiss Avenue, Dallas, Texas, or Director of Vocational Rehabilitation, Capital Station, Austin, Texas.

Social Security Administration. Benefits under this program are available to students who meet the criteria set up by the Social Security Administration. The responsibility of the Director of Financial Aid & Placement in this program is to act as liaison between El Centro College students and the administration.

STUDENT ACTIVITIES

The Student Activities Program at El Centro College is responsible for providing the campus with a balanced program of cultural, recreational, social, and educational activities.

Student Government

The student government of El Centro College is responsible for all matters concerning the welfare of the student body and its administration. These responsibilities include the allocation of student activity fees, the establishment of a line of communication between the students and the faculty and administration, and the development of student leadership. Elections for the student government positions are held in the spring semester each year.

Student Organizations

A wide variety of student organizations are available to each El Centro College student. These include professional, honorary, interest, service, departmental, and the religious organizations. Students wishing to start or join an organization are urged to contact the Director of Student Activities. The procedure for establishing new organizations is found in the Student Handbook.

Student Center

The El Centro College Student Center complex occupies a major portion of two floors in the El Centro building. The Student Center

and its program can mean whatever the student wants it to mean. He may choose to make use of those facilities and services which are there for his comfort and recreation or he may participate fully in the program.

The Student Center Office on the lower floor is the focal point for activities in the Student Center. The lower level also contains recreational facilities, music and television rooms, and a snack bar. The ground level floor houses the cafeteria, faculty dining room, bookstore as well as the information desk and check room.

The mezzanine is the home for student organizations, including the student government. The offices of the Director of Student Activities are also on this floor.

STUDENT CONDUCT

Standards of Conduct

The college student is considered a responsible adult. The student's enrollment indicates acceptance of those standards of conduct which appear in the Student Handbook.

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.

ACADEMIC CALENDAR

1967-68

September 11-15	Monday-Friday	Registration & Student Orientation
September 18	Monday	Classes begin
October 13	Friday	Last day to withdraw from class with a grade of "W"
November 23-25	Thursday-Saturday	Thanksgiving holidays
December 20	Wednesday	Last day of classes before Christmas holidays
January 3	Wednesday	Classes resume at 8:00 a.m.
January 19-24	Friday-Wednesday	Final examinations for the first semester
January 24	Wednesday	First semester closes
January 29-February 2	Monday-Friday	Registration & Orientation
February 5	Monday	Classes begin
March 1	Friday	Last day to withdraw from class with a grade of "W"
March 22-25	Friday-Monday	Spring Vacation
March 26	Tuesday	Classes resume at 8:00 a.m.
May 27-30	Monday-Thursday	Final examinations for the second semester
May 30	Thursday	Semester closes

SUMMER SESSION

1968

June 3-4	Monday-Tuesday	Registration
June 5	Wednesday	Classes begin
June 14	Friday	Last day to withdraw from class with a grade of "W"
July 4-5	Thursday-Friday	Holiday
July 12	Friday	Preparation for examinations (no classes scheduled)
July 13	Saturday	Final examinations

DEGREE REQUIREMENTS

Associate in Arts and Associate in Science Degree requirements:

A total of 60 hours in addition to 4 hours for physical education must be presented with an average grade of at least "C" (2.0). These 60 hours must include:

English 101-102, plus an additional 6 hours of English	12 hrs.
--	---------

Biological Sciences 115-116 or Physical Sciences 115-116. (Music and Science majors are exempt from this requirement. Check listings under subject field.)	6 hrs.
--	--------

History 101-102 and Government 201-202	12 hrs.
--	---------

Humanities: To be selected from Drama 101, Art 104, Music 104 or Humanities 101	3 hrs.
---	--------

(The student is urged to consult the catalog of the institutions to which he might 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 total of 60 hours in addition to 4 hours for physical education must be presented with an average grade of at least "C" (2.0). These 60 hours must include all of the prescribed requirements for the specific technical or occupational program for which the student is enrolled. These requirements are listed in this catalog under the specific program beginning on page 103.

In addition to the course requirements, each student who is granted a degree from El Centro College must fulfill a resident requirement of earning the last 15 credit hours as a resident student on the campus.

RATIONALE FOR CATALOG NUMBERING SYSTEM

90 to 99	Not to be credited in degree program.
100-199	Open to freshmen, though sophomores may take courses whose number designation begins with "1" (one).
200-299	Sophomore courses, open to freshmen by permission of division chairman only.
130-139; 230-239	Designed to be included in a specific occupational program.

Specialized courses within a department may or may not be open to non-majors depending on prerequisites.

GUIDED STUDIES PROGRAM

El Centro College offers specialized programs to students in need of intensive preparation for college level academic work.

Students are selected for this individualized work on the basis of an evaluation of former school work, placement test scores, and the recommendation of high school and college counselors.

The program includes:

(1, 2) GSP 090—Educational Planning (3)

Guided Studies Planning 090 is a course designed for the student entering college for the first time and who is in need of assistance in the process of "self" assessment including aptitudes, interests, achievements, experiences, personality, and study habits. It thus provides a sound basis for meaningful personal direction, realistic educational planning, and career development. The course will be taught by a member of the counseling staff.

(1, 2) GSP 091—Educational Planning (3)

This course is designed to assist students who are on scholastic probation. It is hoped the problems leading toward scholastic probation can be isolated and realistically faced. The course will be taught by a member of the counseling staff.

(1, 2) GSM 090—Basic Mathematics (3)

This course includes a treatment of the fundamental operations with whole numbers, fractions, and decimals. It also includes a

study of percents, computation with approximate numbers and denominate numbers, and an introduction to elementary algebra.

(1, 2) GSM 091—Basic Mathematics (3)

This course includes a study of elementary algebra with topics on special products and factoring, fractions, quadratic equations, graphs, and functions. It also includes an introduction to geometry. Prerequisite: GSM 090 or equivalent.

(1, 2) GSM 093—Intermediate Algebra (3)

This course includes the properties of real numbers, operations with polynomials and fractions, linear and quadratic equations, and inequalities. It also includes graphs, systems of equations, sequences and series, and exponential functions. Prerequisite: One year high school algebra or GSM 091.

(1, 2) GSM 099—Programmed Mathematics (3)

A programmed course designed to improve competence in college algebra and trigonometry, preparatory to entrance in analytic geometry. It is designed primarily for engineering and science majors. Prerequisite: GSM 093 or equivalent.

(1, 2) GSR 090-091—Basic Reading (3) (3)

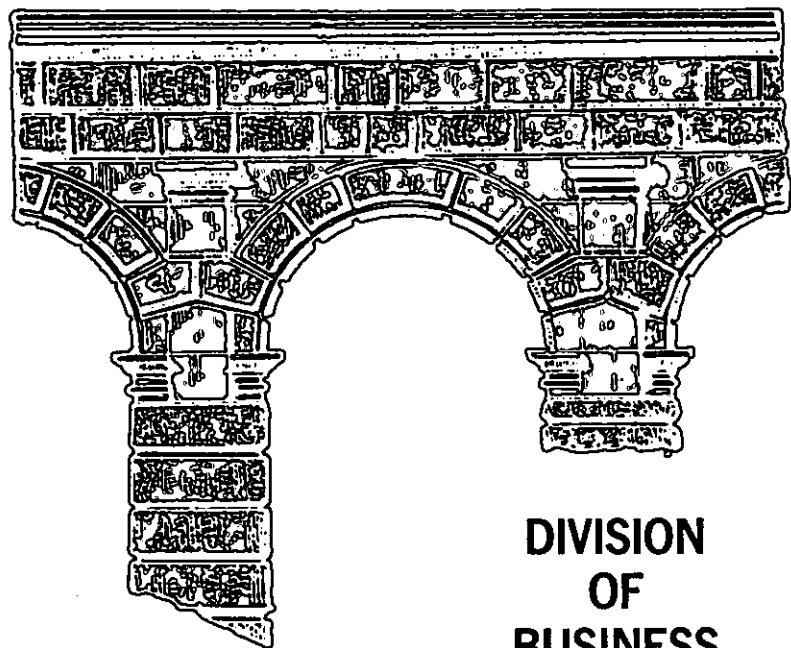
This course is designed to teach students basic reading skills so that they may proceed, without difficulty, through a regular college program. Machines and other devices and techniques will be used in the course. Primary emphasis will be placed on the improvement of comprehension of textbook materials, skills in grasping main ideas, and vocabulary building.

(1, 2) GSW 090-091—Basic Writing (3) (3)

This course is designed to help students improve their writing skills. Emphasized in the course will be practical writing experience which the student can use in his social, business and academic life.

In general, students taking the basic courses may, upon the recommendation of a counselor, take as many as two courses in a degree program.

Upon satisfactory completion of the basic courses, students may enter either regular degree or certificate programs, depending on their relative standing in the basic courses.



**DIVISION
OF
BUSINESS**

BUSINESS

(1, 2) Business 101—Principles of Accounting (3)

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.

(1, 2) Business 102—Principles of Accounting (3)

Accounting procedures and practices applicable to partnership and corporations; the use of cost data, budgetary controls, analysis and interpretation of financial reports for use by creditors, investors, and management. Prerequisite: Business 101.

(1, 2) Business 105—Introduction to Business (3)

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

(1, 2) Business 131—Bookkeeping (3)

An understanding of the fundamental principles of double-entry bookkeeping as applied to practical business situations. Emphasis is given to the following records: financial statements, trial balance, working sheet, special journals, fixed assets and depreciation. A practice set covering the entire business cycle will be completed.

(1, 2) Business 132—Bookkeeping (3)

This course is a continuation of Business 131. Attention will be given to accrued income, accrued liabilities, bad debts, taxes, depreciation, controlling accounts, and business vouchers. Bookkeeping for partnerships and corporations will be introduced. Prerequisite: Business 131.

(1, 2) Business 230—Salesmanship (3)

A course in general salesmanship involving the factors of successful selling of goods or ideas. Buying motives, sales psychology, customer approach, and sales techniques are studied.

(1, 2) Business 231—Business Communications (3)

A practical course that includes a study of letter forms, the mechanics of writing, and composing various types of communications at the typewriter. An emphasis is placed on neatness and form in reports, bulletins, letters, memoranda, telegrams, and news releases. A critical analysis of the appearance and content of representative business correspondence is made. Prerequisite: Business 130 or equivalent.

(1, 2) Business 233—Advertising and Sales Promotion (3)

Introduces the fundamental principles, practices and common media in modern advertising. Includes those activities that supplement and render more effective both advertising and personal selling, such as sampling, displays, and demonstrations.

(1, 2) Business 234—Business Law (3)

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.

(2) Business 235—Advanced Administration Procedures (3)

Concepts of supervisory leadership; communications in management; principles of motivation, morale and related facets of supervision such as acceptance of responsibility, delegation of authority and effective follow-up. This course is oriented toward

middle and upper level management. Prerequisite: sophomore standing or consent of the instructor.

(2) Business 236—Supervisory Management (3)

A study of management philosophy and decision-making processes; study of principles involved in the functions of planning, organizing, supervising and controlling. Includes cases in handling of morale, discipline, communications, order-giving, grievance-handling, and other phases of effective relations with subordinate employees.

DATA PROCESSING

(1, 2) Data Processing 130—Key Punch (3)

A course designed to train students in the operation of key punch machines and the use of these machines in present data processing procedures. Prerequisite: Competence in typing and use of office machines.

(1, 2) Data Processing 131—Basic Principles (4)

This course is designed to give the student skill in the operation of peripheral equipment used in a unit record system. Proficiency in the wiring of control panels for the various machines is developed by lecture and laboratory practice. A study is made of the electric accounting machine emphasizing the need for machines in accounting and record keeping. Lecture 3 hours; Laboratory 4 hours a week.

(1, 2) Data Processing 132—Basic Principles (4)

This course is designed to give the student proficiency in wiring the 407 accounting machine and experience in the basic operation of unit record equipment. Procedure writing, flow charting, job instruction, work-loads, and scheduling are discussed. The operation and wiring of peripheral equipment will be reviewed. Console operation of the computer is developed through

lecture, demonstration, and laboratory practice. Lecture 3 hours; Laboratory 10 hours a week.

(1, 2) Data Processing 134—Beginning Programming (4)

An introductory course to acquaint the student with the elements of programming electronic digital computers with particular emphasis upon the IBM 360 computer. Emphasis will be on programming language and not on operation and functions of the equipment. Programming will be done in COBOL and RPG. Skills in problem formulation, flow charting, coding, check-out, and documentation are developed through laboratory assignments involving direct experience with the computer. Elementary programming techniques are developed through lecture, demonstration, and laboratory practice on the computer. Lecture 3 hours; Laboratory 4 hours a week.

(1, 2) Data Processing 135—Introduction to Data Processing (3)

This course covers the history of data processing and is designed to familiarize the student with broad concepts and business applications in the field. A study is made of basic data processing techniques, punched-card principles, data flow patterns, digital computer concepts, computer components, and programs. A survey of prevalent business uses and managerial applications of data processing is made.

(1, 2) Data Processing 231—Advanced Programming (4)

A continuation of Beginning Programming using the 360 Assembly Language as the programming tool. More emphasis is placed on developing skills in utilization of the equipment running under control of an operating system. Complexity of the problems is increased to develop additional programming techniques and proficiency. File organization approaches for disk files are developed and implemented in programs. Lecture 3 hours; Labora-

tory 4 hours a week. Prerequisite: Data Processing 134.

(1, 2) Data Processing 232—Applied Systems (3)

Introduces and develops skills required to analyze existing systems and 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. Students will implement selected portions of the system in Computer Problems. Lecture 3 hours; Laboratory 1 hour a week. Prerequisite: Data Processing 231.

(1, 2) Data Processing 233—Computer Problems (4)

Designed to employ the student's programming skills in the solution of problems encountered in actual operating environments. This course will be correlated with Applied Systems by implementing selected portions of a total system design. Programming systems concepts in such areas as compilers, macro-generators, physical and logical IOCS, sort-merges, and multi-programming will be analyzed to provide necessary tools for evaluation of systems. Lecture 2 hours; Laboratory 6 hours a week. Prerequisite: Data Processing 231.

MID-MANAGEMENT

(1, 2) Mid-Management 130-131—Management Training (4) (4)

Supervised employment in the student's chosen field. Intended to provide practical experience for students preparing for careers in business management. Prerequisite: Concurrent enrollment in approved Mid-Management Program and consent of instructor. Mid-Management 130 will be offered first semester; Mid-Management 131 will be offered second semester.

(1, 2) Mid-Management 132-133—Seminar (1) (1)

Problem analysis and project development in a conference course for students working in the Mid-Management program. Mid-Management 132 will be offered first semester; Mid-Management 133 will be offered second semester.

(1, 2) Mid-Management 230-231—Management Training (4) (4)

Continuation of supervised employment in the student's chosen field. Intended to provide increased supervisory responsibility for students preparing for careers in business management. Prerequisite: Mid-Management 131-133; concurrent enrollment in Mid-Management 232-233 and consent of instructor. Mid-Management 230 will be offered first semester; Mid-Management 231 will be offered second semester.

(1, 2) Mid-Management 232-233—Seminar (1) (1)

A seminar in basic elements in management including the nature of management, planning, directing, controlling, organizing, and management development. Prerequisite: Mid-Management 132-133; concurrent enrollment in Mid-Management 230-231 and consent of instructor. Mid-Management 232 will be offered first semester; Mid-Management 233 will be offered second semester.

SECRETARIAL

(1, 2) Office Practices 130—Secretarial Training (3)

Special emphasis is given to the most frequently performed secretarial duties. The units of work include filing, skill in the use of duplicating machines, mail, telegraph, postal and shipping service. The student develops skill in using types of dictation and transcribing machines customarily employed in recording dictation of correspondence in business and professional offices. Prerequisite: Typing 131 or consent of instructor.

(1, 2) Office Practices 131—Office Machines (2)

Training for familiarization and competence on those machines common to most business offices, such as adding machines and calculators. Lecture 1 hour; Laboratory 2 hours a week.

(1, 2) Office Supervision 130-131—Supervisory Training (4) (4)

Supervised employment providing a practical application of basic skills in secretarial occupations leading toward office administration, office supervision, or office management. Prerequisite: Concurrent enrollment in Office Supervision Program and consent of instructor. Office Supervision 130 will be offered first semester; Office Supervision 131 will be offered second semester.

(1, 2) Office Supervision 132-133—Seminar (1) (1)

Problem analysis and project development in a conference course for students working in the Office Supervision Program. Emphasis will be placed on supervisory techniques, duties and responsibilities of the office manager, and human relations in administration. Office Supervision 132 will be offered first semester; Office Supervision 133 will be offered second semester.

(1, 2) Office Supervision 230-231—Supervisory Training (4) (4)

Supervised employment in secretarial occupations with increased responsibility leading toward office administration, office supervision, or office management. Prerequisite: Office Supervision 131 and 133, enrollment in Office Supervision 232, and consent of instructor. Office Supervision 230 will be offered first semester; Office Supervision 231 will be offered second semester.

(1, 2) Office Supervision 232-233—Seminar (1) (1)

Problem analysis and project development in a conference course for students working in the Office Supervision Program.

Emphasis will be placed on leadership and human relations and the organizing and planning of office operations including simplification of methods and procedures, establishment of standards, training of office personnel, and controlling office costs. Office Supervision 232 will be offered first semester; Office Supervision 233 will be offered second semester.

(1, 2) Shorthand 131—Beginning Shorthand (3)

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. Five hours a week. Prerequisite: Typing 130 or equivalent.

(1, 2) Shorthand 132—Intermediate Shorthand (3)

Application of principles of Gregg Shorthand to develop the ability to take and accurately transcribe shorthand notes at increased dictation speeds. Includes oral reading of shorthand outlines, speed building dictation, and dictation for timed mailable transcripts: Pre-transcription training to strengthen knowledge of English mechanics and reinforce typing skills. Five hours a week. Prerequisite: Shorthand 131 or equivalent.

(1, 2) Shorthand 231—Advanced Shorthand (3)

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, specialized dictation, and increasing knowledge of periphery skills required in office situations. Five hours a week. Prerequisite: Shorthand 132 or equivalent.

(1, 2) Shorthand 232—Transcription (3)

Emphasis upon specialized dictation, mailable transcriptions, and vocabulary building. Development of high-level skill in pro-

duction work meeting office standards. A study will be made of the responsibilities of the executive secretary and office supervisor. Five hours a week. Prerequisite: Shorthand 231.

(1, 2) Shorthand 235—Medical Shorthand (3)

Writing of medical terms in shorthand is emphasized in this course. A substantial vocabulary is acquired through dictation of medical letters and reports. Five hours a week. Prerequisite: Shorthand 231 or consent of instructor.

(1, 2) Typing 130—Beginning Typing (2)

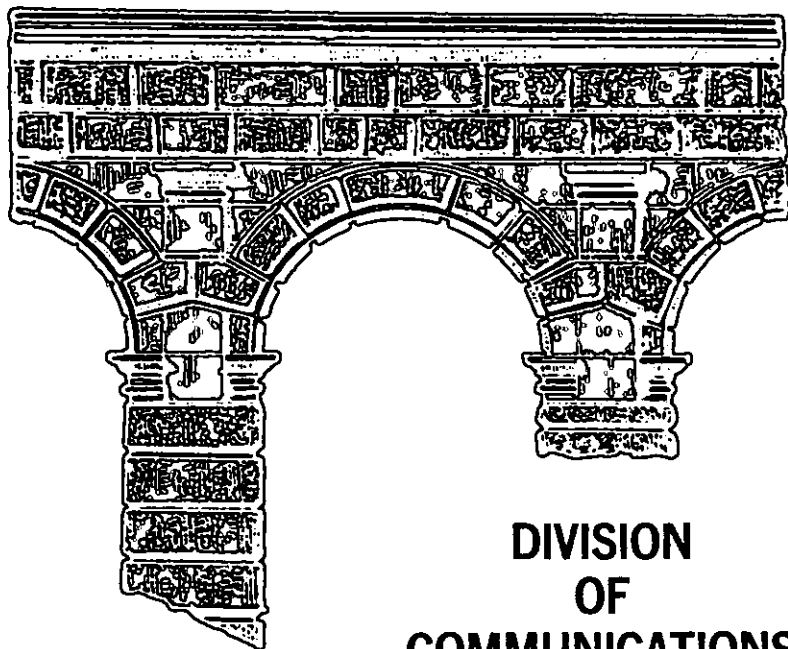
Sound techniques in touch typewriting are developed. The skills involved in typing manuscripts, business letters and tabulation are introduced. This course is for students with no previous training in typewriting. Lecture 1 hour; Laboratory 2 hours a week.

(1, 2) Typing 131—Intermediate Typing (2)

Further development of techniques. Emphasis will be placed on increasing speed and accuracy with practice in typing business forms, correspondence and manuscripts. Lecture 1 hour; Laboratory 2 hours a week. Prerequisite: Typing 130 or the equivalent.

(1, 2) Typing 132—Advanced Typing (2)

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. Lecture 1 hour; Laboratory 2 hours a week. Prerequisite: Typing 131 or consent of instructor.



**DIVISION
OF
COMMUNICATIONS**

COMMUNICATIONS

(1, 2) Communications 131—Applied Composition and Speech (3)

Emphasizes practical application of composition and speech skills in day-to-day business, professional and technical communications.

(1, 2) Communications 132—Applied Composition and Speech (3)

Emphasizes the business letter and technical report writing in addition to speech skills. Special sections for students in technical/scientific programs. Prerequisite: Communications 131 or permission of division chairman.

DRAMA

(1, 2) Drama 101—Introduction to the Theatre (3)

A general survey designed to acquaint the student with the various aspects of theatre: plays and playwrights; directing and acting; theatres, artists, and technicians.

(1, 2) Drama 105—Play Production (3)

A study of the technical aspects of play production, including set design and construction, stage lighting, make-up, costuming, directing and other related areas.

(1, 2) Drama 106—Acting (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.

ENGLISH

(1, 2) English 101—Composition and Expository Reading (3)

Writing practice in making reasonable and valid assertions followed by logical and clear support coincidental with the expository reading matter.

(1, 2) English 102—Composition and Literature (3)

Writing practice in critical evaluation of prose narrative, poetry, and drama. Prerequisite: English 101.

(English 201, 202, 203, 204, 205, and 206 are independent units of three credit hours 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 English courses.)

(1, 2) English 201—Masterpieces of English Literature (3)

Consideration of significant poetry and prose from the fourteenth through the eighteenth centuries. Prerequisite: English 101 and English 102.

(1, 2) English 202—Masterpieces of English Literature (3)

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

(1, 2) English 203—Literary Classics of the Western World (3)

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

(2) English 204—Literary Classics of the Western World (3)

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

(1) English 205—Major American Writers (3)

Study of the works of the important writers before Whitman in the context of their times. Prerequisite: English 101 and English 102.

(2) English 206—Major American Writers (3)

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

JOURNALISM

(1, 2) Journalism 101—Introduction to Mass Communications (3)

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.

(1, 2) Journalism 102—News Gathering and Writing (3)

The gathering of material and writing of simpler types of news stories on assignment. Members of the class serve as student reporters for the *Conquistador*, the college paper, their work being subject to classroom analysis and criticism. Lecture 3 hours; Laboratory 4 hours a week. Required for all journalism majors.

(1, 2) Journalism 103—News Gathering and Editing (3)

A continuation of Journalism 102. The writing of more complex types of news stories. Specialized writing in the fields of sports, police news, markets, finance, society, amusement, government, and news of interest to women. Additional laboratory work on the *Conquistador*. Lecture 3 hours; Laboratory 4 hours a week. Prerequisite: Journalism 102. Required for all journalism majors.

MODERN LANGUAGES

(Language exam required for advanced placement)

FRENCH

(1, 2) French 101—Beginning French (4)

Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression. Lecture 3 hours; Laboratory 2 hours a week.

(1, 2) French 102—Beginning French (4)

Continuation of French 101 with emphasis on idiomatic language and complicated syntax. Lecture 3 hours; Laboratory 2 hours a week. Prerequisite: French 101 or equivalent.

(1, 2) French 201—Intermediate French (3)

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

(1, 2) French 202—Intermediate French (3)

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

GERMAN**(1, 2) German 101—Beginning German (4)**

Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression. Lecture 3 hours; Laboratory 2 hours a week.

(1, 2) German 102—Beginning German (4)

Continuation of German 101 with emphasis on idiomatic language and complicated syntax. Lecture 3 hours; Laboratory 2 hours a week. Prerequisite: German 101 or equivalent.

(1, 2) German 201—Intermediate German (3)

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

(1, 2) German 202—Intermediate German (3)

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

SPANISH**(1, 2) Spanish 101—Beginning Spanish (4)**

Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension, and oral expression. Lecture 3 hours; Laboratory 2 hours a week.

(1, 2) Spanish 102—Beginning Spanish (4)

Continuation of Spanish 101 with emphasis on idiomatic language and complicated syntax. Lecture 3 hours; Laboratory 2 hours a week. Prerequisite: Spanish 101 or equivalent.

(1, 2) Spanish 201—Intermediate Spanish (3)

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

(1, 2) Spanish 202—Intermediate Spanish (3)

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

SPEECH**(1, 2) Speech 105—Fundamentals of Public Speaking (3)**

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.

(1, 2) Speech 106—Voice and Diction (3)

A study of the mechanics of speech applied to improvement of the individual's voice and pronunciation.

(1, 2) Speech 201—Forensic Workshop (1)

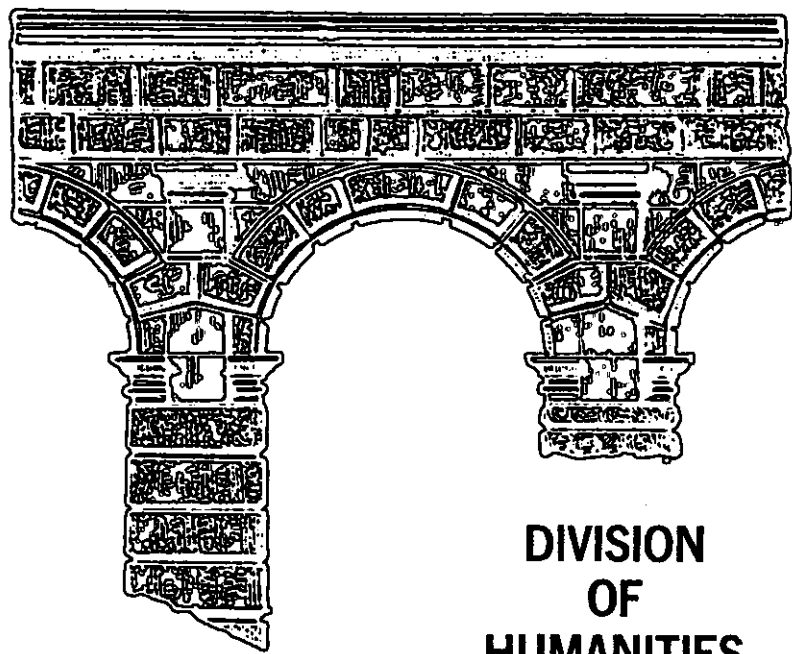
A laboratory course for the preparation of speeches, readings, and debate propositions which will be presented in competition and before select audiences.

(1, 2) Speech 205—Discussion and Debate (3)

A study of theories and application of techniques of public discussion and argumentation. Special emphasis on development of ability to evaluate, analyze, and think logically, through application to current problems. Prerequisite: Speech 105 or consent of instructor.

(1, 2) Speech 206—Oral Interpretation (3)

A study of fundamental techniques of analyzing various types of literature, and practice in preparing and presenting selections orally. Emphasis on individual improvement.



**DIVISION
OF
HUMANITIES**

*ART***(1, 2) Art 101—Basic Design (3)**

A course designed to develop a sensitivity to form, color and texture through an exploration with tools and materials and the study of their relation to simple concepts in the theory of design. Lecture 2 hours; Laboratory 4 hours a week.

(1, 2) Art 104—Art Appreciation (3)

Lectures, slides, and discussion on the theoretical, cultural, and historical aspects of the visual arts. The role of art in everyday living.

(1, 2) Art 108—3D Basic Design (3)

A study of 3D basic concepts involving the use of line, mass, space, texture, and form as related to various three-dimensional materials. Lecture 2 hours; Laboratory 4 hours a week.

(1, 2) Art 114-115—Basic Drawing (3) (3)

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. Lecture 2 hours; Laboratory 4 hours a week.

(1, 2) Art 201-202—Life Drawing (3) (3)

Analytic and expressive drawing of the human figure, stressing study of movement and volume. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: Art 101, 114, sophomore standing and/or permission of the Humanities Division.

(1, 2) Art 205-206—Painting (3) (3)

A studio course stressing fundamental concepts of painting with acrylics and/or oils. Emphasis on painting from still life, models, and the imagination. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: Art 101, 114, or permission of instructor.

(1) Art 207—Crafts**(3)**

A study of the basic techniques of working with various crafts media, including metal, wood, and clay. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: Art 101, 114, or permission of instructor.

(2) Art 208—Sculpture**(3)**

A studio course for developing original expression in three-dimensional media. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: Art 101, 114, and 108, and/or 207, or permission of instructor.

(1) Art 210—Advertising Art**(3)**

Problems in layout and production of signs, posters, and labels in various media; construction of alphabets with pencil, lettering pens, and brushes. Lecture 2 hours; Laboratory 4 hours a week.

(2) Art 211—Advertising Art**(3)**

A continuation of Art 210—plus an introduction to problems of reproduction techniques. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: Art 210.

(1) Art 214—Photography**(3)**

A course designed to teach basic camera and darkroom techniques, emphasizing both technical skill and creativity. Lecture 2 hours; Laboratory 4 hours a week.

(2) Art 215—Photography**(3)**

Continuation of Art 214. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: Art 214.

HUMANITIES

(1, 2)	Humanities 101—Introduction to the Humanities	(3)
---------------	--	------------

A concise survey of the basic elements of music, art; and drama and their application toward aiding the student in discovering, understanding, and appreciating these related expressions in Western culture.

MUSIC

(1, 2)	Music 100—Student Recital	(0)
---------------	----------------------------------	------------

One period per week designed to provide students of private lessons an opportunity to perform before an audience. Required of all music students and open to all other students. Laboratory 1 hour a week.

(1)	Music 101—Freshman Theory	(4)
------------	----------------------------------	------------

Development and cultivation of basic 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 harmony, and notation. Lecture 3 hours; Laboratory 2 hours a week.

(2)	Music 102—Freshman Theory	(4)
------------	----------------------------------	------------

Introduction to partwriting and harmonization with triads and their inversions; classification of chords; seventh chords, sight-singing, dictation, and keyboard harmony to involve basic modulation. Lecture 3 hours; Laboratory 2 hours a week. Prerequisite: Music 101 or permission of instructor.

(1, 2)	Music 104—Music Literature (for the non-music major)	(3)
---------------	---	------------

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.

(1) Music 105—Italian Diction (1)

A study of the phonetic sounds of the Italian language, especially applicable for the first year voice student. Emphasis is on actual singing, rather than vocabulary or conversation. Lecture and laboratory 2 hours a week.

(1) Music 110—Literature (2)

A course for music majors dealing with the characteristics of sound, the elements of music, performance media, and musical texture as seen in the music of recognized composers in the major periods of music history.

(2) Music 111—Literature (2)

A study of music literature from the viewpoint of the compositional procedures and forms employed by the creators of music, including small and large homophonic forms, polyphonic forms, variation forms, multimovement forms, free and miscellaneous forms, program music, dramatic music, song forms, and choral forms. Prerequisite: Music 110.

**(1, 2) Music 121—Section 003—Applied Music (3)
—Major**

Private instruction in the area of the student's major instrument. Primarily for music majors. One hour lesson a week.

**(1, 2) Music 121—Section 002—Applied Music (2)
—Concentration**

Private instruction in the area of the student's concentration. Primarily for music education majors. One hour lesson a week.

(1, 2) Music 121—Section 001—Applied Music (1)
—Minor

Private or class instruction in the student's secondary area. Open to all full-time students as an elective. One half-hour lesson a week.

(1, 2) Music 150—Chorus (1)

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. Permission of instructor required. Laboratory 4 hours a week.

(1) Music 151—Voice Class (1)

A course teaching the principles of breathing, voice production, tone control, enunciation and phrasing. Two group lessons a week.

(2) Music 152—Voice Class (1)

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

(1, 2) Music 155—Vocal Ensemble (1)

A select group for mixed voices concentrating upon excellence of performance. Membership is open only to members of the chorus through an audition with the director. Laboratory 3 hours a week.

(1, 2) Music 160—Band (1)

The band studies and performs a wide variety of music in all areas of band literature. Required of all wind instrument majors. Open to all other students upon consent of instructor. Laboratory 4 hours a week.

(1, 2) Music 161-162—Woodwind Class (1) (1)

A study of the instruments comprising the woodwind section of the band and orchestra. Mastery of the fundamentals of playing these instruments is included to prepare for the correct teaching of the woodwinds in the public schools. Two group lessons a week.

(1, 2) Music 165-166—Brass Class (1) (1)

A study of the instruments comprising the brass section of the band and orchestra. Mastery of the fundamentals of playing these instruments is included to prepare for the correct teaching of the brasses in the public schools. Two group lessons a week.

(2) Music 168—Percussion Class (1)

A study of the instruments comprising the percussion section of the band and orchestra. Mastery of the fundamentals of playing these instruments is included to prepare for the correct teaching of percussion in the public schools. Two group lessons a week.

(1, 2) Music 170—Orchestra (1)

A course affording experience in performing and reading orchestral literature and participation in the college orchestra. Laboratory 4 hours a week.

(1, 2) Music 171-172—String Instruments Class (1) (1)

A study of bowing techniques, positions and fundamentals which are necessary for the correct teaching of the violin, viola, violoncello, and base viola in the public schools. Two group lessons a week.

(1, 2) Music 175—String Ensemble (1)

A course offering experience in reading and performing of string ensemble or string orchestra literature. Required as a lab for all string majors. Laboratory 3 hours a week.

(1) Music 201—Sophomore Theory**(4)**

A continuation of freshman theory. A study is made of other seventh chords, altered chords and modulation with advanced sight-singing, keyboard harmony, part-writing and ear training. Lecture 3 hours; Laboratory 2 hours a week. Prerequisite: Music 101-102 or permission of instructor.

(2) Music 202—Sophomore Theory**(4)**

A continuation of Music 201, including a study of more complex sonorities and chromatic harmony, modulation to remote keys in part writing with a comparable advance in sight-singing, keyboard harmony and ear training. Lecture 3 hours; Laboratory 2 hours a week. Prerequisite: Music 201 or equivalent or permission of instructor.

PHILOSOPHY

(1, 2) Philosophy 105—Logic**(3)**

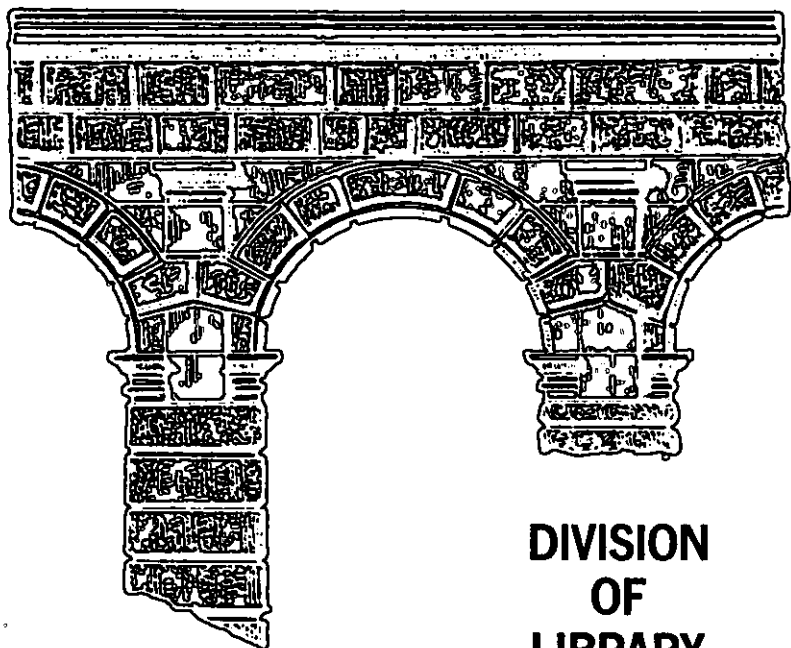
An analysis of the principles of sound reasoning; introduction to deductive and inductive thinking and the scientific method.

(1, 2) Philosophy 201—Introduction to Philosophy**(3)**

A survey course designed to acquaint the student with fundamental problems of philosophy and cardinal issues of thought as found in the major branches and schools of philosophy.

(1, 2) Philosophy 203—Ethics**(3)**

A survey of classical and modern theories of the moral nature of man posing alternative views of his responsibilities to self and society.



**DIVISION
OF
LIBRARY
SERVICES**

**(1) Library Service 131—Introduction to
Library Service****(4)**

A general survey of library activities and services at the associate degree level, emphasizing basic library techniques, materials and terminology. Designed to aid the student in determining areas for selective concentration. Lecture 2 hours; Laboratory 4 hours a week.

**(2) Library Service 132—Technical Processes in
Libraries****(4)**

A study of basic techniques applicable to the acquisition, organization, circulation and preservation of library materials. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: LS 131.

**(Summer) Library Service 133—Co-operative Field
Service in Libraries****(4)**

Supervised training in appropriate work situations in various types of approved libraries. 20 hours a week for six weeks. Prerequisites: LS 131; LS 132.

**(2) Library Service 135—Special Materials and
Media in Libraries****(4)**

A survey of the major types of audio-visual materials and media, their organization, preservation and direct application to library service, through methods of reproduction and operation of equipment. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: LS 131.

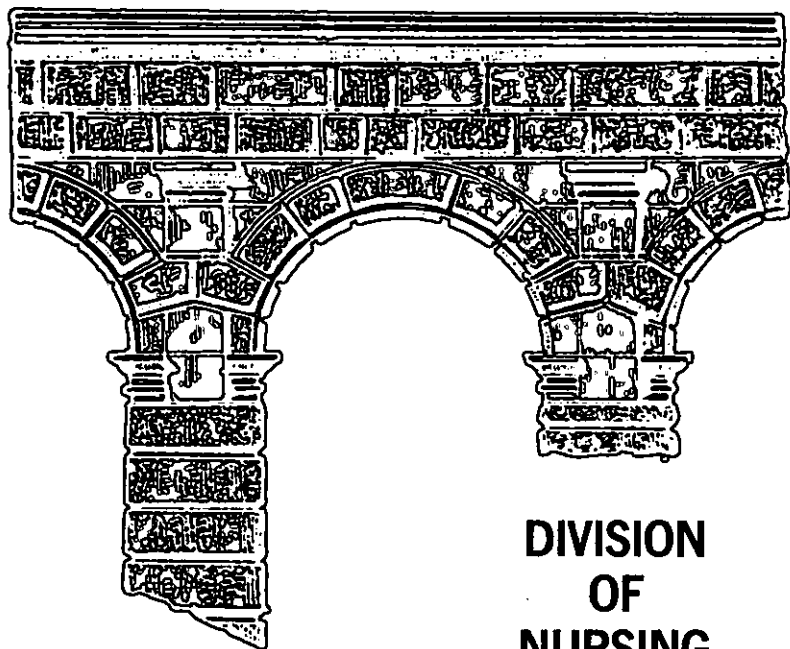
(1) Library Service 231—Public Services in Libraries**(4)**

An introduction to basic functions of circulation and reference and simple types of reference materials, emphasizing specific areas

in which the associate degree library assistant may serve the public directly. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: LS 131; LS 132.

(2) Library Service 232—Applied Library Service (4)

General library service at the associate degree level, as related to various types of libraries, with special emphasis upon the public and special library. Supervised training in appropriate work situations related to the student's individual aptitudes and interests. Lecture 2 hours; Laboratory 4 hours a week. Prerequisite: LS 231.



**DIVISION
OF
NURSING**

(1) Nursing 131—Orientation to Nursing**(1)**

An introduction to the philosophy of nursing care through a study of the history of nursing as well as the trends in nursing with an overview of the ethics, responsibilities and privileges attached to professional practice.

(1) Nursing 132—Fundamentals of Nursing**(6)**

A problem solving approach is used to foster increasing knowledge and application of the principles of safety and comfort in meeting the simple nursing needs of selected patients. Lecture 3 hours; Laboratory 9 hours a week.

(2) Nursing 133—Maternal and Child Health**(8)**

An eight weeks program considering the mother, infant and family as a part of the community as well as care during pregnancy, delivery and post-partal periods. Students will follow a selected mother, infant, and family throughout the semester. Lab experience with selected patients to meet the learning needs of the student.

The last eight weeks are concerned with the care of the child in illness and health with emphasis on his mental, physical, social and emotional needs at various developmental stages; an increasing understanding of medical asepsis. Laboratory experience with selected patients to meet the learning needs of the individual student. Lecture 3 hours; Laboratory 15 hours a week.

**(Summer) Nursing 134—Medical Surgical Nursing
8 weeks (Operating Room)****(3)**

Selected experiences in operating room techniques to increase the student's understanding of and appreciation for surgical asepsis.

sis as well as for the implications of surgical intervention for the patient. Laboratory experience in selected observations and participations as a part of the surgical team. Laboratory 21 hours a week including clinical conferences.

(1) Nursing 231—Psychiatric Nursing**(5)**

Eight weeks course concerned with the contemporary approaches to the prevention and treatment of mental illness. Emphasis is placed upon the use of the student as a member of the psychiatric team in the treatment and rehabilitation of these patients. Laboratory experience with selected patients to meet the learning needs of the student. Lecture 4 hours; Laboratory 18 hours a week.

(1) Nursing 232—Medical Surgical Nursing II**(5)**

Eight weeks concerned with the particular needs of the adolescent and geriatric patient and a beginning understanding of the mental and physical impact of illness upon the patient and his society. A study of the nursing care necessary to the endocrine, metabolic and cardiovascular disorders. Laboratory experience with selected patients to meet the learning needs of the student. Lecture 4 hours; Laboratory 18 hours a week.

(2) Nursing 233—Medical Surgical Nursing III**(8)**

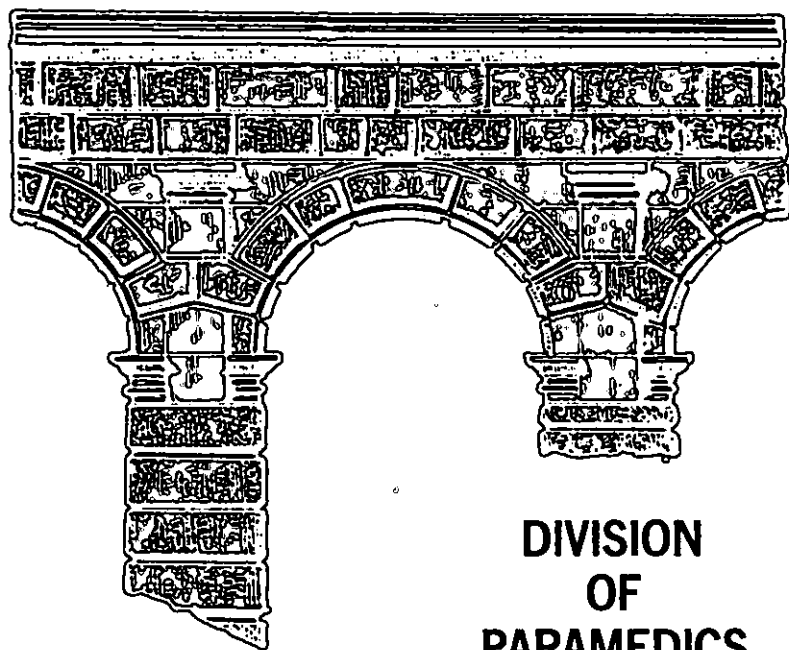
Continuing study of problem solving with patients in medical surgical nursing with emphasis upon diseases of respiratory, neurological, gastrointestinal, muscular, genital-urinary, neoplastic and special sensory systems. Laboratory experience with selected patients to meet the learning needs of the student. Lecture 4 hours; Laboratory 12 hours a week.

(Summer)	Nursing 234—Medical Surgical	(10)
8 weeks	Nursing IV	

A study of the more complex problems of nursing including medical surgical emergencies, disaster nursing (including atomic) and legal aspects of nursing care. Laboratory experiences with selected patients to meet the learning needs of the student. Lecture 4 hours; Laboratory 18 hours a week.

(Summer)	Nursing 235—Seminar	(4)
8 weeks		

Independent study program in which historical, social, legal and scientific impacts upon nursing are discussed along with the responsibilities and privileges of the professional nurse. Lecture 4 hours a week.



**DIVISION
OF
PARAMEDICS**

DENTAL ASSISTING

(1) Dental Assisting 130—Dental Science (4)

The role of the dental assistant in modern dental practice; basic and general science related to dentistry; science and studies in the field of dentistry; growth and development of teeth; head and face anatomy; oral pathology. Lecture 3 hours; Laboratory 2 hours a week.

(1) Dental Assisting 131—Dental Anatomy (3)

Tooth anatomy and function; reproduction of tooth form in carving and drawing relationship of the teeth in their respective arches. Lecture 2 hours; Laboratory 3 hours a week. Prerequisite: Dental Assisting 130.

(2) Dental Assisting 132—Dental Materials (4)

General chemical and physical properties of dental materials; methods and techniques used to prepare materials for use; classification of drugs used in dentistry. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Dental Assisting 131.

(2) Dental Assisting 133—Dental Office Practice (3)

General office routine, receptionist and secretarial duties, general bookkeeping, insurance forms, prepaid plans, clinical record keeping. Prerequisite: Dental Assisting 132.

(1) Dental Assisting 230—Dental Prosthetics (2)

Assistant's duties in the dental laboratory procedure for constructing removable dental appliances. Lecture 1 hour; Laboratory 2 hours a week. Prerequisite: Dental Assisting 133.

(1) Dental Assisting 231—Dental Roentgenology (2)

Production and projection of radiation; operation and care of standard X-ray equipment; techniques of dental roentgenography;

types and scope of X-ray examination; chemistry and techniques for film processing. Lecture 1 hour; Laboratory 2 hours a week. Prerequisite: Dental Assisting 230.

(1) Dental Assisting 232—Dental Operator Procedures (5)

Theory and care of dental equipment and instruments, chair-side assisting for restorative and surgical operations; treatment of dental emergencies. Lecture 3 hours; Laboratory 6 hours a week. Prerequisite: Dental Assisting 231.

(2) Dental Assisting 233—Dental Office Management (3)

Laws governing dental practices; processing of dental records, withholding tax reports; collection of accounts; maintenance of supplies; dental health education. Lecture 2 hours; Laboratory 3 hours a week. Prerequisite: Dental Assisting 232.

(2) Dental Assisting 234—Dental Prosthetics (2)

Assistant's duties in the dental laboratory procedure for constructing fixed and semifixed appliances. Lecture 1 hour; Laboratory and Theory 2 hours a week. Prerequisite: Dental Assisting 233.

(2) Dental Assisting 235—Dental Operatory Practice (2)

Theory and techniques for chairside assisting in specialized dental practice; practice for general proficiency. Lecture 1 hour; Laboratory 2 hours a week. Prerequisite: Dental Assisting 234.

(2) Dental Assisting 236—Dental Clinical Practice (4)

Practical experience under supervision of dentists and the opportunity to observe techniques used in the field of dentistry. Class study of typical problems and student reports give opportunity to share knowledge gained in clinical experience. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Dental Assisting 235.

MEDICAL SECRETARY

(2) Medical Technology 130—Basic Health Technology (3)

A technical course which crosscuts the major health technology specialities; orientation to health service resources, team relationships, health field ethics, how diseases are treated and therapeutic techniques related to health care. Introduction to medical terminology and medical records.

(1) Medical Technology 230—Terminology and Basic Medical Science (3)

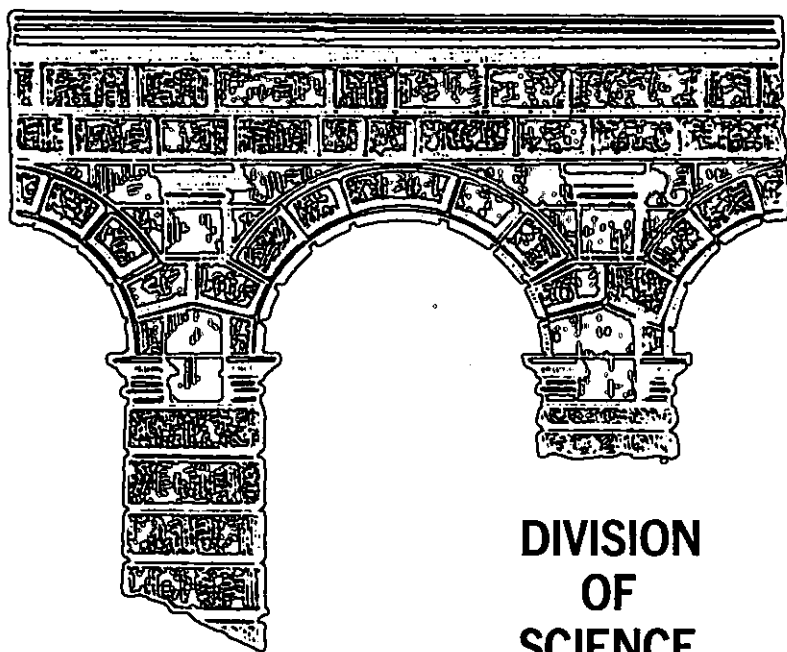
A course designed to familiarize students with medical vocabulary and terminology and use of abbreviation, suffixes and combining forms. They will gain a working knowledge, both written and oral, of medical language, and become familiar with equipment and instruments. Skill and accuracy in filling out the variety of medical forms found in the usual medical office are further objectives. Prerequisite: Medical Technology 130.

(2) Medical Technology 231—Treatment and Examining Room Care (3)

A course in which students are introduced to the role of the doctor's office assistant in the treatment and examining room. They will gain understanding of general and specific examinations, tests, and treatments; of the duties of the receptionist, and their responsibilities in relation to medical ethics and public relations. Prerequisite: Medical Technology 230.

(2) Medical Technology 232—Medical Records Practicum (6)

Practical experience in the medical records department in a community hospital under supervision of Registered Record Librarians. Prerequisite: Medical Technology 230. Fifteen hours a week clinical experience.



**DIVISION
OF
SCIENCE
AND
MATH**

CULINARY ARTS

(1) Culinary Arts 131—Food and Beverage Purchasing, Receiving, Storage, and Distribution (5)

A comprehensive study of inventory taking, ordering, developing food specifications, government and related food standards, competitive bidding, best buys, negotiating contracts with vendors, checking deliveries against orders, proper storage, various methods of distribution to production and serving areas. Combined lecture and laboratory, 3 hours a day, 5 days a week.

(2) Culinary Arts 132—Elementary Food Preparation (5)

An introduction to the principles and techniques of quantity cookery; maintenance of sanitation, efficient and economical selection of equipment, planning and preparing raw materials, serving promptly, attractively, graciously. Combined lecture and laboratory, 3 hours a day, 5 days a week. Prerequisite: Culinary Arts 131.

(1) Culinary Arts 231—Advanced Food Preparation (5)

A continuation of elementary food preparation with emphasis on menu planning, nutritive values, format, type of customer, time and equipment limitations, cost of production and serving and more elaborate quantity cookery. Combined lecture and laboratory, 3 hours a day, 5 days a week. Prerequisite: Culinary Arts 132.

(2) Culinary Arts 232—Food Production Supervision (5)

Problems relating to supervision: leadership development, training line workers, food, supply, and labor cost controls; personnel and food production scheduling; comparison of commercial, school, industrial and institutional food service programs. Combined lecture and laboratory, 3 hours a day, 5 days a week. Prerequisite: Culinary Arts 231.

DRAFTING

(1, 2) Drafting 130-131—Technician Drafting (2)

This course is specifically designed for students enrolled in technical programs (other than Drafting) to familiarize them with the techniques used in drafting. Emphasis is placed on interpretation of industrial prints and not on skill in developing structural or mechanical drawings. Lecture 1 hour; Laboratory 3 hours a week.

(1) Drafting 132—Basic Drafting (4)

This is a beginning course for students who have had little or no previous experience in drafting. The principal objectives are basic understanding of orthographic projection; skill in orthographic, axonometric, oblique and perspective sketching and drawing; lettering fundamentals and techniques; experience in using handbooks and other resource materials; and development of ability to think in three dimensions. A.S.A. and government standards are used and interpretation of industrial sketches and prints is introduced when feasible to emphasize accepted industrial drawing practices. Lecture 2 hours; Laboratory 6 hours a week.

(2) Drafting 133—Intermediate Drafting (3)

The instructional units provide additional understanding of drafting problems, skills and techniques that are essential to the work of the draftsman; emphasize design application and the depth of background knowledge needed to carry out drafting and design functions; and introduce several specialized drafting areas that are equally valuable in preparation for the designer. This course includes the details and assemblies of machine parts, gears and cams, jigs and fixtures, descriptive geometry, drawing room standards and reproduction of drawings. The student is assigned work which requires him to make complete and accurate detail and assembly drawings. Lecture 1 hour; Laboratory 6 hours a week. Prerequisite: Math 131 and Drafting 132.

(2) Drafting 134—Structural Drafting**(3)**

A course dealing with the study of the development of structural steel shapes; a study of A.E.S.C. Standards and Specifications, and designing and detailing structural members and connections, including structural steel, pipe, and concrete reinforcing rods.

(1) Drafting 135—Pipe Drafting**(3)**

This course deals with the study of A.S.M.E. Standards, Pipe and Fittings, Symbols and Specifications. Problems dealing with the designing and detailing of pipe systems, flow diagrams, heat exchangers, vessels, compressors, pumps and mechanical equipment.

(1) Drafting 136—Geological and Land Drafting**(3)**

This course involves study of symbols, abbreviations, classifications, scales, types of maps, cartographic and topographic maps, petroleum and geophysics maps, and application of drawing techniques to land surveying, including boundaries, roads, buildings, elevations, plan and profile sheets and cross sections. Platting surveyor's notes, traverses, plot plans and plats.

(1) Drafting 231—Electronic Drafting**(3)**

An introduction to the use and application of electronic components and apparatus, and the techniques of representing these principles graphically to provide better understanding and communication between the design draftsman and the electronics engineer. Subject matter presents a broad coverage of components, materials, graphic symbols, standards, industrial diagrams, logic diagram, wiring harnesses, printed circuits, reference designations, and electronic equipment design. Broad coverage is given to military electronic equipment specifications and design, solid-state component packaging, and the multilayer printed wiring boards. Lecture 1 hour; Laboratory 6 hours a week. Prerequisite: Math 132 and Drafting 132.

(1) Drafting 232—Production Illustration**(4)**

This course presents the methods of converting orthographic blueprints into three-dimensional drawings which are used in industry as a representative picture of an object — also those illustrations used in handbooks, reports, and proposals relating to military or commercial equipment, including such items as graphs, charts, photos, block diagrams, mechanical and optical schematics as well as those illustrations used for installation, operation, maintenance, parts procurement, winning of contracts and reporting of research projects. Lecture 2 hours; Laboratory 6 hours a week. Prerequisites: Math 131 and Drafting 133.

(2) Drafting 233—Machine and Tool Design**(4)**

This course consists of the applications of the principles of physics, statics, strength of materials and physical properties of materials to the design of machine elements. Factors considered are function, environment, production problems and cost. Practical application of design principles in graphic form. Lecture 2 hours; Laboratory 6 hours a week. Prerequisites: Math 132, Drafting 133, Physics 132, Engineering 230, and Engineering 132.

*ELECTRONICS TECHNOLOGY***(1) Electronics Technology 130—D.C. Circuits and
Electrical Measurements****(4)**

This course combines theory and laboratory fundamentals in electricity and direct current circuits. Elementary principles of magnetism, electrical concepts and units, diagrams, resistance, electro-magnetism, series and parallel circuits, simple meter circuits, conductors and insulators will be emphasized. The course also includes report writing, job description and cost estimating. Lecture 3 hours; Laboratory 3 hours a week.

(2) Electronics Technology 131—A.C. Circuit**(4)**

This course is devoted to the study of fundamental theories of alternating currents and their application in various circuits.

Laboratory experiments will include power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, and capacitance, magnetism and resistance. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Electronics Technology 130.

(1) Electronics Technology 230—Electron Tubes, Transistor Theory and Application (4)

A basic study of electron tubes under static and dynamic conditions will be stressed. Laboratory experiments will be conducted over diodes, triodes, characteristic curves of a triode, amplification factor, plate resistance, voltage amplification per stage, tetrodes, pentodes, and beam power tube. Modern electron and semiconductor theory of transistors will be explored in regard to their characteristics and circuit design. The theory will include chemical properties as well as electrical changes in the transistor. Simple circuits will be designed and tested in the laboratory. Also included will be a unit which surveys atomic structures, periodic classifications of elements, compound formations, chemical calculations, properties of gases, liquids and solids, equilibrium and types of chemical reaction. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Electronics Technology 131.

(1) Electronics Technology 231—Special Circuits (4)

Electronics circuits and devices are analyzed and discussed from the utilization standpoint. Transformers, magnetic amplifiers, regulated power supplies, feed back control systems and relays will be explored in view of circuit designs. Switching circuits will be designed and proven. A fundamental unit will be offered in semiconductors, rectifier circuits, lead currents, filtering networks, current-voltage wave forms, and voltage regulator circuits. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Electronics Technology. 131.

(2) Electronics Technology 232—Network Analysis and Transmission Lines (4)

A general course in circuit analysis designed to correlate and generalize concepts in circuit analysis to which the student has been exposed previously. Specific topics such as maximum power transfer conversions, Thevenin's and Norton's Theorems, Superposition Theorem, Maxwell's mesh-current solutions, Node, Voltage Methods, Z, Y, and H, parameters of 4 terminal linear networks. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Electronics Technology 230-231.

(2) Electronics Technology 233—Industrial and Microwave Electronic Technology (4)

The Microwave Systems portion of the semester work involves a study of U.H.F. and V.H.F. components, circuits and measurement techniques. The course includes the use of distributed constant elements, waveguides, microwave links and an introduction to radar and similar systems.

Industrial Electronics

Time constant and electronic timing circuits; photoelectric controls; synchros and servomechanisms; induction and dielectric heating; radiation detection; applications in the field of industrial control and automation; combining of electrical, electronic, magnetic, and mechanical principles. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Electronics Technology 230-231.

ENGINEERING

(1) Engineering 105—Engineering Graphics (3)

This course has been developed to impart the fundamental theories and concepts of the graphic language considered to be essential to those students desiring to become engineers. Major emphasis is placed on graphical computations, auxiliaries, sections, fastenings, dimensioning and charts and graphs. Lecture 1 hour; Laboratory 6 hours a week.

(2) Engineering 106—Descriptive Geometry**(3)**

This course provides training in the visualization of three dimensional structures, and in accurately representing these structures in drawings by analyzing the true relationships 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 instead of considering each a separate entity. The direct method is used which employs the practical attitude of mind, the vocabulary and the methods used by the professional engineer to visualize and design structures. Lecture 1 hour; Laboratory 3 hours a week. Prerequisites: Engineering 105 or Drafting 132.

(1) Engineering 131—Manufacturing Processes**(2)**

This course is designed to provide a background covering the various manufacturing materials and the fundamental types of manufacturing methods as employed in cold working processes. Through lecture, demonstration, and practical applications the student is given the opportunity to become familiar with the various types of machine tools, tooling, measuring and inspection procedures. Automation is introduced and information is presented to acquaint the student with the modern practices of numerical control for machine tools and the uses of transfer and special machines. Lecture 2 hours; Laboratory 3 hours a week.

(2) Engineering 132—Manufacturing Processes**(2)**

This course is designed to provide a background covering the various manufacturing materials and the fundamental types of manufacturing methods as employed in hot working processes. Through lecture, demonstration, and discussion, the student becomes familiar with the various types of welding processes and their applications, with special machining operations such as ultrasonic, electrical discharge, electroarc, and chemical milling, and

with bonding practices and the use of adhesives in modern manufacturing. Some emphasis is also given to metallurgical practices and procedures. Practical experience is gained by the student in performing simple arc and oxyacetylene welding operations, in producing simple molds, cores, and casting, and in basic heat treating, inspection, and testing, using both destructive and nondestructive methods. Lecture 2 hours; Laboratory 3 hours a week. Prerequisites: Engineering 131, Math 131 and Physics 132.

(1) Engineering 230—Statics and Dynamics (3)

This is a study of force and force systems, resultants and components of force systems, forces due to friction, conditions of equilibrium, forces acting on members of trusses and frame structures, centroids and moments of inertia. Using both analytical and graphical application to the solution of problems. Lecture 2 hours; Laboratory 3 hours a week. Prerequisite: Math 132.

(2) Engineering 231—Strength of Materials (3)

The subject matter deals with the analysis of stresses in machine elements due to various loadings. Axial stresses and strains at a point, stress-strain relationships in elastic bodies and the tension, compression, shear, bending, torsion and combined loadings which produce them. Studies are included in shear and bending moment diagrams, and riveted and welded connections. Laboratory experience involves use of the various physical testing machines and interpretation of resultant data. Lecture 2 hours; Laboratory 3 hours a week. Prerequisites: Math 132, Physics 132 and Engineering 230.

HOME ECONOMICS

(1) Home Economics 101—Design (3)

A study of the fundamental principles of art, design, and color as a basis for developing originality and art appreciation. Projects provide for the development of creative abilities by the application of these principles to clothing and the home. Lecture 2 hours; Laboratory 3 hours a week.

(2) Home Economics 102—Food Selection and Preparation (3)

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, time and methods required for preparation. Laboratory experiences provide for 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. Lecture 2 hours; Laboratory 3 hours a week.

(2) Home Economics 110—Clothing Design (3)

Design and color applied to the costume. Lecture 2 hours; Laboratory 3 hours a week.

MATHEMATICS

(1, 2) Math 101—College Algebra (3)

Introduction to set operations, inequalities, absolute values, coordinate systems, functions, systems of equations, determinants, inverse functions, exponential and logarithmic functions, complex numbers, binomial theorem. Prerequisite: Two years of high school algebra or GSM 093.

(1, 2) Math 102—Plane Trigonometry (3)

Angular measure, functions of angles, derivations of formulae, identities, solution of triangles, equations, inverse functions, complex numbers. Prerequisite: Math 101 (Math 101, 102 may be taken concurrently with consent of division chairman.)

(1, 2) Math 115-116—College Mathematics (3) (3)

A comprehensive modern treatment of the elements of mathematics for the liberal arts student. Emphasis is placed on mathematics as being a deductive science. The cultural effects of mathematics on our civilization and its role in communication are also major themes of the course. Prerequisite: One year high school algebra and one year high school geometry.

(1, 2) Math 121—Analytic Geometry (3)

Introduction to real numbers, distance, the straight line, the circle, conics, transformation of coordinates, polar coordinates, parametric equations, three-dimensional space. Prerequisite: GSM 099, Math 101 and 102, or consent of division chairman.

(1, 2) Math 122—Calculus (3)

Functions, limits, differentiation of algebraic functions and applications, maxima and minima, anti-derivatives, the definite integral. Prerequisite: Math 121 or consent of division chairman.

(1, 2) Math 130—Business Mathematics (3)

Simple and compound interest, bank discount, payrolls, taxes, insurance, markup and markdown, corporate securities, depreciation, purchase discounts. Prerequisite: GSM 091 or equivalent. Considerable skill in arithmetic is required.

(1) Math 131—Technical Mathematics (3)

A course designed for technical students covering a general treatment of arithmetic, a treatment of the basic concepts and the fundamental facts of plane and solid geometry, computations with the slide rule, units and dimensions, a treatment of the terminology and concepts of elementary algebra, functions, coordinate systems, solution of linear and quadratic equations, solution of systems of simultaneous equations, stated problems, determinants, progressions and the binomial theorem. Prerequisite: One year of high school algebra or consent of technical advisor.

(2) Math 132—Technical Mathematics (3)

A course for technical students which includes a study of the following: the trigonometric functions of angles, the trigonometric identities, inverse trigonometric functions, arc length, graphs of the trigonometric and inverse functions, trigonometric equations, complex numbers, logarithms, vectors, and the solution of triangles. Prerequisite: Math 131.

(1, 2) Math 139—Applied Mathematics (3)

Commercial, technical, and simpler 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. Prerequisite: GSM 091, or equivalent.

(1, 2) Math 202—Business Statistics (3)

Methods of collecting, analyzing, and presenting numerical data for business purposes; frequency distributions; averages, index numbers; dispersion; correlation; time series. Prerequisite: Math 132.

(1, 2) Math 223—Calculus (3)

Applications of the definite integral, transcendental functions, techniques of integration, improper integrals, indeterminate forms, infinite series. Prerequisite: Math 122.

(1, 2) Math 224—Calculus (3)

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

PATTERN DRAFTING AND DRAPING

(1) Pattern Drafting and Draping 130 (2)

Fundamentals —Lecture, discussion, demonstration of basic techniques in drafting and draping basic patterns, slopers and master block patterns. These fundamentals are taught in conjunction with the laboratory work. These two courses PDD 130-131 are taught concurrently and meet 15 hours a week.

(1) Pattern Drafting and Draping 131 (3)

Laboratory—Student learns to draft and drape the basic patterns in a laboratory. The techniques of learning slopers and master blocks are developed with the use of the latest apparel industry equipment. These two courses PDD 130-131 are taught concurrently and meet 15 hours a week.

(2) Pattern Drafting and Draping 132**(2)**

Fundamentals—Lectures, discussions and demonstrations of basic patterns in misses sizes. Techniques in developing collars, skirts, slacks, sleeves as well as dresses. These two courses PDD 132-133 are taught concurrently and meet 15 hours a week. Prerequisite: PDD 130-131.

(2) Pattern Drafting and Draping 133**(3)**

Laboratory—Student learns to draft and drape to develop basic patterns in collars, skirts, slacks, sleeves and dresses in misses sizes. These two courses PDD 132-133 are taught concurrently and meet 15 hours a week. Prerequisite: PDD 130-131.

(1) Pattern Drafting and Draping 135—Textiles**(3)**

A study of fibers, fabrics, and finishing processes to familiarize the student with the terms and processes common to the apparel market.

(1) Pattern Drafting and Draping 230**(2)**

Advanced—Lecture, discussion, demonstration of patterns for various kinds of clothing manufacturers. For example, children, sub-teen, Junior petite, Junior, active sportswear, misses and half sizes. These two courses PDD 230-231 are taught concurrently and meet 15 hours a week. Prerequisite: PDD 132-133.

(1) Pattern Drafting and Draping 231**(3)**

Laboratory—Student learns drafting and draping techniques to develop patterns for children's clothing, sub-teen, Junior petite, Junior, active sportswear, misses and half sizes. These two courses PDD 230-231 are taught concurrently and meet 15 hours a week. Prerequisite: PDD 132-133.

(2) Pattern Drafting and Draping 232**(2)**

Advanced—Lecture, discussion, demonstration in patterns for various kinds of clothing manufacturers. For example, lingerie, formal dresses, suits. Techniques are developed for speed in pattern drafting. These two courses PDD 232-233 are taught concurrently and meet 15 hours a week. Prerequisite: PDD 230-231.

(2) Pattern Drafting and Draping 233**(3)**

Laboratory—Student learns by drafting and draping to make patterns for various kinds of clothing manufacturers. For example, lingerie, formal dresses, suits. Techniques are developed for speed in pattern drafting. These two courses PDD 232-233 are taught concurrently and meet 15 hours a week. Prerequisite: PDD 230-231.

PHYSICAL EDUCATION AND HEALTH

(1, 2) Physical Education 101—Fundamentals of Health (3)

Fundamentals of health, dealing with personal hygiene and healthful living.

(1, 2) Physical Education 110—Recreation**(2)**

Principles, organization, and functioning of recreation in the American society.

**(1, 2) Physical Education 144—Orientation and
Introduction to Physical Education****(3)**

This course is designed as a professional orientation in physical education, safety and recreation. History, philosophy and modern trends of physical education, teacher qualification, vocational opportunities, expected competencies, and skill testing.

(1) Physical Education 235—The Coaching of Football (2) and Basketball

The theory and practice of football and basketball coaching.

(2) Physical Education 257—Standard and Advanced (2) Course in First Aid and Safety Education

The theory and practice in the Standard and Advanced Courses of the American National Red Cross in first aid and home and farm safety.

PHYSICAL EDUCATION ACTIVITY

Physical Education 120 M	Bowling	(1)
Physical Education 120 W	Bowling	(1)
Physical Education 121	Dance	(1)
Physical Education 122 M	Gymnastics	(1)
Physical Education 122 W	Gymnastics	(1)
Physical Education 123 M	Swimming	(1)
Physical Education 123 W	Swimming	(1)
Physical Education 124 M	Tennis	(1)
Physical Education 124 W	Tennis	(1)
Physical Education 125 M	Weight Training	(1)
Physical Education 125 W	Figure Training	(1)
Physical Education 126	Body Mechanics	(1)

*SCIENCE***(1, 2) Biological Science 115-116 (3) (3)**

A presentation of selective principles in biological science for the non-science major, including the cell concept, the organization of multi-cellular systems, plants and animals as organized systems, and man in relation to his environment. Lecture 3 hours; Laboratory 2 hours a week.

(1) Biology 131—Comparative Human Anatomy and (4) Physiology

This course is designed to develop an understanding of the anatomical features and the basic physiological functions of the

body systems. Lecture 2 hours; Laboratory 4 hours a week. (For Associate Degree Nursing Program)

(2, Summer) Biology 132—Microbiology (3)

This course is designed to develop an understanding of the life processes of the microorganisms and the methods by which these may be controlled. Special emphasis is placed upon those which exert an influence on man. Lecture 2 hours; Laboratory 2 hours a week.

(1) Botany 101—General Botany (4)

A general survey of the non-vascular plants with emphasis on the structure, function, taxonomy, and their economic importance to man. Lecture 3 hours; Laboratory 3 hours a week.

(2) Botany 102—General Botany (4)

A general survey of the vascular plants with emphasis on the structure, function, taxonomy and their economic importance to man. Lecture 3 hours; Laboratory 3 hours a week.

(2) Microbiology 216—General Microbiology (4)

A study of microbiology and pathology from the standpoint of cause, symptoms and disease prevention. Basic principles of immunological responses by the body in relation to visible pathological symptoms will be stressed as well as emphasis on proper laboratory techniques. Lecture 3 hours; Laboratory 3 hours a week.

(1, 2) Chemistry 101—General Chemistry (4)

This course includes the laws and theories dealing with the structure and interactions of matter and the use of these principles in explaining physical states and changes of state, chemical bonding, chemical reactions, and the properties of solutions. The application of basic principles in solving quantitative problems is stressed. Lecture 3 hours; Laboratory 3 hours; 1 hour problem session a week. Prerequisite: GSM 091 or equivalent.

(1, 2) Chemistry 102—General Inorganic Chemistry (4)

This course continues the fundamental approach of Chemistry 101 to include ionic solutions, chemical kinetics and equilibrium, electrochemistry, and nuclear reactions. The chemical properties of hydrogen and oxygen and of various families of elements are also discussed with the bulk of the laboratory time devoted to the systematic qualitative analysis of inorganic cations and anions. Lecture 3 hours; Laboratory 3 hours; 1 hour problem session a week.

(2) Chemistry 131—Production Chemistry (4)

A continued study of the fundamentals of inorganic chemistry with emphasis on industrial applications. The course includes the study of equilibrium, nuclear changes, metals and metallurgy, electrochemistry, oxidation-reduction, qualitative separation and identification of inorganic elements and compounds. An introduction to the theory of gravimetric and volumetric analysis will be included. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Chemistry 101.

(2) Chemistry 135—Chemistry of Flammable Materials (3)

Enrollment 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 required.

(1) Chemistry 201—Organic Chemistry (4)

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,

stereochemistry, transition state theory and technique of organic synthesis. Lecture 3 hours; Laboratory 4 hours a week. Prerequisite: Chemistry 101-102.

(2) Chemistry 202—Organic Chemistry (4)

A continuation of Chemistry 201 with emphasis on polyfunctional compounds including amino acids, proteins, carbohydrates, sugars, heterocyclic and related compounds. Lecture 3 hours; Laboratory 4 hours a week. Prerequisite: Chemistry 201.

(1) Chemistry 203—Quantitative Inorganic Analysis (4)

This course includes the fundamentals of gravimetric and volumetric analysis with an introduction to colorimetry. The laboratory includes sufficient gravimetric work to develop good technique but places primary emphasis on volumetric and instrumental analyses. Lecture 2 hours; Laboratory 6 hours a week. Prerequisite: Chemistry 101, 102; Math 101.

(2) Chemistry 205—Principles of Chemistry (3)

This course presents an extended treatment of fundamental topics including atomic structure and bonding, modern acid-base theory, kinetic theory and its applications and chemical kinetics and equilibrium together with one application of these to problem solving. Lecture 3 hours; no laboratory. Prerequisite: Chemistry 101, 102; Math 101.

(1, 2) Chemistry 231-232—Production Chemistry (4)

An introductory course in organic chemistry dealing with the analysis of organic compounds, their reactions, nomenclature, classification, synthesis and application to modern industrial processes. The student is introduced to current industrial, organic, analytical and synthetic procedures. Lecture 3 hours; Laboratory 4 hours a week. Prerequisite: Chemistry 131.

(1) Chemistry 233—Unit Operations I (4)

Primarily a laboratory course designed to introduce the student to modern industrial processes and bench scale equipment. The student is also introduced to modern techniques of analytical chemistry. Laboratory work will include gravimetric and volumetric chemical analysis, the use of infrared, ultraviolet, and gas chromatography as industrial analytical tools, and problems associated with converting from bench scales processes to pilot plant operations. Lecture 2 hours; Laboratory 6 hours a week. Prerequisite: Chemistry 101, 131.

(2) Chemistry 234—Unit Operations II (4)

A continuation of Unit Operation I with emphasis on pilot plant operations and experiments. Discussed also will be industrial methods for evaporation, distillation, solvent extraction, filtration, crushing and grinding procedures, polishing, electroplating, and related subjects. Course will also include field trips to local production facilities (petrochemical, food and drug, electronic, aerospace, etc.) Lecture 2 hours; Laboratory 6 hours a week. Prerequisite: Chemistry 233.

(1) Geology 105—Physical Geology (3)

A study of geologic processes; the origin and wise use of local soil and of building materials; the effects of wind and water erosion, of ice, earthquakes, and volcanoes. Not a laboratory science but a cultural course in which common rocks, minerals, and metals are seen in the field and demonstrated in the classroom.

(2) Geology 106—Historical Geology (3)

The evolutionary process of life, including man, as revealed in the rocks; an introduction to the vast time element in the creation of the world as known today; the various geologic periods and processes in which minerals, such as iron ore, coal, and petroleum

and organic forms, including plants, animals, and man, have developed. Not a laboratory science, but fossils of various periods are demonstrated in the field and in the classroom.

(1, 2) Physical Science 115-116**(3) (3)**

A survey of the physical sciences for the non-science major, with emphasis on the fundamental principles and important developments in astronomy, physics, chemistry and geology. Lecture 3 hours; Laboratory 2 hours a week.

(1, 2) Physics 131-132—Applied Physics**(3) (3)**

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. Lecture 3 hours; Laboratory 2 hours a week. Prerequisite: High school algebra and trigonometry or equivalent, or consent of division chairman.

(1) Physics 201—General Physics**(4)**

Principles and applications of mechanics, wave motion and sound, emphasizing fundamentals, concepts, problem solving, notation and units. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Credit or current registration in Math 122.

(2) Physics 202—General Physics**(4)**

Principles and applications of heat and electricity and magnetism, emphasizing fundamentals, concepts, problem solving, notation and units. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Physics 201.

(1, 2) Science 131-132—Survey of Science**(3) (3)**

An overview of the contribution of science to the welfare of man. Draws from both the physical and the biological sciences. Major concepts are developed historically and supported by factual data from the appropriate discipline.

(1) Zoology 101—Invertebrate Zoology (4)

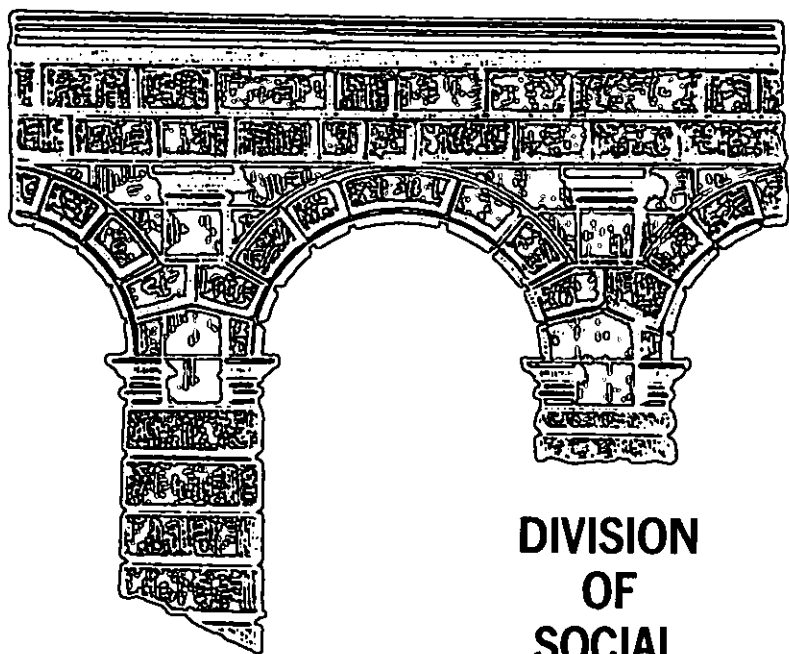
A survey of the invertebrates with emphasis on morphology, physiology, relationships and classification. A review of the phyla below the Chordates with emphasis on the higher invertebrates and their biological significance to man. Lecture 3 hours; Laboratory 3 hours a week.

(2) Zoology 102—Vertebrate Zoology (4)

A brief survey of the lower vertebrates and their relationship and significance to higher vertebrates. Special attention is given to structure and physiology of animals, distribution, development, and adaptation, with considerable time spent on man. Lecture 3 hours; Laboratory 3 hours a week.

(2) Zoology 215—Human Anatomy and Physiology (4)

A detailed study of the structure and function of the human body. Emphasis will be on the interrelationship of the various systems and their significance to the body. Lecture 3 hours; Laboratory 3 hours a week. Prerequisite: Botany 101-102 or Zoology 101-102.



**DIVISION
OF
SOCIAL
SCIENCE**

ANTHROPOLOGY

(1, 2) Anthropology 101—Cultural Anthropology (3)

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

BIBLE

(1) Bible 101—Old Testament History (3)

A nonsectarian, historical study of the Hebrew people, their literature, and their religious concepts from the earliest known period to the time of Christ. Emphasis is placed upon developing a general knowledge of the major personalities of the Old Testament along with a working continuity of Hebrew history.

(2) Bible 102—New Testament History (3)

A brief survey of the Christian movement in the Mediterranean world during the first century. The life of Christ, the beginning of the Christian church, the life and letters of Paul and the general development of the New Testament as considered from a non-sectarian historical viewpoint.

CULINARY ARTS—HISTORY

(1) Culinary Arts 133—History and Development of Restaurants (3)

Tracing the history from the small inns and independents to the large luxuriant restaurants and restaurant chains of today; a broad generalization covering the fundamentals of sanitation, food quality, service refinements, atmosphere, employer-employee relations, safety, promotions, and public good will.

ECONOMICS

(1, 2) Economics 201—Principles of Economics (3)

A survey of the fundamental principles of economics. Particular attention is paid to factors of production, price determination,

distribution of income and money and banking. Sophomore standing recommended.

(1, 2) Economics 202—Principles of Economics (3)

An analysis of current economic developments, including labor-management relations and agricultural problems. In addition, emphasis is placed on a study of public finance, national income, comparative economic systems and international economics. Sophomore standing recommended.

FIRE PROTECTION TECHNOLOGY (FPT)

(1) FPT 131—Introduction to Fire Protection (3)

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 possible solutions for current and future fire protection.

(2) FPT 132—Fire Prevention Theory and Application (3)

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. Prerequisite: FPT 131.

(1, 2) FPT 133—Fire Operations Strategy (3)

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 predicting fire severity. Emphasis will be placed on the development of thinking skills in relation to crisis.

(1, 2) FPT 135—Introduction to Fire Administration (3)

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; and discussion of the proper ways to handle personnel problems, grievances and employee suggestions.

(2) FPT 136—Fire Investigation and Arson**(3)**

The fireman's role in arson investigations; 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.

(1) FPT 231—Fire Protection Through Building Construction**(3)**

Building codes and their necessity to fire protection; common concepts in building construction; elimination of 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. Prerequisite: Sophomore standing.

(2) FPT 232—Protection Systems in Industry**(3)**

Attitudes prevalent in industry toward fire protection; development of fire and safety organizations in industry; relationships 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. Prerequisite: Sophomore standing.

*GEOGRAPHY***(1, 2) Geography 101—World Geography: Physical (3)**

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.

(1, 2) Geography 102—World Geography: Economic (3)

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

*GOVERNMENT***(1, 2) Government 201—American Government (3)**

An introduction to the study of political science; origin and development of the United States Constitution; federal-state and inter-state relations; civil liberties and rights; the dynamics of politics. Special emphasis is given to the constitution, governmental institutions and political processes in Texas. Prerequisite: Sophomore standing.

(1, 2) Government 202—American Government (3)

A study of the three branches of the national government; public policy; foreign relations and national defense; governmental services and functions in Texas and metropolitan areas. Prerequisite: Government 201.

(1) Government 231—Municipal and County Government (3)

A study of the governmental structure of the municipality and county; including organs of government, administration, court system, taxation, utilities and public works, education, welfare and other public services. Presentations by local officials and surveys of area problems are stressed.

HISTORY

(1, 2) History 101—History of the United States (3)

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 1865.

(1, 2) History 102—History of the United States (3)

A survey of the unfolding of United States History from the Reconstruction Era after the Civil War to the present day. The study includes social, economic and political aspects of American life and follows the development of the United States as a world power. Prerequisite: History 101 recommended.

(1, 2) History 105—Western Civilization (3)

A survey of the background for development of civilization in the West from ancient times 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.

(1, 2) History 106—Western Civilization (3)

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

POLICE SCIENCE (POL)

(1, 2) POL 130—Introduction to Criminology (3)

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.

(1, 2) POL 131—Police Administration (3)

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

(1) POL 132—Criminal Law (3)

A survey of substantive criminal law; the laws of arrest, search and seizure; interrogation, confessions and signed statements; the nature of due process.

(1, 2) POL 133—Police Supervision (3)

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.

(2) POL 134—Criminal Law (3)

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

(1, 2) POL 136—Patrol and Traffic Functions (3)

A broad study of police patrol and traffic duties and responsibilities, including policies and procedures.

(1) POL 231—Criminal Investigation**(3)**

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. Prerequisite: Sophomore standing.

(2) POL 233—Forensic Sciences**(3)**

The study of general criminalistics, including scientific methods and devices used in the examination of evidence. Prerequisite: POL 231.

(2) POL 238—Delinquency Prevention and Control**(3)**

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. Prerequisite: Sophomore standing.

PSYCHOLOGY

(1,2) Psychology 105—Introduction to Psychology**(3)**

A study of basic problems and principles of human experience and behavior; heredity and environment, the nervous system, motivation, learning, emotions, thinking, and intelligence.

(2) Psychology 201—Human Growth and Development**(3)**

A study of human growth, development and behavior, emphasizing the physiological and psychological changes which occur during the life pattern. The processes of life from prenatal beginnings to adulthood are treated in an integrated manner. Due attention is given to aging and its place in the developmental sequence.

(1, 2) Psychology 205—Psychology of Personality (3)

A consideration of the important factors involved in successful human adjustment including child-parent relationships, adolescence, anxiety states, mechanisms of defense and psychoanalytic concepts. The course includes a survey of methods of personality measurement.

(1) Psychology 231—Applied Psychology (3)

Basic problems of psychological development, facts and theories of human behavior. Consideration is given the individual both as a social and biological organism. Particular attention is paid to adjustment problems, public opinion and group psychology.

(2) Psychology 236—Group Psychology (3)

A consideration of the psychological factors in propaganda, social control, mob action, leadership, group functioning, measurement of public opinion, social status, and the sources of attitudes. Prerequisite: Psychology 231.

SOCIAL SCIENCE

(1, 2) Social Science 131-132—American Civilization (3) (3)

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 required that these courses be taken in order: 131, 132.

(1, 2) Social Science 135—Human Relations (3)

A study involving the direct application of psychological principles to human relations problems in business and industry. Con-

sideration 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.

SOCIOLOGY

(1, 2) Sociology 201—An Introduction to Sociology (3)

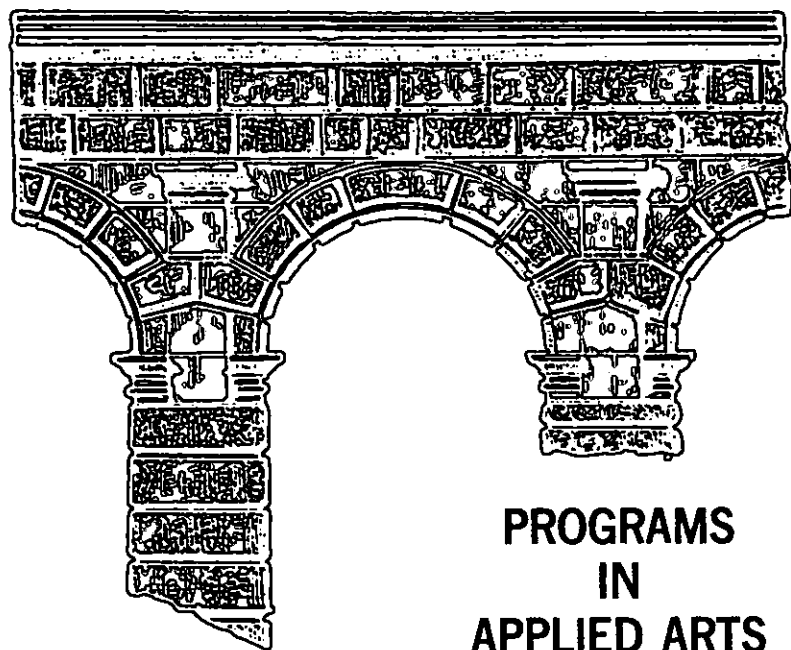
An inquiry into the nature of society and the foundations of group life, including institutions, with a broad presentation of the bases of social change, processes and problems.

(1, 2) Sociology 202—Social Problems (3)

A study of the background, emergence and scope of current group relationships in our society, emphasizing the following topics as they apply to social adjustment in the family and the total community environment: the effects of crime, physical disability, underachievement and urban-rural dislocation.

(2) Sociology 231—Urban Social Problems (3)

The sociology of urban groups and institutions; urbanization as a process; the inner city; the aspect of the neighborhood. Emphasis is placed on case studies, enabling the student to identify and understand the types of social problems inherent in the metropolitan environment.



**PROGRAMS
IN
APPLIED ARTS
AND
SCIENCES**

APPLIED ARTS AND SCIENCES

El Centro College offers to qualified students a variety of programs in those areas in which there is a demand for competent practitioners. The completion time indicated for each program is based upon a full-time student course load. Part-time students may enter any of these programs, but will require longer to fulfill the requirements of the area of studies.

Associate Degree Nursing

Students entering this program will have 24 months of intensive education consisting of hospital clinical experience and campus classroom and laboratory work.

Suggested Curriculum

Fall Semester	Credit Ho
Nursing 131—Orientation (1 hr. lecture per week)	1
Nursing 132—Fundamentals (3 lecture, 9 lab. per week)	6
English 101—Composition and Expository Writing	3
Psychology 105—Introduction	3
Biology 131—Anatomy and Physiology	4
Physical Ed. 126—Body Mechanics	1
	<hr/> 18
Spring Semester	
Nursing 133—Mat. and Child Health (3 hr. lecture 15 lab./week)	8
English 102—Composition and Literature	3
Psychology 201—Human Growth and Development	3
Chemistry 101—General	4
Phys. Ed.—Elective	1
	<hr/> 19
Summer Semester	
Nursing 134—Med.-Surg. (OR) I (0 Lecture, 24 Lab.)	3
Biology 132—Microbiology	3
Sociology 201—Introduction	3
	<hr/> 9
Fall Semester	
Nursing 231—Psychiatric (4 lecture, 18 lab.)	5
Nursing 232—Med. Surg. II (4 lecture, 18 lab)	5
Government 201—American Government	3
History 101—History of U. S.	3
Physical Ed.—Elective	1
	<hr/> 17

(Continued on next page)

Spring Semester	Credit Hours
Nursing 233—Med. Sur. III (4 lecture, 12 lab)	8
History 102—History of U. S.	3
Humanities—Elective	3
Phys. Ed.—Elective	1
	<hr/>
	15
Summer Semester	
Nursing 234—Medical Surg. IV (4 lecture, 18 lab)	10
Nursing 235—Seminar (4 meetings)	2
Government 202—American Government	3
	<hr/>
	15

Bookkeeping (one year)

The objective of this program is to provide the student with a working knowledge of bookkeeping procedures currently in use in business, to introduce the student to accounting principles supporting bookkeeping procedures, and to give the student practical bookkeeping experience by the use of problem solving.

Suggested Curriculum

Fall Semester	Credit Hours
Communications 131—Applied Composition and Speech	3
Business 131—Bookkeeping	3
Mathematics 130—Business Mathematics	3
Office Practices 131—Office Machines	2
Typing 130 or 131—Beginning or Intermediate Typing	2
	<hr/>
	13
Spring Semester	
Communication 132—Applied Composition and Speech	3
Business 132—Bookkeeping	3
Social Science 135—Human Relations	3
Data Processing 135—Introduction to Data Processing	3
*Elective	3
	<hr/>
	15

*Suggested Electives: Office Practices 130, Business 231, Business 105.

Central Service Technicians

The student in this program will be trained for 16 weeks in hospital service in central service departments, contributing to good patient care. There will be formal classes and laboratory work for the demonstration of equipment and procedures.

Suggested Curriculum

The subject matter for this curriculum covers:

Communication Skills

Psychology

Introduction

Basic Principles of Bacteriology, Asepsis and Antisepsis

Principles and Practices of Sterilization Techniques

Learning Mechanics and Operating Skills of Sterilizing Procedures

Packaging Materials — Principles and Methods

Orientation and Identification

Principles in the Care, Preparation, Sterilization and Storage of Tubing, Tubes, Gloves, Rubber Goods, Plastics, Thermometers and Solutions for Sterilization

Introduction and Orientation to Specialized Equipment Stored, Controlled and Maintained in Central Service

A General Orientation to Safety, Fire and Disaster Programs

Central Service Organization, Staffing, Functions, Records, Reports and Controls

Major Housekeeping Responsibilities in Central Service

Chemical Technology

This program will prepare the student to render direct technical assistance to chemists and engineers in chemical or related research and will familiarize the student with the most modern chemical testing equipment. Experimentation and industrial applications will be emphasized.

Suggested Curriculum

Fall Semester	Credit Hours
Communications 131—Applied Composition and Speech	3
Mathematics 131—Technical Mathematics	3
Social Science 131—American Civilization	3
Chemistry 101—General Chemistry	4
Elective	3
	<hr/>
	16
Spring Semester	
Communications 132—Applied Composition and Speech	3
Mathematics 132—Design Mathematics	3
Social Science 132—American Civilization	3
Chemistry 131—Production Chemistry	4
Elective	3
	<hr/>
	16
Fall Semester	
Chemistry 231—Production Chemistry	4
Chemistry 233—Plant Production (Unit Operations)	3
Physics 131—Applied Physics	3
Humanities 101—Introduction to Humanities	3
Elective	3
	<hr/>
	16
Spring Semester	
Chemistry 232—Production Chemistry	4
Chemistry 234—Plant Production (Unit Operations)	3
Applied Physics 132—Applied Physics	3
Social Science 135—Human Relations	3
Elective	3
	<hr/>
	16

*Of the twelve hours of electives the student will select from basic electronics, or instrumentation electronics.

Culinary Arts

This program is designed to acquaint the student with all phases of kitchen operation, including actual experience in purchasing, storing and distributing raw materials to the respective preparation areas, food production, efficiency and finesse in serving, proper use and maintenance of equipment, high sanitation standards and effective scheduling of workers.

Suggested Curriculum

	Credit Hours
Fall Semester	
Social Science 131—American Civilization	3
Communications 131—Applied Composition and Speech	3
Culinary Arts 133—Restaurant History and Development	3
Culinary Arts 131—Food and Beverage Purchase, Receiving and Storage	5
	<hr/> 14
Spring Semester	
Social Science 132—American Civilization	3
Communications 132—Applied Composition and Speech	3
Home Economics 102—Food Selection and Preparation	3
Culinary Arts 132—Elementary Food Preparation	5
	<hr/> 14
Fall Semester	
Humanities 101—Introduction to Humanities	3
Culinary Arts 231—Advanced Food Preparation	5
Culinary Arts 233—Field-cooperative Training	3
Electives—To be chosen from Business and Science offerings	6
	<hr/> 17
Spring Semester	
Social Science 135—Human Relations	3
Culinary Arts 232—Food Production Supervision	5
Culinary Arts 234—Field-cooperative Training	3
Electives—To be chosen from Humanities and Social Science offerings	6
	<hr/> 17

Data Processing Equipment Operator

This intensive one-year program prepares the student to fulfill an important role in the operation and efficiency of electronic data processing equipment.

Suggested Curriculum

ONE YEAR CERTIFICATE PROGRAM

Fall Semester	Credit Hours
Data Processing 131—Basic Principles	4
Communications 131—Applied Composition and Speech	3
Business 131 or 101—Bookkeeping or Accounting	3
Mathematics 130—Business Mathematics	3
Data Processing 135—Introduction to Data Processing	3
	<hr/>
	16
 Spring Semester	
Data Processing 132—Basic Principles	4
Communications 132—Applied Composition and Speech	3
Business 105—Introduction to Business	3
*Electives	5
	<hr/>
	15

*Suggested Electives: Data Processing 130, Philosophy 105, Typing 131, Office Practices 131, Data Processing 134.

Data Processing Programmer

This intensive training program is designed to develop the skill and knowledge necessary to meet the demands of jobs in manufacturing, science, and business that depend upon data processing information for efficient functioning.

Suggested Curriculum

	Credit Hours
Fall Semester	
Data Processing 131—Basic Principles	4
Data Processing 135—Introduction to Data Processing	3
Business 131 or 101—Bookkeeping or Accounting	3
Philosophy 105—Introduction to Logic	3
Communications 131—Applied Composition and Speech	3
	<hr/> 16
Spring Semester	
Data Processing 134—Beginning Programming	4
Business 132 or 102—Bookkeeping or Accounting	3
Business 105—Introduction to Business	3
Mathematics 139—Applied Mathematics	3
Communications 132—Applied Composition and Speech	3
	<hr/> 16
Fall Semester	
Data Processing 231—Advanced Programming	4
Social Science 131—American Civilization	3
Science Elective—Physical or Biological Science 115	3
Mathematics 202—Business Statistics	3
*Elective	3
	<hr/> 16
Spring Semester	
Data Processing 232—Applied Systems	3
Data Processing 233—Computer Problems	4
Social Science 132—American Civilization	3
Science Elective—Physical or Biological Science 116	3
Humanities 101—Introduction to Humanities	3
	<hr/> 16

*Suggested Electives: Economics 201, Mathematics 101, Mathematics 102, Business 236, Office Practices 131.

Dental Assistant

This program prepares the student for examination by the Certifying Board of the American Dental Assistants Association to become a Certified Dental Assistant. In addition to classroom work, students receive clinical experience in private offices and other health agencies in the community.

Suggested Curriculum

Fall Semester	Credit Hours
Dental Assisting 130—Dental Science	4
Dental Assisting 131—Dental Anatomy	3
Biology 131—Anatomy and Physiology	4
Communications 131—Applied Composition and Speech	3
Social Science 131—American Civilization	3
	<hr/>
	17
Spring Semester	
Dental Assisting 132—Dental Materials	4
Dental Assisting 133—Dental Office Practice	3
Biology 132—Microbiology	3
Communications 132—Applied Composition and Speech	3
Social Science 132—American Civilization	3
	<hr/>
	16
Fall Semester	
Dental Assisting 230—Dental Prosthetics	2
Dental Assisting 231—Dental Roentgenology	2
Dental Assisting 232—Dental Operatory Practice	5
Social Science 135—Human Relations	3
Typing 130-132—Beginning or Advanced Typing	2
Business 131—Bookkeeping	3
	<hr/>
	17
Spring Semester	
Dental Assisting 233—Dental Office Management	3
Dental Assisting 234—Dental Prosthetics	2
Dental Assisting 235—Dental Operatory Practice	2
Dental Assisting 236—Dental Clinical Practice	4
Humanities 101—Introduction to Humanities	3
Typing 132—Advanced Typing or	
Elective	2
	<hr/>
	16

Drafting and Design Technology

The objective of this program is to prepare the student for useful employment in a particular cluster of jobs involving competency in the field. Techniques are emphasized and information in related fields is taught to enable the draftsman to work effectively with an engineering or professional staff.

Suggested Curriculum

Fall Semester	Credit Hours
Communications 131—Applied Composition and Speech	3
Mathematics 139—Applied Mathematics	3
Physics 131—Applied Physics	3
Drafting 132—Basic Drafting	4
Engineering 131—Manufacturing Processes	2
Elective	2
	<hr/> 17
Spring Semester	
†Communications 132—Applied Composition and Speech	3
Mathematics 132—Design Mathematics	3
Physics 132—Applied Physics	3
Engineering 106—Descriptive Geometry	3
Drafting 133—Intermediate Drafting	3
Engineering 132—Manufacturing Processes	2
	<hr/> 17
Fall Semester	
Social Science 131—American Civilization	3
Engineering 230—Statics and Dynamics	3
*Drafting 231—Electronic Drafting	3
Drafting 232—Production Illustration	3
Humanities 101—Introduction to Humanities	3
Elective	3
	<hr/> 18
Spring Semester	
*Drafting 134—Structural Drafting	3
Engineering 231—Strength of Materials	3
Social Science 132—American Civilization	3
Drafting 233—Machine and Tool Design	4
Social Science 135—Human Relations	3
	<hr/> 16

*The following courses may be substituted, provided sufficient demand warrants:

- Geological and Land Drafting
- Pipe Drafting

†This course includes Technical Report Writing

Electronics Technology

This two-year program will prepare the student for work as an electronics technician by familiarizing him with most electronic testing equipment and training him in technical communication.

Suggested Curriculum

Fall Semester		Credit Hours
Communications 131—Applied Composition and Speech		3
Mathematics 131—Technical Mathematics		3
Physics 131—Applied Physics		3
Drafting 130—Technical Drafting		2
Electronics Technology 130—Electronics Lab D. C. Circuits and Electrical Measurements		4
		<hr/> 15
Spring Semester		
Communications 132—Applied Composition and Speech		3
Mathematics 132—Design Mathematics		3
Physics 132—Applied Physics		3
Drafting 131—Technical Drafting		2
Electronics Technology 131—Electronics Lab A. C. Circuits		4
		<hr/> 15
Fall Semester		
Electronics Technology 230—Electron Tubes, Transistor Theory and Application		4
Electronics Technology 231—Special Circuits		4
Humanities 101—Introduction to Humanities		3
Engineering 131—Manufacturing Processes		2
Social Science 131—American Civilization		3
Elective		3
		<hr/> 19
Spring Semester		
Electronics Technology 233—Industrial and Microwave Technology		4
Electronics Technology 232—Network Analysis and Transmission Lines		4
Social Science 135—Human Relations		3
Engineering 132—Manufacturing Processing		2
Engineering 231—Strength of Materials		3
Social Science 132—American Civilization		3
		<hr/> 19

Fire Protection Technology

This is an in-service training program for people employed on a full-time basis in the organized fire departments of Dallas County. The objective of the program is to instruct firemen and fire officers in the knowledge and skills they need to perform their duties efficiently.

Suggested Curriculum

	Credit Hours
Fall Semester	
Communications 131 —Applied Composition and Speech	3
Social Science 131 —American Civilization	3
*FPT 131 —Introduction to Fire Protection	3
FPT 135 —Introduction to Fire Administration	3
Mathematics 139 —Applied Mathematics	3
	<hr/> 15
Spring Semester	
Communications 132 —Applied Composition and Speech	3
Social Science 132 —American Civilization	3
FPT 132 —Fire Prevention Theory and Application	3
FPT 133 —Fire Operations Strategy	3
FPT 136 —Fire Investigation and Arson	3
	<hr/> 15
Fall Semester	
FPT 231 —Fire Protection Through Building Construction	3
Psychology 231 —Applied Psychology	3
Speech 105 —Fundamentals of Speech	3
Government 231 —Municipal and County Government	3
Elective	3
	<hr/> 15
Spring Semester	
FPT 232 —Protection Systems in Industry	3
Sociology 231 —Urban Social Problems	3
Business 235 —Advanced Administration Procedures	3
Chemistry 135 —Chemistry of Flammable Materials	3
Humanities 101 —Introduction to Humanities	3
	<hr/> 15

*Fire Protection Technology

Library Assistant

The program in library services will prepare students to function in library service occupations at every level below the professional. Upon completion of the program the student should be qualified as a library assistant.

Suggested Curriculum

Fall Semester		Credit Hours
Communications 131—Applied Composition and Speech		3
Social Science 131—American Civilization		3
Science 131—Survey of Science		3
Library Service 131—Introduction to Library Service		4
*Typing 130—Beginning Typing		2
		<hr/> 15
Spring Semester		
Communications 132—Applied Composition and Speech		3
Social Science 132—American Civilization		3
Science 132—Survey of Science		3
Library Service 132—Technical Processes in Libraries		4
		<hr/> 13
Summer Semester		
Library Service 133—Co-operative Field Service in Libraries		4
Fall Semester		
English Elective		3
Humanities 101—Introduction to Humanities		3
Library Service 135—Special Materials and Media in Libraries		4
Library Service 231—Public Services in Libraries		4
Elective		3
		<hr/> 17
Spring Semester		
English Elective		3
Business 105—Introduction to Business		3
Library Service 232—Applied Library Service		4
Elective		3
		<hr/> 13

*Proof of satisfactory proficiency will excuse the student from this requirement.

Medical Secretary

To help meet the demand for medical secretaries El Centro College offers a two-year program in which are taught basic secretarial skills and specific disciplines applicable to the office of the doctor.

Suggested Curriculum

	Credit Hours
Fall Semester	
Communications 131—Applied Composition and Speech	3
*Typing 131—Intermediate Typing	2
Science 131—Survey of Science	3
Humanities 101—Introduction to Humanities	3
Office Practice 131—Office Machines	2
Elective	3
	<hr/> 16
Spring Semester	
Communications 132—Applied Composition and Speech	3
Typing 132—Advanced Typing	2
Office Practice 130—Secretarial Training	3
Medical Technology 130—Basic Health Technology	3
Science 132—Survey of Science	3
	<hr/> 14
Fall Semester	
Social Science 131—American Civilization	3
Business 131—Bookkeeping	3
Medical Technology 230—Terminology and Basic Medical Science	3
Social Science 135—Human Relations	3
†Electives or on-the-job training	4
	<hr/> 16
Spring Semester	
Social Science 132—American Civilization	3
Medical Technology 231—Treatment and Examining Room Care	3
Medical Technology 232—Medical Records Practicum	6
Electives	4
	<hr/> 16

*Students with previous training will be placed according to ability.

†Electives will be chosen from the field of business or science. Student objective will be the determining factor.

Mid-Management

This program in business management is designed to develop the fundamental skills, knowledge, attitudes and experiences which enable men and women to function in decision-making positions as supervisors or junior executives.

Suggested Curriculum

Fall Semester		Credit Hours
Mid-Management 130—Management Training		4
Mid-Management 132—Mid-Management Seminar		1
Business 105—Introduction to Business		3
Communications 131—Applied Composition and Speech		3
Elective		3
		<hr/>
		14

Spring Semester		
Mid-Management 131—Management Training		4
Mid-Management 133—Mid-Management Seminar		1
Communications 132—Applied Composition and Speech		3
Economics 201—Principles of Economics		3
Electives		6
		<hr/>
		17

Fall Semester		
Mid-Management 230—Management Training		4
Mid-Management 232—Mid-Management Seminar		1
Social Science 131—American Civilization		3
Science Elective—Biological or Physical Science 115		3
Humanities 101—Introduction to Humanities		3
Elective		3
		<hr/>
		17

Spring Semester		
Mid-Management 231—Management Training		4
Mid-Management 233—Mid-Management Seminar		1
Social Science 132—American Civilization		3
Science Elective—Biological or Physical Science 116		3
Elective		3
		<hr/>
		14

Nurse Aide

A one semester program designed to provide a student, either male or female, with the necessary skills and knowledge for performance as an essential member of the nursing team. The nurse aide, working under the supervision of a professional nurse, gives a wide variety of patient care to both bed patients and those needing only supportive care. One may work in hospitals, nursing homes or private homes.

The course is divided into 2 eight week units, with Unit I entirely in the college classrooms and Unit II divided between El Centro and Dallas area hospitals where students receive on-the-job training.

Suggested Curriculum

**The subject matter for
this curriculum covers:**

Communications Skills	80 hours
Orientation to Nursing	162 hours
Medical Terminology	
Ethics	
Basic Anatomy	
Observation and Reporting	
Basic Procedures for Patient Care	
Introduction to Clinical Practice	168 hours

Office Supervision

Office Supervision is a two-year training program providing studies of the responsibilities of the executive secretary, administrative assistant, office supervisor and office manager.

Because work experience in business is effective in developing competent employees, students meeting the requirements of the office supervision program receive credit for supervised work experience in the business world.

Suggested Curriculum I

Fall Semester	Credit Hours
Office Supervision 130—Supervisory Training	4
Office Supervision 132—Seminar	1
*Shorthand 132—Intermediate Shorthand	3
Typing 132—Advanced Typing	2
Office Practices 130—Secretarial Training	3
Communications 131—Applied Composition and Speech	3
	16
Spring Semester	
Office Supervision 131—Supervisory Training	4
Office Supervision 133—Seminar	1
Shorthand 231—Advanced Shorthand	3
Office Practices 131—Office Machines	2
Business 105—Introduction to Business	3
Communications 132—Applied Composition and Speech	3
	16
Fall Semester	
Office Supervision 230—Supervisory Training	4
Office Supervision 232—Seminar	1
Business 131 or 101—Bookkeeping or Accounting	3
Science Elective—Physical or Biological Science 115	3
Social Science 131—American Civilization	3
Humanities 101—Introduction to Humanities	3
	17
Spring Semester	
Office Supervision 231—Supervisory Training	4
Office Supervision 233—Seminar	1
Science Elective—Physical or Biological Science 116	3
Social Science 132—American Civilization	3
†Elective	3
	14

*Some students may be enrolled in Shorthand 231.

†Suggested Electives: Data Processing 130, Data Processing 135, Speech 105, Economics 201, Business 236, Business 234, Social Science 135, Business 230, Mathematics 130, Business 231.

Office Supervision

Suggested Curriculum II

	Credit Hours
Fall Semester	
Office Supervision 130—Supervisory Training	4
Office Supervision 132—Seminar	1
Business 101 or 131—Accounting or Bookkeeping	3
Business 105—Introduction to Business	3
Typing 131—Intermediate Typing	2
Communications 131—Applied Composition and Speech	3
	<hr/>
	16
Spring Semester	
Office Supervision 131—Supervisory Training	4
Office Supervision 133—Seminar	1
Business 102 or 132—Accounting or Bookkeeping	3
Communications 131—Applied Composition and Speech	3
*Electives to total 5 or 6 hours	5 or 6
	<hr/>
	16 or 17
Fall Semester	
Office Supervision 230—Supervisory Training	4
Office Supervision 232—Seminar	1
Economics 201—Principles of Economics	3
Humanities 101—Introduction to Humanities	3
Science Elective—Physical or Biological Science 115	3
Social Science 131—American Civilization	3
	<hr/>
	17
Spring Semester	
Office Supervision 231—Supervisory Training	4
Office Supervision 233—Seminar	1
Science Elective—Physical or Biological Science 116	3
Social Science 132—American Civilization	3
*Elective	3
	<hr/>
	14

*Suggested Electives: Speech 105, Social Science 135, Economics 202, Business 236, Data Processing 131, Business 234, Data Processing 135, Mathematics 130, Business 230, Office Practices 131.

Pattern Drafting and Draping

This program acquaints the student with the equipment and procedures of industrial pattern drafting and draping. Course work includes work in laboratories and classroom.

Suggested Curriculum

Fall Semester	Credit Hours
Pattern Drafting and Draping 130—Fundamentals	2
Pattern Drafting and Draping 131—Laboratory	3
Pattern Drafting and Draping 135—Textiles	3
Communications 131—Applied Composition and Speech	3
Social Science 131—American Civilization	3
	<hr/>
	14
Spring Semester	
Pattern Drafting and Draping 132—Intermediate	2
Pattern Drafting and Draping 133—Laboratory	3
Communications 132—Applied Composition and Speech	3
Social Science 132—American Civilization	3
Social Science 135—Human Relations	3
	<hr/>
	14
Fall Semester	
Pattern Drafting and Draping 230—Advanced	2
Pattern Drafting and Draping 231—Laboratory	3
Humanities 101—Introduction to Humanities	3
Science Elective	3
Electives	5
	<hr/>
	16
Spring Semester	
Pattern Drafting and Draping 232—Advanced	2
Pattern Drafting and Draping 233—Laboratory	3
Science Elective	3
Electives	8
	<hr/>
	16

The electives provide the student with opportunity to select subjects of particular interest, along with the selection of courses directly related to needs of this program.

Police Science

This is an in-service training program for people employed on a full time basis in the organized police departments of Dallas County. All entrants must meet the general entrance requirements established for students applying to El Centro College. The objective is to offer police officers advanced professional training.

Suggested Curriculum

Fall Semester	Credit Hours
Communications 131—Applied Composition and Speech	3
Social Science 131—American Civilization	3
Police Science 130—Introduction to Criminology	3
Police Science 132—Criminal Law	3
Police Science 133—Police Supervision	3
	<hr/>
	15
Spring Semester	
Communications 132—Applied Composition and Speech	3
Social Science 132—American Civilization	3
Police Science 131—Police Administration	3
Police Science 134—Criminal Law	3
Police Science 136—Patrol and Traffic Functions	3
	<hr/>
	15
Fall Semester	
Government 231—Municipal and County Government	3
Psychology 231—Applied Psychology	3
Humanities 101—Introduction to Humanities	3
Police Science 231—Criminal Investigation	3
Elective	3
	<hr/>
	15
Spring Semester	
Psychology 236—Group Psychology	3
Sociology 231—Urban Social Problems	3
Police Science 233—Forensic Sciences	3
Police Science 238—Delinquency Prevention and Control	3
Elective	3
	<hr/>
	15

Secretarial Science (one year program)

The basic purpose of this one-year program is to acquaint students with the opportunities and responsibilities of a secretarial career.

Suggested Curriculum

Fall Semester	Credit Hours
Communications 131—Applied Composition and Speech	3
*Shorthand 131—Beginning Shorthand	3
*Typing 130—Beginning Typing	2
Office Practices 131—Office Machines	2
Business 131—Bookkeeping	3
†Elective	3
	<hr/>
	16
Spring Semester	
Business 231—Business Communications	3
*Shorthand 132—Intermediate Shorthand	3
*Typing 131—Intermediate Typing	2
Office Practices 130—Secretarial Training	3
†Elective	3
	<hr/>
	14

*Students with previous training will be placed according to ability.

Secretarial Science (2 year program)

The purpose of this program is to prepare students to become alert and responsive secretaries capable of performing the tasks required of them in the modern business office.

Suggested Curriculum

	Credit Hours
Fall Semester	
*Shorthand 131—Beginning Shorthand	3
*Typing 131—Intermediate Typing	2
Business 105—Introduction to Business	3
Social Science 131—American Civilization	3
Communications 131—Applied Composition and Speech	3
	<hr/> 14
Spring Semester	
Shorthand 132—Advanced Shorthand	3
Typing 132—Advanced Typing	2
Office Practices 131—Office Machines	2
Social Science 132—American Civilization	3
Communications 132—Applied Composition and Speech	3
Elective	3
	<hr/> 16
Fall Semester	
Shorthand 231—Transcription Shorthand	3
Office Practices 130—Secretarial Training	3
Science Elective—Biological or Physical Science 115	3
Humanities 101—Introduction to Humanities	3
†Elective	3
	<hr/> 15
Spring Semester	
Shorthand 232—Shorthand	3
Business 231—Business Communications	3
Social Science 135—Human Relations	3
Science Elective—Biological or Physical Science 116	3
†Elective	3
	<hr/> 15

*Students with previous training will be placed according to ability.

†Suggested electives: Data Processing 135, Data Processing 130, Business 131, Business 101, Mathematics 130, Business 234, Shorthand 235.

Vocational Nursing

The Vocational Nursing program has been planned to help meet the need for nursing personnel. The one-year course of study meets accreditation requirements of the State Board of Licensed Vocational Nurse Examiners. In addition to classroom and laboratory work at the College, clinical experience at various hospitals is part of the program.

Suggested Curriculum

First Session — 20 Weeks

Credit Hours

Vocational Nursing 130—Physical Foundations, Anatomy and Physiology, Personal and Community Health, Nutrition

4

Vocational Nursing 131—Vocational Foundations, Personal and Vocational Relationships, Normal Growth and Development, Mental Health

2

Vocational Nursing 132—Fundamentals of Nursing, Nursing Principles and Practice

3

Vocational Nursing 133—Basic Concepts of Patient Care, Care of the Adult Patient, Maternal and Child Care

5

Vocational Nursing 134—Introduction to Hospital, Orientation to Clinical Areas

3

Second Session — 30 Weeks

Vocational Nursing 135—Related Theory—4 Hrs. Weekly

6

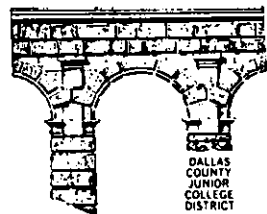
Vocational Nursing 136—Clinical Practice—36 Hrs. Weekly

10

INDEX

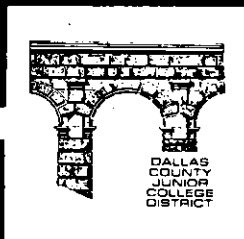
Academic Calendar	33	Journalism	52-53
Administrative Staff	4	Modern Language	53-55
Admissions	14-20	French	53
Policy	14	German	54
Criteria for Entrance	14	Spanish	54-55
Procedures	15	Speech	55
Housing	16	Division of Humanities	57-64
Class Attendance	16	Art	58-59
Scholastic Standards	17-18	Humanities	60
Dropping a Course	18	Music	60-64
Changes of Schedule	18	Philosophy	64
Withdrawal from College	18	Division of Library Science	65-67
Honors	18	Division of Nursing	69-72
Grade Reports	19	Division of Paramedics	73-76
Auditing a Course	19	Dental Assisting	74-75
Credit by Examination	19	Medical Secretary	76
Concurrent Enrollment at Another Institution	20	Division of Science and Math	77-97
Applied Arts and Sciences	109-131	Culinary Arts	78
Associate Degree Nursing	110	Drafting	79-81
Bookkeeping (One Year)	111	Electronics Technology	81-83
Central Service Technicians	112	Engineering	83-85
Clinical Technology	113	Home Economics	85-86
Culinary Arts	114	Mathematics	86-88
Data Processing Equipment Operator	115	Pattern Drafting and Draping	88-90
Data Processing Programmer	116	Physical Education and Health	90-91
Dental Assistant	117	Science	91-97
Drafting and Design Technology	118	Division of Social Science	99-108
Electronics Technology	119	Anthropology	100
Fire Protection Technology	120	Bible	100
Library Service	121	Culinary Arts --- History	100
Medical Secretary	122	Economics	100-101
Mid-Management	123	Fire Protection Technology	101-102
Nurse Aide	124	Geography	103
Office Supervisor (I)	125	Government	103
Office Supervisor (II)	126	History	104
Pattern Drafting and Draping	127	Police Science	104-106
Police Science	128	Psychology	106-107
Secretarial Science (1 Year)	129	Social Science	107
Secretarial Science (2 Years)	130	Sociology	108
Vocational Nursing	131	Faculty	6-12
Board of Trustees	2	Financial Information	21-30
Catalog Numbering System	35	Tuition and Fees	21-22
Course Descriptions	39-131	Financial Aids	27-30
Degree Requirements	34	General Information	5/13-14
Divisions of the College		Policy Statement	5
(Course Descriptions)	39-131	Objectives	13
Division of Business	39-48	Accreditation	14
Business	40-42	Guided Studies Program	36-37
Data Processing	42-44	Student Activities	31-32
Mid-Management	44-45	Student Conduct	32
Secretarial	45-48		
Division of Communication	49-55		
Communications	50		
Drama	50		
English	51-52		

EL CENTRO COLLEGE



DALLAS
COUNTY
JUNIOR
COLLEGE
DISTRICT

FOR ADDITIONAL INFORMATION WRITE TO:
DIRECTOR OF ADMISSIONS
EL CENTRO COLLEGE
MAIN AND LAMAR, DALLAS, TEXAS 75202
RI 2-2151



EL CENTRO COLLEGE

