

H. W. SUCCOP, CHAIRMAN  
ARCHITECTURE & BUILDING CONSTRUCTION

**DADE  
COUNTY  
JUNIOR  
COLLEGE**



**MIAMI,  
FLORIDA**



**BULLETIN**

**1961**

**-**

**1962**

# Dade County Junior College Bulletin 1961-62

"If the nation expects to be ignorant and free,  
in a state of civilization, it expects what  
never was and never will be."

--THOMAS JEFFERSON

Accredited by the State Department of Education

Member of

American Association of Junior Colleges

Florida Association of Public Junior Colleges

Southern Association of Junior Colleges

American Association of Collegiate Registrars and Admissions Officers

Associate Member of Florida Association of Colleges and Universities

Central Center  
1895 N. W. 95 Street  
Miami 47, Florida  
Phone: Plaza 9-6622

Northwestern Center  
7007 N. W. 12 Avenue  
Miami 50, Florida  
Phone: Plaza 4-5491





# Dade County School Administration

The Board of Public Instruction  
of Dade County, Florida

*Mrs. Jane Roberts, Chairman*

Dr. Robert S. Butler	Mrs. Anna Brenner Meyers
Mr. Jack D. Gordon	Dr. C. Raymond Van Dusen, V. Ch.
Mr. C. T. McCrimmon	Mrs. Helene J. Vosloh

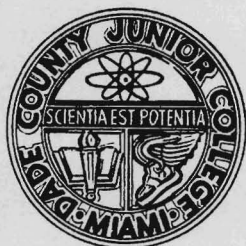
Superintendent of Public Instruction  
Dade County

*Dr. Joe Hall*

## Dade County Junior College Advisory Committee

*Mr. J. N. McArthur, Chairman*

Mr. Paul Scott	Mr. Leonard Usina
Mr. Niles Trammell, V. Ch.	Mr. Mitchell Wolfson



# Dade County Junior College

## CALENDAR

1961—1962

1961

- June 15* Returning students may apply for readmission.
- July 1* Applications for non-Dade residents will be processed in order of receipt.
- August 1* Opening of registration for new and returning students by appointment.
- August 4* Last day for application for admission or readmission. Students who apply after this date are not assured that their application can be processed for the fall semester.
- August 21* New Dade County Junior College faculty reports for Faculty Conference. Central Center.
- August 22* Returning faculty reports.
- August 24* Last day for registration of day students prior to opening of classes.
- August 30* Fee payment for day students begins 9:00 A.M.—12:00 Noon and 1:00 P.M.—4:00 P.M. Central Center.
- September 4* Labor Day Holiday
- September 5* Orientation of extended day students 7:30 P.M. Central and Northwestern Centers.
- September 6* Last day for fee payment by day students 9:00 A.M.—12:00 Noon and 1:00—4:00 P.M. Central Center.
- September 6-7* Registration of extended day students by appointment. Central Center.
- September 7-8* Orientation of new students 9:00 A.M. Central and Northwestern Centers.
- September 11* Classes begin 7:00 A.M.
- Late registration begins 8:30 A.M.—12:00 Noon. Central Center.
- Fee Payment for extended day students begins 5:00—7:30 P.M. Central Center.
- Schedule changes processed for day students 1:00—3:00 P.M. Central Center.
- Schedule changes processed for extended day students 5:00—7:30 P.M. Central Center.

- September 18* Last day for late registration for first semester 8:30 A.M.-12:00 Noon. Central Center.
- Last day for fee payment by extended day students 5:00-7:30 P.M. Central Center.
- Last day for schedule changes for day students 1:00-3:30 P.M. Central Center.
- Last day for schedule changes for extended day students 5:00-7:30 P.M. Central Center.
- September 22* Last day to withdraw from college for fall semester and receive 50% fee refund.
- October 20* Last day to withdraw from a class with a grade of "W".
- November 1* Applications for non-Dade residents will be processed in order of receipt for spring semester.
- November 6-10* Mid-term examinations.
- November 10* Last day to remove an "I" for a grade earned during spring semester 1960-61.
- November 15* Mid-term grades due in Office of Registrar by 4:00 P.M.
- November 22* Classes recess 10:30 P.M. for Thanksgiving.
- November 27* Classes resume 7:00 A.M.
- November 27-December 1* Currently enrolled students initiate readmission for spring semester 1961-62. \$5.00 deposit payable in business office. Central Center.
- December 4* Last day for application for admission. Students who apply after this date are not assured that their application can be processed for the spring semester.
- December 20* Classes recess 10:30 P.M. for Christmas holiday.
- 1962
- January 2* Classes resume 7:00 A.M.
- January 3* Registration begins by appointment for new students. Central Center.
- January 19* Last day for registration for spring semester of day students prior to opening of classes.
- January 19-26* Final examinations.
- January 26* Fall semester ends. Grades due in Office of Registrar by 4:00 P.M.
- January 30* Last day for payment of fees for spring semester for day students 9:00-12:00 Noon and 1:00-4:00 P.M. Central Center.
- January 30-31* Registration of extended day students by appointment. Central Center.
- Orientation of new extended day students 7:00 P.M. Central and Northwestern Centers.
- February 2* Orientation of new day students 9:00 A.M. Central and Northwestern Centers.



- February 5*      Classes begin 7:00 A.M.  
*1962*      Late registration begins 8:30 A.M.—12:00 Noon. Central Center.  
                  Payment of fees by extended day students 5:00—7:30 P.M.  
                  Schedule changes processed for day students 1:00—3:30 P.M. Central Center.  
                  Schedule changes processed for extended day students 5:00—7:30 P.M. Central Center.
- February 12*      Last day for late registration for spring semester 8:30 A.M.—12:00 Noon. Central Center.  
                  Last day for fee payment by extended day students 5:00—7:30 P.M. Central Center.  
                  Last day for schedule changes for day students 1:00—3:30 P.M.  
                  Last day for schedule changes for extended day students 5:00—7:30 P.M. Central Center.
- February 16*      Last day to withdraw from college for spring semester and receive 50% fee refund.
- March 1*      Last day for making application at Office of Registrar for a degree to be conferred at the end of the spring semester, Central Center.
- March 16*      Last day to withdraw from a class with grade of "W".
- April 2-6*      Mid-term examinations.
- April 6*      Last day to remove an "I" for a course taken in the fall semester.
- April 9*      Mid-term grades due in Office of Registrar by 4:00 P.M.
- April 19*      Classes recess at 10:30 P.M. for spring holiday.
- April 24*      Classes resume at 7:00 A.M.  
                  Currently enrolled students initiate readmission for fall semester 1962-63 in business office at Central Center.
- May 30*      Memorial Day holiday.
- May 31-  
June 8*      Final examinations.
- June 7*      Final grades for Sophomores planning to graduate due in Office of Registrar by 12:00 Noon.
- June 8*      Spring semester ends. Final grades due in Office of Registrar by 4:00 P.M.
- June 10*      Baccalaureate.
- June 11*      Commencement. Last contract day for ten month faculty completing second year with Dade County Junior College.  
                  Workshop begins for faculty completing their first year with Dade County Junior College.
- June 16*      Last contract day for ten month faculty completing their first year with Dade County Junior College.

# Administration

*Kenneth R. Williams, Ph.D*

*President*

Sam J. Baptista, M.A.	Director of Student Welfare
Willa M. Boysworth, B.S.L.S.	Director of Libraries
David H. Dobbs, M.A.	Dean of Northwestern Center
L. W. Henderson, M.S.	Dean of Special Degree Studies and Adult Education
Theodore A. Koschler, M.S.	Dean of Technical Studies
Jack R. Netcher, H.S.D.	Dean of Central Center
Evelyn H. Pringle, M.Ed.	Registrar
Gordon B. Pyle, Ph.D.	Dean of Academic Studies
Adelaide R. Snyder, M. A.	Coordinator of Admissions and Publications
Herbert F. Stallworth, Ed.D.	Dean of Administration
Erwin D. Stasek, Ph.D.	Director of Guidance
Charles H. Walker, M.A.	Dean of Student Personnel

## \* Faculty

ACKOUREY, ANN MARIE M.A., 1956, Marquette University	Counselor in charge of Student Activities
ALLINSON, BRENT D. B.A., 1917, Harvard; B.A., M.A., 1929, Columbia.	Instructor in Social Sciences
BABSKI, CARL A. B.S., 1956, M.S., 1959, Florida State University.	Instructor in Natural Sciences
BAILES, EIRKUS B.S., 1950, Morris Brown College; M.A., 1955, Columbia.	Instructor in Business Education
BAKER, GLEN S. B.A., 1949, American International; M.A., 1957, University of Connecticut.	Instructor in Natural Sciences
BAPTISTA, SAM J. A.B., 1952, M.A., 1953, Florida State University.	Director of Student Welfare
BARE, KENNETH E. B.F.A., 1947, B.A.E., 1951, M.A.E., 1951, Art Institute of Chicago.	Instructor in Art
BOYSWORTH, WILLA M. L.S., 1926, Florida State University; A.B., 1928, B.S.L.S., 1940, University of North Carolina.	Director of Libraries
CARTER, THOMAS L. B.S., 1942, U. S. Naval Academy; M.Ed., 1960, University of Miami.	Curriculum Assistant in Technical Studies

\* The Faculty includes those persons who were full-time members during the 1960-61 year.

- CHRISTIE, ROBERT E. Instructor in Mathematics  
B.Ed., 1956, M.A., 1960, University of Miami.
- CLEVELAND, RAFAEL Instructor in Mathematics  
B.S., 1934, Georgia Tech.; M.S., 1960, University of Miami.
- CORINA, JOHN H. Instructor in Music  
B.S., 1951, M.A., 1956, Western Reserve.
- COX, BLANCHE Counselor  
B.Ed., 1941, Southern Illinois University; M.A., 1946, University of Illinois.
- CRUTCHFIELD, JAMES Instructor in Natural Sciences  
B.A., 1943, M.A. 1949, Ball State Teachers College;  
M.A., 1960, University of Miami.
- DEEN, FRANCES Head of the Department of Fine Arts  
B.M., 1925, Stetson; M.A., 1940, Columbia.
- DOBBS, DAVID H. Dean of Northwestern Center  
B.S., 1931, Florida A & M; M.A., 1944, Columbia.
- DOSTER, WILLIAM C. Chairman, Division of Communications  
A.B., 1942, Mercer University; M.A., 1948, Ph.D., 1955, University of Florida.
- DOW, ANDREW N., JR. Head of the Department of Psychology  
and Education  
B.A., 1941, M.A., 1943, University of Florida.
- DUNCOMBE, WILFRED EUGENE Instructor in Natural Sciences  
B.S., 1938, M.S., 1955, Florida A & M.
- DUREN, RUBY K. Instructor in Communications  
B.S., 1952, A & T College; M.A., 1959, Columbia.
- EVANS, HUGH A. Instructor in Technical Studies  
B.S. in Ed., 1951, University of Florida.
- FLETCHER, MABEL Librarian  
A.B., 1939, Florida State University; A.B.L.S., 1947, Emory University.
- FUNKE, FRANCIS J. Instructor in Modern Languages  
A.B., 1937, Butler University; M.A., 1938, University of Wisconsin.
- FURLONG, SYLVIA K. Instructor in Drama  
B.A., 1940, University of Miami.
- GOLDHAGEN, PHILIP D. Instructor in Humanities  
B.A., 1956, M.Ed., 1959, University of Florida.
- GRENARD, HAROLD Instructor in Mathematics  
B.S., 1956, University of Illinois; M.S., 1958, New York University.
- HANDY, RUSSELL F. Instructor in Social Sciences  
B.A., 1932, Ball State Teachers College; M.A., 1941, University of Michigan.
- HARLEY, JAMES R. Instructor in Physical Education  
B.S. Ed., 1957, Georgia Teachers College; M.A., 1959, George Peabody College.
- HARRIS, DAVID A. Instructor in Social Sciences  
B.S., 1958, M.S., 1960, Florida State University.

- HEISS, ELWOOD D. Head of the Department  
of Physical Science  
A.B., 1921, Lebanon Valley College; M.A., 1925, Ph.D., 1932, Columbia.
- HENDERSON, LOUIS W. Dean of Special Degree Studies  
and Adult Education  
B.E., 1947, University of Miami; M.S., 1955, Florida State University.
- HEPBURN, KATHERINE Librarian  
A.B., 1949, M.S.L.S., 1956, North Carolina State College.
- HORNOR, MARIA B. Instructor in Physical Education  
B.S., 1940, University of Illinois; M.Ed., 1954, University of Miami.
- HOUSTON, JULIAN T. Instructor in Physical Education  
A.B., 1934, Florida A & M; M.A., 1948, Catholic University.
- JETER, HARRY L. Counselor  
A.B., 1949, Cumberland University; B.D., 1951, Vanderbilt University;  
M.S., 1955, Northern Illinois University.
- JOFFRE, MARIE Instructor in Communications  
A.B. in Ed., 1938, Florida State University; M.A., 1944, University of  
Miami; Professional Diploma, 1960, Columbia.
- KOSCHLER, THEODORE A. Dean of Technical Studies  
B.S., 1935, Bradley University; M.S., 1947, Iowa State.
- KREIS, NELLIE S. Librarian  
B.A., 1957, University of Kansas.
- MARCHAND, RUTH Instructor in Communications  
A.B., 1953, M.A., 1955, University of Miami.
- McELLIGOTT, THOMAS J. Instructor in Communications  
A.B., 1942, Harvard; A.M., 1949, Boston University; Ed.M., 1956, Harvard.
- McKENZIE, BARBARA ANN Instructor in Communications  
B.A., 1956, M.A., 1958, University of Miami.
- McELWAIN, WILBUR J. Instructor in Business Education  
B.S., 1950, Northwestern University; M.A., 1958, University of Miami.
- McGEEVER, MARGARET E. Head of the Departments of  
Fashion Design, Home and  
Family Life, and Merchandising  
B.S., 1940, Ohio University; M.S., 1952, University of California;  
Ed.D., 1959, Teachers College, Columbia.
- McGRAW, MARY D. Librarian  
A.B., 1935, Berea College; A.B.L.S., 1936, Emory University.
- MAINIERI, DEMIE J. Acting Chairman, Division of Physical Education  
A.A., 1950, Potomac State College; B.S., 1952, West Virginia  
University; M.A., 1956, Columbia.
- NETCHER, JACK R. Dean of Central Center  
B.S., 1950, Carson-Newman; M.S., 1951, University of Tennessee;  
Dir. H.S., H.S.D., 1956, Indiana University.
- OBER, LEWIS D. Acting Chairman, Division of Natural Sciences  
B.S., 1951, Florida Southern College; M.S., 1954, University of Florida.
- PAIT, JAMES A. Chairman, Division of Humanities  
B.A., 1937, Duke University; M.A., 1939, Ph.D., 1941, University of  
Virginia.



- PRINGLE, EVELYN H. Registrar  
B.B.A., 1946, University of Chattanooga; M.Ed., 1952, University of Florida.
- PYLE, GORDON B. Dean of Academic Studies  
B.A.E., 1948, M.A.E., 1950, University of Florida; Ph.D., 1958, Ohio State University.
- RITTER, WILLIAM C. Instructor in Biology  
B.S., 1930, M.S., 1939, Cornell.
- ROBINSON, LEON G. Instructor in Natural Sciences  
B.A., 1945, Talladega College; M.B.A., 1949, Atlanta University.
- SHAFFER, RICHARD D. Instructor in Natural Sciences  
B.A., 1948, University of Miami; M.A., 1955, Appalachian State Teachers College; M.Ed., 1960, University of North Carolina.
- SINGER, S. LEONARD Instructor in Communications  
A.A., 1950, B.S., 1951, M.S., 1952, Boston University.
- SMILEY, JOHN A., JR. Instructor in Technical Studies  
A.A., 1958, B.Ed., 1960, University of Miami.
- SMITH, DOUGLAS R. Instructor in Technical Studies  
B.S.E.E., 1953, University of Miami; M.S.Ed., 1959, Florida State University.
- SMITH, JOE K. Head of the Department of Mathematics  
B.S., 1952, Eastern Kentucky State College; M.S., 1957, Florida State University.
- SNYDER, ADELAIDE R. Coordinator of Admissions and Publications  
B.A., 1944, M.A., 1950, Kent State University.
- STALLWORTH, HERBERT F. Dean of Administration  
B.A., 1948, M.A., 1949, Ed.D., 1951, University of Florida.
- STASEK, ERWIN D. Director of Guidance  
B.S., 1949, Northern Illinois University; M.A., 1950, University of Colorado; Ph.D., 1955, Northwestern University.
- SUTTER, LEO L. Instructor in Social Sciences  
B.A., 1939, M.A., 1940, University of Colorado.
- THOMAS, ROBERT Instructor in Music  
B.S., 1954, M.S., 1955, M.M., 1959, Southern Illinois University.
- WALKER, CHARLES H. Dean of Student Personnel  
B.A., 1946, Carson-Newman College; M.A., 1947, Peabody College.
- WELLMAN, DANIELLE M. Instructor in Modern Languages  
B.S., B.A., 1948, University of Wisconsin; M.A., 1952, University of Miami.
- WILSON, THEODORE B. Acting Chairman, Division of Social Sciences  
A.B., 1937, University of Kansas City; M.A., 1938, University of Missouri.
- WITHERS, HARRIET H. Instructor in Business Education  
B.S., 1941 Asheville Teachers College; M.A.Ed., 1960, Western Carolina College.
- ZION, CAROL LEE Instructor in Humanities  
B.A., 1952, M.S., 1953, University of Miami.

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# General Information

## PURPOSE

Dade County Junior College is a community college which offers educational opportunities beyond the high school level. The College seeks to prepare the individual for one or more of the following:

1. Successful entry into the upper division of a senior university or college.
2. Democratic and creative living in the home and in the community.
3. A vocation from which he may earn a livelihood and gain personal satisfaction.

## OBJECTIVES

The College is devoting its efforts to the development of a superior program of education, incorporating the following specific objectives.

1. To provide two years of college work acceptable for transfer to four-year colleges and universities.
2. To provide technical and special degree programs that will fit the students for employment in the industries and businesses of this area.
3. To provide suitable courses for adults who wish to further their education, enrich their cultural lives and improve their personal efficiency.

## STATE AND COUNTY RELATIONSHIPS

### County

Dade County Junior College is an integral part of the Dade County School System and operates under the policies of the Board of Public Instruction and the authority of the County Superintendent of Schools.

The Advisory Committee to the Dade County Junior College is composed of five citizens. It serves in an advisory capacity to the President of the College and to the Superintendent and County Board of Public Instruction in matters relating to the Junior College.

### State

The Dade County Board of Public Instruction is responsible to the State Board of Education and the State Superintendent of Public Instruction. Affairs of the junior colleges are handled in the State Department of Education by the Division of Community Junior Colleges.

## HISTORY

Dade County Junior College is a publicly supported junior college established under appropriations by the 1959 session of the State Legislature. It is jointly supported by the State of Florida and Dade County.



The college was activated by the Board of Public Instruction of Dade County in 1959 and began instruction September 6, 1960.

Over 1,300 students were registered for the first semester as the College began its first year of service and there was an increase of several hundred students during the second semester. The College is programming for over 3,000 for 1961-62.

## LOCATION OF CENTERS

The College has a central administration with offices located at 1895 N. W. 95 Street, Miami. Direction and development of programs at two centers are maintained by the central administration.

Central Center is located on a fifty acre site extending from N. W. 95 Street to N. W. 103 Street, fronting on 19 Avenue, Northwest. Administrative and Faculty Offices, Library, temporary classroom buildings, Student Center, and Bookstore are located on this site. Eleven classrooms, laboratories, and cafeteria located in Miami Central High School adjoining the college campus are being used by the college until permanent facilities are completed in 1962.

Northwestern Center is located on a twenty acre site at 7007 N. W. 12 Avenue. Facilities of the Northwestern High School are being used by the faculty and students of this center until construction of the Junior College facilities is completed in 1962.

## FUTURE PLANS AND PROJECTED GROWTH

Final plans are currently being developed for complete campus facilities at the Central Center and for extensive enlargement of facilities at the Northwestern Center at a cost of approximately five million dollars.

It is anticipated that by the opening of the Fall Semester 1962-63 the Central Campus will be complete, ready to accommodate four thousand students with a classroom and administration building, a fine arts center, a library, a gymnasium, and a student center including food service. The entire plant will be air conditioned to make possible maximum year-around utilization, and there will be a lake which will be used for the physical education swimming program and for recreational activities. At the Northwestern Center a complete Junior College wing will be constructed.

No one center of the Dade County Junior College is planned to expand beyond 4,000 students. In keeping with the junior college philosophy of bringing higher education to the community in which the students reside, and as the College can be adequately staffed to handle more students, new Centers will be opened in various sections of Dade County. The third center will probably be located in South Dade. Thus, rather than duplicate facilities on one site to handle increased loads, new facilities will be located closer to areas of student residence. There will continue to be only one central administration for all Centers.

# Admissions

## STATEMENT OF POLICY

The Dade County Junior College is established to serve the community by providing college level courses for all who wish to advance their education. However, the college has established policies for admission to degree studies in order to insure that each student will be embarking upon a program in which he has a reasonable chance for success. The college reserves the right to deny admission to any applicant and to change any of its policies, courses, or regulations without notice.

## EDUCATIONAL REQUIREMENTS

### Applicants Who Have Never Attended College

An applicant for admission to degree programs and credit courses must be a graduate of an accredited high school or possess a high school equivalency certificate issued by the Florida State Department of Education.

### Transfer Students

Transfer students are those individuals who have previously registered at any college or university, regardless of the length of time spent there or of credit, if any, earned.

In order to be admitted to Dade County Junior College, a transfer student must be eligible to return to the last college or university he attended. Transfer student admission is not granted until an official transcript of the applicant's previous college record has been evaluated. Any transfer student admitted prior to receipt and evaluation of his transcript is admitted provisionally.

Courses with a grade of "D" will not be accepted for transfer credit toward a degree. If a transfer student is admitted to Dade County Junior College with a previous standing of below "C", he will be entered on probation.

## STEPS IN ADMISSIONS PROCEDURES

### Applicants Who Have Never Attended College

1. Submit an application blank properly executed, accompanied by a \$5.00 deposit. This deposit will be returned if the college does not accept the student and it will be credited to the first semester's fees if the student is accepted. It is not refundable.
2. Request the high school Registrar to forward transcript to the Dade County Junior College Registrar.
3. Take the Guidance Test Battery at one of the periods it is administered as scheduled in the College Bulletin. Consult the section, Guidance Test Battery, for dates and times of tests.
4. Submit a medical examination report completed by a medical doctor on the form furnished by the college. (This step is not required of the part-time student—less than 12 semester hours.)

### Transfer Applicants

1. Submit an application blank properly executed, accompanied by a \$5.00 deposit. This deposit will be returned if the college does not accept the student and it will be credited to the first semester's fees if the student is accepted. It is not refundable.
2. Request official college transcripts of all work previously attempted and a statement of honorable dismissal from the institution last attended, all to be sent directly to the Dade County Junior College Registrar.
3. Take the Guidance Test Battery at one of the periods it is administered as scheduled in the College Bulletin. Consult the section, Guidance Test Battery, for dates and times of tests.
4. Submit a medical examination report completed by a medical doctor on the form furnished by the college. (This step is not required of part-time students—less than 12 semester hours.)

## RESIDENCY REQUIREMENTS FOR ADMISSIONS PRIORITY

Only bona fide Dade County residents will be admitted to Dade County Junior College before July 1 for the fall semester and before November 1 for the spring semester. After these dates all persons qualified and desiring admission to Dade County Junior College will

be admitted to the College as long as space is available on a first come-first served basis, according to the date they have filed their completed applications.

To be considered a bona fide Dade County resident a student must fall in one of the following categories:

1. A person under 21 years of age whose parent or guardian has been a resident of Dade County for the 12 months prior to the first day of classes for the semester in which he is enrolling.
2. A person over 21 years of age who has been a resident of Dade County for the 12 months prior to the first day of classes for the semester in which he is enrolling.
3. A person under 21 years of age who, during the 12 months prior to the first day of classes for the semester in which he is enrolling, was graduated from a Dade County high school and whose parent or guardian executed a residency affidavit claiming Dade County as a permanent residence when the minor was enrolled in the Dade County high school.

## **FOREIGN STUDENTS**

Nationals of other countries who do not meet the residency requirements in 1, 2, or 3 above but who meet the other admission requirements of the college and are able to demonstrate competence in the English language may be admitted to the College upon individual approval by the College Advisory Committee.

## **AUDITING**

Persons may audit a credit course upon permission of the Professor and his Department Chairman without meeting any specific educational requirements.

## **ENTRANCE TO NON-CREDIT COURSES**

The College offers non-credit courses on a college level. No credit is given for these courses and admission requirements are set forth according to the nature of the particular course. However, it is not necessary for a student registered for a non-credit course to formally apply for admission to the College.



## APPLICATION FOR RE-ADMISSION

A previously enrolled student of Dade County Junior College who has not attended for one or more semesters must apply for re-admission in the Office of the Registrar and deposit \$5.00. His deposit will apply to his next semester's fees if he is accepted for re-admission. It is not refundable unless the college refuses re-admission.

He will be scheduled for registration as outlined in *Registration Procedures*.

## GUIDANCE TEST BATTERY

As a part of the admissions procedure, each student entering the Dade County Junior College must take the Guidance Test Battery prior to his first registration.

These tests do not affect eligibility for admission to the college but are used for placement in certain specialized courses at the college and are of value to the staff of the Guidance Department in assisting a student to plan his educational and vocational program.

## GUIDANCE TEST BATTERY DATES

New students are encouraged to take the Guidance Test Battery at the very earliest date possible.

The Guidance Test Battery will be given at Central Center on:

May 4, 1961	7 to 10 p.m.
July 8, 1961	9 a.m. to 12 p.m.
August 5, 1961	9 a.m. to 12 p.m.
August 7, 1961	7 to 10 p.m.
August 31, 1961	9 a.m. to 12 p.m.

The Guidance Test Battery will be given at Northwestern Center on:

May 6, 1961	9 a.m. to 12 p.m.
May 11, 1961	7 to 10 p.m.
August 12, 1961	9 a.m. to 12 p.m.
August 30, 1961	9 a.m. to 12 p.m.

The Guidance Test Battery will be given December 2, 1961, and December 9, 1961, for students planning to enter Dade County Junior College for the spring semester. Applicants will be notified of the times and places of tests.

Special testing dates are scheduled in the spring for seniors in Dade County High Schools who are planning to attend Dade County Junior College.

# Registration Procedures

## FOR NEW AND FOR TRANSFER STUDENTS

1. When a student is accepted for admission to Dade County Junior College, he will be so notified. He will receive an appointment for registration.
2. If the student cannot keep the scheduled registration appointment, he is to contact the Registrar's office and re-schedule an appointment at a mutually convenient time. If a student fails to keep an appointment or to notify the Registrar's office in advance, his application and acceptance will be canceled.
3. At the time of registration the student must decide upon his program and courses. Detailed registration instructions will be given at this time.
4. The student must pay a \$10.00 deposit at the time of registration. This deposit will apply on his fees along with the \$5.00 admission deposit. The total \$15.00 deposit is not refundable if the student withdraws.
5. The student will return to the College to complete fee payment during the time listed on the official College Calendar for the payment of fees. If fees are not paid by the last day for payment of fees as listed in the College Calendar, the student's registration will be canceled and his deposit forfeited.

## FOR STUDENTS CURRENTLY ENROLLED

1. Students currently enrolled in the College are given priority for continuing their studies at the College for consecutive semesters if they indicate their intention to continue.
2. The student should report to the Office of the Registrar during the 12th week of the semester, where he will file the necessary application for continuance of his studies and pay a \$5.00 deposit on his next semester's fees.
3. The student will receive an appointment for registration. At the time of registration the student must decide upon his courses and program changes, if any. Detailed registration instructions will be given at this time.

4. The student must pay an additional \$10.00 deposit at the time of registration advisement. This deposit will apply on his fees along with the \$5.00 deposit. The total \$15.00 deposit is not refundable if the student withdraws.
5. The student will return to the College to complete fee payment during the time listed on the official College Calendar for the payment of fees. If fees are not paid by the last day for payment of fees as listed in the College Calendar the student's registration will be canceled and his deposit forfeited.
6. Currently enrolled students who register in advance for the next semester and who must make schedule changes because of grades will not be assessed the drop-add fee for those specific changes.

# Schedule of Fees and Charges

## 1. Matriculation Fee: (Credit Course)

- |  |  |
|--|--|
| a. Full-time student<br>(enrolled for 12 or more semester hours)   | \$75.00 per semester                     |
| b. Part-time student<br>(enrolled for less than 12 semester hours) | 8.00 per semester hr.<br>max. of \$75.00 |
| c. Person taking credit course as "auditor"                        | 8.00 per semester hr.                    |

## 2. Tuition Fee:

- |  |  |
|--|--|
| a. Residents of Dade County or<br>participating counties | none   |
| b. Residents of non-participating Florida counties:      |  |
| (1) for 12 or more semester hours                        | 50.00 per semester                           |
| (2) for less than 12 semester hours<br>per semester hour | 4.55 per semester hr.<br>(max. of \$50.00)   |
| c. Non-Florida residents:                                |  |
| (1) for 12 or more semester hours                        | 175.00 per semester                          |
| (2) for less than 12 semester hours<br>per semester hour | 16.00 per semester hr.<br>(max. of \$175.00) |

## 3. Student Activity Fee:

- |  |       |
|--|-------|
| a. For full-time student this fee of \$10.00<br>per semester hour is included in the<br>matriculation fee. |       |
| b. Part-time students may purchase student<br>activity membership for                                      | 10.00 |

## 4. Special Fees and Charges:

- |  |                       |
|--|-----------------------|
| a. Late registration fee   | 5.00                  |
| b. Drop or add charge per course   | 2.00                  |
| c. Transcript charge   |                       |
| (1) First transcript   | free                  |
| (2) Additional transcripts - each  | 1.00                  |
| d. Deferred or make-up mid-term or final<br>exam charge - per course   | 3.00 (max. of \$5.00) |
| e. Graduation fee (including rental of cap<br>and gown)  | 15.00                 |
| f. Duplicate I.D. Card or Schedule Card charge   | 1.00                  |
| g. Laboratory fee (except technical labs)<br>(for courses listed as requiring lab)                                     | 5.00                  |
| h. Technical laboratory fee  | 12.00                 |
| i. Private music lessons - per credit hour   | 30.00                 |
| j. Towel charge (assessed all students<br>registered for any course or activity<br>in physical education) per semester | 2.00                  |
| k. Bowling charge  | 12.00                 |
| l. Swimming charge   | 1.00                  |
| m. Golf charge   | to be announced       |

#### 5. Adult Education Fees: (non-credit programs)

- |  |  |
|--|--|
| a. Adult education course                                    | \$5.00   |
| b. Special courses, seminars, institutes,<br>workshops, etc. | Fee to be assessed to<br>cover expenses incurred |

#### PAYMENTS:

Fees are payable as scheduled in the College Calendar at the College Bursar's Office and may be paid in cash or by check or money order made payable to the Dade County Junior College.

#### REFUND POLICY:

The \$15.00 deposit required to enter admissions processing and/or registration is not refundable unless the Dade County Junior College refuses admission or registration.

If a student is withdrawn from the College as a result of official College action, except for disciplinary reasons, he is entitled to full refund of registration fees.

If the student initiates his withdrawal from the College the following policy is in effect:

- |  |                                     |
|--|-------------------------------------|
| 1. Official withdrawal after first 10 days<br>of classes                         | No refund of any<br>fees or charges |
| 2. Official withdrawal before the end of<br>the tenth day of classes             | 50%                                 |
| 3. Official withdrawal after registration<br>but before the first day of classes | All fees except \$15<br>deposit     |

In order to officially withdraw, the student must return his I.D. card to the Registrar and fill out the required withdrawal forms. The amount of refund will be calculated from the date the withdrawal is initiated in the Office of the Registrar.



# Residency Regulations

## FEES FOR STUDENTS OF DADE COUNTY AND OF OTHER PARTICIPATING COUNTIES

A resident of Dade County or of a county which participates in the direct support of a Florida public junior college is not assessed an out-of-county tuition fee if he falls in one of the following categories:

1. A person under 21 years of age whose parent or guardian has been a resident of Dade County or of a participating county for the 12 months prior to the first day of classes for the semester in which he is enrolling.
2. A person over 21 years of age who has been a resident of Dade County or of a participating county for the 12 months prior to the first day of classes for the semester in which he is enrolling.
3. A person under 21 years of age who during the 12 months prior to the first day of classes for the semester in which he is enrolling was graduated from a Dade County high school or a high school in a participating county and whose parent or guardian executed a residency affidavit claiming Dade County or the participating county as a permanent residence when the minor was enrolled in the Dade County or participating county high school.

## FEES FOR STUDENTS FROM NON-PARTICIPATING COUNTIES

If a person is not a Dade County resident or a resident of a participating county as defined above, but is a resident of a non-participating county in Florida, he is assessed the out-of-county tuition fee of \$50.00 per semester in addition to his matriculation fee.

## FEES FOR OUT-OF-STATE STUDENTS

A student who does not qualify for residency as defined above will be classified as a non-Florida student and will be assessed the out-of-state tuition fee of \$175.00 per semester, in addition to his matriculation fee.

# Course Loads and Grading

## SEMESTER HOURS

The Dade County Junior College operates on a semester plan and courses are worth specified semester hours or semester credits. Normally a three semester hour course meets for three hours a week. However, certain courses which require laboratory work or skill practice may meet for more hours per week than the number of semester hours credit they carry.

A semester hour load of 15 or 16 hours is average and will generally permit a student to fulfill his basic requirements for graduation in four semesters. A semester hour load of 12 credit hours is considered full time. The maximum load for the fall and spring semesters of a school year is 18 or 19 hours and a student carrying such a load must have a "B" average and the consent of his advisor.

Veterans should consult the section on Veterans Education for special regulations.

The maximum load for the summer semester is six hours.

## PROGRESS AND FINAL GRADES

Progress grades are distributed after the mid-term (ninth week of the semester.) Final grades are distributed following the close of each semester.

Students are graded:

<u>Grade-Point Value</u>		
A	excellent	4 points
B	good	3 points
C	average	2 points
D	poor	1 point
F	failing	0 points
I	incomplete	0 points
W	withdrawn	0 points
WP	withdrawn passing	0 points
WF	withdrawn failing	0 points

## POINT AVERAGES

Every letter grade is equivalent to a certain number of points. A student may determine the grade points for each course by multiplying the number of points his grade is worth times the number of semester hours the course carries. Thus a B in a 3 hour course is worth 9 points and an A in the same 3 hour course is worth 12 points.

The semester point average is found by adding the total points of all courses carried and dividing by the total number of semester hours attempted.

For example:

Course I	3	semester hours	A = 4 points = 12
Course II	2	" "	B = 3 points = 6
Course III	3	" "	C = 2 points = 6
Course IV	3	" "	A = 4 points = 12
Course V	1	" "	C = 2 points = 2
Course VI	2	" "	A = 4 points = 8
	<u>14</u>		<u>46</u>

$$\begin{array}{r}
 3.285 \\
 14 \overline{)46.000} \\
 \underline{42} \phantom{00} \\
 40 \phantom{00} \\
 \underline{28} \phantom{00} \\
 120 \phantom{00} \\
 \underline{112} \phantom{00} \\
 80
 \end{array}
 = 3.29$$

This student's point average for the semester is thus 3.29.

Courses from which a student withdraws with either a "W" or "WP" are not considered in any way in determining point averages. However, if a student withdraws from a course with a "WF" the hours of that course are included in the total number of hours the student has taken in determining his point average. The result is that a grade of "WF" has the same effect as an "F" while a "W" or "WP" does not reflect on the student's scholastic record.

Grades of "I" are not computed in the point average until they have been changed to a letter grade.

The cumulative point average for any student is the average of all his college work attempted.

Each semester a Dean's List will be issued naming all those students who have earned a semester point average of 3 points or better.

A cumulative grade point average of 2 points is required for graduation from Dade County Junior College. All required courses in which the student received an "F" will have to be taken over. While a student may be able to average out a "D" for graduation purposes, it is well to remember that grades below "C" are seldom transferable.

## INCOMPLETES

A student who is doing passing work in a course but has not completed all of the required work at the end of the semester may be assigned an "I" by the Professor with the concurrence of the Professor's immediate supervisor.

An "I" must be removed by the middle of the following regular semester or by the close of the summer session, if the incomplete is assigned during the second semester. If the work has not been completed by the specified time, it will automatically change to an "F".

An incomplete may be removed even though a student is not enrolled in the college.

## SCHEDULE CHANGES

Schedule changes after registration will be processed for students until the last day for late registration for a service charge of \$2.00 for each drop and for each add (with the exception of those necessitated by action of the College).

Students who want to drop a course after registration must follow the regular procedure and pay a \$2.00 service charge. Failure to do so will result in a "WF" grade being recorded. Proper procedure is as follows:

1. The student will initiate the drop in the Registrar's office.
2. If it is before the end of the sixth week of classes, a grade of "W" will be permitted and a \$2.00 service charge will be made.
3. If it is after the sixth week of classes, a grade of "WP" or "WF" will be assigned and a \$2.00 service charge will be made.

## **WITHDRAWALS FROM COLLEGE**

Withdrawals with a grade of "W" will be permitted from the beginning of the sixth day of classes through the sixth week of the semester for the fall and spring semesters.

A grade of "WP" (Withdrawn Passing) or "WF" (Withdrawn Failing) for each course will be assigned by the Professor after the sixth week should a student withdraw.

The student must initiate official withdrawal in the Registrar's Office. A grade of "WF" is assigned to students who simply absent themselves from class.

## **ACADEMIC PROBATION**

Any student who fails to maintain 1.5 grade point average for all work attempted during any semester will be placed on scholarship probation for his next semester.

A student on scholarship probation will be ineligible for further registration at the Dade County Junior College unless he achieves a 2.0 grade point average for all work attempted for the semester in which he was on scholarship probation.

A student registering as a sophomore will be placed on scholarship probation if he has less than a 1.5 cumulative grade point average.

A student at Dade County Junior College may not remove probation by attending another institution.

Transfer students will be placed on probation at the time of entrance if they have less than a 2.0 cumulative average.

## **SUSPENSION**

The purpose of suspension from the College for academic reasons is to remove from credit registration at the College those students who would not ultimately meet requirements for graduation if they continue at their current level of progress. The purpose of final suspension from the College for academic reasons is to remove permanently from the credit registration at the College those students who would not ultimately meet requirements for graduation if they were to continue or resume college work at a level of performance which they have been achieving.



Suspensions will be, in the first instance of academic deficiency, for one semester. A second suspension for academic reasons shall be final and the student will not be eligible for further credit registration at the college.

A student who has attempted six semesters of work in the College shall be ineligible for further credit registration in the College unless he has an overall grade point average of 2.0.

## ABSENCES

Absences count from the first day of classes and the Professor is required to report absences accurately to the Registrar's Office.

The effect of absences upon grades is determined by the Professor. If any student accumulates so many absences that his success in the class is doubtful, the Professor will notify the registrar who will send a written warning to the student. Upon further absences the Professor will notify the Registrar's office that the student is to be dropped from the class and a grade of "WF" will be assigned.

# Degrees and Graduation

## DEGREES

The College offers the degrees of Associate in Arts and Associate in Science.

## APPLICATION FOR DEGREES

Students who expect to be graduated must file application for the degree in the Office of the Registrar on or before the time indicated in the current College Calendar. Students must make application in the term in which they expect to be graduated, regardless of previous applications made.

## GRADUATION REQUIREMENTS

1. Average required - In order to secure a degree, a student must have a "C" (2.00) average or better in all credit work attempted.
2. The Registrar and the Dean of Studies concerned must certify that all course requirements for the degree have been completed.
3. The faculty of the area of studies awarding the degree must recommend the student for graduation.

## RESIDENCE REQUIREMENTS

A minimum of at least the last 15 semester hours must be earned at Dade County Junior College.

## ATTENDANCE AT COMMENCEMENT

All candidates for degrees are required to be present at commencement exercises (Baccalaureate Service and Commencement Convocation). A student who fails to attend shall not have his degree conferred until he makes another application and complies with this requirement.

This requirement will be waived only under extenuating circumstances. In general, serious illness of the candidate or similar emergency will be considered the only satisfactory reason for waiver. Application for waiver must be made through the Dean of Studies concerned, to the President.

# Student Personnel Services

## FINANCIAL AID

Some scholarships are available. Those students who have high scholastic records may file an application for a scholarship in the Office of Student Personnel. Dade County Junior College is approved for study under the General Scholarship Loans Program for the preparation of teachers.

Those students interested in part-time employment should report to the Office of Student Personnel. An attempt will be made to assist students in finding either on-campus or off-campus employment. Students employed full-time (40 hours per week) should not enroll for more than nine semester hours of course work.

## ORIENTATION

All full-time day students - both new and transfer - are required to attend the orientation program set up by the Student Personnel Office. An orientation program during evening hours will be held for interested students in the extended day program. Consult the College Calendar for date and time. During orientation the student has the opportunity to meet the administrative and instructional staff as well as to learn more about his new curriculum and extracurricular activities.

## STUDENT ACTIVITIES

Student social and service clubs are recognized by the College and students are encouraged to participate.

There is a Student Government Association which elects officers annually and which has a share in developing College policy in areas of student life.

For 1961-1962, a college newspaper and an annual are planned.

Students will be encouraged to form additional groups according to their needs and interests.

No social fraternities or sororities are permitted in publicly supported Florida junior colleges.

## **GUIDANCE SERVICES**

A student coming to the Dade County Junior College should decide prior to his initial registration or as early in his college career as possible the area of studies in which he plans to enroll; that is academic, technical, special degree, or non-degree. He should then select a program, many of which are outlined in this catalog.

In order that these decisions may be sound, they must be made by the individual student after an objective consideration and evaluation of himself—his aptitudes, interests, personality, and financial situation.

The services of the counseling staff of the Guidance Department are available to assist students as they make these decisions and as they plan their educational and vocational programs. Counselors are also available to assist students in resolving problem areas of a more personal nature that may be interfering with progress towards their educational or vocational objective.

The Guidance Test Battery is required of all students entering the college prior to their initial registration. The results of these tests have nothing to do with determining an individual's eligibility for acceptance to the college. They are used by the Guidance Counselors in assisting individual students to evaluate themselves as they plan their programs in the college and they are used in determining eligibility for registration in certain specialized courses at the college.

## **VETERANS' EDUCATION**

The Dade County Junior College is approved for training under Public Law 550 by the Veterans Administration. A veteran planning to attend college should contact the Registrar's Office to obtain an application for certification of training prior to date of registration. He should then follow the regular college admission procedure.

After enrollment in college, the veteran must fill out form V.B.7-1996A at the end of each calendar month of attendance in order to receive payment from the Veterans Administration. This form is available in the Registrar's Office.

Training time is computed by the Veterans Administration under Public Law 550 as follows:

14 or more semester hours	Full time
10-14 semester hours	3/4 time
7-9 semester hours	1/2 time
1-6 semester hours	less than 1/2 time

## VOCATIONAL REHABILITATION

Dade County Junior College is approved for students attending under the existing laws for vocational rehabilitation. Students in this category should consult with the Director of Student Welfare and with the proper authorities in the Vocational Rehabilitation Office.

# Facilities and Services

## BOOKSTORE

The College maintains a Book Store which is located in the center of the Central campus. Textbooks, school supplies, gym outfits, and other items are available.

## CAFETERIA

Arrangements for serving of a noon meal are made with the cafeterias of Central and of Northwestern high schools. Hours are announced at the beginning of each semester. No provision is made for dining room service in the evening but vending machines are available for snacks and sandwiches.

## HEALTH SERVICES

Illness or accidents incurred during school hours or enroute to college should be reported immediately to the office of Health and Physical Education, located in the College Administration Building. The Nurses' Clinic at Central High School or Northwestern High School may be used in instances of necessity and emergency.



## **HOUSING**

The College has no housing available and assumes no responsibility for assisting or supervising the student in this respect.

## **STUDENT CENTER**

The Student Center for Central Center is located in the heart of the campus and is open for relaxation and study throughout the day. Student groups recognized by the college may schedule meetings there.

## **STUDENT AUTOMOBILES**

All students who drive to the college and wish to park on college property must register their cars, including license number, and obtain a parking permit to be affixed to the car window.

## **STUDENT ACCIDENT INSURANCE**

Through the Office of Student Personnel, students may obtain accident insurance at a nominal charge during the first two weeks of each semester and during registration.

## **LIBRARY SERVICES**

The libraries of the Dade County Junior College are located in the heart of the two campuses. The Central Center Library is in a two story stucco building with an adjoining office and storage space. The Northwestern Center has its library in the rear of the Northwestern High School Library.

The libraries have a growing collection of materials selected by trained professional librarians in consultation with faculty and administrative personnel. The materials in the collection are augmented by inter-library loans to the greatest possible extent.

Attractive exhibits of books, newspapers, and current periodicals encourage students to read. Trained librarians are on duty at all times to give individual assistance.

The librarians, in cooperation with the English Department, give class lectures and laboratory problems in the use of the Libraries.

# Physical Education

## GENERAL STATEMENT

The Physical Education Program of Dade County Junior College strives to promote knowledge of individual and community health and help the student develop and maintain maximum physical efficiency, develop useful physical and social skills, and enjoy wholesome recreational activities.

The following services are provided for all students: (1) activity courses in physical education, (2) intramural activities, (3) intercollegiate athletic competition and (4) an adaptive program.

## DEGREE REQUIREMENTS

Each full-time degree student is required to earn 4 credits in physical education for graduation. Physically-able students are required to take PE 104—Beginning Swimming. The passing of a basic swimming test will allow the student to enroll in another activity or in intermediate swimming.

A full-time degree student must have a physical examination and submit a written record thereof at the time he applies for admission. The type of activity in which a student is qualified to participate will be based on this medical examination.

## UNIFORMS

Gym suits and shoes that meet the approval of Physical Education Department must be furnished by the student. Such outfits are available at the Campus Book Store.

## ATHLETIC PROGRAM

A program of intercollegiate and intramural activities is conducted by Dade County Junior College under the leadership of the Director of Athletics and the Department of Health and Physical Education.

During the College's first year, the Basketball Squads of both Central and Northwestern participated in full schedules against Florida and Georgia teams.

There are intramural and recreational opportunities for all men and women, regardless of their physical limitations.

# General Education Program

Students enrolling in Dade County Junior College will find a program of general and specialized courses which combine education for democratic citizenship with education for excellence. The general education courses are specifically designed to provide fundamental education for modern man. The purposes of the general education program are:

1. To provide a common core of experiences for the students.
2. To provide some insight into the basic areas of knowledge.
3. To assist the student in making a more intelligent decision regarding vocational and avocational pursuits.

At Dade County Junior College, general education courses have been organized around the following areas:

1. **Communications** — including reading, speaking, and writing. This is a two-year program involving extensive use of readings drawn from and correlated with the other basic areas.
2. **Humanities** — including the intellectual and aesthetic aspects of art, music, architecture, drama, and philosophy.
3. **Natural Sciences** — including mathematics, physical and biological and earth sciences.
4. **Physical Education** — including a sequential program emphasizing certain biological and psychological factors influencing health. Students must demonstrate development in three areas of physical activity.
5. **Social Sciences** — including tracing the development and transformation of American institutions in the world setting.

Students attending the college should take as many of the general education courses as can be arranged within the requirements of individual programs.

Students in Technical and Special Degree Studies are required to take six hours in the Social Sciences, six hours in Communications, and four hours in Physical Education. Students in Academic Studies must in some manner satisfy requirements in all of the areas of general education. This will include 12 hours in Communications, 12 hours in the Natural Sciences, six hours in the Social Sciences, six hours in the Humanities, and four hours in Physical Education. Exceptions to this pattern are indicated in some of the pre-professional programs where it is assumed that the specialized courses may give sufficient

coverage to provide for general education in one basic area. General education requirements specified under the various programs must be completed by all students receiving an Associate in Arts or Associate in Science Degree from the College.

## DIVISION OF COMMUNICATIONS

### CS 101 Communications

3 Credits

A four semester course which will present an intensive study of and practice in reading, speaking, writing, and listening and which will involve the student's using materials that will enable him to integrate his whole general education program.

### CS 102 Continuation of CS 101 Prerequisite CS 101

3 Credits

### CS 201 Continuation of CS 101-102. Prerequisites CS 101-102.

3 Credits

### CS 202 Continuation of CS 202 Prerequisites CS 201

3 Credits

## DIVISION OF HUMANITIES

### HS 201 Humanities

3 Credits

The significance of artistic experience in Western Culture will be examined by considering music, the visual arts, and drama. This course will satisfy half of the Humanities requirement in Academic Studies.

### HS 202 Humanities

3 Credits

A consideration of the key ideas of human culture and consequences. This course will be concerned largely with the reading of original texts. The second half of the Humanities requirement in Academic Studies will be satisfied by this course. Prerequisite - Sophomore standing or permission of Department Head.

## DIVISION OF NATURAL SCIENCES

- NSS 101 The Natural Sciences (Mathematical) 3 Credits  
An introduction to mathematical concepts necessary for effective citizenship, covering sets, development of numbering system, logarithms, probability and statistics, linear equations and inequalities. - (Formerly MS 105)
- NSS 102 The Natural Sciences (Physical) 3 Credits  
The general principles of the physical sciences. The fundamental concepts of matter and energy basic to all sciences will be covered.
- NSS 201 The Natural Sciences (Biological) 3 Credits  
The general principles of biological science. Cell structure and functions and organization into multi-cellular systems. Plants and animals as organized systems. Man and his relationship to his environment. Prerequisite NSS 101-102.
- NSS 202 The Natural Sciences (Earth Science) 3 Credits  
Facts, concepts, theories and principles from the areas of astronomy, geology, and meteorology basic for general education. Prerequisite NSS 101-102.

## DIVISION OF PHYSICAL EDUCATION

Each full time degree student is required to earn four credits in Physical Education. A physically fit student must include PE 104, Beginning Swimming, in his program unless he is able to pass a basic swimming test.



## DIVISION OF SOCIAL SCIENCES

### SSE 101 Social Sciences

3 Credits

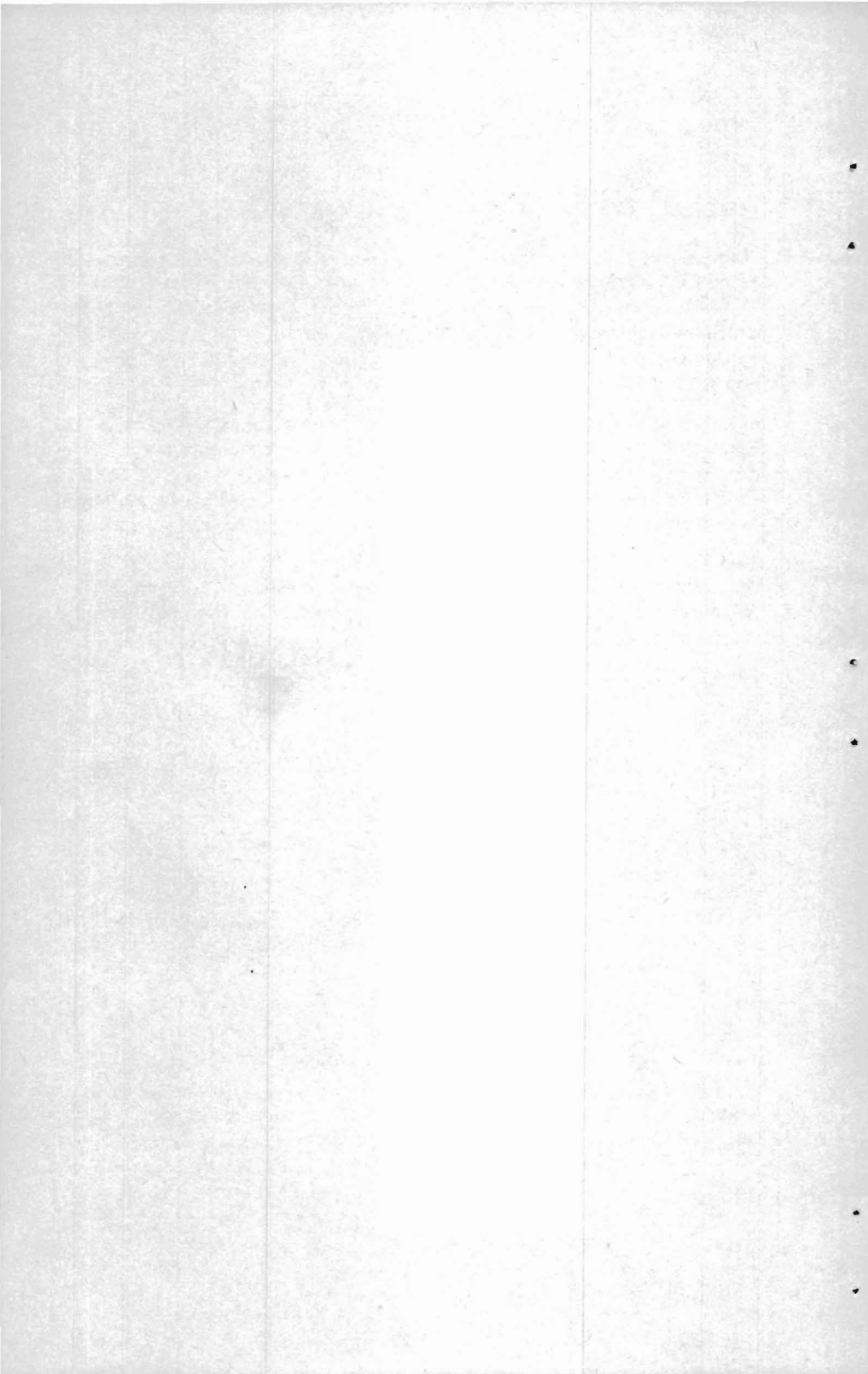
A course designed to acquaint the student with the nature of social institutions and leading political, social, and economic problems; a general understanding of political organization and processes, especially in America, and the problems concerning the relations of the United States to the world at large.

### SSE 102 Continuation of SSE 101

3 Credits

Prerequisite SSE 101.

Programs  
in  
Academic Studies



# Academic Studies

## LIBERAL ARTS

Students who intend to enter a senior college of Arts and Sciences for graduation with an academic major should include the entire General Education program in their selection of courses at Dade County Junior College. Normally, CS 101-102, SSE 101-102, NSS 101-102, and HS 201 will be taken in the Freshman year. CS 201-202, NSS 201-202, and HS 202 should be taken in the Sophomore year.

In addition to completing his General Education program and Physical Education requirements, the student should complement his work at this college by selecting courses that will lead into his major at a senior college or that will provide him with desirable intellectual experiences for his personal life.

Two years of a foreign language or an equivalent are required for the Bachelor of Arts degree at almost all senior colleges. Students whose plans lead to this degree will find it desirable to complete this requirement in junior college.

A typical schedule for pre-liberal arts students follows:

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications.....	3	CS 102	Communications.....	3
SSE 101	Social Sciences.....	3	SSE 102	Social Sciences.....	3
NSS 101	Natural Sciences.....	3	NSS 102	Natural Sciences.....	3
PE	Physical Education ....	1	HS 201	Humanities.....	3
	Electives .....	6	PE	Physical Education....	1
				Electives .....	3

### SOPHOMORE YEAR

CS 201	Communications.....	3	CS 202	Communications.....	3
NSS 201	Natural Sciences.....	3	NSS 202	Natural Sciences.....	3
PE	Physical Education.....	1	HS 202	Humanities.....	3
	Electives .....	9	PE	Physical Education....	1
				Electives .....	6

## PRE-PROFESSIONAL PROGRAMS

Professional Schools, in addition to general education, vary the nature and number of pre-professional requirements which should be taken during the freshman and sophomore years. Students who have determined which profession or occupation they plan to enter should study the list of courses prescribed under the proper pre-professional program. Because of changing professional requirements at various senior institutions, students should consult with program advisors before registering for professional courses. Students should also become familiar with the requirements of the senior institution to which they may transfer.

Programs are offered in the pre-professional fields of:

- Agriculture and Forestry
- Architecture
- Art
- Business Administration
- Economics
- Engineering
- Health and Physical Education
- Journalism
- Law
- Medicine and Dentistry
- Music Education
- Nursing
- Pharmacy
- Science
- Teaching

General program outlines for the Academic Studies follow.



## PRE-AGRICULTURE AND PRE-FORESTRY

These curriculums are designed to enable the student to transfer to most institutions that offer Bachelor's degrees in agriculture or forestry. A reasonable distribution of general education courses and basic science courses has been included.

### Pre-Agriculture

#### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences .....	3	LC 105	Man and His Thinking	3
BY 181	Botany .....	4	BY 182	Zoology .....	4
PE	Physical Education .....	1	PE	Physical Education ....	1
	Electives .....	3		Electives .....	3

#### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
HS 201	Humanities .....	3	HS 202	Humanities .....	3
BY 217	Invertebrate Zoology ....	4	BY 218	Comparative Vertebrate Anatomy .....	4
CY 101	General Chemistry .....	4	CY 102	General Chemistry .....	4
PE	Physical Education .....	1	PE	Physical Education ....	1
	Electives .....	3		Electives .....	3

## Pre-Forestry

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications.....	3	CS 102	Communications .....	3
BY 181	Botany .. .....	4	BY 182	Zoology .....	4
CY 101	General Chemistry .....	4	CY 102	General Chemistry .....	4
MS 140	Fundamental Mathematical Functions 1.....	4	MS 141	Fundamental Mathematical Functions 2 .....	4
PE	Physical Education.....	1	PE	Physical Education ....	1
	Electives .....	3		Electives .....	3

### SOPHOMORE YEAR

CS 201	Communications.....	3	CS 202	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
HS 201	Humanities .....	3	HS 202	Humanities .....	3
BY 217	Invertebrate Zoology....	4	CY 201	Qualitative Analysis	4
PE	Physical Education.....	1	PE	Physical Education ....	1
	Electives .....	3		Electives .....	3

## PRE-ARCHITECTURE

Students interested in architecture or its allied arts should consult with the pre-art advisor regarding their programs.

## PRE-ART

The Art Department curriculum has been developed with the idea of covering as broad a field of interests as possible as long as the courses were all related to a sound foundation. Whether a person is a creator or a consumer of art and design, the basic need is to understand the logic of form and the means by which it speaks directly to the emotions.

Fields of specialization are provided in which the foundation skills may be extended and deepened. Professional standards will be worked for at all times but is not assumed, as the student begins, that he has had prior training. Diligent students will find that they have an excellent preparation for stimulating and rewarding profession, as well as all of the general education courses required for transfer to a senior institution.

### Pre-Art or Pre-Art Education

#### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
NSS 101	Natural Sciences .....	3	NSS 102	Natural Sciences .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences.....	3
AT 101	Basic Art Workshop .....	3	AT 102	Basic Art Workshop.....	3
AT 121	Art History .....	3	AT 122	Art History .....	3
AT 131	Figure Drawing.....	3	AT 132	Figure Drawing .....	3
PE	Physical Education .....	1	PE	Physical Education.....	1

#### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
NSS 201	Natural Sciences .....	3	NSS 202	Natural Sciences.....	3
AT 201	Advanced Design .....	3	AT 202	Advanced Design.....	3
AT 231	Art Practicum		AT 232	Art Practicum	
	(any two areas).....	6		(any two areas).....	6
PE	Physical Education .....	1	PE	Physical Education.....	1

## PRE-BUSINESS ADMINISTRATION

The Pre-Business Administration program is designed to meet the course requirements of the first two years for most senior institutions which offer the Bachelor's degree in business administration. Since there are variations in the requirements at different institutions, students should become familiar with the particular requirements at the school they plan to attend. Some requirements are noted after the suggested program which follows.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MS 140	Fundamental Mathematical Functions 1 .....	4	MS 141	Fundamental Mathematical Functions 2 .....	4
ACG 181	Principles of Acct.....	3	ACG 182	Principles of Acct.....	3
BAN 181	Principles of Business	3	BAN 182	Principles of Business	3
PE	Physical Education.....	1	PE	Physical Education....	1

### SOPHOMORE YEAR

CS 201	Communications.....	3	CS 202	Communications .....	3
HS 201	Humanities .....	3	HS 202	Humanities.....	3
NSS 102	Natural Sciences .....	3	NSS 201	Natural Sciences .....	3
MS 225	Statistical Methods .....	3	NSS 202	Natural Sciences .....	3
ES 201	Principles of Economics .....	3	ES 202	Principles of Economics .....	3
PE	Physical Education ....	1	PE	Physical Education....	1

Students who plan to major in Economics in the Business Administration Department at the University of Florida should follow the above program. Students who plan to enter a senior institution that does not require advanced mathematics for entrance to upper division College of Business Administration, may substitute NSS 101 and an approved elective for MS 140 and 141. Students who plan to transfer to the to the University of Miami College of Business Administration should take BAN 231 Business Law as their approved elective.

## PRE-ECONOMICS

The Pre-Economics curriculum provides a general program outline for those students who plan to complete their education at a senior institution, in preparation for careers as economists. Special attention should be paid to particular requirements of several universities as noted below the suggested program which follows.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences.....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences.....	3	NSS 102	Natural Sciences.....	3
ACG 181	Principles of Acct .....	3	ACG 182	Principles of Acct .....	3
PE	Physical Education ....	1	PE	Physical Education ....	1
	Elective in Language or Government .....	3		Elective in Language or Government .....	3

### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
HS 201	Humanities .....	3	HS 202	Humanities .....	3
NSS 201	Natural Sciences.....	3	NSS 202	Natural Sciences.....	3
ES 201	Principles of Economics .....	3	ES 202	Principles of Economics .....	3
MS 225	Statistical Methods ....	3	PE	Physical Education ....	1
PE	Physical Education ....	1		Approved Elective .....	3

Transfers to the University of Florida who plan to major in Economics in the College of Arts and Sciences must take a minimum of 6 hours in a language while in junior college.

Approved electives should be selected from language, political science, or history.

NOTE: Transfers to the University of Miami for a major in Economics must follow the Pre-Business Administration Program.



## PRE-ENGINEERING

The Pre-Engineering curriculum is designed to meet the course requirements of the first two years of undergraduate study in professional engineering schools.

Engineering requires a high proficiency in the areas of mathematics and science. About half of the course work and study is devoted to these two areas. The remainder of the courses are designed to meet the requirements of a general education.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications.....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences.....	3
MS 140	Fundamental Mathematical Functions 1 .....	4	MS 141	Fundamental Mathematical Functions 2.....	4
CY 101	General Chemistry .....	4	CY 102	General Chemistry .....	4
EG 101	Engineering Drawing 1..	2	EG 102	Engineering Drawing 2 ..	2
PE	Physical Education ....	1	PE	Physical Education .....	1

### SOPHOMORE YEAR

HS 201	Humanities .....	3	HS 202	Humanities .....	3
MS 240	Calculus 1 .....	4	MS 241	Calculus 2 .....	4
PS 205	General Physics .....	4	PS 206	General Physics .....	4
CY 201	Qualitative Analysis....	4	EG 205	Descriptive Geometry..	3
PE	Physical Education ....	1	PE	Physical Education ....	1

## PRE-HEALTH AND PHYSICAL EDUCATION

The following is a general program outline for those students who plan to complete their education at a senior institution and to enter the health and physical education field professionally:

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications.....	3	CS 102	Communications .....	3
SSE 101	Social Sciences.....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences .....	3	NSS 102	Natural Sciences .....	3
EN 101	Introduction to Education .....	3	SPH 105	Introduction to Speech .....	3
PE 136	Introduction to Health, Physical Education and Recreation .....	2	PE 128	Teaching of Team Games .....	2
PE 127	Teaching of Team Games .....	2	PE 130	Hygiene .....	3
PE	Physical Education Activity .....	1	PE	Physical Education Activity .....	1

### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
NSS 201	Natural Sciences.....	3	NSS 202	Natural Sciences .....	3
HS 201	Humanities .....	3	HS 202	Humanities .....	3
EN 245	Human Growth and Development .....	3	PE 205	First Aid .....	2
BY 205	Human Physiology and Anatomy .....	3	PE	Physical Education Activity .....	1
PE	Physical Education Activity .....	1		Electives .....	3-5

## PRE-JOURNALISM

The pre-journalism curriculum, for students planning to enter the fields of journalism, broadcasting, and allied professions, is designed to fulfill a three-fold purpose.

Firstly, it provides the student with a 40-hour general education program.

Secondly, it provides the introductory courses essential to the professional program.

And lastly, it provides an opportunity to explore various areas of journalism and communications.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications.....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences .....	3	NSS 102	Natural Sciences .....	3
SPH 105	Fundamentals of Speech .....	3	AT 101	Basic Art Workshop ....	3
BEN 110	Typewriting .....	2	BEN 115	Shorthand Stenoscript	2
PE	Physical Education ....	1	PE	Physical Education ....	1
	Electives .....	3		Electives .....	3

### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
HS 201	Humanities .....	3	HS 202	Humanities .....	3
NSS 201	Natural Sciences .....	3	NSS 202	Natural Sciences .....	3
JM 201	Survey of Communications .....	3	JM 202	Writing for Mass Communications .....	3
BUS 140	Advertising and Copywriting .....	3	EH 213	Contemporary Literature .....	3
PE	Physical Education ....	1	PE	Physical Education ....	1

Suggested electives include a foreign language or courses in the fields of psychology, history, political science or sociology.

## PRE-LAW

Most colleges of law now limit their admissions to students who have received a baccalaureate degree from an approved college or university. There is a growing trend among law schools to require entering students to have had a course or courses in logic and in argumentation and debate. These courses are therefore required as part of the pre-law program at Dade County Junior College.

In addition to the recommended program, pre-law students should choose at least twelve semester hours work from among the areas of accounting, economics, American history, political science, and psychology.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences .....	3	NSS 102	Natural Sciences.....	3
HS 201	Humanities .....	3	LC 105	Man and His Thinking	3
PE	Physical Education ....	1	PE	Physical Education ....	1
	Electives .....	2-5		Electives .....	2-5

### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
NSS 201	Natural Sciences .....	3	NSS 202	Natural Sciences .....	3
SPH 205	Argumentation and Debate .....	3	HS 202	Humanities .....	3
PE	Physical Education ....	1	PE	Physical Education ....	1
	Electives .....	5-8		Electives .....	5-8

## PRE-MEDICINE AND PRE-DENTISTRY

Entrance requirements for medical and dental schools vary with each institution. Records indicate that pre-medical and pre-dental students usually apply to from six to ten schools, hoping to get accepted by any one. Therefore, this two-year program has been designed to satisfy the general requirements of most medical and dental schools, not a particular one. Each student should keep in mind that one to two years of additional work will be required at a senior institution before application can be accepted by the medical or dental schools.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
CY 101	General Chemistry .....	4	CY 102	General Chemistry .....	4
BY 181	Botany .....	4	BY 182	Zoology .....	4
MS 140	Fundamental Mathematical Functions 1 .....	4	MS 141	Fundamental Mathematical Functions 2 .....	4
GN 101	German or		GN 102	German or	
FH 101	French .....	3	FH 102	French .....	3
PE	Physical Education ....	1	PE	Physical Education ....	1

### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
HS 201	Humanities .....	3	HS 202	Humanities .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
CY 201	Qualitative Analysis ..	4	CY 205	Organic Chemistry .....	4
BY 217	Invertebrate Zoology ..	4	BY 218	Comparative Vertebrate Anatomy .....	4
PE	Physical Education ....	1	PE	Physical Education ....	1

Entrance to many of these courses requires competence in verbal and quantitative skills and a minimum score on a screening test. Those failing to meet these requirements will be required to work out a special program with an advisor.



## PRE-MUSIC EDUCATION

The Pre-Music Education course is designed to teach music in the fullest sense and to build educated musicians, not mere vocal or instrumental performers. It places stress on a sound general education as essential to the equipment of a successful musician.

This curriculum is designed to prepare the student to continue a program which will lead him to a professional career in music education or some related field.

Students will be given a music achievement test during the first week of the semester (or before) to determine in which classes they should be placed.

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences .....	3	NSS 102	Natural Sciences .....	3
MC 101	Music Theory .....	3	MC 102	Music Theory .....	3
MC 103	Sight Singing .....	1	MC 104	Sight Singing .....	1
MC 121	Applied Music Principal Subject ....	2	MC 122	Applied Music Principal Subject ....	2
MC 123	Applied Music Secondary Subject ....	1	MC 124	Applied Music Secondary Subject ....	1
MC 127	String Techniques .....	1	MC 128	String Techniques .....	1
MC 140, MC 150, MC 160 (Band, Chorus, or Orchestra)		1	MC 140, MC 150, MC 160 (Band, Chorus, or Orchestra)		1
PE	Physical Education ....	1	PE	Physical Education ....	1

## SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
NSS 201	Natural Sciences .....	3	NSS 202	Natural Sciences .....	3
MC 201	Music Theory .....	3	MC 202	Music Theory .....	3
MC 203	Sight Singing .....	1	MC 204	Sight Singing .....	1
MC 205	Keyboard Harmony .....	1	MC 206	Keyboard Harmony .....	1
MC 221	Applied Music Principal Subject .....	2	MC 210	Music History and Literature .....	3
MC 223	Applied Music Secondary Subject ....	1	MC 222	Applied Music Principal Subject .....	2
MC 140, MC 150, MC 160 (Band, Chorus, or Orchestra)		1	MC 224	Applied Music Secondary Subject ....	1
PE	Physical Education ....	1	MC 140, MC 150, MC 160 (Band, Chorus, or Orchestra)		1
			PE	Physical Education ....	1

## PRE-NURSING

The programs of the several colleges offering work toward a nursing degree vary so that it is almost impossible to design a pre-nursing program which will articulate with any one of the schools completely. In this program an attempt has been made to cover as many common requirements as was possible. However, the student is advised to consider this program more as a rough guide than as a final dictum. He should consult the catalog of the college at which he hopes to finish his training and work out a specific program with his advisor.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences .....	3	LC 105	Man and His Thinking	3
BY 181	Botany .....	4	BY 182	Zoology .....	4
PE	Physical Education ....	1	PE	Physical Education ....	1

### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
HS 201	Humanities .....	3	HS 202	Humanities .....	3
PSY 205	Personal Psychology ..	3	BY 205	Human Physiology and Anatomy .....	3
SPH 105	Fundamentals of Speech .....	3	CY 102	General Chemistry .....	4
CY 101	General Chemistry .....	4	PE	Physical Education ....	1
PE	Physical Education ....	1		Electives .....	3

## PRE-PHARMACY

This is a basic pre-pharmacy program designed to meet the general requirements for a bachelor's degree in pharmacy. Requirements vary at different institutions and the student should study the catalog of the institution to which he plans to transfer and work out his individual program with his advisor.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MS 140	Fundamental Mathematical Functions 1 .....	4	MS 141	Fundamental Mathematical Functions 2 .....	4
CY 101	General Chemistry .....	4	CY 102	General Chemistry .....	4
PE	Physical Education ....	1	PE	Physical Education ....	1
	Electives .....	3		Electives .....	3

### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
HS 201	Humanities .....	3	HS 202	Humanities .....	3
CY 201	Qualitative Analysis ..	4	CY 205	Organic Chemistry .....	4
BY 181	Botany .....	4	BY 182	Zoology .....	4
PE	Physical Education ....	1	PE	Physical Education ....	1
	Electives .....	3		Electives .....	3

## PRE-SCIENCE

Because of the variety of pre-science major fields, interested students should work out an individual program with a science counselor.

## PRE-TEACHING

The pre-teaching curriculums are designed to introduce lower division students to the field of education as a profession concurrently with their academic preparation. Florida State requirements for teacher certification and the upper division programs of the universities and colleges to which most students will transfer serve as the basis for these programs.

While the general preparation and professional preparation requirements for Florida certification are not identical for all levels and areas of specialization, certain courses meet these requirements and are required of all pre-teaching students. Other courses are specifically needed by prospective elementary grade teachers; these have been gathered into a program for them. The specialization needs of future high school teachers are varied. Consequently, a flexible structure within which the student and advisor can organize the individual's program has been provided.

### Pre-Teaching (Elementary)

#### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences .....	3	NSS 102	Natural Sciences .....	3
HS 201	Humanities .....	3	AT 104	Introduction to Art .....	3
EN 101	Introduction to Education .....	3	PE	Physical Education ....	1
PE	Physical Education ....	1		Professional Electives	3

#### SOPHOMORE YEAR

CS 201	Communications .....	3	CS 202	Communications .....	3
NSS 201	Natural Sciences .....	3	NSS 202	Natural Sciences .....	3
SH 101	Spanish .....	3	SH 102	Spanish .....	3
HS 202	Humanities .....	3	SPH 105	Fundamentals of Speech .....	3
EN 245	Human Growth and Development .....	3	PE	Physical Education ....	1
DA 105	Play Production .....	2		Professional Electives	3
PE	Physical Education ....	1			

Professional Electives include PSY 205, PSY 291, LC 105, and PE 130.

## Pre-Teaching (Secondary)

### FRESHMAN YEAR

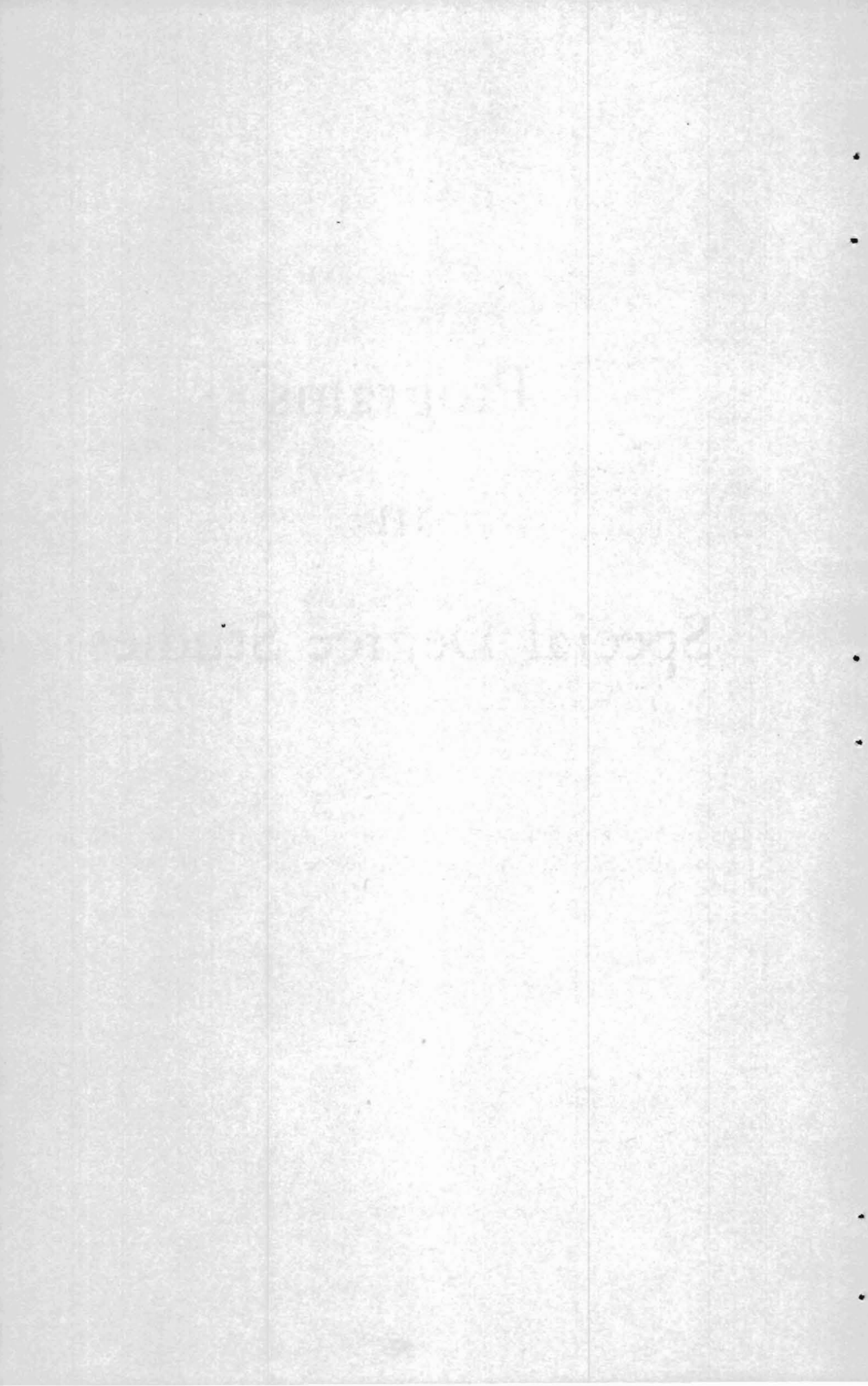
First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
NSS 101	Natural Sciences .....	3	NSS 102	Natural Sciences .....	3
HS 201	Humanities .....	3	EN 101	Introduction to Education .....	3
SPH 105	Fundamentals of Speech .....	3	PE	Physical Education ....	1
PE	Physical Education ....	1		Approved Electives ....	3

### SOPHOMORE YEAR

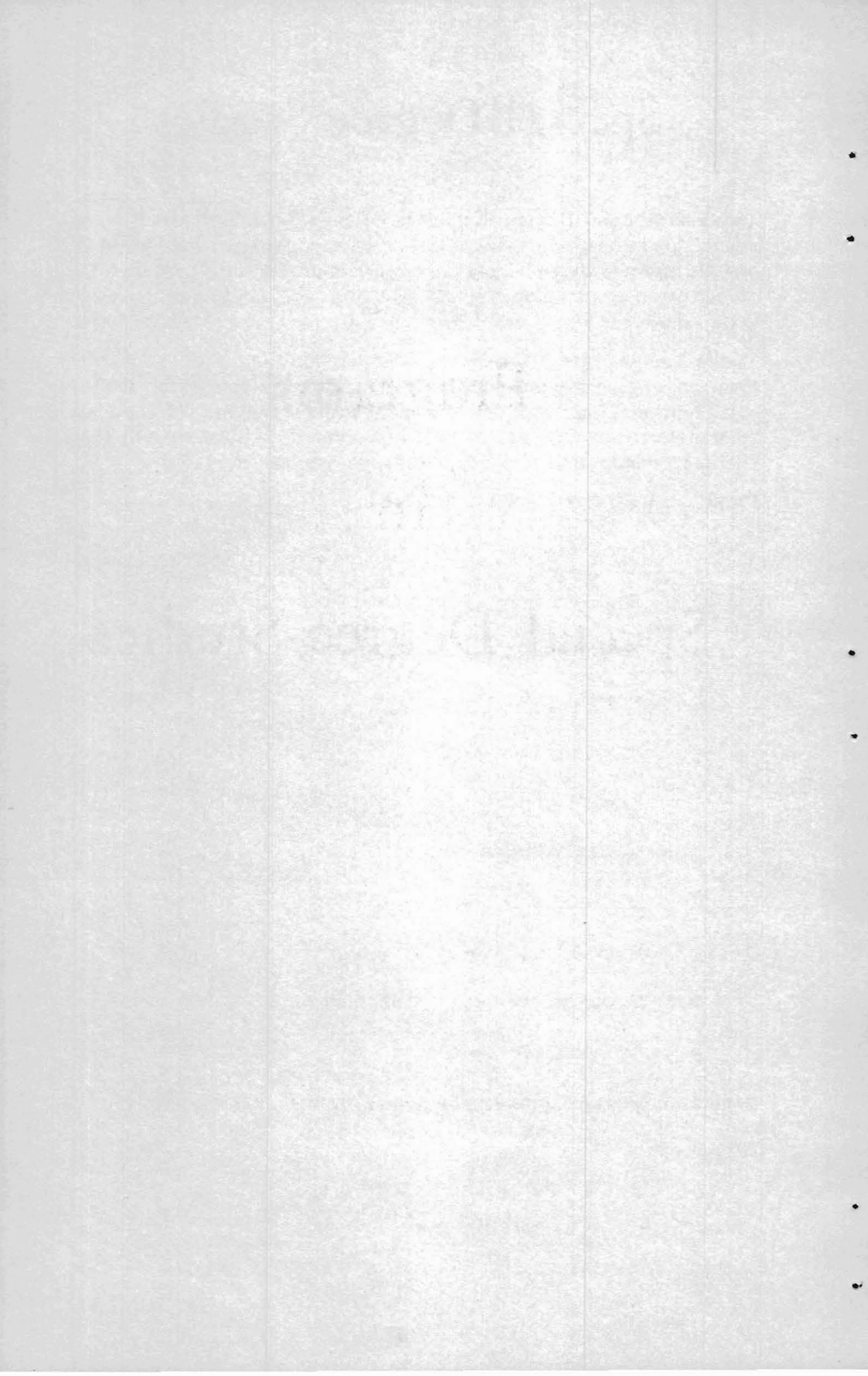
CS 201	Communications .....	3	CS 202	Communications .....	3
NSS 201	Natural Sciences .....	3	NSS 202	Natural Sciences .....	3
EN 245	Human Growth and Development .....	3	PE	Physical Education ....	1
HS 202	Humanities .....	3		Approved Electives ....	9
PE	Physical Education ....	1			
	Approved Electives ....	3			

Approved Electives include any two of these: PSY 205, PSY 291, LC 105, PE 130 plus nine semester hours in the proposed teaching field.





Programs  
in  
Special Degree Studies



# Special Degree Studies

Two-year Special Degree Studies have been developed for those high school graduates who wish to complete a college program which will prepare them to enter business or professional employment at a level of competence requiring more than a high school education but less than a four-year university degree.

These courses are all college-level (credit) courses. Though the programs are designed to prepare for entrance to employment, there are sufficient academic courses scheduled and the majority of them could be transferred to a senior college or university, if the student should decide to continue toward a four-year professional degree.

Programs are offered in the fields of:

Accounting

Business Administration and Office Management

Church and Institutional Music

Fashion Design

Home and Family Life

Legal Secretary

Medical Secretary

Merchandising

Piano Pedagogy

Police Science and Criminology

Secretarial Science

General program outlines for the Special Degree Studies follow.

## ACCOUNTING

The two-year program in Accounting is a highly specialized course of study for those students who plan to seek immediate employment in the accounting field. The course offerings constitute an integral and significant part in meeting individual needs of students entering accountancy.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
ACG 181	Principles of Acct .....	3	ACG 182	Principles of Acct .....	3
BEN 105	Business Mathematics ...	3	BEN 113	Office Machines .....	3
BEN 111	Typewriting .....	2	PE	Physical Education .....	1
PE	Physical Education .....	1		Electives .....	2
	Elective .....	2			

### SOPHOMORE YEAR

BEN 231	Business Corresp .....	3	BEN 214	Office Machines .....	3
ANG 281	Intermediate Acct 1 .....	3	ANG 282	Intermed Acct 2 .....	3
BAN 231	Business Law .....	3	BEN 270	Income Tax .....	3
PE	Physical Education .....	1	BEN 283	Cost Accounting .....	3
	Electives .....	6	BEN 284	Auditing .....	3
			PE	Physical Education .....	1
				Elective .....	2



## BUSINESS ADMINISTRATION AND OFFICE MANAGEMENT

This two-year course of study is planned for those students who wish to train as Junior Business Executives and who will not continue in a four year college. It covers a course of study in office organization, personnel, procedures, supervision and other such aspects of Business Administration and Office Management.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
ACG 181	Principles of Acct .....	3	ACG 182	Principles of Acct .....	3
BEN 105	Business Mathematics ..	3	BEN 113	Office Machines .....	3
BEN 111	Typewriting .....	2	PE	Physical Education .....	1
PE	Physical Education .....	1		Electives .....	2
	Electives .....	2			

### SOPHOMORE YEAR

ACG 281	Intermed Acct .....	3	ACG 282	Intermed Acct .....	3
BEN 231	Business Corresp .....	3	BAN 231	Business Law .....	3
BEN 160	Principles of Finance ...	3	BEN 217	Office Management .....	3
PE	Physical Education .....	1	BEN 270	Income Tax .....	3
	Electives .....	6	BEN 226	Psychology (Human Relations) .....	3
			PE	Physical Education .....	1
				Electives .....	2

## CHURCH AND INSTITUTIONAL MUSIC

Church and Institutional Music is a two-year program designed to equip the student with the essential background, techniques and skills in preparation for full-time or part-time service as church musicians, ministers of music, and music leaders of community youth groups or civic organizations.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MC 101	Music Theory .....	3	MC 102	Music Theory .....	3
MC 103	Sight Singing .....	1	MC 104	Sight Singing .....	1
MC 121	Applied Music, Principal Subject, Voice or Organ .....	2	MC 122	Applied Music, Principal Subject, Voice or Organ .....	2
MC 123	Applied Music, Secondary Subject, Voice, Piano or Organ .....	1	MC 124	Applied Music, Secondary Subject, Voice, Piano or Organ .....	1
MC 150	Chorus .....	1	MC 150	Chorus .....	1
MC 171	History of Liturgy .....	2	MC 172	History of Liturgy .....	2
PE	Physical Education .....	1	PE	Physical Education .....	1

### SOPHOMORE YEAR

MC 150	Chorus .....	1	MC 150	Chorus .....	1
MC 201	Music Theory .....	3	MC 202	Music Theory .....	3
MC 203	Sight Singing .....	1	MC 204	Sight Singing .....	1
MC 205	Keyboard Harmony .....	1	MC 206	Keyboard Harmony .....	1
MC 221	Applied Music, Principal Subject, Voice or Organ .....	2	MC 222	Applied Music, Principal Subject, Voice or Organ .....	2
MC 223	Applied Music, Secondary Subject, Voice, Piano, or Organ .....	1	MC 224	Applied Music, Secondary Subject, Voice, Piano, or Organ .....	1
MC 271	Choir Training .....	2	MC 272	Choral Literature and Conducting .....	2
MC 273	Service Playing .....	2	MC 277	Institutional Techniques and Materials.....	1
MC 275	Church Music Principles .....	2	MC 210	Music History and Literature .....	3
PE	Physical Education .....	1	PE	Physical Education .....	1

## FASHION DESIGN

The Fashion Design program is for those students with strong interest in and feeling for design. It prepares for employment in those areas where creative design ability is needed, such as fashion design, styling and display. It also prepares for employment in areas where keen discernment of and appreciation for good design is an essential, an understanding of economics is important and the ability to get along with people is a real asset.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
HFL 121	Clothing for Moderns .....	3	HFL 131	Design Applied to	
FDN 100	Opportunities in the			Everyday Living 1 .....	3
	Fashion World .....	1	FDN 102	Fashion Design 2 .....	3
FDN 101	Fashion Design 1 .....	3	FDN 116	Textiles 1 .....	3
FDN 110	Creative Pattern		PE	Physical Education .....	1
	Design 1 .....	3			
PE	Physical Education .....	1			

### SOPHOMORE YEAR

BEN 226	Psychology (Human		HFL 115	Personal Development ...	1
	Relations) .....	3	HFL 132	Design Applied to	
HFL 101	Dynamics of Family			Everyday Living 2 .....	3
	Living .....	3	FDN 251	Supervised Designing	
FDN 201	Clothing Production and		252	Internship .....	6
	Manufacturing .....	3	PE	Physical Education ..	1
FDN 211	Creative Pattern			Electives .....	3
	Design 2 .....	3			
PE	Physical Education .....	1			
	Electives .....	3			

## HOME AND FAMILY LIFE

The Home and Family Life curriculum consists of a group of required courses known as the homemaking core, the required academic courses, and freedom to elect courses of general nature. The core has three major objectives, namely, the (1) development of the student as a person; (2) preparation for family life, (3) preparation for the responsibilities of citizenship in its broadest sense.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
HFL 100	Introduction to Home Economics .....	1	HFL 106	Foods for Young Moderns	3
HFL 101	Dynamics of Family Living .....	3	HFL 132	Design Applied to Everyday Living 2 .....	3
HFL 115	Personal Development ....	1	PE	Physical Education .....	1
HFL 121	Clothing for Moderns .....	3		Elective .....	3
HFL 131	Design Applied to Everyday Living 1 .....	3			
PE	Physical Education .....	1			

### SOPHOMORE YEAR

HFL 201	Child Development and Observation 1 .....	3	HFL 102	Decision Making and Management in Family Living .....	3
HFL 217	Family's Health and Home Nursing .....	3	HFL 202	Child Development and Observation 2 .....	3
HFL 231	Space for Family Living	3	HFL 232	Family Housing and Furnishing .....	3
PE	Physical Education .....	1	PE	Physical Education .....	1
	Electives .....	6		Electives .....	6

## LEGAL SECRETARY

The curriculum for Legal Secretaries has been designed as a two-year terminal program to train young men and women in the specialized knowledge and skill required for competence in this distinct secretarial area.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
BEN 105	Business Mathematics ....	3	EC 201	Economics .....	3
BEN 101	Shorthand 1 .....	3	BEN 102	Shorthand 2 .....	3
BEN 111	Typewriting 1 .....	2	BEN 112	Typewriting 2 .....	2
PE	Physical Education .....	1	BEN 213	Office Machines .....	3
			PE	Physical Education .....	1

### SOPHOMORE YEAR

ACG 181	Accounting 1 .....	3	HS 201	Humanities .....	3
BEN 201	Dictation and Transcription 1 .....	3	BEN 231	Business Correspondence	3
BEN 204	Secretarial Proced .....	3	BEN 253	Legal Dictation and Transcription .....	3
BEN 211	Typewriting 3 .....	2	BEN 226	Psychology (Human Relations) .....	3
BAN 231	Business Law .....	3	BAN 232	Business Law .....	3
PE	Physical Education .....	1	PE	Physical Education .....	1
	Elective .....	1			



## MEDICAL SECRETARY

The curriculum for Medical Secretaries has been designed as a two-year terminal program to train young men and women in the specialized knowledge and skills required in this distinct secretarial area.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
BEN 105	Business Mathematics ....	3	BY 182	Zoology .....	4
BEN 101	Shorthand 1 .....	3	BEN 102	Shorthand 2 .....	3
BEN 111	Typewriting 1 .....	2	BEN 112	Typewriting 2 .....	2
PE	Physical Education .....	1	PE	Physical Education ....	1
	Electives .....	2		Electives .....	2

### SOPHOMORE YEAR

HS 201	Humanities .....	3	HS 202	Humanities .....	3
ACG 181	Principles of Acct .....	3	BEN 204	Secretarial Proced .....	3
BEN 201	Dictation and Transcription .....	3	BEN 231	Business Correspondence	3
BEN 211	Typewriting 3 .....	2	BEN 251	Medical Dictation and Transcription .....	3
BY 205	Human Physiology and Anatomy .....	4	BEN 226	Psychology (Human Relations) .....	3
PE	Physical Education .....	1	PE	Physical Education .....	1

## MERCHANDISING

Students who select this program may choose one of several avenues to a business career for which a knowledge of store merchandising, buying, and selling is important.

The purpose of this program is to combine a broad general education with a knowledge of customers' needs, merchandising principles, and commodity evaluation in order to prepare students for junior executive positions in the merchandising industry. (The areas of emphasis are general, home furnishings, and fashion.)

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MEG 131	Merchandising 1 .....	3	MEG 132	Merchandising 2 .....	3
MEG 100	Opportunities in Merchandising .....	1	BEN 105	Business Mathematics ....	3
MEG 125	Fundamentals of Selling .....	3	HFL 211	Economics for Consumers .....	3
HFL 131	Design Applied to Everyday Living 1 .....	3	PE	Physical Education .....	1
PE	Physical Education .....	1			

### SOPHOMORE YEAR

HFL 101	Dynamics of Family Living .....	3	SPH 105	Fundamentals of Speech .....	3
HFL 115	Personal Development ....	1	BEN 226	Psychology (Human Relations) .....	3
MEG 225	Promotion, Advertising and Display .....	3	MEG 226	Store Operation and Branch Stores .....	3
MEG 231	Principles of Retailing ..	3	MEG 251	Supervised Retail Internship .....	6
PE	Physical Education .....	1	PE	Physical Education .....	1
	Electives .....	6			

## PIANO PEDAGOGY

Piano Pedagogy is a two-year terminal course designed to equip the student with the essential background, technique and skills for the teaching of piano.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MC 101	Music Theory .....	3	PSY 205	Psychology .....	3
MC 103	Sight Singing .....	1	MC 102	Music Theory .....	3
MC 121	Applied Music, Principal Subject, Piano .....	2	MC 104	Sight Singing .....	1
MC 123	Applied Music, Secondary Subject, Class Voice ....	1	MC 124	Applied Music, Principal Subject, Piano .....	2
MC 181	Piano Pedagogy .....	2	MC 123	Applied Music, Secondary Subject, Class Voice ....	1
PE	Physical Education .....	1	MC 182	Piano Pedagogy .....	2
			PE	Physical Education .....	1

### SOPHOMORE YEAR

HS 101	Humanities (Fine Arts) ....	3	HS 102	Humanities (Fine Arts) .....	3
MC 201	Music Theory .....	3	MC 202	Music Theory .....	3
MC 203	Sight Singing.....	1	MC 204	Sight Singing .....	1
MC 221	Applied Music, Principal Subject, Piano .....	1	MC 222	Applied Music, Principal Subject, Piano .....	1
MC 223	Applied Music, Secondary Subject, Class Voice ....	1	MC 223	Applied Music, Secondary Subject, Class Voice ....	1
MC 205	Keyboard Harmony .....	1	MC 206	Keyboard Harmony .....	1
MC 281	Class Piano Methods .....	3	MC 282	Class Piano Methods .....	3
MC 150	Chorus .....	1	MC 210	Music History and Literature .....	3
PE	Physical Education .....	1	MC 150	Chorus .....	1
			PE	Physical Education.....	1

## POLICE SCIENCE AND CRIMINOLOGY

The modern police officer must be a well-educated and specially trained man. This means that specific education and training must be provided for those young men who want to make a career of police work. The two-year curriculum of Police Science and Criminology has been designed to meet State and local needs.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
BEN 105	Business Mathematics..	3	PSC 102	Criminology 2 .....	3
PSC 101	Criminology 1 .....	3	PE	Physical Education .....	1
PE	Physical Education .....	1		Electives .....	6
	Electives .....	3			

### SOPHOMORE YEAR

PSC 203	Criminology 3 .....	3	PSC 204	Criminology 4 .....	3
PSC 207	Criminal Law Procedure .....	3	PSC 214	Police Arsenal Weapons and Laboratory .....	3
PSC 211	Identification Techniques 1 .....	3	PSC 212	Identification Techniques 2 .....	3
BEN 226	Psychology (Human Relations) .....	3	PE 130	Hygiene .....	3
PE 113	Conditioning .....	1	PE 205	First Aid .....	2
	Electives .....	3		Electives .....	2

## SECRETARIAL SCIENCE

The Secretarial Science two-year curriculum is specially designed for those young men and women who plan to enter into office occupations and will not continue their formal education beyond the junior college level. It includes intensive study in business and commercial subjects as well as certain general education courses which provide for a well balanced program of education.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
BEN 101	Shorthand 1 .....	3	BEN 102	Shorthand 2 .....	3
BEN 105	Business Mathematics..	3	BEN 112	Typewriting 2 .....	2
BEN 111	Typewriting 1 .....	2	PE	Physical Education .....	1
PE	Physical Education .....	1	Electives .....		4
	Electives .....	2			

### SOPHOMORE YEAR

BEN 201	Dictation and Transcription 1 .....	3	BEN 202	Dictation and Transcription 2 .....	3
BEN 211	Typewriting 3 .....	2	BEN 204	Secretarial Procedure .....	3
BEN 213	Office Machines .....	3	BEN 226	Psychology (Human Relations) .....	3
BAN 231	Business Law .....	3	PE	Physical Education .....	1
ACG 181	Principles of Accounting .....	3	Electives .....		6
BEN 231	Business Correspondence .....	3			
PE	Physical Education .....	1			



## PLANNED CERTIFICATE PROGRAMS

The adult student who desires to follow a certificate program is asked to select his definite objective with the assistance of a College advisor. When the program of studies has been worked out, the student will then submit it to the Dean of Special Degree Studies for his approval. All certificate programs for adults must be approved by the Dean.

Certificates will be awarded to those students completing 18 credit hours of the 21 hours offered and who have a grade average of "C" or better on all courses attempted.

### Pre-Planned Programs

#### ● Advertising-Public Relations

Course	Semester Hours
Public Relations, BUS 190	3
Fundamentals of Speech, SPH 105	3
Advertising Copywriting, BUS 140	3
Advertising Layout, BUS 160	3
Advertising Production, BUS 150	3
Psychology (Human Relations) BEN 226	3
Sales Promotion, BUS 130	3

#### ● Certified Professional Secretaries - Junior Executive

Course	Semester Hours
Office Management, BEN 217	3
Principles of Finance, BEN 160	3
Economics, ES 201	3
Accounting I, ACG 101	3
Business Law, BEN 215	3
Business Correspondence, BEN 130	3
Psychology (Human Relations) BEN 226	3

#### ● Management-Finance

Course	Semester Hours
Principles of Business, BUS 181	3
Office Management, BEN 217	3
Principles of Finance, BEN 160	3
Psychology (Human Relations), BEN 126	3
Advertising Copywriting, BUS 140	3
Business Law, BEN 215	3
Fundamentals of Speech, SPH 105	3

## ADULT EDUCATION

College level non-vocational offerings of a non-credit nature for adults in the community who wish to improve themselves through organized study are available. These offerings will be largely directed toward intellectual and cultural development. Special non-credit courses for technological personnel will also be offered, in accordance with demonstrated community need.

The following courses were offered 1960-61 and are among those which can be offered any semester upon sufficient demand.

### Music Appreciation

A study of the development of music in modern times through listening to outstanding examples of the various periods, with brief explanation of themes, content and structure. Non-credit.

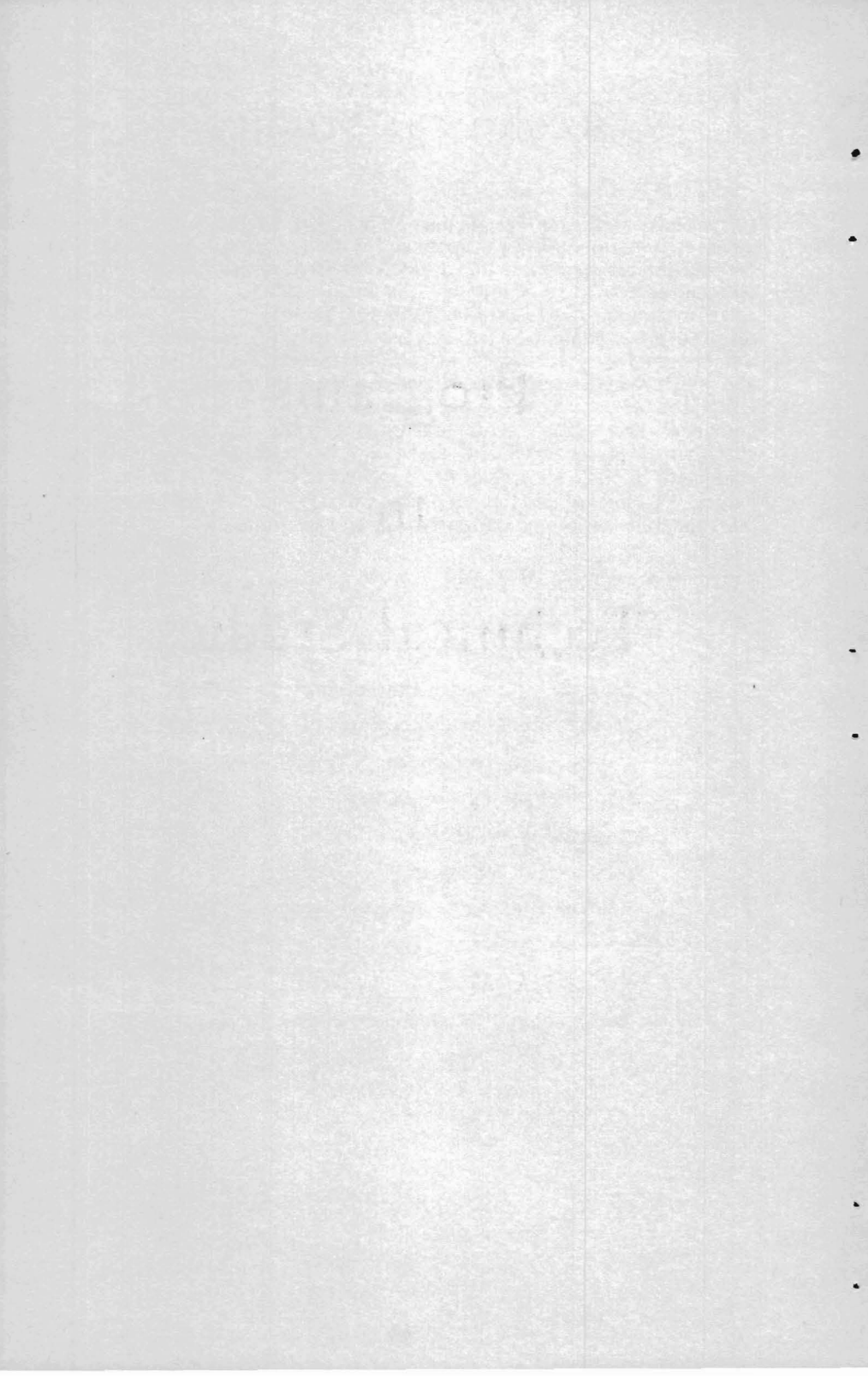
### Community Chorus

Each meeting will concern itself with the rudiments of choral singing and sight reading. The remainder of the session will be devoted to the singing of all types of selections. Non-credit.

### Reading Skills

To develop the students' reading skills so that he can efficiently read textbooks and other materials in his college courses. Mechanics of reading, vocabulary, comprehension and rate of reading. Non-credit.

Programs  
in  
Technical Studies



# Technical Studies

Phenomenal technological advances have been accomplished by scientists, engineers, mathematicians, and other technical workers including skilled craftsmen, each with their specialized skills, working together as a team in developing new applications for scientific laws. Ever-increasing need for the combined talents of such teams has resulted in an unprecedented demand not only for the creative scientist and engineer, but for technically competent supporting personnel and skilled craftsmen with a good working knowledge of the basic principles of mathematics and science. This group of supporting personnel and skilled craftsmen is making an increasingly greater contribution to the technical team, and is in critical demand wherever there is work in product development of a scientific or technical nature. Technical Studies at Dade County Junior College provides the education necessary for qualifying in this field.

Programs are offered in:

- Aeronautical Technology
- Air Conditioning and Refrigeration Technology
- Civil Engineering Technology
- Construction Technology
- Data Processing Technology
- Electronics Technology
- Instrument Technology
- Machine Drafting and Design Technology
- Mechanical Technology
- Medical Technology
- Technological Extension Courses



## AERONAUTICAL TECHNOLOGY

The advances in the field of aviation brought about by the universal acceptance and use of jet and turbojet aircraft has placed new demands on those responsible for the maintenance, installation, modification, testing, production, planning, standardization and control of quality of aircraft units and assemblies. Research and development agencies in private industry and government employees anticipate extended use of technicians to supervise and carry out the plans of aircraft engineers. Electronics, hydraulics, pneumatics, and mechanics are used in instrumentation with a need for accuracy and perfection not previously required. Aircraft technicians are employed in instrumentation, supervision, maintenance control, quality control, research, and numerous other areas. This curriculum provides the training in the above mentioned areas which will enable the student to pursue a successful career in the field of modern aviation.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
MS 121	College Algebra		MS 122	Trigonometry	
	w/application .....	3		w/application .....	3
PS 201	General Physics .....	4	PS 202	General Physics .....	4
AVN 101	Aircraft Structures .....	3	AVN 112	Aircraft Powerplants ..	3
EG 111	Machine Drawing 1 .....	2	AVN 123	Theory of Flight .....	2
	Physical Education ....	1	EG 112	Machine Drawing 2 .....	2
	*Elective .....	1	PE	Physical Education ....	1

### SOPHOMORE YEAR

SSE 101	Social Science .....	3	SSE 102	Social Science .....	3
AVN 214	Aircraft Systems .....	4	AVN 226	Aircraft Instruments ....	3
AVN 203	Aviation Lab 1 .....	3	AVN 233	FAA Regulations .....	3
PE	Physical Education ....	1	AVN 204	Aviation Lab 2 .....	3
	Electives .....	7		Physical Education ....	1
				Electives .....	4

\* EG 141 Slide Rule Applications recommended

## AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

A program on the technical level including basic principles of refrigeration; thermodynamics; design characteristics of compressors, condensers, and evaporators; operating and control devices; absorption refrigeration methods and applications; air conditioning fundamentals; determining heat losses from buildings, refrigeration required under various conditions; planning heating and refrigeration combination systems; and the application of psychometric charts to air conditioning problems. The air conditioning and refrigeration technician assists the engineer in designing, installing, and modifying air conditioning systems, and he supervises and inspects the installation of new facilities and the modification and maintenance of existing facilities.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences.....	3	SSE 102	Social Sciences .....	3
MS 121	College Algebra		NSS 102	Natural Sciences .....	3
	w/application .....	3	MS 122	Trigonometry	
RFN 101	Refrigeration Principles			w/application .....	3
	and Systems .....	3	RFN 115	Refrigeration System	
PE	Physical Education ....	1		Operations Lab .....	4
	Electives .....	4	PE	Physical Education ....	1
				Electives .....	1

### SOPHOMORE YEAR

PS 201	General Physics .....	4	PS 202	General Physics .....	4
MDD 103	Machine Laboratory 1..	5	ARC 101	Air Conditioning Fund	3
RFN 201	Refrigeration Controls		ARC 105	Air Conditioning	
	and Installation.....	5		Systems Lab .....	2
PE	Physical Education ....	1	PE	Physical Education ....	1
	Electives .....			Electives .....	8

## CIVIL ENGINEERING TECHNOLOGY

This curriculum provides the fundamental training required for technological activities in the fields of civil engineering and heavy construction. Particular emphasis is placed upon the fundamental engineering principles required in civil engineering practice. Basic experience in field surveys, drafting, and laboratory testing is also provided. This program prepares individuals for employment in civil engineering and related industries (such as aircraft, shipbuilding, automotive, and petroleum) in the areas of hydroelectric projects; flood and beach erosion control; highway, airport, and railroad construction; water and sewage systems; water supply systems; locks; dams; tunnels; aqueducts; and similar projects. This technician assists the civil engineer in planning directing, inspecting, and supervising these kinds of projects.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MS 121	College Algebra w/application .....	3	MS 122	Trigonometry w/application .....	3
PS 201	General Physics .....	4	PS 202	General Physics .....	4
EG 101	Engineering Drawing 1 .....	2	EG 102	Engineering Drawing 2 .....	2
PE	Physical Education ....	1	PE	Physical Education ....	1
	* Approved Electives ....	1			

### SOPHOMORE YEAR

MS 221	Applied Calculus for Technicians .....	3	EG 201	Strength of Materials ..	4
SPH 105	Speech .....	3	EG 205	Engineering Drawing 3 .....	3
CY 101	General Chemistry .....	4	CEG 102	Route Surveying .....	3
EG 231	Engineering Mechanics	3	EG 223	Highway Engineering ..	4
CEG 101	Elementary Surveying..	2	PE	Physical Education ....	1
PE	Physical Education ....	1		Approved Electives ....	3
	Approved Electives ....	2			

\* Slide Rule Applications EG 141 recommended.

## CONSTRUCTION TECHNOLOGY

The phenomenal growth in all kinds of construction, both civil and military, has made it imperative that properly trained and qualified personnel be available to supervise and inspect the work involved and the need will be even greater in the future. This program is designed to furnish technically trained men for the building construction field by training technical assistants who work with skilled artisans, contractors, architects, and professional designers. The development of sound concepts of the related problems of the owner, the architect, the engineer, the building materials manufacturer, and the distributor — as they apply to the planning and erection of buildings — is the aim of this course in construction technology. People trained in this program can be gainfully employed as supervisors, contractors, or similar related positions.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
NSS 102	Natural Sciences .....	3	NSS 201	Natural Sciences .....	3
MS 121	College Algebra w/application .....	3	MS 122	Trigonometry w/application .....	3
EG 101	* Engineering Drawing 1 .....	2	CN 101	Construction Lab .....	4
EG 141	Slide Rule Applications .....	1	PE	Physical Education ....	1
PE	Physical Education ....	1		Electives .....	3
	Electives .....	4			

### SOPHOMORE YEAR

SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
EG 102	Engineering Drawing 2	2	EG 201	Strength of Materials ..	4
EG 209	Architectural Drafting and Design .....	3	EG 225	Strength of Materials Lab .....	2
CY 101	General Chemistry .....	4	PE	Physical Education ....	1
PE	Physical Education ....	1		Electives .....	6
	Electives .....	3			

\* Students with one or more units earned in high school drafting will not be scheduled for this course.

## DATA PROCESSING TECHNOLOGY

The development of new equipment with greater capability and capacity for solving engineering and production problems has created a demand for technicians in the data processing field. This program provides the mathematical understanding, application of scientific principles, study of circuits and circuit theory, and programming for equipment applications necessary for solving typical engineering, business, and industrial problems. Classroom and laboratory training includes instruction in basic electronic apparatus and instruments, and digital and analog computers utilizing mechanical, electrical and electronic components. Both gaseous and solid state conduction equipment are used in laboratory application.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
MS 121	College Algebra w/application .....	3	MS 122	Trigonometry w/application .....	3
ELS 105	Electronic Circuit Theory 1 .....	2	ELS 106	Electronic Circuit Theory 2 .....	2
DAP 101	Computer Theory and Applications .....	3	DAP 112	Digital Computers Lab	2
MS 150	Binary Mathematical Applications .....	2	PE	Physical Education ....	1
PE	Physical Education ....	1		*Electives .....	6

### SOPHOMORE YEAR

SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
ACG 281	Intermediate Accounting 1 .....	3	ACG 282	Intermediate Accounting 2 .....	3
DAP 212	Computer Programming	3	DAP 201	Analog Computers Lab	2
DAP 204	Business Computer Applications .....	3	DAP 203	Industrial Computer Applications .....	4
PE	Physical Education ....	1	PE	Physical Education ....	1
	Electives .....	4		Electives .....	4

\*Slide Rule Applications EG 141 recommended.



## ELECTRONICS TECHNOLOGY

Electronic technicians are employed in many industries such as aircraft, missile research and production, automated machinery and equipment, communications, airways traffic control and safety, power plants, defense ordnance and research laboratories. Training for electronic technicians must include much work in mathematics, science, the study of mechanisms, television fundamentals, industrial control circuits, and other associated subjects. This curriculum provides the understanding of electronic principles and applications necessary for gainful employment in any industry involving electronic equipment or devices.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences.....	3	SSE 102	Social Sciences .....	3
MS 121	College Algebra w/application .....	3	MS 122	Trigonometry w/application .....	3
ELS 101	Electronics Lab. 1 .....	5	ELS 102	Electronics Lab. 2 .....	5
ELS 105	Electronic Circuit Theory 1 .....	2	ELS 106	Electronic Circuit Theory 2 .....	2
EG 141	Slide Rule Application	1	PE	Physical Education ....	1
PE	Physical Education ....	1			

### SOPHOMORE YEAR

PS 201	General Physics .....	4	PS 202	General Physics .....	4
ELS 201	Electronics Lab. 3 .....	5	ELS 202	Electronics Lab. 4 .....	5
ELS 210	Electronic Circuit Theory 3 .....	2	ELS 211	Electronic Circuit Theory 4 .....	2
MS 221	Applied Calculus for Technicians.....	3	PE	Physical Education ....	1
PE	Physical Education ....	1		Electives .....	6
	Electives .....	2			

## INSTRUMENT TECHNOLOGY

Industry has found more use for mechanical and electronic methods of control, fabrication and management, and the need for instruments for the machinery used by industry has increased markedly. So also has the need increased for technicians who can calibrate, maintain, control, and analyze the instrumentation accompanying this industrial machinery. This course covers the mathematics, mechanics, hydraulics, pneumatics, electrical theory, and electronic technology necessary for an understanding of numerous industrial applications of instrumentation, and meets the requirements of industrial, scientific, and military advancements in the field of instrumentation. Applications in this rapidly growing field of technology include: industrial control, telemetry, aircraft devices, air traffic control, rocketry and missiles, special communication apparatus, manufacturing assembly lines, and automation.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MS 121	College Algebra w/application .....	3	MS 122	Trigonometry w/application .....	3
ELS 101	Electronics Lab. 1 .....	5	ELS 102	Electronics Lab. 2 .....	5
ELS 105	Electronic Circuit Theory 1 .....	2	ELS 106	Electronic Circuit Theory 2 .....	2
EG 141	Slide Rule Applications .....	1	PE	Physical Education ....	1
PE	Physical Education ....	1			

### SOPHOMORE YEAR

PS 201	General Physics .....	4	PS 202	General Physics .....	4
*MDD 103	Machine Lab. 1 .....	3	INS 202	Instruments 2 .....	5
EG 115	Hydraulics and Pneumatics .....	3	PE	Physical Education ....	1
INS 201	Instruments 1 .....	5		Electives .....	7
MS 221	Applied Calculus for Technicians.....	3			
PE	Physical Education ....	1			

\* Laboratory scheduled according to student's background.

## MACHINE DRAFTING AND DESIGN TECHNOLOGY

Technicians employed in machine drafting and design are employed in many industries such as power equipment production; steel and nonferrous metals production; aircraft and missile production; electronics appliances and devices; computers and testing equipment; ventilating, heating, and air conditioning equipment; radio, television, sound recording and reproduction equipment and industrial machinery. This curriculum provides for these types of employment by offering courses which are designed to enable the graduate to work with engineers in projects of research, design and development. Specific instruction is given in machine design, technical sketching, detail and assembly drawing, material testing, metal production practice, metal working, heat treating, alloys and other metallurgical aspects.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MS 121	College Algebra w/application .....	3	MS 122	Trigonometry w/application .....	3
EG 101	Engineering Drawing 1 .....	2	EG 102	Engineering Drawing 2 .....	2
MDD 103	Machine Lab. 1 .....	3	PE	Physical Education ....	1
PE	Physical Education ....	1	Electives .....		5
	Electives .....	3			

### SOPHOMORE YEAR

MDD 201	Machine Design 1 .....	3	MDD 202	Machine Design 3 .....	3
PS 201	General Physics .....	4	PS 202	General Physics .....	4
MS 221	Applied Calculus for Technicians .....	3	EG 201	Strength of Materials ..	4
MDD 205	Machine Lab. 3 .....	3	MDD 223	Metallurgy .....	3
MDD 212	Precision Measuring Instruments .....	3	PE	Physical Education ....	1
PE	Physical Education ....	1	Electives .....		3

## MECHANICAL TECHNOLOGY

This course is planned for those individuals desirous of entering the large field involved in the production of goods and products. Mechanical technology covers the design, production, installation, and operation of machines, tools, and all types of metal, plastic, and ceramic products and devices. Knowledge of hydraulics, pneumatics, electronic applications and mechanics with their mathematical and scientific principles are required. The curriculum offers basic training in power production and its utilization, design, mechanisms, performance testing, dynamics, and related metallurgy.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
MS 121	College Algebra w/application .....	3	MS 122	Trigonometry w/application .....	3
EG 101	Engineering Drawing 1 .....	2	EG 102	Engineering Drawing 2 .....	2
* MDD 103	Machine Lab. 1 .....	3	* MDD 104	Machine Lab. 2 .....	3
PE	Physical Education ....	1	PE	Physical Education .....	1
	Electives .....	3		Electives .....	2

### SOPHOMORE YEAR

MS 221	Applied Calculus for Technicians .....	3	EG 201	Strength of Materials ..	3
MDD 212	Precision Measuring Instruments .....	3	MDD 201	Machine Design 1 .....	3
* MDD 205	Machine Lab. 3 .....	3	MDD 223	Metallurgy .....	3
MDD 231	Engineering Mechanics	3	PE	Physical Education ....	1
PE	Physical Education ....	1		Electives .....	7
	Electives .....	4			

\* Laboratory scheduled according to student's background.  
Some are 5 credit hour courses.

\*\* Slide Rule Applications EG 141 recommended.

## MEDICAL TECHNOLOGY

The Medical Technology program provides the training necessary for competent performance (in a hospital, clinic, or research laboratory), under the supervision of a physician or pathologist, of the various chemical, microscopic, bacteriologic, and other medical laboratory procedures used in the diagnosis, treatment, and scientific study of disease. The medical technologist is one who, by virtue of his education and training, will be in demand and qualified for positions in hospitals, clinics, and research laboratories of business, government agencies, and colleges. The medical technology curriculum emphasized the basic sciences in such a way that the scope and sequence of the courses (the teaching of the subject matter) provide maximum mastery of the required course of study by the learner. After graduation, internship in an institution approved by the A.M.A. Council on Medical Education and Hospitals provides for further study in the areas of biochemistry, hematology, parasitology, histology, serology, urinalysis, and basal metabolism. Successful completion of the medical technology course and subsequent internship qualifies the technologist for certification in this field which is nationally recognized.

### FRESHMAN YEAR

First Semester			Second Semester		
Course No.	Course Name	Cr. Hrs.	Course No.	Course Name	Cr. Hrs.
CS 101	Communications .....	3	CS 102	Communications .....	3
MS 121	College Algebra w/application .....	3	BY 205	Human Physiology and Anatomy .....	3
BY 181	Botany .....	4	MS 122	Trigonometry w/application .....	3
CY 101	General Chemistry .....	4	BY 182	Zoology .....	4
PE	Physical Education ....	1	CY 102	General Chemistry .....	4
	Electives .....	3	PE	Physical Education ....	1

### SOPHOMORE YEAR

SSE 101	Social Sciences .....	3	SSE 102	Social Sciences .....	3
CY 201	Qualitative Chemistry..	4	CY 202	Quantitative Chemistry	4
BY 211	Bacteriology .....	4	CY 205	Organic Chemistry .....	4
BY 231	Clinical Laboratory 1..	3	BY 232	Clinical Lab. 2 .....	3
PE	Physical Education ....	1	PE	Physical Education ....	1
	Electives .....	3		Electives .....	3



## TECHNOLOGICAL EXTENSION COURSES

The Dade County Junior College is approved to offer college level technical courses for qualified adults in the following and similar subjects:

- |   |   |
|---|---|
| 1. Aerodynamics                         | 23. Industrial Materials and Processes  |
| 2. AM Transmitters                      | 24. Kinematics                          |
| 3. Analytical Instruments               | 25. Machine Design                      |
| 4. Applied Electronics                  | 26. Manufacturing Analysis              |
| 5. Applied Mechanics                    | 27. Metal Processing                    |
| 6. Assembly Drafting and Design         | 28. Organic Chemistry                   |
| 7. Audio Amplifiers and AM Receivers    | 29. Physical Chemistry                  |
| 8. Automatic Control Instruments        | 30. Plant Layout                        |
| 9. Biochemistry                         | 31. Pressure and Flow Measuring Devices |
| 10. Chemical Analysis                   | 32. Production Planning and Control     |
| 11. Chemical Processes                  | 33. Quality Control                     |
| 12. Electric Circuits                   | 34. Reinforced Concrete Design          |
| 13. Electric Power Equipment            | 35. Sound Amplification                 |
| 14. Electrical Controls and Instruments | 36. Strength of Materials               |
| 15. Electrical Drafting                 | 37. Stress Analysis                     |
| 16. Electrical Layout and Design        | 38. Structural Drafting                 |
| 17. Electrical Instruments              | 39. Tachometers - Operation and Repair  |
| 18. Electronic Circuits                 | 40. Temperature Indicators              |
| 19. Electronic Compass Systems          | 41. Thermodynamics                      |
| 20. Engineering Mathematics             | 42. Tool Design                         |
| 21. Estimating                          |   |
| 22. Inspection Methods                  |   |

These courses will be offered as the need arises and are usually requested by industry. The Technical Steering Advisory Committee assists in the identification of technological training requirements.

# Course Descriptions

## ACCOUNTING

- ACG 181 Principles of Accounting 3 credits  
Basic training in accounting as a device for measuring business activity. Study of the assumptions underlying accounting: basic accounting procedures, recording and reporting transactions, interpretation of financial and operating statements.
- ACG 182 Principles of Accounting 3 credits  
Accounting for different equity structures and for cost reporting and control. Intensive analysis of financial reports and statements. Prerequisite: ACG 181.
- ACG 281 Intermediate Accounting 1 3 credits  
Accounting records with a review of the accounting cycle. End-of-period procedures. Working capital: temporary investments, receivables, inventories and current liabilities. Prerequisites: ACG 181-182, or its equivalent.
- ACG 282 Intermediate Accounting 2 3 credits  
Non-current items: investments, plants and equipment, intangibles, long-term debt. Paid-in capital and retained earnings. Analysis of operations: statement of application of funds. Prerequisite: ACG 281.

## AIR CONDITIONING

- ARC 101 Air Conditioning Fundamentals 3 credits  
Basic principles of thermodynamics as applied to air conditioning; heat loss and insulation problems. Basic design and installation. Summer cooling and winter heating. Prerequisites: RFN 101, RFN 115.
- ARC 105 Air Conditioning Systems Laboratory 2 credits  
Planning air conditioning installations. Testing and operation of equipment. Applications of the psychrometric chart to air conditioning problems. Thermodynamics of air vapor mixtures. Load calculations, heat transfer, air distribution. Corequisite: ARC 101.

## ART

- AT 101 Basic Art Workshop 3 credits  
Exploration of design through tools and materials. Individual projects and instructional consultation. Emphasis on manual dexterity - sensitivity to form, texture, and space.
- AT 102 Continuation of AT 101 3 credits

AT 104 Introduction to Art	2 credits
A course directed to non-art majors. Background material on creativity, history, and actual performance in the arts. Drawing, painting, and critical sessions.	
AT 121 Art History	3 credits
A survey of the visual arts from pre-history to the Renaissance. Space principles and design concepts will be underlined and the course will be presented through the media of colored slides and informal lecture. Student projects (some in visual terms) indicating the comprehension of artistic concepts covered in the lectures will be required.	
AT 122 Continuation of AT 121	3 credits
AT 131 Figure Drawing	3 credits
Unorthodox, dynamic approach. Simple and natural procedure leading to a thorough and functional grasp of structure, movement and expression.	
AT 132 Continuation of AT 131	3 credits
AT 145 Design and Composition (Summer Sessions only)	3 credits
A compressed course covering the fundamentals of controlling visual energy. Theory and practical projects.	
AT 175 Commercial Art. (Summer Sessions only)	3 credits
A survey of techniques, processes and attitudes typical of the professional in advertising and editorial art.	
AT 201 Advanced Design	3 credits
A diligent analysis of the roots of design and an extensive application of their possibilities with special reference to modern usage.	
AT 202 Continuation of AT 201	3 credits
AT 231 Art Practicum	3 credits
May be pursued in the following areas with the object of synthesizing observation, design concepts and the disciplines of ideas and materials: <u>Painting and Composition</u> . All painting media; oil, watercolor, encaustic, fresco.	
<u>Graphics</u> . All processes such as etching, lithography, silk screen, monoplate, woodblock, etc. as equipment is available.	
<u>Sculpture</u> . All techniques such as taille directe, modeling, casting, pointing, welding, etc. as equipment is available.	
<u>Commercial Art</u> . Special techniques and procedures of a professional calibre.	
AT 232 Continuation of AT 231	3 credits

## AVIATION

### AVN 101 Aviation Structures

3 credits

An introduction to aviation technology including history of flight, theory of flight, problems and types of airframe construction, fundamentals of aircraft electricity and principles of aircraft instrument operation.

### AVN 112 Aviation Powerplant

3 credits

Principles of operation and construction features of the following types of aircraft engines: reciprocating (in-line, opposed, and radial), compound, turboprop, turbojet, turbofan. Also thermal, mechanical, and volumetric efficiencies; superchargers; engine accessories; controls and instrumentation.

### AVN 123 Theory of Flight

2 credits

An analysis of the physics of flight, including applied aerodynamics of lift, drag, take-off, and climb, turning, glide, and landing, high speed, propellers and acrobatics. Factors affecting flight, including weight of aircraft, speed, air density, pressure and temperature.

### AVN 203 Aviation Laboratory 1

3 credits

Practical shop work on aircraft inspection, maintenance, and repair including: wood, fabric and dope, sheet metal and riveting, welding, assembly and rigging; hydraulic test equipment operation, jet and reciprocating engine build-up, overhaul and test. Prerequisites: AVN 101 and AVN 112.

### AVN 204 Aviation Laboratory 2 (Continuation of AVN 203)

3 credits

### AVN 214 Aircraft Systems

4 credits

A detailed study of the operation, maintenance and inspection of typical aircraft systems including shop demonstration and application. Electrical, hydraulic, pneumatic, fuel purging, fire detecting and extinguishing, deicing, oxygen, cabin pressurization, air conditioning and flight control systems. Prerequisite: AVN 101.

### AVN 226 Aircraft Instruments

3 credits

Theory of operation of flight, engine and navigation instruments. Maintenance, adjustment, calibration and deviations of the of the various instruments including pressure differential, gyroscopic, electrical, inertial, magnetic and remote indicating. Instrument interpretation, application and limitations. Prerequisites: AVN 101, AVN 112.

### AVN 233 FAA Regulations

3 credits

The need for and development of civil air regulations. Civil Air Regulations, Part 18, Maintenance, Repair, and Alteration of Airframes, Powerplants, Propellers, and Accessories. Prerequisites: AVN 101 or AVN 112.

## BIOLOGY

BY 181 Botany	4 credits
Survey of the plant world based on detailed morphological and anatomical studies of selected representative specimens. The relationships and functions of their structures are also studied. Prerequisite: satisfactory score on Guidance Test Battery.	
BY 182 Zoology	4 credits
Survey of the animal world based on detailed morphological and anatomical studies of selected representative specimens. The relationships and function of their structures are also studied. Prerequisite: satisfactory score on Guidance Test Battery.	
BY 205 Human Physiology and Anatomy	3 credits
A three hour lecture-demonstration course to provide the student with a fairly detailed knowledge of the structure and functions of the human body. Prerequisite: 3 hours Biology and consent of department head.	
BY 211 Bacteriology	4 credits
An introduction to the study of bacteria and to related laboratory techniques. Prerequisite: CY 101-102 and BY 181.	
BY 217 Invertebrate Zoology	4 credits
Intensive study of the classification, morphology and anatomy of the lower phyla of animals (Protozoa through the Cephalochordata). Prerequisite: BY 182.	
BY 218 Comparative Vertebrate Anatomy	4 credits
Comparison of the morphology, anatomy and development of closely related systems in the vertebrate animals. Prerequisite: BY 217.	
BY 231 Clinical Laboratory 1	3 credits
The study of an actual laboratory practice in clinical laboratory techniques as used in doctors' offices and hospital laboratories. Prerequisite: CY 101-102.	
BY 232 Clinical Laboratory 2	3 credits
Continuation of BY 231. Prerequisite: BY 231.	

## BUSINESS

BUS 130 Sales Promotion	3 credits
The methods of determining where and what to promote; the guideposts in selecting merchandise for promotion, planning of sales promotion activities, methods of promoting business, and coordination of sales promotion activities.	



BUS 140 Advertising and Copywriting	3 credits
Familiarizes the student with the basic principles and some of the advanced techniques of advertising copy and gives practice in becoming more articulate with the written word and the complex forms of advertising copy structure. Also, presents the psychological factors which motivate human response and how to appeal to these through advertising copy.	
BUS 150 Advertising Production	3 credits
Methods, techniques, and processes in preparing materials for advertising. Reproduction methods, selection of type, ink and paper.	
BUS 160 Advertising Layout	3 credits
Principles and practices of effective layouts for selling; detail and visual media, preparation and evaluation, lecture and discussion.	
BUS 190 Public Relations	3 credits
Public relations function of business enterprises; the organization and administration of public and community functions.	

## BUSINESS ADMINISTRATION

BAN 181 Principles of Business	3 credits
Ownership, management, marketing, personal, finance and law as they affect the operation of American business and industry.	
BAN 182 Principles of Management	3 credits
The basic principles of management underlying the solution of problems of organization and operation of the business enterprises. Prerequisite: BAN 181.	
BAN 231 Business Law	3 credits
Contracts, agencies, sales and property law are studied in relationship to the proper conduct of business.	
BAN 232 Business Law	3 credits
A continuation of BAN 231. Partnerships, corporations, negotiable instruments, insurance and bankruptcy are studied. Prerequisite: BAN 231.	

## BUSINESS EDUCATION

BEN 101 Shorthand	3 credits
This course covers the theory of Gregg Shorthand, simplified for colleges. A basic business vocabulary is developed through reading and writing practice.	

BEN 102 Continuation of BEN 101	3 credits
Includes a rapid review of theory and continuing vocabulary and speed development with emphasis on advanced phrasing.	
BEN 105 Business Mathematics	3 credits
This course includes a review of basic mathematics: cash and trade discounts, markup, interest and bank discount, insurance, distribution of profits, good will, debt amortization.	
BEN 111 Typewriting	2 credits
This course is designed to provide an opportunity for students to begin preparation for obtaining and maintaining positions which require the basic skills, techniques, and knowledge of the typewriter.	
BEN 112 Continuation of BEN 111	2 credits
BEN 113 Office Machines	3 credits
Use of the basic office machines is taught. Two adding machines, a key-driven calculator and a rotary calculator are required. In addition to the manipulative skills, decimal equivalents, percentages and discount, and use of reciprocals are among the business arithmetic topics covered, as applied to office machines.	
BEN 115 Stenoscrypt ABC	2 credits
This is an alphabetical note-taking system that can be learned in a comparatively short time. Theory is based on dominant sounds, high frequency letter groups, prefixes and suffixes.	
BEN 160 Principles of Finance	3 credits
Designed to orient students in the complex financial aspects of modern life. The principal financial institutions of the United States are discussed. Particular emphasis is given to ways in which the money-creating, money allocating, and money-utilizing institutions affect the individual saver and user of credit, the conduct of business, and the growth and stability of world economics.	
BEN 201 Dictation and Transcription	3 credits
Continuation of vocabulary development with emphasis on speed in transcribing shorthand notes, including placement of letters, use of correct types of stationery, carbons, envelopes, special instructions from the dictator, editing, and other office transcription problems. Prerequisite: BEN 101-102 or the equivalent.	
BEN 202 Continuation of BEN 201	3 credits
Emphasis on development of speed and accuracy in taking dictation and in transcribing shorthand notes under office conditions.	

- BEN 204 Secretarial Procedures** 3 credits  
Develops the personal and professional efficiency of typists, secretaries and clerical workers. Provides actual office routine: duties, obligations, business methods, and office procedure applied in various circumstances. Prerequisite: BEN 111-112 and 211 or the equivalent.
- BEN 211 Typewriting** 2 credits  
Designed to provide the student with training adequate for handling varied typing duties that business requires. Offerings include use of duplicating machines, electric typewriters, and dictating and transcribing machines. Students will be required to meet production standards in transcribing business correspondence, addressing envelopes, preparing master copies and in straight copy typing. Prerequisite: BEN 111-112 or the equivalent.
- BEN 214 Office Machines** 3 credits  
Basic and advanced machine accounting are offered: the two sequences of posting, using realistic media, must be satisfactorily completed on a minimum of two types of bookkeeping machines. Posting media for accounts receivable are required, with a choice of posting materials for accounts payable, savings and mortgage loans, or payroll for the second sequence.
- BEN 216 Office Machines Survey for Teachers** 2 credits  
Planned to meet needs of teachers of business education at the secondary level who need instruction in the theory, application, and operation of office machines which have been designed for modern business and industry.
- BEN 217 Office Management** 3 credits  
Office organization, layouts, appliances, personnel procedures, standards, supervision, functions and work of the business departments, such as filing, stenographic, purchasing, credit and collecting, selection, training, promotion, payment, and other such aspects will be covered.
- BEN 226 Human Relations (Psychology)** 3 credits  
The student receives fundamental concepts governing human relations and public relations as they apply to the broad field of business. Practice in making decisions among business alternatives, with due regard for human relations, is provided through class projects.
- BEN 231 Business Correspondence** 3 credits  
Special stress is laid, throughout the course, on diction, courtesy, and character in business writing.

**BEN 252 Medical Dictation and Transcription** 3 credits  
Includes dictation and transcription of medical vocabulary for the secretary who intends to work in a medical office. Practice in writing medical case histories in correct form and assistance in development of the personality necessary to those who deal with ill and infirm people. Prerequisite: BEN 101-102 and BEN 201.

**BEN 254 Legal Dictation and Transcription** 3 credits  
Gives the student a background for practical legal office experience. Through the use of actual legal forms, the student becomes familiar with legal terminology and with such legal instruments as wills, contracts, deeds, closing statements, opinions of title, and requirements of forms in pleadings and briefs. Prerequisites: BEN 101-102 and BEN 201.

**BEN 270 Income Tax** 3 credits  
Provides a study of the income tax laws, both state and national, as they apply to the individual and the single proprietorship business. Recognition of items of income and deduction, including capital gains and losses, is stressed.

**BEN 283 Cost Accounting** 3 credits  
Intensive study which combines theory with actual practice. It reflects the provisions of the new income tax and social security laws. The three principal systems of cost accounting are developed: the job cost system, the process cost system, and the standard cost system. Prerequisites: ACG 181-182 or its equivalent.

**BEN 284 Auditing** 3 credits  
Fundamental principles of audit practice and procedure, the verification of balance sheet and profit and loss items; the preparation of audit working papers, and the compilation of audit reports. Short problems and the audit of a full set of records. Prerequisites: ACG 181-182 or the equivalent.

## CHEMISTRY

**CY 101 General Chemistry** 4 credits  
A study of the atomic theory, the kinetic molecular theory, formulas and equations, solutions, chemical equilibrium, nuclear chemistry and chemical mathematics. Laboratory work is included.

**CY 102 Continuation of CY 101** 4 credits  
A study of the periodic law, electrochemistry, industrial chemistry, the colloidal state and carbon compounds. Prerequisite: CY 101.

- CY 201 Qualitative Analysis 4 credits  
A study of the ways and means by which metallic ions and acid radicals are identified in substance. Prerequisites: CY 101-102.
- CY 205 Organic Chemistry 4 credits  
The course develops the fundamental chemistry of the hydrocarbons, alcohols, acids, and other classes of organic compounds. Prerequisite: CY 101-102.

## CIVIL ENGINEERING

- CEG 101 Elementary Surveying 2 credits  
Measurement. Latitude and departure. Double meridian distance, horizontal and vertical curves. Plane tables and topography. Mapping. Earthwork calculations. Field astronomy.
- CEG 102 Route Surveying 3 credits  
Geometric design of highways. Error theory, triangulation, land and route surveying. Route surveys and reports; drainage and culvert design. Legal and economic aspects of highway design. Prerequisite: CEG 101.

## CONSTRUCTION

- CN 101 Construction Materials Laboratory 4 credits  
Wood frame construction, footings, waterproofing. Wood classification, measurement, and grading. Walls and rooms; exterior and interior finish; thermal insulation and fire protection; metal products; specifications. Masonry construction, cementing materials, brick and block masonry, footing and foundation problems; stair construction. Metal doors and windows.

## DATA PROCESSING

- DAP 101 Computer Theory and Applications 3 credits  
An introductory course in the principles of computers, their uses in business, industry, and science; the number systems used, functions of components, and basic computer programing. Operations and characteristics of computers. Machine organization, representation of information, coding, analyzing, programing. Functional units. Comparative studies of techniques. Corequisites: MS 221-222.
- DAP 112 Digital Computers Laboratory 2 credits  
Applications and operational characteristics of digital computers. Preparation of problems for and demonstration of the digital computer in the laboratory. Application of the theory of electronic circuitry to computer design and programing.



Physical concepts, characteristics, and parameters. Individual investigation of problems in projects requiring methods of research and analysis. Components, including both the mechanism and the arithmetic method employed. Elementary coding, number systems, computer logic. Control and arithmetic units. Accuracy, precision, checking.

DAP 201 Analog Computers Laboratory

2 credits

The analog computer as an electronic differential analyzer. D.C. analog computers. Practical setup procedure. Applications to practical problems. Theory and design of linear computing elements. Operational amplifiers and networks. Multiplication and function generation with D.C. amplifiers in analog computer installations. Auxiliary circuits. Computer operation. The design of a complete D.C. analog computer installation. Prerequisite: DAP 101.

DAP 203 Industrial Computer Applications

4 credits

Data processing systems in relation to the industry using them. Problems of adapting computer installations to specific applications. Designing the computer and the installation. Installing and using plant automation. Prerequisite: DAP 212.

DAP 204 Business Computer Applications

3 credits

Data processing applications relating to functions performed in banks, insurance firms, wholesalers, accountants, and others. Includes preparation of forms, accounting procedures, and the preparation of data for machine processing.

DAP 212 Computer Programing

3 credits

A methodical approach to the preparation of problems for computers. The principles and procedures apply to scientific, technical, and industrial programing. Numerical methods and computer applications. Prerequisites: DAP 101, DAP 112.

## DRAMA

DA 101 Principles of Drama and Theatre

3 credits

Designed as background for pre-teacher. May be taken concurrently with DA 103. Constitutes a basic study of the theatre with emphasis on lighting, make-up, sound effects, stagecraft, costuming and scenery.

DA 102 Continuation of DA 101

3 credits

Emphasis on directing, make-up and costuming.

DA 103 Principles of Acting

3 credits

Emphasis on standards of good diction, body flexibility, and demonstrations in acting. Problems in characterization, interpretation and art acting, stage techniques, pantomime and voice.

DA 104 Continuation of DA 103

3 credits

DA 105 Play Production	2 credits
Methods and techniques of play direction, planning settings, stage movement, the director as teacher, organization of stage, rehearsals, and play production and design.	
DA 106 Continuation of DA 105	2 credits
Second semester emphasis on the directing of one-act plays.	
DA 201 Principles of Drama	3 credits
Advance study of the theatre, set designing and directing of 3 act plays. Prerequisite: DA 101-102 or permission of department head.	
DA 202 Continuation of DA 201	3 credits
DA 203 Principles of Acting	3 credits
Laboratory hours — participation in experimental plays and productions. Prerequisite: DA 103-104 or permission of department head.	
DA 204 Continuation of DA 203	3 credits
DA 213 History of the Theatre	3 credits
First semester. Lectures on the history of the theatre from its beginning to the 16th Century. Study of theatre architecture and application of staging.	
DA 214 History of the Theatre	3 credits
Second semester. Lectures on the history of the theatre from the 16th Century to the present.	

## ECONOMICS

ES 201 Principles of Economics	3 credits
A basic course designed to provide a fundamental understanding of the production, distribution, and consumption of wealth. Time is given to an analysis of resources for production; the function of money, of credit, and of prices; the functions of the entrepreneur, government, and labor; and problems of inflation, unemployment, and world trade. Prerequisite: SSE 101-102, or permission of department head.	
ES 202 Continuation of ES 201	3 credits

## EDUCATION

EN 101 Introduction to Education	3 credits
A basic course in the principles of education. Emphasis is placed upon the social and philosophical foundations of public education. Rather than attempt to indoctrinate, this course considers several conflicting views, their bases and implications. Meets the certification requirements of a course in social foundations.	
EN 245 Human Growth and Development	3 credits
A course designed to acquaint students with the nature of human behavior as a dynamic developmental phenomenon. While the emphasis in this course is psychological, the physi-	

cal aspects of development and their psychological and social implications will be included. Observations in a public school will be required. Designed to meet certification requirements in the area of psychological foundations. Prerequisite: EN 101.

## ELECTRONICS

- ELS 101 Electronics Laboratory 1 5 credits  
Verification of the characteristics of resistors, inductors, capacitors, and circuits containing combinations of resistance, inductance and capacitance with direct and alternating currents. Corequisite: ELS 105.
- ELS 102 Electronics Laboratory 2 5 credits  
Verification of the characteristics of vacuum, gaseous, and semiconductor devices. The linear characteristics of these devices as circuit elements for rectification, amplification, and sinusoidal wave generation. Prerequisite: ELS 101. Corequisite: ELS 106.
- ELS 105 Electronic Circuit Theory 1 2 credits  
Fundamental principles of electric, magnetic, and dielectric circuits involving combinations of resistance, inductance, and capacitance with direct currents, and single and polyphase sinusoidal alternating currents. Corequisites: MS 121.
- ELS 106 Electronic Circuit Theory 2 2 credits  
Internal physical behavior of vacuum, gaseous, and semiconductor devices. Analysis and characteristics of these devices and their associated circuits and components. Prerequisite: ELS 105. Corequisite: MS 122.
- ELS 201 Electronics Laboratory 3 5 credits  
Verification of the nonlinear characteristics of vacuum, gaseous, and semiconductor devices, the nonlinear characteristics of these devices as circuit elements for nonsinusoidal wave generation and shaping. Pulse and digital circuits. The effects of passive networks upon nonsinusoidal waves. Prerequisite: ELS 102 Corequisite: ELS 210.
- ELS 202 Electronics Laboratory 4 5 credits  
Verification of microwave properties; characteristics of servomechanisms, receiver systems, transmission systems, recording and indicating systems and control systems. Testing the characteristic behavior of industrial electronic components and determining curves and efficiencies. Prerequisite: ELS 201. Corequisite: ELS 211.
- ELS 210 Electronic Circuit Theory 3 2 credits  
Basic nonlinearities of tubes and semiconductor devices and the effects of these nonlinearities on wave form transmission for wave generation and shaping. Prerequisite: ELS 106. Corequisite: MS 221.

ELS 211 Electronic Circuit Theory 4	2 credits
Microwave techniques and applications. Servomechanisms, receiver systems, transmission systems, recording and indicating systems, control systems. Prerequisite: ELS 210.	

## ENGINEERING

EG 101 Engineering Drawing 1	2 credits
Required of all pre-engineering and technical students. Drafting techniques, lettering, sketching, applied geometry, orthographic and isometric drawing. Auxiliary views. Sections. Working drawings. Meets 3 hours per week.	
EG 102 Engineering Drawing 2	2 credits
Development of techniques used in making working drawings in the field of architectural, civil, mechanical, aeronautical, and electrical engineering. Prerequisite: EG 101. Meets 3 hours per week.	
EG 105 Drafting	2 credits
A basic course in line symbols. Drawing scales, dimensioning and use of rotes. Principles of projections, sections, and pictorial sketching. Introduction to structural drafting and detailing of structural steel. Corrections and revisions.	
EG 111 Machine Drawing 1	2 credits
Instruments and their use. Lettering. Applied geometry. Orthographic and pictorial drawing. Sketching. Auxiliary views. Sections, intersections and developments. Revolutions. Techniques of finished drawings. Aircraft, mechanical, electrical and architectural drafting. Welding drawings. Cams, gears and fastenings. Working drawings. Meets 3 hours per week.	
EG 112 Machine Drawing 2	2 credits
A continuation of EG 111. Emphasis placed on detail and assembly drawings. Students work from actual machine assemblies, making sketches, details, and assembly drawings.	
EG 115 Hydraulics and Pneumatics	3 credits
Fluid mechanics. Hydrostatics: the flow of water, air, and oil. Calibration of metering devices. Pipe friction. Elementary hydraulic tests. Friction and energy loss. Devices for making fluid measurements. Prerequisite or corequisite: MS 121.	
EG 141 Slide Rule Applications	1 credit
The slide rule as a tool for engineers, scientists and technicians. Multiplication, division, powers and roots, trigonometry, logarithms and combined operations. Particular emphasis on problems solving in electronics, mechanics, physics and chemistry, with stress on exponential functions. For engineering, mathematics, science, and technical students. Meets 1 hour per week.	



EG 201 Strength of Materials	4 credits
Elasticity, shear modulus, stress, deflection, torsion. Statics. Various physical properties of materials. Simple stresses, stress distribution, load yield points, ultimate strength, and safety factors. Prerequisites: MS 121-122. MS 221. Corequisite: MS 222.	
EG 205 Engineering Drawing 3	3 credits
Descriptive Geometry. Methods of obtaining fundamental views of points, lines, and surfaces. Practical application to problems in engineering. Required of all pre-engineering students. Prerequisite: EG 101. Meets 5 hours per week.	
EG 209 Architectural Drafting and Design	3 credits
Development of design characteristics and techniques used to provide an architectural working drawing. Plot plans, floor plans, foundations, elevations, sections, electrical and plumbing riser diagrams, and finish schedules. Meets 3 hours per week. Prerequisite: EG 101 or EG 105.	
EG 223 Highway Engineering	4 credits
Soils and subgrade, pavement design, construction techniques. Highway design. Traffic engineering. Prerequisites: CES 101-102.	
EG 225 Strength of Materials Laboratory	2 credits
Experimentation in stress and strain with applications in structural and machine design. Study and laboratory examination of axial stress and strain; torsion; stresses in beams; elasticity, beam deflection, columns, and combined stress. Corequisite: EG 201.	
EG 231 Engineering Mechanics	3 credits
Nomenclature and operation of mechanical devices and equipment. Problems of mechanical design and construction. Analytical and graphical studies of motion; linkages, cams, gear teeth, gear and epicyclic trains. Maintenance of mechanical equipment. Prerequisite: MDD 103-104.	
<b>ENGLISH</b>	
EH 120 Reading Improvement	2 credits
A fuller development of effective reading, including proficiency in comprehension, vocabulary and speed. A review of methods of reasoning, principles of rhetoric, and criteria for judging evidence.	
EH 210 English Literature	3 credits
A survey of major British writers from Chaucer through the contemporary period. Students planning to major in English should take this course. Prerequisites: CS 101-102.	
EH 211 Continuation of EH 210	3 credits
EH 213 Contemporary Literature	3 credits
A survey of contemporary prose and poetry. Prerequisites: CS 101-102.	



## FASHION DESIGN

<b>FDN 100 Opportunities in the Fashion World</b> An introduction to careers in the fashion design field. A survey of designing, manufacturing, and retailing. Required of all majors.	1 credit
<b>FDN 101 Fashion Design 1</b> Introduction to the fundamental techniques of fashion design. Elementary problems giving attention to research, structure, silhouette, and historical styles. Fashion figure sketching and draping is introduced in this course.	3 credits
<b>FDN 102 Fashion Design 2</b> Course stresses practical applied problems in fashion design with attention centered upon current trade practices. Class projects emphasize the development of the fashion silhouette in both contemporary and historical periods. Creative work of the student is developed.	3 credits
<b>FDN 110 Creative Pattern Design 1</b> The development of dress patterns by the flat pattern drafting method. Students learn to make patterns from an individual sketch, as well as to draft from measurements. Taught in accordance with approved garment trade practices. Prerequisite: FDN 121 or permission of department head.	3 credits
<b>FDN 112 Creative Pattern Design 1-a</b> The development of dress patterns by the flat pattern drafting method. Students learn to make patterns from an individual sketch as well as to draft from measurements. Taught in accordance with approved garment trade practices. Permission of department head.	2 credits
<b>FDN 113 Creative Pattern Design 1-b</b> Continuation of FDN 112. May be taken same semester as FDN 112.	2 credits
<b>FDN 116 Textiles 1</b> Identification and analysis of fibers, fabrics and finishes. A study of the durability, care and price of newer fibers and blends as well as standard dress fabrics.	3 credits
<b>FDN 121 Fashion Fundamentals</b> Socio-economic factors underlying fashion and the basic principles in the merchandising of fashion at the wholesale and retail levels. It includes problems of garment production, distribution, promotion and merchandising of the ready-made clothing industry in the United States. An analysis of fashion trends throughout the world; how fashions originate; designers, markets, uses of fashion; factors that bring about changes.	3 credits

FDN 201 Clothing Production and Manufacturing 3 credits  
 Organization, functions and interrelationships of the major factors of the textile and clothing industry and the regional markets producing ready-to-wear and apparel accessories. Prerequisite: FDN 102.

FDN 211 Creative Pattern Design 2 3 credits  
 An advanced laboratory course in grading, drafting, and designing patterns for the clothing industry. Prerequisite: FDN 110.

FDN 213 Creative Pattern Design 2 2 credits  
 Continuation of the Creative Pattern Design sequence. Prerequisites: FDN 112-113.

FDN 216 Textiles 2 3 credits  
 Comparative properties of contemporary textiles with emphasis on laboratory measurement of physical properties. The application of scientific information to problems in the merchandising and consumption of fabrics, apparel, and household textiles. Consideration of textiles and clothing preparation as an asset in department store careers.

FDN 222 Tailoring 3 credits  
 Comparison of custom tailoring procedures with trade methods and short cuts. Advanced clothing construction with emphasis on pattern alteration, fitting, detail and alternative techniques to improve judgment, originality and skill in construction.

FDN 231 History of Costume 3 credits  
 The development of costumes from the earliest times to the present, the customs which have affected garment styles, and their influence upon the current mode.

FDN 251-252 Supervised Designing Internship 6 credits  
 Student works closely with a fashion designer in a local clothing manufacturing establishment to produce the season's "line". Prerequisites: FDN 100-101-102 and permission of department head.

## HISTORY

HY 201 History of World Civilizations to 1715 3 credits  
 A general survey of world civilizations from the pre-historic period through the seventeenth century with the emphasis being placed upon cultural history. The course is designed to give the student an understanding of the cultural roots of American Civilizations. Prerequisite: SSE 101-102, or permission of department head.

HY 202 History of World Civilizations from 1715 to Contemporary Times 3 credits  
 A survey of modern world civilizations which have had or are having a particularly strong impact upon the culture, problems and international relations of America. Attention will be given

to the spread of European culture, the extension of imperialism, the growth of nationalism and the development of contemporary institutions and concepts. Prerequisite: HY 201.

HY 211 History of the United States to 1865 3 credits

A survey of the founding, growth and development of the colonies in North America and of the United States from its founding through 1865. Prerequisite: SSE 101-102, or permission of department head.

HY 212 History of the United States since 1865. 3 credits

A survey of social, economic and political developments in the United States since the Civil War. Prerequisite: SSE 101-102, or permission of department head.

## HOME AND FAMILY LIFE

HFL 100 Introduction to Home Economics 1 credit

Development, scope and character of home economics as a field of study, and its various professional opportunities. A survey of home economics as education for home and family life and parent education. Required of all majors.

HFL 101 Dynamics of Family Living 3 credits

A practical approach to interpersonal relationships including the study of personal and family problems. An analysis of the basic factors of courtship, mate selection, engagement, marriage, parenthood and child development. Required of all majors.

HFL 102 Decision Making and Management in Family Living 3 credits

Decision making as affected by family values, goals and resources. Principles of time and motion study, work simplification, storage, work areas arrangement and safety as applied to the home.

HFL 106 Foods for Young Moderns 3 credits

Essentials of an adequate diet; meeting nutrient needs through wise food choices; some basic principles of food preparation and meal management including a study of work simplification and foods of various countries.

HFL 115 Personal Development 1 credit

Essentials of good manners and accepted standards of social usage. Personal improvement of the individual student in personal appearance, social customs, personality and human relations. Required of all majors.

HFL 121 Clothing for Moderns 3 credits

Contemporary uses of clothing and textiles as affected by economic, social, and psychological forces. Development of judgment in selecting patterns and fabrics; development of skill and understanding in basic construction techniques and in fitting.

HFL 122 Clothing Selection and Wardrobe Planning Elements of design and aesthetic qualities in relation to the student's appearance, personality and needs. Care and repair of clothing as well as planning and buying a wardrobe.	3 credits
HFL 131 Design Applied to Everyday Living 1 Laboratory problems in color, form, pattern, and texture to develop understanding of good design. Application of these aesthetic principles to the selection, merchandising and designing of clothing, food, and shelter. Required of all majors.	3 credits
HFL 132 Design Applied to Everyday Living 2 Art principles applied to textiles, dwellings, and costume. Designed to develop appreciations which enrich everyday living. Laboratory problems in home planning and furnishings for the family. Prerequisite: HFL 131.	3 credits
HFL 201 Child Development and Observation 1 Develops understanding of young children in many kinds of families and various cultures and their need for adult guidance. Emphasis on observation of the pre-school child. Prerequisite: HFL 101.	3 credits
HFL 202 Child Development and Observation 2 Development of child from prenatal through adolescent period, with emphasis on guidance in the home. Observation of children at various ages and nursery school laboratory practice. Prerequisite: HFL 101.	3 credits
HFL 206 Family Meal Management Planning, preparing, and serving meals emphasizing management of time, energy, and money (at minimum, adequate, and subsistence levels). Factors which influence food quality, selection and meal plans of families and of the professional man or woman. Marketing, food budgets, and short cuts are included.	3 credits
HFL 211 Economics for Consumers Standards for selection of clothing, food, and housing needs. The family's role in the economy. Impact of changing trends; needs in relation to the life cycle. Providing for financial security under changing conditions.	3 credits
HFL 212 Personal and Family Finance Family financial practices, and some of the factors, psychological, sociological, economic and cultural, which influence the use of money. Consideration of economic adjustment, sound money management, credit, housing, social security, insurance and investment.	3 credits
HFL 217 The Family's Health and Home Nursing Principles of family health; occurrence of illness; preventive measures; positive health; simple procedures for care of sickness and accidents in the home.	3 credits



- HFL 221 Family and Children's Clothing Problems 3 credits  
Clothing requirements at different developmental levels from infancy to the retirement years. Construction and selection of children's garments. Men's and boys' wear is also included. Use of family resources to secure maximum satisfaction and serviceability.
- HFL 231 Space for Family Living 3 credits  
Factors influencing housing provided by families and society. Effect on family living of physical surroundings, home planning, furnishings, household equipment, appliances, and location.
- HFL 232 Family Housing and Furnishing 3 credits  
Study of space relationships and furnishings for family living. Laboratory work includes analysis, drawing, and evaluation of house plans as well as selecting the furnishings, colors, equipment for a specific family's needs. Prerequisite: HFL 131-132.

## INSTRUMENTS

- INS 201 Instruments 1 5 credits  
Pressure and temperature sensing and measurement. Measuring and control elements. Emphasis on pneumatic principles. Use of hand and power tools, standards, and testing devices. Use and care of meters and test equipment. Liquid level measurements. Combination measurements of pressure, temperature, and level and their interaction. Prerequisite: EG 115.
- INS 202 Instruments 2 5 credits  
Flow measurement and control. Flowmeters. Calibration and maintenance. Telemetry. Applications of electronics to industrial instrumentation. Automatic control, on-off control, basic controller responses. Measurement and control of humidity, density, frequency, viscosity, hardness. Control applications, plant processes, cascade and ratio-control pneumatic set controllers, time-schedule control. Use of radio-isotopes and nuclear applications in instrumentation. Prerequisite: INS 201.

## JOURNALISM

- JM 201 Survey of Communications 3 credits  
An introduction to the various media of mass communications with special emphasis on the standard printed media, radio, television, and films; their requirements and opportunities; and their responsibilities to the public. Prerequisite: Sophomore standing.
- JM 202 Writing for the Mass Media 3 credits  
A pre-professional course designed to provide fundamental instruction in writing as a basis for all college programs in journalism, advertising and communications. This course may not be taken as a substitute for the communications series.



## LOGIC

### LC 105 Man and His Thinking

3 credits

A consideration of the processes of human reasoning with especial emphasis on the place of logical procedures in every-day life.

## MACHINE DRAFTING AND DESIGN

### MDD 103 Machine Laboratory 1

3 credits

Materials of the machinist. Machine tools and processes. Machine tool design. Forging. Metallurgy. Testing. Milling, shaping, slotting, planning, grinding. Inspection and quality control. Hot and cold metal forming. Time and motion study. Automation. Corequisites: EG 101, MS 121.

### MDD 104 Machine Laboratory 2

3 credits

A continuation of MDD 103, but including more advanced topics in testing and quality control; impact, bend, and fatigue tests. Elementary metallurgy; working hot and cold metals; forging, rolling, and swagging. Prerequisite: MDD 103.

### MDD 105 Machine Laboratory

5 credits

Same as MDD 103 with more laboratory time.

### MDD 106 Machine Laboratory

5 credits

Same as MDD 104 with more laboratory time.

### MDD 201 Machine Design 1

3 credits

Introduction to the study of design and stress analysis. Screw fastenings and riveted connections. Design of open cylinders, shafts, keys couplings, various drive systems, gears, bearings, springs, brakes and clutches. Cam design emphasized. Individual design projects. Use of standard design accessories. Prerequisites: EG 111-112, MDD 103.

### MDD 202 Machine Design 2

3 credits

Continuation of MDD 201. Design of cutting tools, drill jugs, milling fixtures, and press tools. Proportioning machine elements by applying principles of strength of materials modified by practical considerations. Study of the elements of lubrication. Individual design project, actual design of a simple machine, including all calculations, detail, and assembly drawings. Prerequisite: MDD 201.

### MDD 205 Machine Laboratory 3

3 credits

Analytical and graphical studies of motion, linkages, cams, gears, and gear trains. Dynamics of machines; vibration, balance, and loading. Automation. Prerequisites: MDD 103-104.

### MDD 212 Precision Measuring Instruments

3 credits

Principles of precision measuring instruments as used in modern industry. Application of mechanical, pneumatic electronic, and hydraulic devices as they are applied to quality control, production standardization, and automation processes. Equipment study includes stereo-microscopes, electronic

comparators, tension gauges, impact devices, balancing machines, hardness testers, torque gauges and strength testing machines. Prerequisite: MDD 103.

**MDD 223 Metallurgy**

3 credits

Elements of metallurgy, including the more important aspects of physical, chemical, ferrous, nonferrous and general engineering metallurgy. A survey of production practice, metal working, heat treating and metallography. Properties of metals and alloys. Prerequisite: MDD 103.

**MDD 231 Engineering Mechanics**

3 credits

Nomenclature and operation of mechanical devices and equipment. Problems of mechanical design and construction. Analytical and graphical studies of motion; linkages, cams, gear teeth, gear and epicyclic trains. Maintenance of mechanical equipment. Prerequisites: MDD 103-104.

**MATHEMATICS**

**MS 110 College Algebra**

3 credits

Number system, exponents and radicals, polynomials, functions and graphs, fractional expressions, solution of equations, inequalities, absolute value, permutations and combinations, mathematical induction, binomial theorem, theory of equations, and complex numbers. Prerequisite: "C" or better in NSS 101 or consent of department head.

**MS 111 Trigonometry**

3 credits

Functions of acute angles and general angles, fundamental identities, logarithms, radian measure, trigonometric equations, addition formulas, oblique triangles, complex numbers. Prerequisite: MS 110.

**MS 121 College Algebra w/application**

3 credits

Treatment of measured data, scientific notation, tables and interpolation, plane and solid mensuration, usual topics in college algebra. Credit will not be given for both MS 110 and MS 121.

**MS 122 Trigonometry w/application**

3 credits

Analytical trigonometry, vector algebra, complex notations, usual topics in college trigonometry. Credit will not be given for both MS 111 and MS 122. Prerequisite: MS 121.

**MS 140 Fundamental Mathematical Functions 1**

4 credits

Sets, real number system, exponents and logarithms, relations and functions, basic elementary functions, graphing, circular functions, brief introduction to differential calculus. Prerequisite: Guidance Test Battery score 60% ile.

**MS 141 Fundamental Mathematical Functions 2**

4 credits

Brief introduction to integral calculus, polynomial equations and inequalities, systems of equations, plane and solid analytic geometry, permutations, combinations, binomial theorem, probability, statistics, Prerequisite MS 140.

MS 150 Binary Mathematical Applications	2 credits
Survey of the work of the applied mathematician. Problems, computational methods, and devices. Boolean algebra with applications. Logical circuitry using Boolean algebra, such as on-off elements, switches, relays, "flip-flops," and gates. Axioms, postulates, and theorems as they apply to elements of the physical circuit. Symbolism and representation. Primes and "nots." Applications of the associative and commutative laws. Algebraic reduction of networks. The algebra of combinational and sequential circuits. Prerequisite: MS 221.	
MS 210 Computing and Estimating	3 credits
Problems of approximate and exact methods of taking off quantities from plans. Methods of arriving at unit prices, lump sum, and estimating total costs from quantities. Making preliminary and final estimates. Required of construction technology majors.	
MS 221 Applied Calculus for Technicians	3 credits
This is a one semester course with emphasis on problem solving for technicians. Graphical methods for calculating rates of change, area, etc. Differentiation; limits, maxima and minima, derived curves. Integration, the indefinite integral, accelerated motion, the definite integral and volume by integration. Credit will not be given for this course and MS 240. This course may not be used as a prerequisite for MS 241. Prerequisite: MS 122.	
MS 225 Statistical Methods	3 credits
Collecting, grouping and presenting data; measures of central tendency and dispersion; probability; testing hypotheses; confidence intervals; correlation. Prerequisite or corequisite: NSS 101.	
MS 230 Analytic Geometry	3 credits
Rectangular coordinate system, distance formula, straight line, conic sections, translation and rotation of axes, general second degree equation, polar coordinates, introduction to solid analytic geometry. Prerequisite: MS 111.	
MS 240 Calculus 1	4 credits
Limits, continuity, derivatives of various functions, applications of derivatives, differentials, integration by various methods, applications of integration, partial differentiation, multiple integrals. Prerequisite: MS 141 or MS 230.	
MS 241 Calculus 2	4 credits
Continuation of MS 240. Prerequisite: MS 240.	

## MERCHANDISING

MEG 100 Opportunities in Merchandising	1 credit
An introduction to the merchandising field as a career. A survey of the retailing field with its opportunities, problems, and remedies. Required of all majors.	

MEG 105 Fashion Illustration	3 credits
Basic skills in illustrating the figure, fashions, and accessories are developed. Many different techniques currently used in fashion advertising and illustrating are introduced.	
MEG 125 Fundamentals of Selling	3 credits
Nature of personal selling and its requirements. Functional relationships of selling. Buyer motivations and selling theories, with application to various buyer-seller situations.	
MEG 131 Merchandising 1	3 credits
Analysis of customer wants, buying techniques, the buyer's order, the legal aspects of buying. Buying new items, staple items and promotional merchandise. Special buying arrangements, central buying by chain organizations, resident and foreign buying.	
MEG 132 Merchandising 2	3 credits
Retail merchandise management, discounts and datings, inventories turnover, the operating statement, the retail method of inventory, markups, margins, markdowns, expenses, and other income. Prerequisite: MEG 131.	
MEG 225 Promotion, Advertising, and Display	3 credits
Emphasis on the development of retail sales promotions through analysis of media for advertising and promoting merchandise in retail distribution. Application of design principles to interior and exterior display through practical experience in different methods and techniques. Prerequisites: MEG 100, MEG 125.	
MEG 226 Store Operation and Branch Stores	3 credits
The problems involved in the successful operation of a retail organization, the preparation of the store for business, the analysis of employee productivity, the movement of merchandise from the resource to the store, the preparation of the goods for sale, the movement of the goods to the selling floor and thence to the customer. Prerequisites: MEG 100, MEG 125, MEG 131.	
MEG 231 Principles of Retailing	3 credits
Survey of retailing and its role in distribution. Development and advantages of major retail institutions. Administrative organization and allocation of functions within retail firms. Store location and layout; buying, pricing, merchandising and sales promotion; personnel problems; overall planning, control and coordination. Prerequisites: MEG 100, MEG 125.	
MEG 251- MEG 252 Supervised Retail Internship	6 credits
Supervised coordinated training program in stores. Students work part-time in assigned stores and attend seminars at the college. Open to majors in merchandising who have achieved a creditable academic record and who give tangible evidence of interest in the field of retailing. Prerequisite: MEG 100, MEG 125, MEG 131, and permission of department head.	



## MODERN LANGUAGES

### *French*

FH 101 Elementary French 3 credits  
Essentials of French with special emphasis on oral and aural training in the language. Credit for the full year only.

FH 102 Continuation of FH 101 3 credits  
Prerequisite: FH 101. Credit for the full year only.

FH 201 Introduction to French Civilization 3 credits  
Reading in the literature and cultural history of France. Brief review of grammar. Prerequisite: FH 101-102 or equivalent.

FH 202 Continuation of FH 201 3 credits  
Prerequisite: FH 201.

### *German*

GN 101 Elementary German 3 credits  
Essentials of German with special emphasis on oral and aural training in the language. Credit for full year only.

GN 102 Continuation of GN 101 3 credits  
Prerequisite: GN 101. Credit for full year only.

### *Russian*

RN 101 Elementary Russian 3 credits  
Essentials of Russian with special emphasis on oral and aural training in the language. Credit for full year only.

RN 102 Continuation of RN 101 3 credits  
Prerequisite: RN 101. Credit for full year only.

### *Spanish*

SH 101 Elementary Spanish 3 credits  
Essentials of Spanish with special emphasis on oral and aural training in the language. Credit for full year only.

SH 102 Continuation of SH 101 3 credits  
Prerequisite: SH 101. Credit for full year only.

SH 201 Introduction to Hispanic Civilization 3 credits  
Reading in the literature and cultural history of Hispanic countries. Brief review of grammar. Prerequisite: SH 101-102 or equivalent.

SH 202 Continuation of SH 201 3 credits  
Prerequisite: SH 101-102.

SH 251 Intermediate Spanish Conversation and Advanced Composition 3 credits

Especially recommended to those who are planning to teach Spanish or major in Spanish. Prerequisite: SH 201-202 or equivalent.

SH 252 Continuation of SH 251 3 credits  
Prerequisite: SH 251. Credit for full year only.



## MUSIC

MC 101 Music Theory	3 credits
A study of the basic principles of music.	
MC 102 Continuation of MC 101	3 credits
MC 103 Sight Singing	1 credit
A study of sight singing techniques with emphasis on diatonic materials.	
MC 104 Continuation of MC 103.	1 credit
MC 110 Music Masterpieces	2 credits
An elective course offered as an enrichment of Humanities 101. Materials selected from the standard concert repertoire will be studied to further the enjoyment of the home and concert listener. Specifically designed for non-music majors. Pre-requisite: HS 101.	
MC 121 Applied Music (Principal Subject)	2 credits
Two private lessons per week. Required of pre-music education students.	
MC 122 Continuation of MC 121	2 credits
MC 123 Applied Music (secondary subject)	1 credit
Required of pre-music education students. If principle subject is voice or instrument other than piano, student will take class piano. For pre-music education students only.	
MC 124 Continuation of MC 123	1 credit
For pre-music education students only	
MC 127 String Techniques	1 credit
A course in elementary techniques on violin, viola, violoncello and bass viol. Required of pre-music education students.	
MC 128 Continuation of MC 127	1 credit
MC 130 Music Skills	3 credits
A course in music fundamentals and basic techniques of singing, playing piano, and playing rudimental chord, melody and rhythm instruments for pre-elementary education majors.	
MC 140 Band	1 credit
The College Band is concerned mainly with the performance of the standard concert band literature with special emphasis on music composed originally for bands. Members may also participate in the pep band and dance band activities.	
MC 150 Chorus	1 credit
The College Choir is open to all students who like to sing good music. Its repertoire includes a wide range of music literature from various periods both accompanied and a capella.	

MC 160 Orchestra	1 credit per year
An orchestra which affords experience in performing and reading the rich orchestral literature.	
MC 171 History of Liturgy	1 credit
Study of the Anglican, Lutheran, and Roman liturgies; the Hebrew service, history of Protestant church music.	
MC 172 Continuation of MC 171	1 credit
MC 181 Piano Pedagogy	2 credits
Study of pedagogy as applied to the piano; methods for development of techniques, study of graded teaching materials for various stages of advancement, including child and adult beginners.	
MC 182 Continuation of MC 171	2 credits
MC 201 Music Theory	3 credits
A study of the materials of music basic to the standard repertoire.	
MC 202 Continuation of MC 201	3 credits
MC 203 Sight Singing	1 credit
Study of sight singing techniques with emphasis on chromatic materials.	
MC 204 Continuation of MC 203	1 credit
MC 205 Keyboard Harmony	1 credit
Practical application of materials studied in MC 101-102 and MC 201-202 with principal emphasis on harmonization of melodies, improvisation and score reading. Prerequisite: MC 101-102.	
MC 206 Continuation of MC 205	1 credit
MC 210 Introduction to Music Literature and History	3 credits
A study of music literature with emphasis on musical periods, style medium, and form.	
MC 221 Applied Music (principal subject)	2 credits
Two private lessons per week. Required of pre-music education students. Prerequisite: MC 121-122.	
MC 222 Continuation of MC 221	2 credits
MC 223 Applied Music (secondary subject)	1 credit
Class Piano or Class Voice. Required of pre-music education students. For pre-music education students only.	
MC 224 Continuation of MC 223	1 credit
For pre-music education students only.	
MC 271 Choir Training	2 credits
Organization and training of various types of church choirs, choral ensemble techniques; rehearsal procedures; selection of materials.	

MC 272 Choral Literature and Conducting	2 credits
Survey of anthem material for the church service; study of cantatas, oratorios and other large forms of church music. Fundamentals of baton techniques and experience in conducting various forms of choral works.	
MC 273 Service Playing	2 credits
Special course for training organists in general requirements of playing church services; sight reading, hymn playing, etc.	
MC 275 Church Music Principles	2 credits
Introduction to graded choir program, conducting basic hymnology; use of music in worship; church music administration.	
MC 277 Institutional Techniques and Materials	1 credit
A survey of techniques and materials for recreation type groups with emphasis on moral and spiritual values and community service.	
MC 281 Class Piano Methods	3 credits
Aims and objectives of piano classes, classroom procedures, organization and equipment. Study and evaluation of the newest teaching materials for children including ear training, keyboard harmony and the principles of techniques.	
MC 282 Continuation of MC 281	3 credits

## PHILOSOPHY

PHY 211 The History of Western Thought, Ancient and Medieval	3 credits
An account of the development of philosophical thought in the Western world from the beginnings through the Middle Ages. Prerequisites: Sophomore standing, HS 201-202.	
PHY 212 The History of Western Thought, Modern and Recent	3 credits
Continuation of PHY 211. Intellectual movements from the Middle Ages to the present will be examined. Prerequisite: PHY 211 or permission of department head.	

## PHYSICAL EDUCATION

PE 100 Volleyball and Basketball	1 credit
Separate for men and women.	
PE 101 Soccer, Softball, and Speedball	1 credit
Separate for men and women.	
PE 102 Field hockey and Hallball	1 credit
For women only.	
PE 103 Tag Football and Handball	1 credit
For men only.	
PE 104 Swimming	1 credit
PE 105 Social and Folk Dance	1 credit
Coeducational. Participation in a variety of social and folk dances suitable for school and recreational purposes.	

PE 106 Modern Dance Coeducational. Studies of the variations in body movement, rhythm, design, dynamics and composition.	1 credit
PE 107 Tennis Coeducational.	1 credit
PE 108 Bowling Coeducational.	1 credit
PE 109 Badminton and Archery Coeducational.	1 credit
PE 110 Gymnastics and Tumbling Coeducational.	1 credit
PE 111 Golf Coeducational	1 credit
PE 112 Bait Casting Coeducational	1 credit
PE 113 Conditioning	1 credit
PE 114 Adaptive Basic Coeducational.	1 credit
PE 115 Swimming, Intermediate Coeducational.	1 credit
PE 116 Aquatics Coeducational.	1 credit
PE 117 Basic Rhythms	1 credit
PE 126 Introduction to Health, Physical Education and Recreation This course presents a broad overview of health, physical education and recreation.	2 credits
PE 127 Teaching of Team Games	2 credits
PE 128 Continuation of PE 127	2 credits
PE 130 Hygiene Meaning and significance of physical, mental, and social health as related to the individual and to society. Individual and community health problems are discussed.	3 credits
PE 150 Physical Education in Modern Living A combination of classroom study and physical activity designed to acquaint the student with the interrelationships of physical education to his entire educational program.	1 credit
PE 200 Teaching of Tennis	2 credits
PE 201 Teaching of Gymnastics and Tumbling	2 credits
PE 202 Teaching of Social and Folk Dancing	2 credits
Note: PE 127, 128, 200, 201, 202, TO BE ARRANGED COURSES. The pre-major students enrolling in these courses will gain necessary experience to organize, administer and teach games.	

PE 203 Community Recreation	3 credits
This course will acquaint the student with the field of Community Recreation. Considerations of positions in industries, hospitals, municipalities, commercial outlets, institutions, churches and private agencies.	
PE 204 Sports Officiating	2 credits
Theory and practice of officiating in football, basketball, baseball, swimming, tennis and other elected sports. Practice is accomplished in intramural activities.	
PE 205 First Aid	2 credits
Theory, demonstration and practical work in first aid. Upon completion of the course the student will receive the standard and advanced American Red Cross Certificate.	

## PHYSICS

PS 201 General Physics	4 credits
A study of mechanics, heat, and sound. One three hour laboratory period per week. A non-calculus course for technology, pre-medical and pre-dental students.	
PS 202 General Physics	4 credits
A study of electricity and magnetism, light and nuclear physics. A non-calculus course. Prerequisite: PS 201.	
PS 205 General Physics	4 credits
Theory of mechanics and heat. Primarily for physics majors and engineering students. Prerequisite: MS 140-141. Corequisite: MS 240.	
PS 206 General Physics	4 credits
Theory of electricity and magnetism, wave motion, sound, Prerequisites: MS 140-141, PS 205. Corequisites: MS 241.	

## POLICE SCIENCE AND CRIMINOLOGY

PSC 101 Criminology 1	3 credits
Arrest, search, seizure, mechanics of arrest, laws of evidence, history and development of police.	
PSC 102 Criminology 2	3 credits
Continuation of PSC 101	
PSC 203 Criminology 3	3 credits
Police patrol procedure, records and reports, civil defense and military police, police science, police organization and administration.	
PSC 204 Criminology 4	3 credits
Driver license control, traffic law enforcement, accident investigation procedure, police communications, case preparation and court presentation.	



PSC 207 Criminal Law Procedure 3 credits  
 This branch of law treats of crimes and their punishments, substantive and procedural; parties to crime; special defense; municipal, county, state and federal laws.

PSC 209 Police First Aid 3 credits  
 Basic principles of first aid and progressing to the more complicated facets, this course is designed to train the police officer in dealing with situations he will encounter while on duty.

PSC 211 Identification Techniques 3 credits  
 Moulage, handwriting and documentary, photography, lie detection.

PSC 212 Identification Techniques 3 credits

- a. Ballistics - The science of projectile propulsion and motion, its applicability to police work, its importance in the identification of weapons and projectiles is presented in a basic comprehensive manner.
- b. Fingerprint science- Instruction includes classification, sequencing, searching, filing fingerprints, and the proper method of taking inked impression fingerprints.

PSC 214 Police Arsenal Weapons and Laboratory 3 credits  
 The handling, care, safety and use of firearms used in police work as will enable him to cope with any situation where firearms are needed. Lectures are supplemented by an intensive range program in a deliberate, point and defense shooting.

PSC 215 Health and Physical Education 3 credits  
 Personal appearance, physical habits, police judo and karate, field problems.

PSC 216 Continuation of PSC 215 3 credits

## POLITICAL SCIENCE

PSE 203 State and Local Government in America 3 credits  
 A survey of typical state and local government organization and political practices in America with special emphasis upon the governmental organization and the major contemporary political problems of the State of Florida and of Florida communities. Prerequisite: SSE 101-102.

PSE 204 American Federal Government 3 credits  
 A study of the American Constitution and its development, the organization and machinery of the national government, political parties and the electoral process, and the relation of the individual to the federal government. Prerequisite: SSE 101-102.

PSE 208 International Relations 3 credits  
 A study of the nature of international relations, the origins and status of leading international problems, foreign policies of world powers, international political organization, and the United Nations. Prerequisite: SSE 101-102.

## PSYCHOLOGY

- PSY 205 Personal Psychology 3 credits  
An introductory course in the study of the psychological adjustment of the individual to the groups in which he lives, and to his environment. There is a systematic presentation of one approach to the study of personality and a lesser consideration of others.
- PSY 291 Foundations of Scientific Psychology 3 credits  
An extensive coverage of the several topics and viewpoints which constitute the main-stream of contemporary Psychology, designed to be the prerequisite to advanced courses in this field. Prerequisite: Sophomore standing or 50% on SCAT test.

## REFRIGERATION

- RFN 101 Refrigeration Principles and Systems 3 credits  
Basic principles of refrigeration and elementary thermodynamics. Construction features of compressor, condensers, and evaporators. Insulation materials. Compound and multiple-effect compression and absorption system.
- RFN 115 Refrigeration System Operations Laboratory 4 credits  
Laboratory experimentation in problems involving heat losses, conduction, convection, radiation. Principles of refrigeration installation design. Enthalpy, entropy, and the Mollier Chart. Prerequisite: RFN 101.
- RFN 201 Refrigeration Controls and Operations 5 credits  
Design characteristics of compressors, condensers, and evaporators. Emphasis on operating and control devices. Planning heating and refrigeration systems; reverse-cycle principles. Refrigerants. Application of machines to cooling, using various media and cycles. Prerequisites: RFN 101, RFN 115.

## SOCIOLOGY

- SY 201 Introduction to Sociology 3 credits  
An introduction to the principles, concepts, and methods of sociology, with special emphasis being given to the social institutions of America in relation to some contemporary social problems. Prerequisite: SSE 101-102, or permission of department head.

## SPEECH

- SPH 105 Fundamentals of Speech 3 credits  
This course aims to improve the basic skills of speaking and listening through classroom exercises, discussion, oral reading and public address.

SPH 205 Argumentation and Debate

3 credits

The principles of argumentation and their application to issues of current public interest. Analysis, evidence, inference and refutation. Debating practice. SPH 105 recommended but not required.

SPH 207 Oral Interpretation of Literature

3 credits

An introduction to oral reading of short stories, poetry, readings, plays; exercises for developing the effectiveness of body and voice. Prerequisite: SPH 205 or permission of Division Chairman.

# Course Descriptions

## As Offered 1960-1961

### ACCOUNTING

- ACG 101 Principles of Accounting 3 credits  
 Basic training in accounting as a device for measuring business activity. Study of the assumptions underlying accounting: basic accounting procedures, recording and reporting transactions, interpretation of financial and operating statements. (After 1960-61, this course will be titled ACG 181.)
- ACG 102 Principles of Accounting 3 credits  
 Accounting for different equity structures and for cost reporting and control. Intensive analysis of financial reports and statements. (After 1960-61, this course will be titled ACG 182.)
- ACG 201 Intermediate Accounting 1 3 credits  
 Accounting records with a review of the accounting cycle. End-of-period procedures. Working capital: temporary investments, receivables, inventories and current liabilities. (After 1960-61, this course will be titled ACG 281.)
- ACG 202 Intermediate Accounting 2 3 credits  
 Non-current items: investments, plants and equipment, intangibles, long-term debt. Paid-in capital and retained earnings. Analysis of operations: statement of application of funds. (After 1960-61, this course will be titled ACG 282.)

### ART

- AT 101 Basic Art Workshop 3 credits  
 Exploration of design through tools and materials. Individual projects and instructional consultation. Emphasis on manual dexterity — sensitivity to form, texture, and space.
- AT 102 Continuation of AT 101 3 credits
- AT 104 Introduction to Art 2 credits  
 A course directed to non-art majors. Background material on creativity, history and actual performance in the arts. Drawing, painting, and critical sessions.
- AT 121 Art History 1 credit  
 A survey of the visual arts from pre-history to the Renaissance. Space principles and design concepts underlined. Includes student projects (some in visual terms) indicating the comprehension of artistic concepts covered in the lectures.
- AT 122 Continuation of AT 121 1 credit

AT 131 Figure Drawing 3 credits  
 Unorthodox, dynamic approach. Simple and natural procedure leading to a thorough and functional grasp of structure, movement and expression.

AT 132 Continuation of AT 131 3 credits

## AVIATION

AVN 101 Aircraft Structures 3 credits  
 An introduction to Aviation technology including history of flight, theory of flight, problems and types of airframe construction, fundamentals of aircraft electricity, and principles of aircraft instrument operation. (After 1960-61 this course will be titled AVN 101 Aviation Structures.)

AVN 112 Aircraft Powerplants 3 credits  
 Principles of operation and construction features of the following types of aircraft engines: reciprocating (in-line, opposed, and radial), compound, turboprop, turbojet, turbofan. Also thermal, mechanical, and volumetric efficiencies; superchargers; engine accessories; controls and instrumentation. (After 1960-61, this course will be titled AVN 112 Aviation Powerplants.)

AVN 123 Theory of Flight 2 credits  
 An analysis of the physics of flight, including applied aerodynamics of lift, drag, take-off and climb, turning, glide and landing, high speed, propellers, and aerobatics. Factors affecting flight, including weight of aircraft, speed, air density, pressure, and temperature.

## BIOLOGY

BLY 101 Man in the Biological World 3 credits  
 A course designed to develop an appreciation of the contribution of the biological sciences. (After 1960-61, this course will be titled NSS 201.)

BLY 102 Continuation of BLY 101 3 credits

BLY 201 Introductory Botany 4 credits  
 A basic course for majors in science and related fields. (After 1960-61, this course will be titled BY 181 Botany.)

BLY 202 Introductory Zoology 4 credits  
 A basic course for majors in science and related fields. (After 1960-61, this course will be titled BY 182 Zoology.)

## BUSINESS

BUS 140 Advertising and Copywriting 3 credits  
 Familiarize the student with the basic principles and some of the advanced techniques of advertising copy, and to become more articulate with the written word and the more complex forms of advertising copy structure. Also, to understand the



psychological factors which motivate human response and how to appeal to these through advertising copy.

## BUSINESS EDUCATION

- |   |           |
|---|-----------|
| BEN 101 Shorthand   | 3 credits |
| Covers the theory of Gregg Shorthand, simplified for colleges. A basic business vocabulary is developed through reading and writing practice.   |           |
| BEN 102 Continuation of BEN 101   | 3 credits |
| Including a rapid review of theory and continuing vocabulary and speed development with emphasis on advanced phrasing.  |           |
| BEN 105 Business Mathematics  | 3 credits |
| Includes a review of basic mathematics: cash and trade discounts, markup, interest and bank discount, insurance, distribution of profits, good will, debt and amortization.   |           |
| BEN 110 Typewriting 1   | 2 credits |
| Provides preparation for obtaining and maintaining positions which require the basic skills, techniques, and knowledge of the typewriter. (After 1960-61, this course will be titled BEN 111 Typewriting.)  |           |
| BEN 111 Typewriting 2   | 2 credits |
| Continuation of BEN 110 (After 1960-61, this course will be titled BEN 112 Typewriting.)  |           |
| BEN 112 Office Machines   | 3 credits |
| Teaching the use of the basic office machines including two adding machines, a key-driven calculator and rotary calculator. In addition to the manipulative skills, decimal equivalents, percentages, and discount, and use of reciprocals are among the business arithmetic topics covered, as applied to office machines. (After 1960-61, this course will be titled BEN 113.)                              |           |
| BEN 114 Office Machines   | 3 credits |
| Basic and advanced machine accounting: the two sequences of posting, using realistic media, must be satisfactorily completed on a minimum of two types of bookkeeping machines. Posting media for accounts receivable required, with a choice of posting materials for accounts payable, savings and mortgage loans, or payroll for the second sequence. (After 1960-61, this course will be titled BEN 214.) |           |
| BEN 115 Shorthand (Stenoscript)   | 2 credits |
| Alphabetical note-taking system that can be learned in a comparatively short time. Theory is based on dominant sounds, high frequency letter groups, prefixes and suffixes.   |           |
| BEN 120 Touch and Type  | 2 credits |
| Provides preparation for obtaining and maintaining positions which require the basic skills, techniques, and knowledge of the typewriter.   |           |

BEN 125 Human Relations (Psychology) 3 credits  
Fundamental concepts governing human relations and public relations as apply to the broad field of business. Practice in making decisions among business alternatives, with due regard for human relations, is provided through class projects. (After 1960-61, this course will be titled BEN 226.)

BEN 130 Business Correspondence 3 credits  
Special stress on diction, courtesy, and character in business writing. (After 1960-61, this course will be titled BEN 231.)

BEN 160 Principles of Finance 3 credits  
Designed to orient students in the complex financial aspects of modern life including the principal financial institutions of the United States. Particular emphasis on ways in which the money-creating, money allocating, and money-utilizing institutions affect the individual saver and user of credit, the conduct of business, and the growth and stability of world economics.

BEN 170 Income Tax 3 credits  
A study of the income tax laws, both state and national, as they apply to the individual and the single proprietorship business. Stressing recognition of items of income and deduction, including capital gains and losses. (After 1960-61, this course will be titled BEN 270.)

BEN 205 Cost Accounting 3 credits  
Intensive study combining theory with actual practice. It reflects the provisions of the new income tax and social security laws. Develops the three principal systems of cost accounting: the job cost system, the process cost system and the standard cost system. (After 1960-61, this course will be titled BEN 283.)

BEN 215 Business Law 3 credits  
Contracts agencies, sales and property law studied in relationship to the proper conduct of business. (After 1960-61, this course will be titled BAN 231.)

## CHEMISTRY

CY 101 General Chemistry 4 credits  
An introduction to chemistry for students majoring in science or one of the related fields.

CY 102 Continuation of CY 101 4 credits

## DATA PROCESSING

DAP 101 Computer Theory and Applications 3 credits  
An introductory course in the principles of computers, their uses in business, industry, and science; the number systems used, functions of components, and basic computer programming. Operations and characteristics of computers. Machine organization, representation of information, coding, analyzing, programming. Functional units. Comparative studies of techniques.

DAP 112 Digital Computers Laboratory	2 credits
Applications and operational characteristics of digital computers. Preparation of problems for and demonstration of the digital computer in the laboratory. Application of the theory of electronic circuitry to computer design and programming. Physical concepts, characteristics, and parameters. Individual investigation of problems in projects requiring methods of research and analysis. Components, including both the mechanism and arithmetic method employed. Elementary coding, number systems, computer logic. Control and arithmetic units. Accuracy, precision, checking.	

## DRAMA

DA 101 Principles of Drama and Theatre	3 credits
Constitutes a basic study of the theatre with emphasis on lighting, make-up, sound effects, stagecraft, costuming, and scenery.	
DA 102 Continuation of DA 101	3 credits
Emphasis on directing, make-up and costuming.	
DA 103 Principles of Acting	3 credits
Emphasis on standards of good diction, body flexibility, and demonstrations in acting. Problems in characterization, interpretation and art acting, state techniques, pantomime, and voice.	
DA 104 Continuation of DA 103	3 credits

## EDUCATION

EN 101 Introduction to Education	3 credits
A basic course in the social and philosophical foundations of education.	

## ELECTRONICS

ELS 101 Electronics Laboratory 1	5 credits
Verification of the characteristics of resistors, inductors, capacitors, and circuit containing combinations of resistance, inductance and capacitance with direct and alternating currents.	
ELS 102 Electronics Laboratory 2	5 credits
Verification of the characteristics of vacuum, gaseous, and semiconductor devices. The linear characteristics of these devices as circuit elements for rectification, amplification, and sinusoidal wave generation.	
ELS 105 Electronic Circuit Theory 1	2 credits
Fundamental principles of electric, magnetic, and dielectric circuits involving combinations of resistance, inductance, and capacitance with direct currents, and single and polyphase sinusoidal alternating currents.	

## ENGINEERING

### EG 100 Slide Rule Applications

1 credit

The slide rule as a tool for engineers, scientists, and technicians. Multiplication, division, powers and roots, trigonometry, logarithms and combined operations. Particular emphasis on problem solving in electronics, mechanics, physics and chemistry, with stress on exponential functions. For engineering, mathematics, science, and technical students. (After 1960-61, this course will be titled EG 141.)

### EG 101 Engineering Drawing 1

2 credits

Required of all pre-engineering and technical students. Drafting techniques, lettering, sketching, applied geometry, orthographic and isometric drawing. Auxiliary views. Sections. Working drawings.

### EG 102 Engineering Drawing 2

2 credits

Development of techniques used in making working drawings in the field of architectural, civil, mechanical, aeronautical, and electrical engineering.

## ENGLISH

### EH 101 Man and Communication

3 credits

A basic course in the communication arts -- reading, writing, listening, and speaking. Required of all students. (After 1960-61, this course will be replaced by CS 101 Communications.)

### EH 102 Continuation of EH 101

3 credits

(After 1960-61, this course will be replaced by CS 102 Communications.)

### EH 112 Technical Report Writing

3 credits

An intensive course in the research for and preparation of reports of various kinds.

### EH 120 Reading Improvement

2 credits

Designed for students whose reading skills are insufficient for college work. This course provides skills necessary for efficient reading of textbooks and other materials encountered in college courses.

## FASHION MERCHANDISING

### FM 100 Flat Patterns

2 credits

Development of dress patterns by the flat pattern drafting method. Students learn to make patterns from an individual sketch as well as to draft from measurements. Taught in accordance with approved garment trade practices. (After 1960-61, this course will be titled FDN 112 Creative Pattern Design 1a.)

FM 101 Basic Design	3 credits
Introduction to the fundamental techniques of fashion design. Elementary problems giving attention to research, structure, silhouette, and historical styles. Introduction of figure sketching and draping. (After 1960-61, this course will be titled FDN 101 Fashion Design.)	
FM 102 Basic Fashion Design	3 credits
Course stresses practical applied problems in fashion design with attention centered upon current trade practices emphasizing the development of the fashion silhouette in both contemporary and historical periods. Creative work of the student is developed. (After 1960-61, this course will be titled FDN 102 Fashion Design.)	
FM 105 Fashion Illustration	3 credits
Basic skills in illustrating the figure, fashions, and accessories. Many different techniques currently used in fashion advertising and illustrating. (After 1960-61, this course will be titled MEG 105.)	
FM 110 Flat Pattern Drafting and Design	3 credits
Development of dress patterns by the flat pattern drafting method. Students learn to make patterns from an individual sketch as well as to draft from measurements. Taught in accordance with approved garment trade practices. (After 1960-61, this course will be titled FDN 110 Fashion Creative Pattern Design.)	
FM 115 Textiles	3 credits
Identification and analysis of fibers, fabrics, and finishes. A study of the durability, care and price of newer fibers and blends as well as standard dress fabrics. (After 1960-61, this course will be titled FDN 116.)	
FM 120 Fashion Fundamentals	3 credits
Socio-economic factors underlying fashion and the basic principles in the merchandising of fashion at the wholesale and retail levels. Including problems of garment production, distribution, promotion, and merchandising of the ready-made clothing industry in the United States. Analysis of fashion trends throughout the world; how fashions originate; designers, markets, uses of fashion; factors that bring about changes. (After 1960-61, this course will be titled FDN 121.)	
FM 125 Techniques of Selling	3 credits
Nature of personal selling and its requirements. Functional relationships of selling. Buyer motivations and selling theories, with application to various buyer-seller situations. (After 1960-61, this course will be titled MEG 125 Fundamentals of Selling.)	
FM 130 Merchandising	3 credits
Analysis of customer wants, buying techniques, the buyer's order, the legal aspects of buying. Buying new items, staple	



items, and promotional merchandise. Special buying arrangements, central buying by chain organizations, resident and foreign buying. (After 1960-61, this course will be titled MEG 131.)

## FRENCH

- FH 101 Elementary French 3 credits  
An introduction to conversational French including grammar and culture of the country.
- FH 102 Continuation of FH 101 3 credits

## HOME AND FAMILY LIFE

- HFL 101 Dynamics of Family Living 3 credits  
A practical approach to interpersonal relationships including the study of personal and family problems. An analysis of the basic factors of courtship, mate selection, engagement, marriage, parenthood and child development.
- HFL 105 Foods for Young Moderns 3 credits  
Essentials of an adequate diet; meeting nutrient needs through wise food choices; some basic principles of food preparation and meal management including a study of work simplification and foods of various countries. (After 1960-61, this course will be titled HFL 106.)
- HFL 110 Economics for the Consumer 3 credits  
Standards for selection of clothing, food, and housing needs. The family's role in the economy. Impact of changing trends: needs in relation to the life cycle. Providing for financial security under changing conditions. (After 1960-61, this course will be titled HFL 211.)

## HUMANITIES

- HS 201 Man and His Culture 3 credits  
A course designed to acquaint the student with the great literature, philosophy, art, and music in Western Civilization with primary emphasis upon basic philosophic concepts. (After 1960-61, this course will be titled HS 201 Humanities.)
- HS 202 Continuation of HS 201 3 credits  
(After 1960-61, this course will be titled HS 202 Humanities.)

## LOGIC

- LC 105 Man and His Thinking 3 credits  
A basic course designed to improve the student's thinking and reasoning skills through an analysis of the various factors which influence a person's every day actions and thoughts.

## MACHINE DRAFTING AND DESIGN

- MDN 103 Machine Laboratory 3 credits  
Materials of the machinist. Machine tools and processes. Machine tool design. Forging. Metallurgy. Testing. Milling, shaping, slotting, planing, grinding. Inspection and quality control. Hot and cold metal forming. Time and motion study. Automation. (After 1960-61, this course will be titled MDD 103.)
- MDN 104 Machine Laboratory 2 3 credits  
A continuation of MDN 103, but including more advanced topics in testing and quality control; impact, bend, and fatigue tests. Elementary metallurgy; working hot and cold metals; forging, rolling, and swagging. (After 1960-61, this course will be MDD 104.)

## MATHEMATICS

- MS 105 Mathematics and Human Affairs 3 credits  
An introduction to mathematical concepts necessary for effective citizenship, covering sets, development of number system, logarithms, probability, and statistics, linear equations and inequalities. (After 1960-61, this course will be titled NSS 101.)
- MS 110 College Algebra 3 credits  
Number system, exponents and radicals, polynomials, functions and graphs, fractional expressions, solution of equations, inequalities, absolute value, permutations and combinations, mathematical induction, binomial theorem, theory of equations, and complex numbers.
- MS 121 Mathematics for Electronics Technicians 3 credits  
Treatment of measured data, scientific notations, tables and interpolation, plane and solid mensuration, usual topics in college algebra. (After 1960-61, this course will be titled MS 121 College Algebra w/application.)
- MS 140 Fundamentals of Mathematical Functions 4 credits  
A course in college mathematics primarily for students majoring in mathematics or in one of the sciences.
- MS 141 Continuation of MS 140 4 credits

## MUSIC

- MC 101 Music Theory 3 credits  
A study of the basic principles of music.
- MC 102 Continuation of MC 101 3 credits
- MC 103 Sight Singing 1 credit  
A study of sight singing techniques with emphasis on diatonic materials.

MC 104 Continuation of MC 103	1 credit
MC 121 Applied Music (Principal Subject) Two private lessons per week.	2 credits
MC 122 Continuation of MC 121	2 credits
MC 123 Applied Music (Secondary Subject) Required of pre-music education students. If principal subject is voice or instrument other than piano, student takes class piano.	1 credit
MC 124 Continuation of MC 123	1 credit
MC 127 Strings Techniques This course in elementary techniques on violin, viola, violoncello and bass viol. Required of pre-music education students.	1 credit
MC 128 Continuation of MC 127	1 credit
MC 130 Music Skills A course in music fundamentals and basic techniques of singing, playing piano, and playing rudimental chord, melody and rhythm instruments.	3 credits
MC 140 Band The College Band is concerned mainly with the performance of the standard concert band literature with special emphasis on music composed originally for bands. Members may also participate in the pep band and dance band activities.	1 credit
MC 150 Chorus The College Choir is open to all students who like to sing good music. Its repertoire includes a wide range of music literature from various periods both accompanied and a capella.	1 credit

## PHYSICAL EDUCATION

PE 100 Volleyball and Basketball Separate for men and women	1 credit
PE 101 Soccer and Softball Separate for men and women.	1 credit
PE 104 Swimming	1 credit
PE 105 Social and Folk Dance Co-educational. Participation in a variety of social and folk dances suitable for school and recreational purposes.	1 credit
PE 107 Tennis Co-educational	1 credit
PE 108 Bowling Co-educational	1 credit
PE 109 Badminton and Archery Co-educational	1 credit
PE 110 Gymnastics and Tumbling Separate for men and women.	1 credit

PE 113 Conditioning	1 credit
PE 114 Adaptive Basic	1 credit
PE 115 Swimming, Intermediate	1 credit
PE 116 Aquatics	1 credit
PE 126 Introduction to Health, Physical Education and Recreation Attempts to present a broad overview of health, physical education and recreation.	2 credits
PE 127 Teaching of Team Games	2 credits
PE 128 Continuation of PE 127	2 credits
PE 130 Hygiene Meaning and significance of physical, mental, and social health as related to the individual and to society. Individual and community health problems discussed.	3 credits
PE 204 Sports Officiating Theory and practice of officiating football, basketball, baseball, swimming, tennis, and other elected sports. Practice in intramural activities.	2 credits

## PHYSICAL SCIENCE

PSE 101 Man in the Physical World An introductory course in physical science for non-majors. (After 1960-61, this course will be titled NSS 102.)	3 credits
PSE 102 Continuation of PSE 101 (After 1960-61, this course will be titled NSS 202.)	3 credits

## PHYSICS

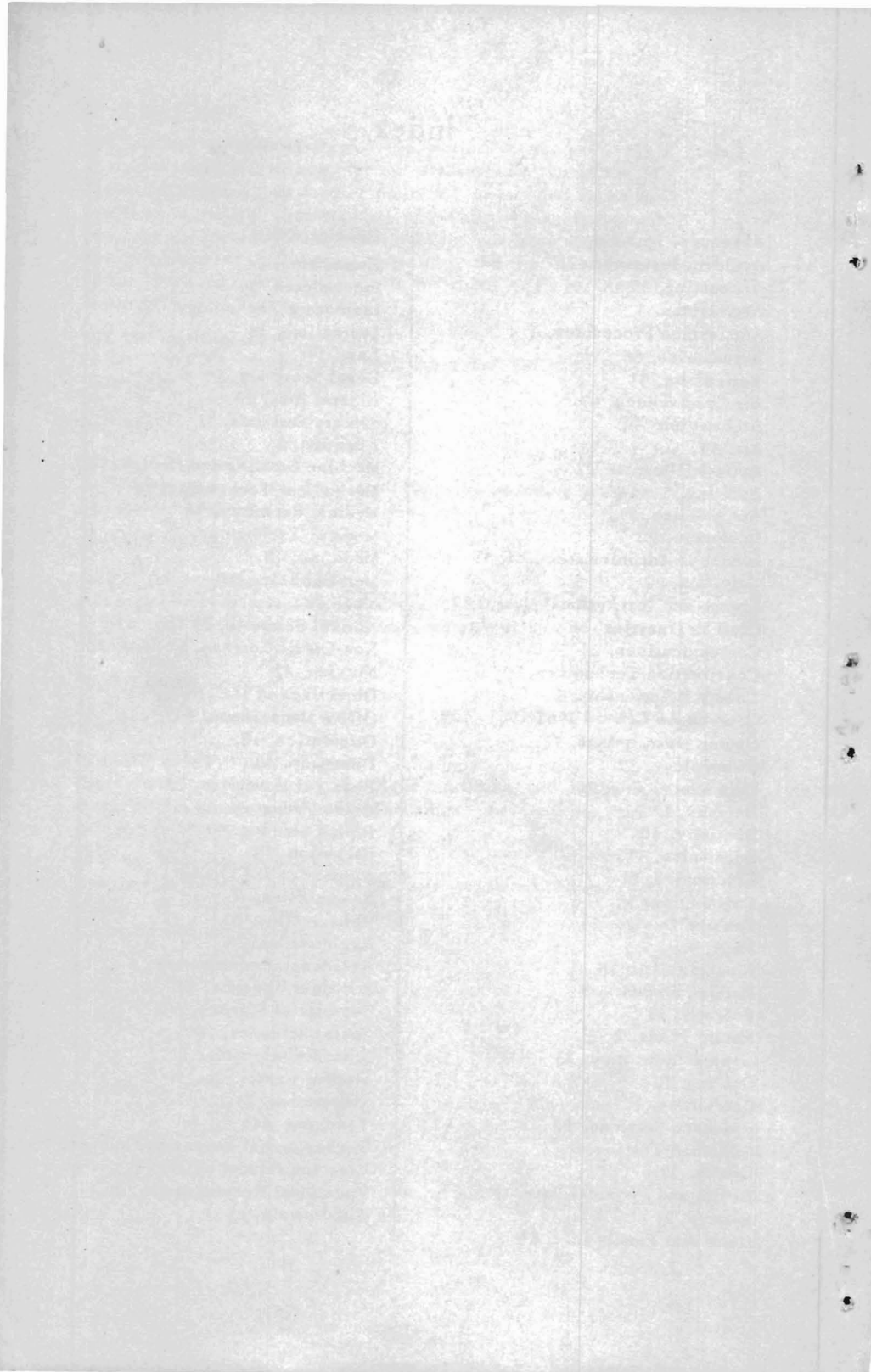
PS 201 General Physics An introduction to physics for students majoring in science or one of the related fields.	4 credits
PS 202 Continuation of PS 201	4 credits

## POLICE SCIENCE

PSC 101 Criminology 1 Arrest, search, seizure, mechanics of arrest, laws of evidence, history and development of police.	3 credits
PSC 102 Criminology 2 Continuation of PSC 101	3 credits

## PSYCHOLOGY

PSY 205 Personal Psychology An introductory course in the principles of psychological adjustment and behavior of the individual.	3 credits
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