IAC IRCC CATALOG 1990-1991


INDIAN
RIVER
COMMIUNITY


## Indian River Community College

 1990 -91 CatalogThe provisions of this publication are not to be construed as a contract between the student and Indian River Community College. The College reserves the right to change any provision or requirement when such action will serve the interests of the College or its students. The College further reserves the right to ask a student to withdraw when it considers such action to be in the best interest of the College.

Students are responsible for meeting in full the requirements for graduation set forth in the College Catalog. The Educational Services Division assists in the planning of a program of study for each student but the final responsibility for meeting the requirements for graduation rests with the student. The catalog considered "in force" and binding on the student is (on the student's option):

1. The one under which he originally enrolled (if not more than four regular semesters prior to his graduation).
2. The current college catalog.


## INDIAN RIVER COMMUNITY COLLEGE

Main Campus
3209 Virginia Ave.
Fort Pierce, FL
$34981-5599$
(407) 468-4700

Mueller Center
5880 Lundberg Rd.
Vero Beach, FL
32966
(407) 569-0333

Chastain Center 2400 S.E. Salerno Rd. Stuart, FL 34997 (407) 283-6550

Port St. Lucie Site 200 S.W. Prima Vista Blvd. Port St. Lucie, FL 34952
(407) 879-4199

Dixon Hendry Center
2229 N.W. 9th Ave. Okeechobee, FL 34972
(813) 763-8017

Indian River Academy
5400 Tedder Rd.
Fort Pierce, FL
34954
(407) 464-7676

## INDIAN RIVER COMMUNITY COLLEGE FORT PIERCE, FLORIDA 1990-91 Catalog



Accredited by:
The Southern Association of Colleges and Schools The Florida State Board of Nursing National League for Nursing, Board of Review for Associate Degree Programs
Joint Review Committee on Education in Radiologic Technology
Council on Education American Dental Association
Dental Assisting and Dental Technology
Commission on Accreditation of Rehabilitative Facilities
National Accrediting Agency for
Clinical Laboratory Sciences (NAACLS)
Committee on Allied Health Education
and Accreditation (CAHEA) of the
American Medical Association


## TABLE OF CONTENTS

District Board of Trustees ..... 4
Message from IRCC President ..... 7
Academic Calendar ..... 8
Statement of Purpose ..... 14
Overview of College ..... 16
Educational Services Division ..... 20
Admissions ..... 20
Special Admissions ..... 22
Fees ..... 24
Financial Aid ..... 32
Veterans ..... 32
Career Planning and Placement. ..... 33
Add and Drop ..... 34
CLAST ..... 36
Student Activities ..... 44
Athletics ..... 46
Access to Educational Records ..... 48
Programs ..... 51
Continuing Education ..... 56
Degrees ..... 59
Associate in Arts Degree ..... 59
Associate in Science Degree ..... 85
Technical Certificates ..... 123
Career Training Programs ..... 129
Course Descriptions ..... 142
Administration \& Faculty ..... 246
Advisory Committees ..... 259
Master Course Directory ..... 263
Index ..... 291
Maps of Campus and Center Locations ..... 294
Statement of Nondiscriminatory Policies Inside Back Cover
Application for AdmissionSee Insert


## DISTRICT BOARD OF TRUSTEES

The District Board of Trustees of Indian River Community College is appointed by the Governor of the State of Florida and serves Indian River, Martin, Okeechobee and St. Lucie Counties.

| Elder M. Sumner, Chairman | Okeechobee County |
| :---: | :---: |
| Eunice Bruyn | St.Lucie County |
| Harriett Crago | Indian River County |
| Ben F. Dixon | Okeechobee County |
| G. Gene Greenwood | Martin County |
| Joyce Hobson | Martin County |
| William Jordan, Vice Chairman | Indian River County |
| Gracia Rosslow | St. Lucie County |
| Harold Supank | St. Lucie County |
| Edwin R. Massey, Ph.D. | ... Secretary to the Buard of Trustees |





Welcome to Indian River Community College! Located on Florida's Treasure Coast, IRCC is a two-year college offering Associate in Arts degrees for transfer to senior universities, as well as Associate in Science degrees, certificates, and short-term training programs for vocational-technical careers. As one of Florida's 28 community colleges, IRCC maintains a policy of "open door" admissions, which guarantees admission to any high school graduate. This policy makes college easily accessible to 98 percent of Florida's residents.

At IRCC, our priority is educational excellence. Our students consistently achieve top scores and one of the highest passing rates in the State on the College Level Academic Skills Test, the State-required sophomore exit exam. Our highly qualified faculty, strong programs, and effective counseling combine to create an atmosphere which is extremely conducive to student success.

The programs and policies described in this catalog have been carefully developed with one purpose in mind: to enable our students to achieve to their greatest potential and to lay a firm foundation for their future academic and career pursuits. The counselors in our Guidance Division stand ready to answer your questions and assist you in any way possible.

We commend you on your decision to attend college, and hope that IRCC will be a part of your plans for the future. We encourage you to visit with our students, faculty and administrators. You will find that we are, as our motto states, "IRCC PROUD."

Sincerely,

## Summer Term I, 1990

$\left.\begin{array}{ll}\text { May 4, Friday } & \begin{array}{l}\text { Registration Deadline, 8:00 a.m. to 8:30 } \\ \text { p.m. (Consult Educational Services Division } \\ \text { for Advanced Registration) Last day to pay }\end{array} \\ & \text { all fees to avoid late fee. } \\ & \text { Last day to register for CLAST Exam }\end{array}\right\}$

## Summer Term II, 1990

| June 22, Friday | Registration Deadline, 8:00 a.m. to 8:30 p.m. (Consult Educational Services Division for Advanced Registration) Last day to pay all fees to avoid late fee. |
| :---: | :---: |
| June 25, Monday | Faculty Report Classes begin. A \$15.00 late fee on and after this date. Drop and Add Begins. |
| June 29, Friday | Drop and Add period ends. <br> Last day to apply for Graduation for Summer I and Summer II. <br> Last day to withdraw with refund of fees. NO refunds for drops or withdrawals after this date. <br> Last day to pay all fees. Registration will be cancelled for non-payment after this date. |
| July 4, Wednesday | *Holiday - Independence Day |
| July 17, Tuesday | Mid Term Grades due in Records Center by 5:00 p.m. |
| August 3, Friday | Last day to apply for Fall, 1990 Dental Laboratory Technology Program |
| July 24, Friday | Last day to withdraw from a course with a "W" |
| August $8 \& 9$, Wednesday \& Thursday | Semester Exams |
| August 9, Thursday | Term Ends - Grades due in Records Center by 5:00 p.m. |
| August 17, Friday | Diplomas Mailed |

## Fall Semester, 1990

August 15, Wednesday
August 16, Thursday
August 20, Monday

August 21, Tuesday

August 29, Wednesay

September 3, Monday
September 7, Friday
September 19, Wednesday
September 21, Friday

October 6, Saturday
October 19, Friday

November 2, Friday
November 12, Monday
November 22-23, Thursday \& Friday
December 12, 13, 14
Wednesday, Thursday \& Friday
December 14, Friday

December 28, Friday

New Faculty Report
Returning Faculty Report
Registration Deadline, 8:00 a.m. to 8:30 p.m.
(Consult Educational Services Division for Advanced Registration)
Last day to pay all fees to avoid late fee.
Classes begin. A $\$ 15.00$ late fee on and after this date. Drop and Add Begins.
Drop and Add period ends
Last day to withdraw with refund of fees. NO refunds for drops or withdrawals after this date.
Last day to pay all fees. Registration will be cancelled for non-payment after this date. Last day to apply for Graduation.
*Holiday - Labor Day Last day to register for CLAST Exit Exam. Last day to apply for January, 1991 Licensed Practical Nursing Program
Last day to apply for LPN Transitional Program
CLAST Exit Exam
Mid Term Grades due in Records Center by 5:00 p.m.
Last day to apply for Cosmetology Program (January)
Last day to withdraw from a course with a "W"
*Holiday - Veteran's Day
*Holiday - Thanksgiving
Semester Exams

Term Ends - Grades due in Records Center by 5:00 p.m.
Diplomas Mailed

[^0]
## Spring Semester, 1991

January 2, Wednesday
January 4, Friday

January 7, Monday
January 15, Tuesday

January 21, Monday
January 25, Friday
February 23, Saturday
March 15, Friday
March 18-22,
Monday-Friday
March 25, Monday

March 29, Friday
April 8, Monday
April 26, 29, 30
Friday, Monday \& Tuesday
May 1, Wednesday
May 2, 3, Thursday \& Friday
May 5, Sunday Commencement (Required for all Spring
*Official Holiday - All offices closed. No classes.

## Summer Term I, 1991

May 3, Friday

May 6, Monday

May 10, Friday

May 27, Monday
May 28, Tuesday
June 1, Saturday
June 3, Monday

June 5, Wednesday
June 7, Friday
June 19 \& 20,
Wednesday \& Thursday
June 20, Thursday
June 25, Tuesday
June 28, Friday

Registration Deadline, 8:00 a.m. to 8:30 p.m.
(Consult Educational Services Division for Advanced Registration)
Last day to pay all fees to avoid late fee.
Last day to register for CLAST Exam
Faculty Report
Classes begin. A $\$ 15.00$ late fee on and after this date.
Drop and Add Begins.
Drop and Add period ends.
Last day to apply for Graduation for Summer I and Summer II.
Last day to withdraw with refund of fees. NO refunds for drops or withdrawals after this date.
Last day to pay all fees. Registration will be cancelled for non-payment after this date.
*Holiday - Memorial Holiday
Mid Term Grades due in Records Center by 5:00 p.m.
CLAST Exit Exam
Last day to apply for Fall, 1991 Medical Laboratory Technology Program
Last day to apply for Fall, 1991 Paramedic Program
Last day to withdraw from a course with a "W"
Last day to apply for June, 1991 Dental Assistant Program
Semester Exams
Term Ends - Grades due in Records Center by 5:00 p.m.
Last day to apply for Cosmetology Program (August Class)
Diplomas Mailed
*Official Holiday - All offices closed. No classes.

| Summer Term II, 1991 |  |
| :---: | :---: |
| June 21, Friday | Registration Deadline, 8:00 a.m. to 8:30 p.m. <br> (Consult Educational Services Division for <br> Advanced Registration) <br> Last day to pay all fees to avoid late fee. |
| June 24, Monday | Faculty Report Classes begin. A $\$ 15.00$ late fee on and after this date. Drop and Add Begins. |
| June 28, Friday | Drop and Add period ends. <br> Last day to withdraw with refund of fees. NO refunds for drops or withdrawals after this date. <br> Last day to pay all fees. Registration will be cancelled for non-payment after this date. |
| July 4, Thursday | *Holiday - Memorial Holiday |
| July 16, Tuesday | Mid Term Grades due in Records Center by 5:00 p.m. |
| July 23, Tuesday | Last day to withdraw from a course with a " $W$ " |
| August 2, Friday | Last day to apply for Fall, 1991 Dental Laboratory Technology Program |
| August 7 \& 8, Wednesday \& Thursday | Semester Exams |
| August 8, Thursday | Term Ends - Grades due in Records Center by 5:00 p.m. |
| August 16, Friday | Diplomas Mailed |

## The College Statement of Purpose:

Indian River Community College is a comprehensive community college dedicated to meeting the continuous and changing educational needs of all citizens of St: Lucie, Martin, Indian River, and Okeechobee Counties, Indian River Community College leads as an innovative educational network building a stronger community by providing college transfer programs, occupational training, student services, developmental studies, personal enrichment and community and cultural involvement.


IRCC

## INDIAN RIVER COMMUNITY COLLEGE

Located on the tropical Treasure Coast of Florida, Indian River Community College stands out as a two-year public post-secondary institution dedicated to serving the educational and cultural needs of its surrounding area.

IRCC is truly an "equal access, equal opportunity educational institution."
IRCC welcomes students of any age, race, religion, nationality, sex, and physical ability. Special adjustments within the College, such as architectural modifications for the handicapped and classes in English for the foreign-born, ensure that all students have equal opportunities for success at IRCC. The "open door policy" in force at the College guarantees that anyone who holds a high school or high school equivalency diploma will be admitted to the College. Every effort is made to keep costs to a minimum at IRCC without compromising academic excellence. Close cooperation between the administration and faculty and a general atmosphere of open communication and concern for the overall success of the student allow IRCC to give its students a high-quality education at a reasonable cost. In addition, many financial aid and scholarship programs are readily available to eligible students.

The "average" student at IRCC is 32 years of age, female and enrolled in a vocational program. In reality, however, this mythical "average" represents students of every age, either sex, with a myriad of goals.

Recent high school graduates take their first step toward future plans at IRCC. Persons already established in careers attend IRCC to expand their skills and retrain for new positions. Senior citizens stay atuned to the world around them through courses offered at IRCC.

The area's comprehensive educational provider, designated vocationaltechnical center, and the hub of culture, IRCC has a reputation for quality that inspires some 48,000 people to enroll in classes each year.

High school students who wish to get a headstart on college can discover new challenges and broaden their experience through IRCC's Dual Enrollment and Early Admissions Programs.

## ACADEMIC PROGRAMS

Linking Indian River, Martin, Okeechobee and St. Lucie Counties with five campuses, IRCC offers a wide range of degree and certificate programs, including Associate in Arts and Associate in Science-Technical Degrees, as well as shorterterm certificate programs. The College strives to provide its students with a maximum of educational options; programs are offered not only for students who plan to transfer to upper-level colleges or universities, but also for students who wish to pursue careers immediately upon completion of their IRCC programs.

With its community in mind, IRCC provides a full curriculum for students who want to take classes simply to expand their interests and enhance specific job skills. Programs covered by this blanket of Continuing Education include the Adult Basic Education Program, The General Equivalency Diploma Program, the Adult Vocational Credit Program, the Center for Personalized Instruction, the Adult High School for St. Lucie County, and the Women's Program.

## ACCREDITATION

Accredited by the Southern Association of Colleges and Schools, the Florida State Board of Nursing, the National League for Nursing, and Joint Review Committee on Education in Radiologic Technology, the American Dental Association Council on Education, the Commission on Accreditation of Rehabilitative Facilities, the National Accrediting Agency for Clinical Laboratory Sciences, and the Committee on Allied Health Education and Accreditation of the American Medical Association, IRCC is totally committed to supplying its students with the most modern facilities and most relevant program choices.

## FACILITIES

Twenty-five buildings on a lovely 100-acre campus compose IRCC's main facility in the coastal city of Fort Pierce; in addition, there are convenient "satellite sites" located throughout the four-county district.

Reflecting the diversity of IRCC students and their interests, the Main Campus encompasses such specialized facilities as a sophisticated aquatic complex, a regional crime lab, a fire science training center, a modern child development center, a physical fitness lab, a fully-equipped dental lab, and a large, comfortable student center. The acquisition and renovation of the historical Coast Guard building in Fort Pierce has enabled IRCC to provide an oceanside setting for its environmental and marine sciences programs. The McAlpin Fine Arts Center emphasizes IRCC's commitment to the development of the well-rounded student. With a professional 620-seat theatre, classrooms, and music and drama rehearsal rooms, the Fine Arts Center allows students to participate in the arts and enjoy cultural activities.

The College-sponsored Performing Arts Series annually brings outstanding professional musical productions and dramatic performances to the Treasure Coast.

## HISTORY

Authorized by the Florida Legislature in 1959, Indian River Community College has grown in the past thirty years from a one-building structure to the dominant educational and cultural center in the community. The College moved to its present campus on Virginia Avenue after the City of Fort Pierce donated 87 acres of land to IRCC in 1963. As the College grew in scope and role, the Board of Trustees felt that a name representative of the College's comprehensive service was appropriate, and, in 1970, changed its name to Indian River Community College. The past decade has been one of notable growth at IRCC. Although students from nearly every state and many foreign countries now attend the college, it has maintained its primary commitment to providing academic, vocational, technical, cultural, and service programs that meet the needs of its four-county community.

Administered by a District Board of Trustees representative of the four-county area, IRCC maintains an open, innovative administration, a dedicated staff, and concerned, well qualified faculty. College faculty and staff members contribute to their community through involvement in many local organizations.

## AREA HIGHLIGHTS

As might be expected from a college located in an area of unsurpassed natural beauty, mild weather, and closeness to the sea, IRCC is oriented toward outdoor life. Open areas and courtyards on campus give students places to gather or study, and classes are sometimes conducted outdoors. With Lake Okeechobee to the west, the Indian River to the east, and the white sandy beaches of the Atlantic Ocean only minutes away from campus, activities such as swimming, surfing, fishing, SCUBA and snorkeling are always within easy access. The cities of Fort Pierce, Vero Beach, Stuart, Okeechobee and Port St. Lucie offer an array of recreational and cultural events, and leisure time activities such as Jai-Alai, rodeos, professional baseball, shopping, restaurants, and night spots are also readily available.

Within an hour's drive on the Sunshine State Parkway or l-95 are the city of West Palm Beach, two senior universities, many natural attractions, Kennedy Space Center, and a multitude of job opportunities. Only a short distance further are the Florida Keys, Orlando, Disney World, and by air or boat, the Bahamas.

On campus, an unlimited number of organizations, formal and informal gatherings, and stimulating special events ensure that IRCC students always have the opportunity to explore their interests, discover new ones, and make friends to share them with. Students find that challenges, work, research, study, service, discovery, and fun all have a place at IRCC.


EDUCATIONAL SERVICES

## EDUCATIONAL SERVICES DIVISION

Under the Educational Services Division "umbrella" are Instructional Advisement, Financial Aid, Veteran's Affairs, Records, Testing, Curriculum Support, and Career Planning. These services ensure that each student's program of study will be uniquely suited to his or her interests and abilities.

Every student meets individually with academic counselors before each term begins to select and schedule classes that meet the degree requirements for the student's major, that can be transferred as part of an upper division program if the student desires, and that correspond to the student's future plans and goals. Personal counseling and therapy are not included in the services offered by the Educational Services Division.

Working closely with the Vice President of Academic Affairs, the Educational Services Division evaluates the specifications of senior universities concerning the transfer of credits and advises students on the courses available at IRCC that fulfill these requirements. The Dean of the Educational Services Division and the Vice President of Academic Affairs make certain that the programs of study offered at IRCC are the most current and relevant possible. In this way, students are assured that the courses in which they enroll at IRCC will be truly beneficial both in transfer to an upper-level college or university and in a chosen career.

## ADMISSIONS

The first step to be taken by any person planning to enroll at Indian River Community College is to complete an IRCC Application for Admission. (Attached to this catalog, or available through the Educational Services Division, IRCC, 3209 Virginia Avenue, Fort Pierce, FL 34981-5599). All applicants must complete the Statement of Residency included on the application. The completed application should be submitted to the IRCC Admissions Office. Applications may be submitted well in advance of the term of enrollment, and all admission papers must be on file in the Admissions Office on or before the registration dates noted in the academic calendar near the front of the catalog. Special notice should be given to deadlines for programs such as Allied Health Education and Cosmetology.

It is the responsibility of the applicant to make sure that official transcripts from the high school and college previously attended are on file in the Admissions Office.
Any other required papers, such as references or Health Certificates for athletes and applicants to the health programs, should also be submitted prior to the time of enrollment.

Applicants who take these steps and who meet the admission requirements listed below will receive formal notification of acceptance to IRCC.

## ADMISSION REQUIREMENTS AND PROCEDURES

1. Under the "open door admissions policy" in effect at IRCC, any graduate of an accredited high school or any person who holds a high school equivalency diploma will be accepted as a student at IRCC.
2. According to state law, all degree-seeking students entering the community college or state university system are required to be tested for placement
purposes. IRCC accepts the ACT or SAT scores (preferably ACT). Students are not permitted to schedule any mathematics, English, Reading or Gordon Rule Classes without these scores.
3. Transfer students, that is, all applicants who have previously attended or enrolled in another college or university, must supply official transcripts from all colleges and universities attended.
4. Applicants who are not graduates of accredited high schools or high school equivalency programs, or who do not have evidence of honorable withdrawal from colleges or universities previously attended will be considered on an individual basis by the IRCC Admissions Committee. If accepted into IRCC, students are expected to meet conditions specified by the Admissions Committee.
5. Academically superior students may be admitted to IRCC while still in high school after they have obtained the approval of their high school principals or others designated by their country's Superintendent of Schools. (See Dual Enrollment and Early Admissions).
6. Certain specialized programs in IRCC have additional requirements for admission and different application deadlines. Applicants to the Associate Degree Nursing, Cosmetology, Dental Assisting, Dental Lab Technology, Dental Hygiene, Emergency Medical Technician, Medical Lab Technology, LPN/RN Transitional, Paramedic, Practical Nursing, and Radiologic Technology Programs should contact the IRCC Educational Services Office for information about special requirements.
7. (a) No Florida high school graduate shall be admitted to the Associate in Arts degree program if he has not successfully completed the requirements set forth in S.232.246 or unless he has been awarded a general education development diploma, provided the examination completed for such diploma was in the English language.
(b) Nonresident students may be admitted to the community college upon such terms as the college may establish. However, effective August 1, 1987, such terms for nonresidents admitted to the Associate in Arts degree program shall include, but shall not be limited to: completion of secondary school curriculum which includes 4 years of English and 3 years each of mathematics, science and social studies, or a high school equivalency diploma; however, in lieu of the English requirement, a foreign student may use 4 years of instruction in his native language or another language which was the language of instruction in the secondary school attended.

## PLACEMENT TESTING

The ACT may be taken at IRCC. A student must submit an application for admission before registering for testing. Registration for the test (and advance payment of the $\$ 9.00$ testing fee) can be made at the Educational Services Office or the sites. (Test schedules are available in Educational Services.) Only IRCC students may take the Residual ACT at IRCC.

## CLASSIFICATION OF STUDENTS

Students may enroll at IRCC on a full-time or part-time basis. Students who enroll for 12 or more semester hours are classified as full-time, while those who enroll for fewer than 12 hours are part-time students. The number of semester
hours credit earned determines whether a student is classified as a freshman, sophomore, or special student. Freshmen have earned fewer than 30 semester hours credit; sophomores at least 30 but fewer than 64 semester hours credit; and special students have earned more than 64 semester hours credit or already hold a degree.

## ATTENDANCE

Class attendance policies at IRCC are set by individual instructors. Students are expected to adhere to the policies set by each instructor. (Students who receive financial aid or V.A. benefits should refer to the "Financial Aid" section of this catalog for further information on attendance.)

## SPECIAL ADMISSIONS

## DUAL ENROLLMENT

Dual enrollment is defined as a student receiving high school credit toward a high school diploma and college credit toward an associate degree or credit toward a vocational certificate for an eligible course. There are four types of dual enrollment:

1. Academic-Students in grades 9-12 qualify who are earning high school credit toward a high school diploma and college credit toward an associate or baccalaureate degree. Students may be part-time or full-time. The following are ineligible to be counted as dual enrollment:

A Vocational preparatory instruction
B. College preparatory
C. Other forms of pre-college instruction
D. Physical education and recreational studies that focus on physical execution of skills rather than the intellectual attributes of an activity.
Students enrolled in college credit mathematics or English must successfully complete an entry-level examination as required by Section 240.117, Florida Statutes. For the purpose of this agreement, ACT and SAT scores are acceptable.
2. Vocational-Students in grades 9-12 qualify who are earning elective high school credit toward a high school diploma and college credit toward an associate degree or credit toward a vocational certificate from a complete job preparatory program, but not isolated vocational courses. Students may be part-time or full-time in vocational dual enrollment.
Students enrolled in vocational classes for vocational dual enrollment must complete the vocational entry-level exam as required by Section 240.117, Florida Statutes. For the purpose of this agreement, the TABE will be used.
3. Early Admission-Students qualify who are enrolled full-time in college, and are earning high school credits toward a high school diploma and college credit toward an associate or baccalaureate degree. Students must have completed, prior to early admission, a minimum of six semesters of full-time secondary enrollment (grades 9-11).
Eligibility criteria, as stated in paragraphs 1 and 2 above, will also apply to early admission.
4. Advanced Placement/Dual Enrollment-Students in grades 9-12 qualify who are enrolled in a dual enrollment/advanced placement course taught by a community college or state university. The course must integrate, at a minimum, the course structure recommended by the college board and the structure that corresponds to the common course number. The student may choose advanced placement credit or academic dual enrollment credit for the course, but not both. If the student elects advanced placement credit, the student must score a minimum of three on a five-point scale on the applicable advanced placement examination to receive college credit.

## TRANSIENT STUDENTS

Students attending other colleges or universities who wish to earn credits for transfer to those institutions may be admitted to IRCC as transient students. These students must present an official statement from the institution they have been attending which certifies that the credits they earn at IRCC will be accepted as part of their academic program. Such students are not required to file transcripts of their previous college credits.

## FOREIGN STUDENTS

The admission of foreign students to IRCC is the same as American students except for these added criteria:

1. Official transcripts of completed high school and college work, including the dates of attendance, courses taken, and grades received, must accompany a notarized English translation. Both should be submitted with the application.
2. Official copy of scores attained on the Test of English as a Foreign Language (TOEFL) must be submitted. A minimum total score of 500 is required of - foreign students whose native language is not English.
3. Foreign Students receive the Form 1-20 (Immigration Certificate of Acceptance) upon approval of the application.
4. The Admissions Committee evaluates the student's application and transcripts to determine acceptance at IRCC.

## INTERNATIONAL TRANSFER STUDENTS:

Students who have attended college outside the United States and wish to have applicable credit transferred to Indian River Community College must have their academic credentials evaluated by World Education Services, Inc., P.O. Box 745, Old Chelsea Station, New York, NY 10011, and provide the Admissions Office with this evaluation as well as official translated transcripts from each institution attended.

Students should be informed that this evaluation service will cost them \$50.00 to $\$ 75.00$ and there is no guarantee that anything or everything will transfer to IRCC. This fee is charged by the evaluation agency, not IRCC.

## ADMISSION TO HEALTH PROGRAMS

Although the admission requirements for most of the programs at IRCC are minimal, the Allied Health Division requires that applicants to some of its programs meet additional "selective admission" conditions. These include
appropriate academic preparation and acceptable scores on various aptitude tests. Students who need refresher or remedial help before being accepted into the health programs are referred to the CPI Health Lab, where individualized instruction is available on a one-to-one basis.

## TRANSFER STUDENTS

IRCC welcomes transfer students from other colleges and universities, and provides academic advisement, through the Educational Services Division, to ensure that as many earned credit hours as possible will be applied toward their program of study at IRCC.

## REGISTRATION

Registration is not complete until all fees are paid. Although classes may be scheduled in advance, that schedule is not effective until all fees are paid. Registration deadlines are noted in the college calendar near the front of this catalog. Refunds will be mailed 3-4 weeks after drop/add period ends.

## FEES

Every effort is made at IRCC to provide a high quality education at a reasonable cost. Many financial aid and scholarship programs are available to eligible students to assist with the financing of their college education at IRCC.

Ninety cents of each student's tuition fee per credit hour is applied toward scholarships.

The fee schedule in effect at IRCC as of Fall Semester, 1990 is as follows. These fees are subject to change within the academic year covered by this catalog.

|  | In-State Matriculation | Out-of-State Tuition |
| :---: | :---: | :---: |
| Advanced and Professional | \$22.00/cr. hr. | \$44.00/cr. hr. |
| Postsecondary Vocational | \$22.00/cr. hr. | \$44.00/cr. hr. |
| Postsecondary Adult |  |  |
| Vocational | \$6.00/0-15 hrs. | \$12.00/0-15 hrs. |
| (\$1.00 for every 3 hours) | \$7.00/16-18 hrs. | \$14.00/16-18 hrs. |
|  | \$8.00/19-21 hrs. | \$16.00/19-21 hrs. |
|  | \$9.00/22-24 hrs. | \$18.00/22-24 hrs. |
|  | \$10.00/25-27 hrs. | \$20.00/25-27 hrs. |
|  | \$11.00/28-30 hrs. | \$22.00/28-30 hrs. |
| Supplemental Vocational ( $\$ 3.00$ for every 3 hours) | \$6.00/0-10 hrs. | \$12.00/0-10 hrs. |
|  | \$9.00/11-15 hrs. | \$18.00/11-15 hrs. |
|  | \$12.00/16-20 hrs. | \$24.00/16-20 hrs. |
|  | \$15.00/21-25 hrs. | \$30.00/21-25 hrs. |
|  | \$18.00/26-30 hrs. | \$36.00/26-30 hrs. |
| Lifelong Learning ( $\$ 1.00$ for every 6 hours) | \$1.00/0-6 hrs. | \$2.00/0-6 hrs. |
|  | \$2.00/7-12 hrs. | \$4.00/7-12 hrs. |
|  | \$3.00/13-18 hrs. | \$6.00/13-18 hrs. |
|  | \$4.00/19-24 hrs. | \$8.00/19-24 hrs. |
|  | \$5.00/25-30 hrs. | \$10.00/25-30 hrs. |


| College Preparatory | \$22.00/cr. hr. | \$44.00/cr. hr. |
| :---: | :---: | :---: |
| Vocational Preparatory | \$11.00/cr. hr. | \$22.00/cr. hr. |
| Adult Basic Skills and Adult Secondary | \$11.00/cr. hr. | \$22.00/cr. hr. |
| Adult Elementary \& Secondary | NO FEE | NO FEE |
| Women's Program Seminars | \$1.00 | \$2.00 |
| Recreational and Leisure Time Course | \$1.00/contact hr. | \$1.00/contact hr. |
| SPECIAL FEES |  |  |
| Special fees, in addition to matriculation, tuition and registration: |  |  |
| Late Registration |  | \$15.00 |
| Commencement-Spring Semester (includes regalia) |  | \$25.00 |
| Graduation Fee - Fall, Summer I \& II Semesters |  | \$10.00 |
| Graduation Late Fee |  | \$ 5.00 |
| Internal Testing |  | \$ 5.00 |
| ACT Test |  | \$ 9.00 |
| General Education Development Test (GED) |  | \$25.00 |
| Child Care (per child, per week) |  | \$40.00 |
| Computer Laboratory Use (per | edit hour in-state) | \$10.00 |
|  | edit hour out-of-state) | \$20.00 |
| Office Machines Laboratory (pe | credit hour in-state) | \$15.00 |
|  | -state) | \$30.00 |
| Drafting Laboratory (in-state) |  | \$15.00 |
| (out-of-state) |  | \$30.00 |

Additional fees may be charged for instruction incurring unusual costs and for special services to individuals or community or governmental agencies, but not exceeding the anticipated costs.
COURSE TITLE COURSE ID AMOUNT
AIR CONDITIONING, REFRIGERATION AND HEATING TECHNOLOGY

Basic Refrigeration
Applied Electricity I
Applied Electricity II
Components of Refrigeration
Heat
Heat Pump Systems

## ART

Graphics

## AUTOMOTIVE SERVICE TECHNOLOGY

Automotive Service and Minor Repair
Introduction to Automotive
Electrical Systems
Engine Tune-up
Management of Automotive Service Functions
Automotive Power Trains
Auto Air Conditioning and Heating
Engine Overhaul
Advanced Automotive Electrical Systems

| ACR | 1000 | $\$ 20.00$ |  |
| :--- | :--- | :--- | :--- |
| ACR | 1101 | 20.00 |  |
| ACR | 1102 |  | 20.00 |
| ACR | 1741 |  | 20.00 |
| ACR | 1600 |  | 20.00 |
| ACR | 1601 |  | 20.00 |

ART 2400C
15.00
AER $1001 \quad 20.00$
AER $1100 \quad 20.00$
AER 115120.00
AER 216120.00
AER 213820.00
AER 217520.00
AER 211320.00
AER 210120.00

| Auto Technology - Special | AER | 2931 | 20.00 |
| :--- | :--- | :--- | :--- |
| Auto Technology - Special | AER | 2932 | 20.00 |
| Auto Technology - Special | AER | 2933 | 20.00 |
| Auto Technology - Special | AER | 2934 | 20.00 |
| BIOLOGY |  |  |  |
| Anatomy and Physiology I | APB |  |  |
| Anatomy and Physiology II | APB 2203L | 15.00 |  |
| General Botany I | BOT 204L | 15.00 |  |
| General Botany II | BOT 20111 | 15.00 |  |
| General Biology I | BSC | 15.00 |  |
| General Biology II | BSC | 1010L | 15.00 |
| Microbiology | MCB 2010L | 15.00 |  |
| Introduction to Marine Biology | OCB 2010C | 15.00 |  |
| Invertebrate Zoology | ZOO 2203C | 15.00 |  |
| Vertebrate Zoology | ZOO 2303C | 15.00 |  |

BUILDING CONSTRUCTION TECHNOLOGY
Basic Woodworking

| BCT | 1111 | 15.00 |
| :--- | :--- | ---: |
| BCT | 1421 | 20.00 |
| BCT | 1422 | 20.00 |
| BCT | 1423 | 20.00 |
| BCT | 1424 | 20.00 |
| BCV | V111 | 10.00 |
|  |  |  |
| ACR | V935 | $\$ 50.00$ |
| BCV | V311 | $\$ 50.00$ |

## CHEMISTRY

General Chemistry
CHM 1045L 15.00
General Chemistry II
Organic Chemistry I
Organic Chemistry II
COMPUTER CAMP

| Computer Camp | 2 | Credits | 35.00 |
| :--- | :--- | :--- | :--- |
| Marine Science/Computer Camp | 4 | Credits | 20.00 |

## COSMETOLOGY

| Cosmetology (1260 hour course in-state) |  |  |
| :--- | :--- | ---: |
| excluding uniforms | COS V131, | 50.00 |
|  | COS V132, | 50.00 |
| Cosmetology Refresher (in-state) | COS V133 | 50.00 |
| Cosmetology Extended Training <br> (in-state) | COS V139 | 625.00 |
| Advanced Techniques of Hair Shaping <br> (in-state) | COS V930 | 10.00 |
| Advanced Systematic Hair Coloring <br> (in-state) | COS V710 | 35.00 |


| Techniques of Make Up Application (in-state) | COS | V931 | 25.00 |
| :---: | :---: | :---: | :---: |
| Fundamentals of Manicuring/Pedicuring with Nail Extensions - |  |  |  |
| 120 hours (in-state) | COS | V929 | 40.00 |
| Electrolysis - 64 Clock Hrs. (in-state) | COS | V300 | 150.00 |
| Esthetics - 260 Clock Hrs. (in-state) | COS | V900 | 75.00 |
| Cosmetology Specialist (in-state) | COS | V941 | 125.00 |
| CRIMINAL JUSTICE |  |  |  |
| Basic Law Enforcement | CJD | V000 | 60.00 |
| Advanced Firearms Training | CJT | 2311 | 10.00 |
| Law Enforcement Explorers Academy | CJT | V930 | 10.00 |
| First Responder to Medical Emergencies | CJD | 1254 | 10.00 |
| Basic Corrections Training | CJD | V450 | 60.00 |
| Law Enforcement Auxiliary | CDT | V001 | 20.00 |
| Breathalyzer Technician | CJT | 2230 | 10.00 |
| Breathalyzer Refresher | CDT | V048 | 5.00 |
| Intoxilyzer 5000 Basic | CJT | V932 | 5.00 |
| Firearms Familiarization | CJT | X312 | 10.00 |
| Advanced Firearms | CJT | X311 | 10.00 |
| Law Enforcement Cross Training | CJD | V002 | 60.00 |
| Corrections Cross Training | CJD | V010 | 60.00 |
| Corrections Supplemental (230 hr) | CJD | V006 | 60.00 |
| Law Enforcement Supplemental (290 hr) | CJD | V008 | 60.00 |
| DENTAL SCIENCE |  |  |  |
| Intraoral Auxiliary Procedures I | DEA | 1820C | 15.00 |
| Intraoral Auxiliary Procedures II | DEA | 1821C | 15.00 |
| Clinical Practice I | DEA | 1800C | 15.00 |
| Clinical Practice II | DEA | 1801C | 15.00 |
| Dental Anatomy | DES | 1000C | 15.00 |
| Dental Radiology Lab | DES | 1200L | 15.00 |
| Elements of Dental Materials | DES | 1100C | 15.00 |
| Tooth Physiology and Anatomy Lab | DTE | 1020L | 15.00 |
| Complete Denture Theory Lab | DTE | 1103L | 15.00 |
| Partial Denture Theory Lab | DTE | 2107L | 15.00 |
| Occlusal Topography Lab | DTE | 1030L | 15.00 |
| Orthodontic and Pedodontic Lab | DTE | 1132L | 15.00 |
| Ceramic Lab | DTE | 2141L | 15.00 |
| Crown and Bridge Lab | DTE | 2150L | 15.00 |
| Advanced Fixed Prosthodontics Lab | DTE | 2151L | 15.00 |
| Advanced Removable Prosthodontics Lab | DTE | 2123L | 15.00 |
| Advanced Orthodontic Pedodontic Lab | DTE | 2133 | 15.00 |

## ELECTRONICS ENGINEERING TECHNOLOGY

| DC Circuits | EET | 1015 C | 10.00 |
| :--- | :--- | :--- | :--- |
| AC Circuits | EET | 1025 C | 10.00 |
| Electronic Devices I | EET | 2106 C | 10.00 |
| Electronic Devices II | EET | 2107 C | 10.00 |
| Communication Circuits I | EET | 2325 C | 10.00 |
| Communication Circuits II | EET | 2335 C | 10.00 |
| Electronic Drafting | ETD | 2614 C | 10.00 |

## EMERGENCY MEDICAL SERVICES TECHNOLOGY

| First Provider Concepts of Emergency Care | EMS | 1059 C | 15.00 |
| :--- | :--- | :--- | :--- |
| Fundamentals of Emergency Care | EMS | 1119 C | 15.00 |
| Paramedic I | EMS | 2234 C | 15.00 |
| Paramedic Hospital/Field Exp. I | EMS | 2435 | 15.00 |
| Paramedic II | EMS | 2235 C | 15.00 |
| Paramedic Hospital/Field Exp. II | EMS | 2436 | 15.00 |
| Paramedic Field Internship | EMS | 2450 | 15.00 |

FIRE SCIENCE TECHNOLOGY

| Basic Fire Recruit Training | FFP | V005 | 65.00 |
| :--- | :--- | :--- | ---: |
| Fire Service Special Topics | FFP | 1935 | 5.00 to |
|  |  |  | 20.00 |
| FURNITURE UPHOLSTERY |  |  |  |
| Furniture Upholstery I | HEV | V432 | 5.00 |
| Furniture Upholstery II | HEV | V433 | 5.00 |
| Furniture Upholstery III | HEV | V434 | 5.00 |


| HOME SERVICE MANAGEMENT |  |  |
| :--- | :--- | :--- |
| Food for the Family | FSS 2202C |  |

## RESTAURANT MANAGEMENT

| Food Preparation I | FSS | 2221 C | 10.00 |
| :--- | :--- | :--- | :--- |
| Food Preparation II | FSS | 2222 C | 10.00 |
| Quantity Baking | FSS | 2246 C | 10.00 |
| MARINE SCIENCE |  |  |  |
| Introduction to Marine Biology | OCB | 2010 C | 15.00 |

## MEDICAL LABORATORY TECHNOLOGY

Hematology
Coagulation and Blood Banking
Serology and Urinalysis
Clinical Chemistry
Clinical Microbiology
Basic Concepts of Phlebotomy

MLT 1300C 30.00
MLT 1335C 30.00
MLT 1542C 30.00
MLT 2620C 30.00
MLT $2937 \quad 30.00$
MLT 2040
10.00

## MOTORCYCLE REPAIR

| Introduction to Motorcycle Repair | SER | 1600 | 10.00 |
| :--- | :--- | :--- | :--- |
| Intermediate Motorcycle Repair | SER | 1610 | 10.00 |
| Small Engine Repair | SER | V371 | 10.00 |

## MUSIC (APPLIED)

## PRINCIPAL APPLIED MUSIC

Trumpet I \& II
French Horn I \& II
Trombone I \& II
Baritone Horn I \& II
Tuba I \& II
Piano I \& II
Organ I \& II
Percussion I \& II
Violin I \& II
Viola I \& II
Cella I \& II
String Bass I \& II
Guitar I \& II
Voice I \& II
Flute I \& II
Oboe I \& II
Clarinet I \& II
Bassoon I \& II
Saxophone I \& II
Trumpet III \& IV
French Horn III \& IV
Trombone III \& IV
Baritone Horn III \& IV
Tuba III \& IV
Piano III \& IV
Organ III \& IV

## SECONDARY APPLIED MUSIC

Trombone III \& IV
Baritone Horn III \& IV
Tuba III \& IV
Piano III \& IV
Organ III \& IV
Percussion III \& IV
Violin III \& IV
Viola III \& IV
Cello III \& IV
String Bass III \& IV
Guitar III \& IV
Voice III \& IV

| MVB | 1311 | 75.00 |
| :--- | :--- | :--- |
| MVB | 1312 | 75.00 |
| MVB | 1313 | 75.00 |
| MVB | 1314 | 75.00 |
| MVB | 1315 | 75.00 |
| MVK | 1311 | 75.00 |
| MVK | 1313 | 75.00 |
| MVP | 1311 | 75.00 |
| MVS | 1311 | 75.00 |
| MVS | 1312 | 75.00 |
| MVS | 1313 | 75.00 |
| MVS | 1314 | 75.00 |
| MVS | 1316 | 75.00 |
| MVV | 1311 | 75.00 |
| MVW | 1311 | 75.00 |
| MVW | 1312 | 75.00 |
| MVW | 1313 | 75.00 |
| MVW | 1314 | 75.00 |
| MVW | 1315 | 75.00 |
| MVB | 2321 | 75.00 |
| MVB | 2322 | 75.00 |
| MVB | 2323 | 75.00 |
| MVB | 2324 | 75.00 |
| MVB | 2325 | 75.00 |
| MVK | 2321 | 75.00 |
| MVK | 2323 | 75.00 |

MVB $2223 \quad 75.00$
MVB $2224 \quad 75.00$
MVB $2225 \quad 75.00$
MVK $2221 \quad 75.00$
MVK $2223 \quad 75.00$
MVP $2221 \quad 75.00$
MVS $2221 \quad 75.00$
MVS $2222 \quad 75.00$
MVS $2223 \quad 75.00$
MVS $2224 \quad 75.00$
MVS $2226 \quad 75.00$
MVV $2221 \quad 75.00$

Flute III \& IV
MVW 2221
75.00

Oboe III \& IV
Clarinet III \& IV
Bassoon III \& IV
Saxophone III \& IV
MVW 2222
75.00

MVW 2223
75.00

MVW 2224
75.00

MVW 2225
75.00

PRINCIPAL APPLIED MUSIC

Percussion
Violin III \& IV
Viola III \& IV
Cello III \& IV
String Bass III \& IV
Guitar III \& IV
Voice III \& IV
Flute III \& IV
Oboe III \& IV
Clarinet III \& IV
Bassoon III \& IV
Saxophone III \& IV

## SECONDARY APPLIED MUSIC

Trumpet I \& II
French Horn I \& II
Trombone I \& II
Baritone Horn I \& II
Tuba I \& II
Piano I \& II
Organ I \& II
Percussion I \& II
Violin I \& II
Viola I \& II
Cello I \& II
String Bass I \& II
Guitar I \& II
Voice I \& II
Flute I \& II
Oboe I \& II
Clarinet I \& II
Bassoon I \& II
Saxophone I \& II
Trumpet III \& IV
French Horn III \& IV
PHYSICAL EDUCATION
Scuba

## PHYSICS

General Physics I
General Physics II
Physics for Engineers I
Physics for Engineers II

MVP $2321 \quad 75.00$
MVS $2321 \quad 75.00$
MVS $2322 \quad 75.00$
MVS $2323 \quad 75.00$
MVS $2324 \quad 75.00$
MVS $2326 \quad 75.00$
MVV $2321 \quad 75.00$
MVW $2321 \quad 75.00$
MVW $2322 \quad 75.00$
MVW $2323 \quad 75.00$
MVW $2324 \quad 75.00$
MVW $2325 \quad 75.00$
$\begin{array}{lll}\text { MVB } & 1211 \quad 75.00\end{array}$
MVB $1212 \quad 75.00$
MVB $1213 \quad 75.00$
$\begin{array}{lll}\text { MVB } & 1214 & 75.00\end{array}$
MVB $1215 \quad 75.00$
MVK $1211 \quad 75.00$
MVK $1213 \quad 75.00$
MVP $1211 \quad 75.00$
$\begin{array}{lll}\text { MVS } & 1211 \quad 75.00\end{array}$
MVS $1212 \quad 75.00$
MVS $1213 \quad 75.00$
MVS $1214 \quad 75.00$
MVS $1216 \quad 75.00$
MVV $1211 \quad 75.00$
MVW $1211 \quad 75.00$
MVW $1212 \quad 75.00$
MVW $1213 \quad 75.00$
MVW $1214 \quad 75.00$
MVW $1215 \quad 75.00$
MVB $2221 \quad 75.00$
MVB $2222 \quad 75.00$

Additional Costs

PHY 2053C 20.00
PHY 2054C 20.00
PHY $2048 \quad 20.00$
PHY 204920.00

## RADIO AND TELEVISION

| Broadcast Practicum I | RTV | 1941 | 10.00 |
| :--- | :--- | :--- | :--- |
| Broadcast Practicum II | RTV 1942 | 10.00 |  |

RADIOLOGIC TECHNOLOGY

| Radiologic Positioning I | RTE | 1504 C | 30.00 |
| :--- | :--- | :--- | :--- |
| Radiologic Positioning II | RTE | 1514 C | 30.00 |
| Radiologic Positioning III | RTE | 1523 C | 30.00 |

## REAL ESTATE

| Real Estate Principles and |  |  |  |
| :--- | :--- | :--- | :--- |
| Practices I (Salespersons) <br> Real Estate Principles and <br> Practices II (Brokers) | REE | 1040 | 8.50 |

## SECRETARIAL SCIENCE

| Reprographics | OST 2323 | 15.00 |
| :--- | :--- | :--- |

## WELDING

| Combination Welding I | PMT 1123 | 25.00 |
| :--- | :--- | :--- |

Electric Welding I PMT $1121 \quad 25.00$
Electric Welding II PMT $1122 \quad 25.00$

Welding Special
PMT $2930 \quad 25.00$
Welding Special
PMT 2931
25.00

Welding Special
PMT 2932
25.00

Welding Special
PMT $2933 \quad 25.00$

## WOODWORKING

Basic Woodworking
BCT 1111
15.00

## REFUNDS

No changes in students' schedules or refunds will occur once the drop/add period is over except for Special Registration classes. Refunds for "SR" classes can only occur before the second meeting of the class. Once the class has met twice, no refunds will be authorized. Refunds for a one-day course will only be authorized prior to the class meeting. Refunds will be mailed after drop/add period ends. No exceptions can be made to the refund deadlines.

## INSURANCE

The college does not currently offer a student insurance program, although all students are encouraged to contact their personal insurance carriers for coverage. Cosmetology and allied health students are required to contract for liability insurance through the IRCC Business Office.

## FINANCIAL AID

Because Indian River Community College believes that no person should be denied a college education due to a lack of funds, the college makes available to eligible students a variety of scholarships, grants, work opportunities, and loans. Although students and their parents are expected to make every effort to meet the costs of education, many students do qualify for some form of financial aid and are encouraged to determine their eligibility through the IRCC Financial Aid Office.
Federal- and state-funded financial aid programs are offered to eligible students at IRCC. These are:

Pell Grant
Supplemental Educational Opportunity Grant (SEOG)
Florida Student Assistance Grant (FSAG)
College Work Study Program (CWSP)
Stafford Loans (formerly GSL)
Seminole-Miccosukee Indian Scholarship
College Career Work Experience
Job Location \& Development
Applications and information on any of these programs are available to students through their high school guidance counselor or the IRCC Financial Aid Office. Federal financial aid recipients have academic requirements to which they must adhere. All financial aid recipients must maintain a minimum of a 2.0 grade point average for each semester attempted and complete $70 \%$ of all hours attempted each semester. Other requirements for specific programs may be ascertained by reading the annual Financial Aid brochure.

## SCHOLARSHIPS

The IRCC Trustees Scholarship, which covers two years of tuition and books at IRCC, is offered each year to the high school valedictorians in the four-county area. Various discipline area scholarships are also available on a competitive basis. In addition, many organizations throughout the community offer scholarships to students who plan to attend IRCC. The Lillian G. Lockwood Scholarship, designated by the donor for students from Indian River County, is awarded to many students each year on the basis of grade point average. All Indian River County public school graduates are encouraged to apply for this scholarship to attend IRCC. For further information about scholarships, contact the IRCC Financial Aid Office.

## VETERANS

Under the G.I. Bill, veterans are entitled to receive educational benefits. Indian River Community College has been approved for the training of veterans. It is important that veterans who plan to attend IRCC apply early through the Veterans Affairs Office on the IRCC Main Campus, so that certification of eligibility may be obtained from the State Regional Office (P.O. Box 1437, St. Petersburg, FL 33731). In order to receive their benefits, veterans should follow certain procedures. It is the veteran's responsibility to make sure that he or she meets all of the veteran requirements, and reads and understands the regulations and
policies that govern the V.A. benefit program. Veterans must enroll for at least 12 semester hours during the Fall and Spring Terms, and for at least 6 * semester hours during the Summer Terms to receive full benefits; if fewer semester hours are attempted, monthly allotments are reduced proportionately. Veterans must maintain an overall 2.0 grade point average to continue to be eligible for benefits. Every semester, the college reports the veteran's status and certifies his or her enrollment to the Veterans Administration. Veterans should report all changes in semester hours or any other change in status to the IRCC Veteran's Office. At least 45 to 60 days should be allowed for the paperwork to be processed before the veteran can expect his or her first payment.
*Subject to change by the Veterans Administration.

## ATTENDANCE

Students at IRCC who receive any sort of federal financial assistance, including veteran's benefits, are expected to attend all class sessions. Absences should be discussed with instructors. Also, students covered by any of these programs must make satisfactory educational progress to maintain their eligibility.

There are specific attendance policies for each financial aid program, so students should check with the Financial Aid Office for more information.

## CAREER PLANNING

One of the most important and difficult decisions facing any student is his or her choice of a career. With thousands of careers from which to choose, many students find the selection overwhelming. For this reason IRCC provides professional career counseling, interest surveys, and evaluation of talents and abilities through the Career Planning Office. An extensive library of books, magazines, and pamphlets informs students of the jobs that exist, the outlook for future employment, the qualifications and characteristics that each job demands, and the rewards and drawbacks of the various occupations. The CHOICES computer analyzes individual interests and preferences, then matches students to suitable careers. Linked into the Job Service of Florida, CHOICES also lets job-seekers know of positions available throughout the state.

## JOB PLACEMENT

IRCC students are also encouraged to use the services of the College Placement Office for assistance in locating suitable jobs while enrolled as a student or upon graduation from IRCC. The Placement Office prepares and distributes bi-weekly JOB GRAMS, which list various positions open to qualified students.

Assisting IRCC students and alumni to obtain employment is the campus office of Job Service of Florida. The only extension of Job Service of Florida located on a college campus, IRCC's Job Service receives a daily computerized update of jobs available within the state.

On-campus interviews, advice on job search techniques, and help in preparing resumes ensure that IRCC students are given every opportunity to pinpoint their interests and obtain a job which corresponds with those interests.

## HANDICAPPED STUDENT SERVICES

Indian River Community College strives to provide all possible forms of assistance to handicapped students. Reasonable substitutions of requirements for admission to programs or graduation shall be provided to eligible disabled students in accordance with Section 240.152, Florida Statutes. Each request for a substitution will be considered on an individual basis. Any student with a special need is encouraged to contact the Handicapped Student Advisor in the Educational Services Division for additional information and assistance.

## ORIENTATION

After applicants complete and submit admission forms, are accepted into IRCC, schedule their classes through the Educational Services Division, and pay their fees, one preparatory step to enrollment remains. That recommended step, for new full-time students, is orientation. An excellent way to get acquainted with fellow students and the IRCC campus, orientation also familiarizes students with the policies and procedures of the college, the programs of study available, and other useful information. For their convenience, out-of-state students are invited to attend the orientation sessions scheduled just before the beginning of each term.

## ADD AND DROP PROCEDURES

Students who wish to change their class schedules after registration has been completed should return to the Educational Services Division and again meet with an academic counselor to amend the schedule. An Add and Drop card will be filled out, signed and processed by the counselor. It is up to the student to make sure that the necessary fee adjustments are paid by the Add and Drop deadline. The Add and Drop period is noted in the calendar near the front of this catalog; state regulations prohibit IRCC from allowing changes after the deadline for Add and Drop has passed.

## WITHDRAWAL FROM A COURSE

Students may withdraw from any course and have a " $W$ " recorded for that course provided certain conditions are met: the withdrawal must occur before the deadline noted in the calendar near the front of this catalog, and the withdrawal must be made in person and in writing through the Educational Services Division. Students who simply do not attend class and who do not officially withdraw from the course will receive a failing grade. Students may withdraw from a Special Registration Course anytime prior to the last class meeting. These classes are labeled "SR" after the course number (section).

## WITHDRAWAL FROM IRCC

Students who must withdraw from all classes at IRCC may do so prior to the first day of final examinations for that term; again, the student must withdraw in person to receive a " $W$ " rather than an " $F$ " in the courses. Official Withdrawal Forms are available in the Educational Services Office, and a counselor will answer any questions that the student may have.

## GRADING SYSTEM

Final grades are mailed to each student within a few days after the completion of each semester.
*The following grading system is used:
A Outstanding work (4 quality points per semester hour.)
B Very competent and effective work (3 quality points per semester hour.)
C Satisfactory work (2 quality points per semester hour.)
D Work sufficient to gain credit for the course and satisfy graduation requirements, but not usually acceptable as transfer credit. (1 quality point per semester hour.)
F Unsatisfactory work, failing grade (no quality points.)
I Incomplete work, grade arranged with instructor. Student must register and pay tuition to complete the course during the academic year that the " 1 " grade was received. Failure to do so will result in an " $F$ " for the course.
S Satisfactory (no quality points)
U Unsatisfactory
The student's grade-point average is computed by dividing the total number of quality points earned by the total number of hours attempted. Students may repeat a course; only the final grade earned will be computed in the cumulative grade point average at IRCC. Transfer without the A.A. degree may invalidate this policy at another school.

A student may take courses for " $\mathrm{S}^{\prime \prime}$ (Satisfactory) or " U " (Unsatisfactory) credit and count it for the degree given appropriate advisement. Courses taken for "S" or " $U$ " credit will not convert subsequently to any other type of grade. With proper registration and payment of fees, " $S$ " or " $U$ " courses may be repeated sequentially or concurrently.
*Some courses require a grade of " C " or better for graduation (e.g., Gordon Rule, Allied Health). Consult Educational Services.

## PRESIDENT'S LIST

The President's List is posted at the end of the fall and spring semesters. All students who have completed a minimum of 16 credit hours with the letter grade of " $A$ " will be eligible.

## DEAN'S LIST

The Dean's List is posted at the end of each semester. All students who have earned an academic average of 3.5 or higher with no grade lower than " C ", and who are carrying 12 or more semester hours in courses which carry letter grades of A, B, C (S/U courses ineligible), will be placed on the Dean's List. (For summer terms, 6 or more semester hours must be completed.)

## ACADEMIC AWARDS

Graduating students' academic achievements are recognized at the Spring Commencement, based on the student's total grade point average, as follows:
3.85 to 4.00 - Graduated with Highest Honors
3.70 to 3.84 - Graduated with High Honors
3.50 to 3.69 - Graduated with Honors

Students whose academic averages merit honors will have their transcripts so designated. Computation of Academic Awards is based on all course work attempted, including course work at previous institutions.

## COLLEGE LEVEL ACADEMIC SKILLS TEST

The State of Florida has developed a test of college-level communication and computation skills. The test is called the College Level Academic Skills Test (CLAST).

The CLAST is designed to test the communication and computation skills that are judged by state university and community college faculty to be essential for college students to have attained by the end of the sophomore year. The test is required by Florida statutes and State Board of Education rules.

To be eligible to take CLAST, a student must file an application to take the test on or before the established deadline. (See college calendar near the front of this catalog.)

Effective August 1, 1984, the State Board of Education requires attainment of minimum CLAST scores for the award of the A.A. and for admission to upper division status in state universities in Florida.

The Educational Services Office can tell you how and when to apply to take the CLAST and where the communication and computation skills are taught in the curriculum.

## PROCEDURES FOR REGISTERING FOR CLAST

To register for the CLAST exam, students must see a counselor and complete CLAST application by the registration deadline dates.

Test Administration Day
October 6, 1990
February 23, 1991
June 1, 1991

Registration Deadline
September 7, 1990
January 25, 1991
May 3, 1991

College-Level Communication and Computation Skills
Assessed By The College Level Academic Skills Test
I. MATHEMATICS SKILLS
A. Arithmetic

1. Adds and subtracts rational numbers.
2. Multiplies and divides rational numbers.
3. Adds and subtracts rational numbers in decimal form.
4. Multiplies and divides rational numbers in decimal form.
5. Calculates percent increase and percent decrease.
6. Recognizes the meaning of exponents.
7. Recognizes the role of the base number in determining place value in the base-ten numeration system and in systems that are patterned after it.
8. Identifies equivalent forms of positive rational numbers involving decimals, percents and fractions.
9. Determines the order relation between magnitudes.
10. Identifies a reasonable estimate of a sum, average, or product of numbers.
11. Infers relations between numbers in general by examining particular number pairs.
12. Selects applicable properties for performing arithmetic calculations.
13. Solves real-world problems which do not require the use of variables and which do not involve percents.
14. Solves real-world problems which do not require the use of variables and which do require the use of percents.
15. Solves problems that involve the structure and logic of arithmetic.
B. Algebra
16. Adds and subtracts real numbers.
17. Multiples and divides real numbers.
18. Applies the order-of-operations agreement to computations involving numbers and variables.
19. Uses scientific notation in calculations involving very large or very small measurements.
20. Solves linear equations and inequalities.
21. Uses given formulas to compute results when geometric measurements are not involved.
22. Finds particular values of a function.
23. Factors a quadratic expression.
24. Finds the roots of a quadratic equation.
25. Recognizes and uses properties of operations.
26. Determines whether a particular number is among the solutions of a given equation or inequality.
27. Recognizes statements and conditions of proportionality and variation.
28. Indentifies regions of the coordinate plane which correspond to specified conditions.
29. Infers relations among variables.
30. Selects applicable properties for solving equations and inequalities.
31. Solves real-world problems involving the use of variables, aside from commonly used geometric formulas.
32. Solves problems that involve the structure and logic of algebra.
C. Geometry and Measurement
33. Rounds measurements to the nearest given unit of the measuring device.
34. Calculates distances.
35. Calculates areas.
36. Calculates volumes.
37. Identifies relationships between angle measures.
38. Classifies simple plane figures by recognizing their properties.
39. Recognizes similar triangles and their properties.
40. Identifies appropriate types of measurement for geometric figures.
41. Infers formulas for measuring geometric figures.
42. Selects applicable formulas for computing measures of geometric figures.
43. Solves real-world problems involving perimeters, areas, and volumes of geometric figures.
44. Solves real-world problems involving the Pythagorean property.
D. Logical Reasoning
45. Deduces facts of set inclusion or set non-inclusion from a diagram.
46. Identifies simple and compound statements and their negations.
47. Determines equivalent or nonequivalent statements.
48. Draws logical conclusions from data.
49. Recognizes that an argument may not be valid even though its conclusion is true.
50. Infers valid reasoning patterns and expresses them with variables.
51. Selects applicable rules for transforming statements without affecting their meaning.
52. Draws logical conclusions when facts warrant them.
E. Statistics, Including Probability
53. Identifies information contained in bar, line and circle graphs.
54. Determines the mean, median, and mode of a set of numbers.
55. Counts subsets of a given set.
56. Recognizes properties and interrelationships among the mean, median and mode in a variety of distributions.
57. Chooses the most appropriate procedure for selecting an unbiased sample from a target population.
58. Identifies the probability of a specified outcome in an experiment.
59. Infers relations and makes accurate predictions from studying particular cases.
60. Solves real-world problems involving the normal curve.
61. Solves real-world problems involving probabilities.
II. READING SKILLS
A. Literal Comprehension
62. Recognizes main ideas.
63. Identifies supporting details.
64. Determines meanings of words on the basis of context.
B. Critical Comprehension
65. Recognizes the author's purpose.
66. Identifies author's overall organizational pattern.
67. Distinguishes between statement of fact and statement of opinion.
68. Detects bias.
69. Recognizes author's tone.
70. Recognizes explicit and implicit relationships within sentences (passage with blanks).
71. Recognizes explicit and implicit relationships within sentences (one sentence, identify relationship).
72. Recognizes explicit and implicit relationships between sentences (passage with blanks).
73. Recognizes valid arguments.
74. Draws logical inferences and conclusions.

## III.ENGLISH LANGUAGE SKILLS

A. General

1. Selects subject which lends itself to development.
2. Determines the purpose and audience for writing.
3. Limits a subject to a topic which can be developed within the requirements of time, purpose and audience.
4. Formulates a thesis or main idea statement which reflects the purpose and the focus.
5. Provides adequate support which reflects the ability to distinguish between generalized and concrete evidence.
6 . Arranges the ideas and supporting details in an organizational pattern appropriate to the purpose and the focus.
6. Writes unified prose in which all supporting material is relevant to the thesis or main idea statement.
7. Writes coherent prose, providing effective transitional devices which clearly reflect the organizational pattern and relationships of the parts.
8. Avoids inappropriate use of slang, jargon, cliches, and pretentious expressions.
9. Uses a variety of sentence patterns.
10. Avoids unnecessary use of passive construction.
11. Maintains a consistent point of view.
12. Revises, edits and proofreads to assure clarity, consistency and conformity to the conventions of standard American English.
B. Word Choice
13. Uses word which convey the denotative and connotative meanings required by context.
14. Avoids wordiness.
C. Sentence Structure
15. Places modifiers correctly.
16. Coordinates and subordinates sentence elements according to their relative importance.
17. Uses parallel expressions for parallel ideas.
18. Avoids fragments, comma splices and fused sentences (student identifies a sentence which contains and error).
D. Grammar, Spelling, Capitalization and Punctuation
19. Uses standard verb forms.
20. Maintains agreement between subject and verb.
21. Maintains agreement between pronoun and antecedent.
22. Uses proper case forms.
23. Uses adjectives and adverbs correctly.
24. Uses standard practice for spelling.
25. Uses standard practice for punctuation.
26. Uses standard practice for capitalization.

Classes in which Essential Skills are taught:

| ENC | 1101 | Communications I |
| :--- | :--- | :--- |
| ENC | 1102 | Communications II |
| REA | 1205 | Advanced College Reading I |
| MGF | 2118 | Essential Skills in Mathematics |
| MAC | 1102 | Basic College Algebra |
| MAC | 1104 | College Algebra |
| MGF | 2202 | Finite Mathematics |
| ENC | 2090 | Essential Skills in English |
| REA | 1125 | Reading/CLAST Review |

## COMMUNICATIONS AND COMPUTATION REQUIREMENT

The communications and computation requirement (the Gordon Rule) became effective Fall Semester, 1982, throughout the State of Florida. This rule states that prior to receipt of an A.A. degree from a public community college or university, or prior to entry into the upper division of a public university, a student shall successfully complete the following:
A. Twelve semester hours of English/Humanities in which the student demonstrates writing skills (24,000 words).
B. Six semester hours of mathematics at the college algebra level or higher. For the purposes of this rule, a grade of " C " or higher shall be considered successful completion.

To meet the requirements of the Communications and Computations rule, all IRCC A.A. degree-seeking students will complete the following:
A. ENC 1101*, ENC 1102* (6 semester hours)
B. HUM 1541 (Humanities Lit.) or HUM 1533* (Humanities Philosophy); SYG 2000* (Introduction to Sociology); PSY 2012* (Introduction to Psychology); and EUH 1000* (History of Western Civilization I); and EUH 1001* (History of Western Civilization II). Each of these disciplines require 4,000 words of acceptable written material from the students, except for EUH 1000 and EUH 1001 which require 2,000 words each.
C. MAC 1102* and MAC 1104* or MGF 2202 or higher level math ( 6 semester hours). Pre-Calculus and Calculus are each 6 credit hour courses. A student satisfying CLEP requirements in math will be allowed to exempt 3 hours of math required by this rule.
*A minimum grade of " $C$ " must be achieved in each course.


STUDENTS

## STUDENTS

Education at IRCC is enhanced for students who utilize the many services that are available to them. By the same token,there are certain regulations and responsibilities that students are expected to accept while enrolled at IRCC.

## KOBLEGARD STUDENT UNION

The "hub" of the Main Campus, IRCC's Koblegard Student Union houses a number of student-oriented activities. Located in this modern and comfortable student center are the cafeteria, a student lounge for relaxation and study, the Vice President of Student Affairs, Student Activities Office, the Campus Coalition Government Office, the Educational Services Division, and the Health and Wellness Center. In addition, the KSU serves as the information outlet for students; notices, activities bulletins, and student publications are distributed here, and bulletin boards are available for students' use.

## PIONEER BOOKSTORE

Conveniently situated in the F Building, the well-stocked Pioneer Bookstore sells new and used textbooks, classroom supplies and miscellaneous items to students and faculty. As part of a continuing effort to keep the cost of education at IRCC to a minimum, the bookstore buys and resells used books with two stipulations: that the books are in good condition and that they will be used in upcoming classes at IRCC.

## HEALTH AND WELLNESS CENTER

This Center, located in the Koblegard Student Union, provides a variety of services for students. It is staffed by a full-time Nurse Practitioner (ARNP) and licensed counselor. Emergency medical care, first aid, medical information and referral, and crisis counseling are provided free of charge to all students currently enrolled at IRCC who possess a valid I.D. card. The promotion of personal wellbeing is the focus of the Center. Literature and audio-visual materials are available on a variety of health and wellness topics through this office. In addition, an individual assessment of overall well-being is provided to students upon request, along with assistance in the development and implementation of a personal plan of change designed to increase overall wellness.

## STUDENT I.D. CARDS

During registration, each student will be supplied with a College Identification Card, which may be used for free or reduced rate admission to many activities held on campus, and which is needed to obtain a college library card.

## HOUSING

Because community colleges are within easy commuting distance for the majority of students, no provisions for on-campus housing have been made. For this reason, IRCC encourages students from out of this area to begin looking for suitable housing early, certainly before registration.

The Vice President of Student Affairs posts a listing of rental property available to students, but it is the student's responsibility to work out the arrangements for housing.

## PIONEER POST

A monthly campus newspaper, The Pioneer Post, is produced by students enrolled in the College journalism courses. The Pioneer Post office is located in the $F$ Building.

## TRANSPORTATION AND PARKING

Most students who attend IRCC travel to and from the campus in private vehicles, either driving or carpooling to class.

Student parking areas on campus are clearly designated and conveniently located. Students should get parking decals for every vehicle to be parked in campus parking lots; these decals are available at no expense to the student upon registration of the vehicle with the Vice President of Student Affairs Office. At the time of registration, each student is given a copy of the IRCC Traffic Regulations.

Certain regulations pertinent to parking and traffic have been set up for the safety and convenience of all; it is up to the individual to adhere to speed limits, parking decal rules, and restricted parking designations. Measures taken in parking infractions include tickets, fines, and having vehicles towed away at the owner's expense. Failure to pay traffic fines will result in withheld grades.

## LEARNING RESOURCES

At Indian River Community College we recognize that no introduction to a field of knowledge is complete without instruction in how to proceed beyond that introduction on one's own. What students learn today can never be all they will ever need to know. The world is evolving. Knowledge is expanding. And, the best education we can provide students is the ability to cope with rapid change.

The library at Indian River Community College exists to teach students how to find information. How to go beyond, to reach knowledge that wasn't handed them in class or prescribed by an expert.

Our mission is to provide access to information and to provide ways for students to become more effective learners in conventional classes, in independent study, and in the lifelong pursuit of learning. The Learning Resources Center also assumes a vital role as a focal point for the accumulation of information.

To achieve this goal, the Learning Resources Center strives to accomplish these objectives:

1. To provide informational, instructional, and learning services for the college community.
2. To provide services and equipment for the college community to retrieve and use print and non-print materials.
3. To provide a comprehensive collection of print and non-print materials.
4. To provide instructional development and production services to members of the college community.
5. To engage in cooperative interactions with community and county agencies and groups and educational institutions.
6. To participate in institutional planning and educational development of the college.

## CHILD CARE

Students who have children two-, three- or four-years old may utilize the services of the IRCC Child Care Center. Staffed by well-qualified and experienced teachers, as well as IRCC Child Care students, the Center maintains a structured, creative pre-kindergarten program for two-, three- and four-year olds. Offered at reasonable cost and open each day that college classes are scheduled, the Child Care Center provides worthwhile learning experiences and a caring environment for the young child while his or her parents attend classes at IRCC.

## STUDENT ACTIVITIES

Although classes and coursework are the primary concerns at IRCC, they are only one part of the student's education. Beyond academics are on-campus clubs for just about every imaginable interest, many opportunities to develop leadership skills, several professional and honorary societies, and a wellrespected intercollegiate and intramural-sports program. Campus activities exist to enhance and expand the total learning experience available to students at IRCC, and all students are encouraged to participate in the activities of their choice. The Student Activities Office is located in the Koblegard Student Union.

Held each year just before Fall Term begins, the Leadership Conference is conducted to encourage the development of student leadership skills. Incoming freshman who have been recommended by their high school counselors and other interested students who plan to attend IRCC during the Fall Term are invited to participate in a weekend-long series of leadership workshops held at a local resort. Interesting lecturers and experts in a number of different fields give students practical advice on how they can use their talents and abilities to reach their potential. The cost of the Leadership Conference is largely underwritten by student activities, so that any interested student may attend, regardless of financial circumstance.

## CAMPUS COALITION GOVERNMENT

The Campus Coalition Government (CCG) is the official student government organization of Indian River Community College. The CCG is a member of the Florida Junior College Student Government Association.

Representatives serving as members of the Campus Coalition Government are selected by both campus-wide election and by appointment as representatives of student clubs on campus.

Communication is a key purpose of the Campus Coalition Government. It serves as a coordinating board between the various groups of students on campus, as well as with the administration of the College. All student activities must have the approval of the Campus Coalition Government, which then places
them on the campus activities calendar and ensures their coordination. CCG meets every Tuesday " A " week at 12:40 p.m. in the KSU.

## CLUBS AND ORGANIZATIONS

Art Club
Auto Body
Automotive Technology (VICA)
Bacchus Club
Baseball
Basketball (men)
Basketball (women)
CCG
Cheerleaders
Chess and Checkers Club
Child Care Club
Christian Friends
Circle K
Communications Club
Compass
Cosmetology
Cultural Exchange
DECA (Delta Epsilon Chi)
Dental Assistants
Dental Hygienists
Dental Lab Association
EMT/Paramedic Club
Fla. Nursing Students Assn. (FNSA) FSLATE

Golf (Men)
Human Services
Interior Design
Intramurals
Math Club
Marine Science Club
Medical Lab. Tech.
Music
Phi Beta Lambda
Phi Theta Kappa
Philosophy Club
Practical Nursing
Radiology
Stage Business
Swimming \& Diving (men)
Swimming \& Diving (women)
Tennis (men)
Tennis (women)
VICA (Vocational International Clubs of America)
Volleyball
Young Democrats Club
Young Republicans Club

## PHI THETA KAPPA

As a society which honors high academic achievement, the Nu lota Chapter of the Phi Theta Kappa national scholastic fraternity promotes scholarship, encourages the development of character, and cultivates fellowship among students of community colleges. Students eligible for membership must be enrolled as degree-seeking students at IRCC and must be carrying at least 12 semester hours per term in courses which carry a letter grade of A, B, C, (S/U courses ineligible). In addition, the eligible student must meet the following levels of achievement:
a. a 4.0 grade point average (GPA) for the first semester at IRCC.
b. a 3.85 or higher cumulative GPA for two consecutive semesters.
c. a 3.70 or higher cumulative GPA for three consecutive semesters.
d. a 3.50 or higher cumulative GPA for four consecutive semesters.

If a member of Phi Theta Kappa allows his or her GPA to drop below 3.25 while enrolled as a student at IRCC, he or she will be given one semester in which to raise the GPA. If the GPA is not raised within one semester, that member will be dropped from the organization.

## INTERCOLLEGIATE ATHLETICS

As a member of the Florida Community College Activities Association and the National Junior College Athletic Association, IRCC competes on a state-wide and national level in men's and women's basketball, swimming and tennis, as well as men's baseball and golf and women's volleyball. Grants-in-aid are available in all sports.

Although academics never take a backseat to athletics at IRCC, the athletic teams are given the administrative support and backing necessary to perform to the best of their abilities.

Winners of the 1979 Florida Championship in baseball, holders for the past 14 years of the men's national swimming and diving championship as well as ten time holders of the women's national swimming and diving title, and recognized every year at the district level in several sports, IRCC's athletic teams have accumulated an impressive record.

With superb athletic facilities, including two pools, racquetball and tennis courts, and a weight training room open for use by all students, IRCC encourages the all around development of its students.

## INTRAMURAL SPORTS

Every student who attends IRCC has the option of participating in some type of recreational sport or activity through the Intramural Program. Intramural events are planned, administered and carried out by students, and it is the students friendly rivalry in many different forms of competition which makes the program fun.

A few extramural athletic events are held with other area community colleges, and are separate from Inter-Collegiate Athletics.

## OPPORTUNITIES FOR TRAVEL

Each year, IRCC students are offered the opportunity to travel abroad, either as part of a college organization or for college credit. In recent years, groups have toured France, Greece, the British Isles, Italy, and other European countries.

Special Registrations are conducted for all "travel for credit" opportunities and applicants must meet certain requirements before the tour begins. For this reason interested students are encouraged to inquire about these travel programs well in advance.

## PERFORMING ARTS \& LECTURE SERIES

Cultural enrichment is a vital part of every person's education, and students are provided with many cultural activities at IRCC. Music and drama students participate in the production of plays and musicals several times each year in the McAlpin Fine Arts Center, a professional-quality 620-seat theatre located on the main campus. Student performance groups include the song-and-dance troupe "Company," the Jazz Band, Symphonic Band, College Chorale, Theatre Program, and Theatre Touring Group.

The Performing Arts Series brings professional entertainers and lecturers to campus each year. Such notable and diverse performers and lecturers as Count

Basie, the American Ballet Theatre II, Buddy Rich, undersea explorer Jean Michel Cousteau, comedian Steve Landesberg and political satirist Mark Russell have entertained IRCC students and the public.

## WQCS-FM 88.9

Classical music, jazz, in-depth public affairs analysis, and cultural programming are brought to the Treasure Coast by WQCS, IRCC's on-campus FM radio station. Staffed by professionals and students enrolled in broadcasting classes, WQCS is affiliated with National Public Radio.

## STUDENT RESPONSIBILITY

Indian River Community College resembles society as a whole: the students are treated as mature adults who are responsible for their own actions, there are rules and regulations that are followed for the benefit of all, and each person has a right to expect courtesy, integrity, and good citizenship in dealing with others. Upon enrollment at IRCC, all students assume the responsibility of compliance and cooperation with college and Campus Coalition Government policies, just as each student is responsible to the larger community, state, and nation in which he or she lives.

The college does not permit the possession or use of alcoholic beverages on campus or at any college function. Possession of illegal narcotics is not allowed and will result in suspension of the student from the college; gambling is also prohibited. Students who violate the college regulations or who display misconduct either on or off campus can expect the appropriate disciplinary measures to be taken; these measures include disciplinary probation; suspension and expulsion. If the college finds it necessary to impose these measures for disruptive behavior or other forms of misconduct, such will be noted on the student's transcript and sent to any senior university requesting academic records. In all disciplinary matters, the decision of the President of IRCC is final.
The Florida Board of Regents, in 1970, directed all educational institutions under its control to consider the behavior and character of all applicants, as well as their academic ability, before accepting those applicants into the college or university.

## GRADUATION

## APPLYING FOR GRADUATION

Students nearing completion of required courses for their degree program should go to the Educational Services Division and file a "Request for Graduation Check" form. The graduation check should be completed one semester prior to the expected graduation date. Please allow at least ONE WEEK for the completion of this request. The student then returns to Educational Services to review the graduation check with a counselor. When registering for the final classes needed for the degree, the student completes and submits a Graduation Application for preliminary approval.

In order to graduate with the A.A. Degree, the candidate must pass the required state exit (CLAST) examination. Students who have not already completed the

CLAST must submit a request to take this exam. After the Application for Graduation is signed by a counselor, the student goes to the Business Office to pay the graduation fee. Finally, the validated application is returned to Educational Services. Students will not graduate unless they follow this procedure; it notifies the college that the student has completed all the course requirements for his or her major and qualifies for a degree.

## COMMENCEMENT

The student's graduation from college is a noteworthy event, and IRCC holds an annual Commencement Ceremony to mark this milestone. All Spring Semester candidates are required to attend the Spring Semester Commencement Ceremony, during which degrees are awarded by the College President. Although no official ceremony is held during the Fall and Summer, graduates from these semesters are welcome to participate in the Spring Commencement. Diplomas will be mailed to Fall and Summer graduates from the Records Center after final grades are submitted.

## TRANSCRIPTS

Transcripts of academic records are available at the IRCC Records Center upon the student's written request. Any transcript requested from IRCC will show the grades earned in all courses taken at IRCC and previously attended colleges; in repeated courses, however, only the final grade will be computed into the student's cumulative grade point average. No transcripts will be released until all financial obligations are paid. Consult the Records Center for further information.

## ACCESS TO EDUCATIONAL RECORDS

Every student has certain rights regarding access to his or her own educational records and the disclosure of information from those records to others. Under two important rulings by the District Board of Trustees, the rights of IRCC students in these areas are clearly specified and protected by law. (These Board Rules are: \#6H $\times 11-5.13$ entitled "Students Records-Directory Information" and \#6Hx11-5.131 entitled "Students Rights Regarding Limited Access Records." Copies of these Board Rules are available in the IRCC Vice President of Student Affairs Office or in the Records Center.) Unless a student specifically requests in writing that the college not release information, IRCC generally releases certain data about its students, called "Directory Information." This "Directory Information" includes: the student's name, address, date of birth, place of birth, major field of study, participation in college-sanctioned activities and sports, weight and height if the student is a member of an athletic team, dates of college attendance, dates and types of degrees and awards received, and the name of the most recently attended educational institution. All other information on file at the college about students is classified "Limited Access Information" and is released only under very rigid conditions. Limited Access Information includes: health and medical records, disciplinary records, records of personal counseling, student and family financial records, transcripts and other student academic records, student permanent records, and all other personally identifiable data except for the "Directory Information" lisied above.

In brief, here is a summary of the rights stipulated by the Board of Trustees that are guaranteed to all students 18 years of age or older and to all parents or guardians of students under the age of 18 years:

1. The right to be provided with a list of the types of data that this institution maintains for each student.
2. The right to be shown any of the records maintained in each student's own file.
3. The right to receive copies of such records at a fee not to exceed the actual cost of making such copies.
4. The right to waive access to confidential information in the student's files, if done in writing (the College will notify the student of the identity of the source of such confidential information)
5. The right to challenge the content of any record in the student's files (If the student and the college officials cannot agree as to the correctness of such records, further hearings may be held pursuant to Florida Statute \#228.093)
6. The right of privacy with respect to the student's educational records. No identifiable information shall be released without the student's written consent, except to : (a) Officials of educational institutions in which the student may be seeking enrollment; (b) IRCC officials having a legitimate educational interest in the records; (c) Certain U.S. Government and State of Florida officials having legitimate interests in such data; (d) Other IRCC officials concerned with the granting of financial aid if the student has filed an application: (e) Individuals or organizations conducting studies for or on behalf of an institution for the purpose of developing, validating or administering predictive tests, administering student aid programs or improving instruction, if such studies are conducted in such a manner as will not permit the personal identification of students by persons other than representatives of such organizations, and if such information will be destroyed when no longer needed for the purpose of conducting such studies; (f) Accrediting organizations, in order to carry out their functions; (g) For use as evidence in any due process hearings held in accordance with the Administrative Procedures Act; (h) Appropriate persons in connection with an emergency, or if the knowledge of such record contents is necessary to protect the safety or health of the student or other individuals; (i) The student's parent or guardian, if the student has not yet reached the age of eighteen (18); (j) The student's parent or guardian if he or she is a student (k) Upon order of a court or competent jurisdiction.
7. The right to prevent disclosure of "Directory Information" from the student's records; (For a complete description of such information, please see Board Rule \#6H $\times 11-5.13$ (Revised) entitled Student RecordsDirectory Information.")
All universities are instructed to refuse admission to any applicant who has, in the past, shown disruptive behavior or misconduct that might not reflect well on the university. Each college was charged by the Board of Regents to implement this policy and to set up a procedure for appeals. (See page 48-Student Responsibility.)

## CHANGES OF ADDRESS

Students should report any change of address to the Educational Services Office within 24 hours; it is important that records of this type be kept up to date since grades are sent through the mail.

## SEXUAL HARASSMENT

Indian River Community College has a policy concerning sexual harassment. It is as follows:

## Policy Statement:

It is the policy of the District Board of Trustees that each employee and student be allowed to work and attend this institution in an environment free from any form of improper discrimination. Sexual harassment is a form of sex discrimination and is conduct unbecoming a college employee or student.
Definition of Sexual Harassment:
Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature from any person when such conduct has the purpose or effect of unreasonably interfering with an individual's work performance, study habits and/or educational experiences, or creating an intimidating, hostile or offensive working/study environment.

## Notification Requirements:

This policy shall be included in all future publications of Student Handbooks, Full-Time and Part-Time Faculty Handbooks, and similar handbooks issued for Other Employees.

## Disciplinary Actions:

Any employee or student of this institution who is found to have sexually harrassed another employee or student will be subject to disciplinary action up to and including dismissal, suspension, and/or expulsion,within the provisions of applicable current Board Rules. Designation of Person to Receive Complaints:

The President shall appoint a person as Intake Counselor, who will receive all alleged sexual harassment complaints.

## Procedure for Filing a Complaint:

Any employee or student having a complaint concerning sexual harassment may discuss it with the Intake Counselor. Such a discussion should include as much information as possible including names and positions of persons involved, identification of witnesses, if any, the time, place and details of the allegation.
Action by Intake Counselor:
If, in the judgment of the Intake Counselor, further inquiry or investigation is warranted by the circumstances, the complainant shall be informed in writing to pursue the appropriate due process procedures already in place for processing grievances for employees and students.

The Intake Counselor will also submit a written report to the President summarizing details of the complaint and actions taken.


PROCRAMS

## PROGRAMS OF INSTRUCTION

There are three major programs of instruction available for high school graduates at Indian River Community College. These programs are set up as follows:

Associate in Arts Degree - College Transfer Program.
Associate in Science Degree - Technical Program.
Technical Certificate.
Indian River is on a two-semester schedule, Fall and Spring, and has two Summer Sessions, Terms I and II. This permits a student to enter at any time of the year and to complete the program in his or her own time frame.

## GENERAL EDUCATION

General Education is the combination of subjects and activities at the freshman and sophomore levels of college that are considered essential for effective participation of a citizen in the community. While providing these needed common understandings, skills, and competencies, general education also serves as a foundation for further studies. Therefore, a course of study should include appropriate academic subjects and supplementary activities whereby the student achieves citizenship, equipped not only with a vocation, but with a better understanding of himself or herself and a higher regard for others. One important and specific way to realize this philosophy is to guarantee teaching of the highest caliber. General Education has as its objectives: the increased understanding of cultural heritage, the development of citizenship, the broadening of the skills of communication, the encouragement of critical thinking, the stimulation of creativity, the enhancement of physical development, the development of moral and spiritual values and comprehension of the total environment.

Students pursuing the Associate in Arts Degree satisfy the General Education requirements by taking specified courses in English, Science, Physical Education, History, Reading, Social Science, Mathematics and Humanities. A segment of the Associate in Arts program is devoted to the pursuit of elective courses (excluding occupational courses) which introduce the student to possible majors for upper division studies.

## COLLEGE PREPARATORY CLASSES

Based on ACT or SAT scores, a student may be placed in college preparatory classes in English, math, and/or reading. A student must progress from college preparatory to college-level coursework within three attempts in each of these subject areas. Attempts are defined as a letter grade received or withdrawal from a course. College preparatory courses do not satisfy the General Education requirements in any degree program.

## ELECTIVES

The student must keep in mind that the Associate in Arts Degree program is a College Transfer Program. The Educational Services Division assists the student in selecting electives that fit the course of study which he or she intends to pursue upon transfer to a senior college or university.

## THE STATEWIDE COMMON COURSE NUMBERING SYSTEM

The course numbers appearing in the catalog are part of a statewide system of prefixes and numbers developed for use by all public postsecondary and participating private institutions in Florida. One of the major purposes of this system is to make transferring easier by identifying courses which are equivalent, no matter where they are taught in the state. All courses designated as equivalent will carry the same prefix and last three digits.

The course numbering system is, by law, descriptive and not prescriptive. It in no way limits or controls what courses may be offered or how they are taught. It does not affect course titles or descriptions at individual schools. It seeks only to describe what is being offered in postsecondary education in Florida in a manner that is intelligible and useful to students, faculty, and other users of the system.

The course numbering system was developed so that equivalent courses could be accepted for transfer without misunderstanding. Each public institution is to accept for transfer credit any course which carries the same prefix and last three digits as a course at the receiving institution. For example, if a student has taken SYG-000 at a community college, he or she cannot be required to repeat SYG000 at the school to which he or she transfers. Further, credit for any course or its equivalent, as judged by the appropriate faculty task force and published in the course numbering system, which can be used by a native student to satisfy degree requirements at a state university can also be used for that purpose by a transfer student regardless of where the credit was earned.

It should be noted that a receiving institution is not precluded from using nonequivalent courses for satisfying certain requirements.

## LAB INDICATORS

Some courses will carry an alpha suffix indicating a lab. The alpha suffixes " L " and " C " are used as follows to indicate laboratories:
" $L$ " means either (a) a course, the content of which is entirely laboratory or (b) the laboratory component of a lecture-lab sequence in which the lab is offered at a different time/place from the lecture.
" C " means a combined lecture-lab course in which the lab is offered in conjunction with the lecture at the same time/same place.

Examples: Marine Biology OCB -010 (lecture only) OCB -010L (lab only)
Marine Biology $\quad$ OCB -010C (lecture and lab combined)
Therefore, OCB -010C is equivalent to OCB -010 plus OCB -010L

## EXCEPTIONS TO THE RULE FOR EQUIVALENCIES

The following are exceptions to the general rule for course equivalencies:
A. All graduate level courses (except those which the faculty and their reviewing colleagues have determined to be substantively equivalent with undergraduate courses) are not automatically transferable.
B. All numbers which have a second digit of 9 (ex.: ART 2905) are "place keeper" numbers for such courses as directed independent study, thesis hours, etc. courses with -900 numbers must be evaluated individually and are not automatically transferable.
C. All internships, practicums, clinical experiences and study abroad courses, whatever numbers they carry, are not automatically transferable.
D. Performance or studio courses in Art, Dance, Theatre, and Music are not automatically transferable but must be evaluated individually.

## MULTIPLE DEGREES

An additional or "second" degree may be earned provided the student completes all appropriate general education requirements for both degrees and, in the case of Associate of Science Degree programs, the required core courses. In all cases, the student must earn a minimum of 21 additional credit hours for the second degree. (Please consult Educational Services for specific credit hour requirements.)

## TIME SHORTENED DEGREE OPPORTUNITIES

## ADVANCED PLACEMENT

Indian River Community College participates in the Advanced Placement program which is administered by high schools through the Educational Testing Service.

Under this system, a student entering the College presents a nationally graded examination as evidence of his or her completion of a college level course taken in high school. When the results of the examination meet at least the minimum requirements, the student may receive college credit for courses offering similar material. In some cases, only exemption from a course, not credit, is available. In either case, the student is assured that the College takes full cognizance of the advanced work done prior to his or her entrance.

## CLEP PROGRAM

Indian River Community College administers the College Level Examination Program (CLEP). Students may be awarded credit through the CLEP program as specified in the Articulation Agreement. Testing is provided each month through the Educational Services Division. Students should contact the Educational Services Division for additional information and test dates.

## DEFERRED CREDIT ENROLLMENT

An individual will be permitted, without formal admission, to register for college course work on a "deferred credit" basis. Said "deferred credit" may become "standard college credit" if, and only if, the student is formally admitted and/or pursues a degree program, and requests a change in the status of his or her "deferred credit" course work. The student will be responsible for seeking formal admission to the college when and if such action becomes warranted. No transcripts will be issued for "deferred credit" until formal admissions are complete.

All individuals in the above category will be clearly designated "deferred credit." Regular registration procedures are required, including the statement of residency.

## DIRECTED INDEPENDENT STUDY

In no case will a Directed Independent Study course duplicate a course regularly scheduled. Students must have the Vice President of Academic Affairs approval for independent study.
The regular grading system applies to all students of independent study. Grades earned by independent study have the same status as those acquired through regular class attendance.

## PROCEDURE FOR COMPLETION OF DIRECTED INDEPENDENT STUDY FORM

Students who find it necessary to take a college course by independent study must contact the instructor of the course prior to registration and complete a written contract.

After counseling the student for directed independent study, the counselor will enter the course information on the DIS form and give the form to the student.

The student must complete the form by filling in the date, name, address, and social security number.

The instructor will sign the form if, and only if, he or she agrees to administer the directed independent study and will list the requirements for the completion of the course. The contract will specify the requirements to be completed by the student (including tests, periodic class attendance, term papers, etc.) The student must complete all requirements of the contact to obtain credit for the course.

After the form has been completed, the student returns the form to the Dean/ Chairman of the Educational Services Division to have the student's GPA entered (a 2.0 GPA is required). The form is then sent to the Vice President of Academic Affairs for approval. The student, instructor, Educational Services Division, and Records Center will then be notified by mail of the action taken on this form.

It is the responsibility of the student to register for the DIS, when approved, within the registration dates noted in the calendar near the front of this catalog.

## CHALLENGE EXAMINATION (CREDIT BY EXAMINATION)

By special petition to the Admissions Committee through the Educational Services Division or the Vice President of Academic Affairs, a student at Indian River Community College may be given the opportunity to earn credit for course work through challenge examinations in certain specified areas. A student may earn credit in authorized courses by successfully completing relevant subject tests. Credit by Examination is generally limited to the following courses:

Chemistry, CHM 1045C and CHM 1046C; or Biology, APB 2203 C and APB 2204C, or BSC 1010C and BSC 1011C; or Physical Science, PSC 1341 and PSC 1311, or Geology, GLY 1010 or GLY 1100. These examinations are considered under the Directed Independent Study procedure only.

## EXTENDED COURSE LOAD

Academically superior students who are qualified may, with special permission, take up to 20 semester credits in the regular term ( 12 semester credits in the summer session), thus shortening the time required to earn a degree at Indian River Community College.

## CONTINUING EDUCATION

The Continuing Education Division at IRCC offers distinct choices in "lifelong learning" for students who want to enrich their lives through education.

## ADULT BASIC EDUCATION

The Adult Basic Education (ABE) Program exists for students who have less than a high school education or who need to review the basics before continuing with their education. The courses in this program will start the student on a path to the GED, or high school equivalency exam and diploma.

## ENGLISH AS A SECOND LANGUAGE

The ESL (English as a Second Language) Program offers English language and literacy courses to a variety of immigrant groups at several locations in the community. Two literacy levels provide basic literacy skills in the students' native language and in English, respectively, while four ESL levels, ranging from Beginning to Advanced, address a broad spectrum of competencies and English language skills. Students may also study American history and government to meet the civics requirement established by the Immigration and Naturalization Service.

## ADULT HIGH SCHOOL

IRCC provides the Adult High School Program for St. Lucie County. The course offerings are open-entry and self-paced. Classes are held both day and evening on the main campus.

## GENERAL EDUCATION DEVELOPMENT

The General Education Development program provides individuals the opportunity to review high school subjects in preparation for the high school equivalency examination. The Adult Education Center offers individualized review in language, literature, science and social science. Upon successful completion of the GED exam, students are issued a high school diploma from the Florida State Department of Education.

## ADULT VOCATIONAL CREDIT

The classes and seminars offered for Adult Vocational Credit help people improve nearly every aspect of their lives: at home, on the job, and in selfimprovement. When need for a particular class is demonstrated and if there is
sufficient interest in the class, chances are good that the class will be offered. In this way IRCC remains responsive to the community. Some of the most popular Adult Vocational courses are cosmetology, nurse assistant, languages, floral design, sewing, and effective communication.

## INDIVIDUALIZED STUDIES

Personalized open-entry, open-exit programs are available on the main campus and in Okeechobee to meet a variety of needs.

The Adult Educational Center (Main Campus - R212) offers remediation in reading, math, and English for GED, job-entry, college-entry, and selfimprovement. Two special offerings include a beginning readers' program and conversational English classes for the foreign-born.

The Center for Personalized Instruction (W112-114) offers individualized instruction tied closely to college course requirements in reading, mathematics, and English, including Gordon Rule writing. It provides extra support including tutorial assistance, drill and study techniques to help students to be successful in the classroom.

Personalized basic skills upgrading is also available for special programs such as cosmetology, sheriff's department and public school aide, or simply for selfimprovement.

An Allied Health component provides remediation in basic skills and science for allied health program entry.

The Center in Okeechobee offers, on a more limited basis, the same kinds of services provided by both the AEC and CPI on the main campus.

## WOMEN'S PROGRAM

Since 1979, the Women's Program at IRCC has been helping women to build the skills and gain the confidence necessary to enter the work force or return to school, and offering programs and seminars of special interest. The Women's Program was placed under the Continuing Education Division in 1980, a reflection of the Program's more diversified aim: to help both men and women realize the alternatives available in their lives, to provide interested adults access to experts in a number of fields, and to give any interested person practical and sound advice on how best to achieve his or her potential.

The Women's Career Development Program is a joint effort of the Women's Program and the Business Department of IRCC. These departments have designed a special program to introduce working women with little or no college experience to a college program to enhance their job skills and education for job satisfaction and promotion. Program participants take two courses each semester and are awarded a Certificate of Completion at the end of the two semesters.

The Women's Program also offers the Displaced Homemaker and Single Parent Program under a Vocational Education Grant. This program can provide tuition funds to students who qualify as displaced homemakers and single parents in financial need who meet this criteria:

Defined by Public Law 98-524, the terms "SINGLE PARENT" and "DISPLACED HOMEMAKER" mean as individual who:
Single Parent: a. is unmarried or legally separated from a spouse and
b. has a minor child or children for which the parent has either custody or joint custody.
Displaced
Homemaker: a. is an adult and
b. has worked as an adult primarily without renumeration to care for home and family, and for that reason has diminished marketable skills.

## VOCATIONAL TRANSITION

The Vocational Transition Center is the result of continuing interagency cooperation which began in 1977. The purpose of the program is to provide specialized, individualized services for individuals who have vocationally handicapping conditions. The vocational handicap may be the result of a congenital problem, a developmental disability, a diagnosed physical, mental or emotional disability, industrial injury, or traumatic accident.

Services provided include vocational assessment, work adjustment, vocational counseling, career exploration, employability skills training, job placement, and follow-up.

Preliminary vocational recommendations and individualized plans are developed following assessment to assist disabled individuals in entering or reentering competitive employment, pursuing vocational training, or changing careers.

Certain eligibility and fee sponsorship requirements must be met prior to enrollment.

Since 1980 the program has consistently received the highest level of accreditation status awarded by the Commission on Accreditation of Rehabilitation Facilities (CARF).

## ASSOCIATE IN ARTS DEGRE PROGRAMS

Agriculture<br>Anthropology<br>Art<br>Art Education<br>Bfology<br>Biology Education<br>Business Administration<br>Business Education<br>Chemistry<br>Computer Satence<br>Criminal lusticelCorrections<br>Drama<br>Education<br>Engineering<br>English<br>Forestry<br>French<br>Geology<br>German<br>Healich Education<br>History<br>Human Services<br>Journalism<br>Journalism Public Relations<br>liberal Arts<br>Marine Science<br>Math<br>Math Education<br>Medical Techology<br>Mediane/Dentistry<br>Music<br>Ocean Engineering<br>Pharmacy with Specialization<br>Gencral Practice<br>Philosophy<br>Physical Education/Recreation<br>Physical Therapy<br>Physics<br>Physics Education<br>Rolitical Science<br>Psychology<br>Social Studies Education<br>Social Welfare<br>Sociology<br>Spanish<br>Speech

## ASSOCIATE IN ARTS DEGREE

## COLLEGE TRANSFER PROGRAM

The Associate in Arts Degree program is designed for students who intend to transfer to senior colleges and universities. It is a transfer or college parallel program which offers a solid academic program for the first two years of college resulting in the liberal arts degree.

As its primary function, the Associate in Arts Degree program gives the student an academic experience in preparation for continued success in his or her college career. A major component of the A.A. Degree program is the general education requirement.

The A.A. degree program certifies that the student has completed the first half (freshman and sophomore years) of a senior college program. With the A.A. degree, the student begins the junior year at the upper-division and may then begin programs leading to a degree in such major areas as:

Agriculture
Anthropology
Art
Art Education
Biology
Biology Education
Business Administration
Business Education
Chemistry
Computer Science
Criminal Justice/Corrections
Drama
Education
Engineering
English
Forestry
French
Geology
German
Health Education
History
Human Services

Journalism
Journalism-Public Relations
Liberal Arts
Marine Science
Math
Math Education
Medical Technology
Medicine/Dentistry
Music (Educ. Performance, Theory)
Ocean Engineering
Pharmacy
Philosophy
Physical Education/Recreation
Physical Therapy
Physics
Physics Education
Political Science
Psychology
Social Studies Education
Social Welfare/Work
Sociology
Spanish
Speech

## ASSOCIATE IN ARTS DEGREE REQUIREMENTS

To meet the requirements for the Associate in Arts Degree, the student must complete the required courses for graduation (38-41 semester hours of general education), as listed below, plus at least 23-26 semester hours of elective courses designed for the Associate in Arts Degree (excluding occupational courses). A minimum of 64 semester hours must be earned for the A.A. Degree. In addition to the above requirements, the student must:

1. Take the last 20 semester hours at this college unless written permission is authorized from the office of the Vice President of Academic Affairs.
2. Submit the required placement scores upon acceptance to IRCC and successfully complete, prior to graduation and the award of the degree, the College Level Academic Skills Test, known as the Exit Exam.
3. Achieve a grade point average of not less than 2.0 in all courses attempted (including transfer hours) and complete the requirements of the Communications and Computations rule (the Gordon Rule).
4. Apply for graduation at the beginning of the semester or term in which the student plans to graduate. This application must include the payment of the graduation fee. See pages 8-13 for deadline dates.
5. Participate in all phases of graduation if graduating Spring Semester. (Those graduating in absentia will not receive the diploma.) Graduates from other semesters are welcome to take part in the Spring Commencement Ceremony.
6. Be recommended by the faculty to the President of the College for the confirmation of the degree.

It is the sole responsibility of the student to check his or her record to be sure that the above graduation requirements are satisfied. A Guidance Counselor will assist the student at any time in checking course selections and graduation requirements.

## GENERAL EDUCATION REQUIRED COURSES FOR GRADUATION (AA DEGREE)

## ENGLISH

6 semester hours
ENC 1101, ENC 1102
In each of the above courses, students must produce 4,000 words of acceptable written material and complete each course with a grade of " C " or higher.
SCIENCE
7-8 semester hours minimum
The Science requirement may be met through completion of 7-8 semester hours in biological and/or physical science courses. One course must be a laboratory course. Consult Educational Services about specific Science requirements for major and for university transfer.

## HISTORY

6 semester hours
EUH 1000 - EUH 1001
In each of the above courses, students must produce 2,000 words of acceptable written material and complete each course with a grade of " $\mathrm{C}^{\prime}$ or higher.
SOCIAL SCIENCE 6 semester hours
PSY 2012
SYG 2000
In each of the above courses, students must produce 4,000 words of acceptable written material and complete each course with a grade of " C " or higher.
MATHEMATICS 6 semester hours
MAC 1102
MAC 1104 or MGF 2202 or higher
Students must complete each course with a grade of " C " or higher.
HUMANITIES
3 semester hours
HUM 1541 or HUM 1533
Students must produce 4,000 words of acceptable written material and complete this course with a grade of " C " or higher.
READING Dependent on Placement Scores
Depending on the student's ACT or SAT score, a series of Reading classes may be required.
PHYSICAL EDUCATION
4 semester hours
The Physical Education requirement is met through the completion of PEM 1101 and at least one semester hour of swimming. The swimming requirement may be met by taking PEN 1121, PEN 1122, PEN 1136, or PEN 1113. (Students taking PEN 1136 satisfy their swimming requirement and one activity course.) The two remaining hours must be ACTIVITY courses. Students who cannot participate in regular Physical Education classes because of medical limitations will have their participation modified accordingly. Waived credits must be made up. The Physical Education requirement is met through regular class participation. The Physical Education Curriculum will be required of all students with the exception of those who have medical exemptions, those who are veterans, or those who are 26 years of age or older at the time of entrance.
The above 38-41 hours are required for the Associate in Arts Degree. In addition the student must take at least 23-26 semester hours of elective courses designed for an Associate in Arts Degree. Please refer to program guidelines and description of courses on the following pages.
NOTE: No occupational courses are permitted in the Associate in Arts Degree programs. In the catalog section on "Curriculum and Course Descriptions," courses are designated with code letters " P " for Professional/Academic, " $\mathrm{O}^{\prime}$ for Occupational, and "D" for Dual.
" $D$ " courses are permitted in the A.A. degree only if applicable to the student's major field. This must be verified through the Educational Services Division.

## PROGRAM GUIDES

To earn the Associate in Arts Degree, certain general education requirements and elective courses must be satisfactorily completed. It is in the elective area that the student must select courses which will best prepare him or her for transfer into a particular major field at a specific college or university. For students planning to pursue a Bachelor's Degree, the following suggested programs meet the requirements for the Associate in Arts Degree and include the electives generally recommended for certain majors at most of the state universities.

Listing all recommendations and requirements for all major fields at all colleges and universities is not possible. Therefore, it is imperative that the student who has already selected the senior college or university to which he wishes to transfer plan his or her pre-professional program at Indian River Community College with the aid of a counselor. In this way the student's program of study can be made to conform to the specific requirements for the major field he or she intends to enter at the senior institution chosen.

In planning the program of study at Indian River Community College, the student is advised to review the overall requirements of his or her chosen major field before making selections from the courses acceptable for meeting general education requirements, since specific general education courses may be recommended for a particular major. The student should also review the upper level requirements of his or her major field in order to become acquainted with necessary prerequisites and any particular sequence of courses which may be required.

The programs listed do not necessarily have to be taken in the order presented. In some cases, courses are not offered each semester and the student is advised to plan ahead so as to enroll in courses when they are available.

Final responsibility for choice of program and courses selected rests with the student.

## *AGRICULTURE

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

MAC 1114 Plane Trigonometry ..... 3 credits
or
MAC 1135 Pre-Calculus 6 credits
MAC 2311 Calculus I ..... 6 credits
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
BSC 1010C Gen. Biology I ..... 4 credits
BSC 1011C Gen. Biology II ..... 4 credits
PHY 2053C General Physics I ..... 4 credits
HOS 1010 Fundamentals of Horticulture ..... 3 credits
SPC 1010 Introduction to Speech Communications ..... 3 credits
Biology with Lab (Biology, Botany or Zoology) ..... 8 credits
AEB 2104 Principles of Agriculture Economics 4 credits
STA 2014 Elementary Statistics 3 credits
*Consult Educational Services for specific degree program requirements
ANTHROPOLOGY
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
ANT 2402 Anthropology and Modern Life 3 credits
ANT 2410 Introduction to Cultural Anthropology ..... 3 credits
ANT 2511 Introduction to Physical Anthropology ..... 3 credits
ANT 2930 Anthropology and the Paranormal ..... 3 credits
SYG 2010 Social Problems ..... 3 credits
STA 2014 Elementary Statistics ..... 3 credits
ECO 2013 Principles of Economics I 3 credits
PHI 1010 Introduction to Philosophy ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language ..... 8 credits
ART
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
ART 1300C Introduction to Drawing 3 credits
ART 1301C Drawing 3 credits
ART 1205C Color and Design I ..... 3 credits
ART 1206C Color and Design II ..... 3 credits
ART 2400C Graphics 3 credits
ART 2510C Introduction to Painting 3 credits
ARH 2050 Introduction to the History of Art ..... 3 credits
ARH 2051 History of Art ..... 3 credits
ART 1701C Sculpture I ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language. various credits
ART EDUCATION
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
ART 1300C Introduction to Drawing ..... 3 credits
ART 1301C Drawing 3 credits
ART 1205C Color and Design I ..... 3 credits
ART 1206C Color and Design II 3 credits
ART 2400C Graphics ..... 3 credits
REA 1205 Advanced College Reading I ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
EDP 2002 Educational Psychology ..... 3 credits
EDF 2020 Human Development ..... 3 credits
EDF 2070 Social Foundations of Education ..... 3 credits
Foreign Language various credits
BUSINESS ADMINISTRATION
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
ACG 2001 Principles of Accounting I 3 credits
ACG 2011 Principles of Accounting II ..... 3 credits
ACG 2450 Microcomputers in Accounting I ..... 1 credit
STA 2014 Elementary Statistics ..... 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
ECO 2023 Principles of Economics II ..... 3 credits
CIS 1000 Introduction to Data Processing 3 credits
COP 2000 Intro to Computer Programming ..... 3 credits
or
COP 1170 BASIC Programming I ..... 3 credits
or
COP 2120 COBOL Programming I 3 credits
COP 2110 FORTRAN ..... 3 credits
MAC 2233 Business Calculus I ..... 3 credits
MAC 2234 Business Calculus II ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
BUL 2111 Business Law 1 ..... 3 credits
Foreign Language various credits
BUSINESS EDUCATION
REQUIRED PROGRAM:See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
OST 1100 Elementary Typewriting ..... 3 credits
OST 1110 Intermediate Typewriting ..... 3 credits
OST 1211 Introductory Shorthand ..... 3 credits
OST 1212 Intermediate Shorthand ..... 3 credits
ACG 2001 Principles of Accounting I ..... 3 credits
ACG 2011 Principles of Accounting II ..... 3 credits
ACG 2450 Microcomputers in Accounting I ..... 1 credit
ECO 2013 Principles of Economics I ..... 3 credits
ECO 2023 Principles of Economics II ..... 3 credits
SPC 1010 Intro. to Speech Communication 3 credits
BUL 2111 Business Law I ..... 3 credits
EDF 2020 Human Development ..... 3 credits
CIS 1000 Introduction to Data Processing 3 credits
EDF 2070 Social Foundations of Education ..... 3 credits
Foreign Language ..... various credits
BIOLOGY
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
BSC 1010C General Biology I 4 credits
BSC 1011C General Biology II ..... 4 credits
ZOO 2203C Invertebrate Zoology. ..... 4 credits
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
CHM 2210C Organic Chemistry I ..... 5 credits
CHM 2211C Organic Chemistry II ..... 5 credits
PHY 2053C General Physics I 4 credits
PHY 2054C General Physics II ..... 4 credits
MAC 2311 Calculus I ..... 6 credits
MAC 2312 Calculus II ..... 3 credits
MAS 2103 Linear Algebra ..... 3 credits
BOT 2010C General Botany I ..... 4 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language various credits
BIOLOGY EDUCATION
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
EDF 2020 Human Development 3 credits
MAC 2311 Calculus I ..... 6 credits
APB 2203C Anatomy and Physiology I ..... 4 credits
ZOO 2203C Invertebrate Zoology ..... 4 credits
ZOO 2303C Vertebrate Zoology ..... 4 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II. ..... 4 credits
BOT 2010C General Botany I ..... 4 credits
BSC 1010C General Biology I ..... 4 credits
BSC 1011C General Biology II ..... 4 credits
PHY 2053C General Physics I ..... 4 credits
PHY 2054C General Physics II ..... 4 credits
EDF 2070 Social Foundations of Education. 3 credits
Foreign Language various credits

## CHEMISTRY

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
CHM 1045C General Chemistry I 4 credits
CHM 1046C General Chemistry II 4 credits
CHM 2210C Organic Chemistry I ..... 5 credits
CHM 2211C Organic Chemistry II 5 credits
PHY 2048C Physics for Engineers I ..... 5 credits
or
PHY 2053C General Physics I 4 credits
PHY 2049C Physics for Engineers II ..... 5 credits
or
PHY 2054C General Physics II 4 credits
BSC 1010C General Biology I ..... 4 credits
BSC 1011C General Biology II ..... 4 credits
MAC 2311 Calculus I ..... 6 credits
MAC 2312 Calculus II ..... 3 credits
MAS 2103 Linear Algebra ..... 3 credits
Foreign Language various credits
COMPUTER SCIENCE
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
(SCIENTIFIC OPTION)
COP 2000 Introduction to Computer Programming ..... 3 credits
COP 2400 ASSEMBLER Programming I ..... 3 credits
MAC 2311 Calculus I ..... 6 credits
MAC 2312 Calculus II 3 credits
MAS 2103 Linear Algebra ..... 3 credits
CGS 2420 Computer Programming for Engineers 3 credits
CIS 2321 OComputer Systems Design 3 credits
CHM 1045C 6General Chemistry I 4 credits
CHM 1046C General Chemistry II. ..... 4 credits
PHY 2048C Physics for Engineers I ..... 5 credits
PHY 2049C Physics for Engineers II ..... 5 credits
CGS 2423 © Programming I ..... 3 credits
ACG 2001 Principles of Accounting I 3 credits
ACG 2011 Principles of Accounting II ..... 3 credits
ACG 2450 Microcomputers in Accounting I ..... 3 credits
ECO 2023 Principles of Economics II ..... 3 credits
STA 2014 Elementary Statistics 3 credits
COP 2000 Introduction to Computer Programming 3 credits
CIS 1000 Introduction to Data Processing 3 credits
COP 2120 COBOL Programming I ..... 3 credits
COP 2121 COBOL Programming II ..... 3 credits
COP 1170 BASIC Programming I ..... 3 credits
COP 1171 BASIC Programming II ..... 3 credits
or
COP 2200 FORTRAN 3 credits
CIS 2321 Computer Systems Design ..... 3 credits
CGS 2423 C Programming I ..... 3 credits
MAC 2311 Calculus I ..... 6 credits
or
MAC 2233 Business Calculus I 3 credits
MAC 2234 Business Calculus II 3 credits
Foreign Language various credits
CRIMINAL JUSTICE/CORRECTIONS
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
POS 1041 American Government 3 credits
POS 2112 State \& Local Government 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
AMH 2010 American History to 1877 ..... 3 credits
AMH 2020 American History since 1878 ..... 3 credits
STA 2014 Elementary Statistics ..... 3 credits
ANT 2410 Introduction to Cultural Anthropology ..... 3 credits
SYG 2010 Social Problems 3 credits
CCJ 2020 Introduction to Criminal Justice 3 credits
CCJ 2220 Criminal Law ..... 3 credits
CCJ 2231 Criminal Procedure ..... 3 credits
CCJ 2300 Introduction to Corrections ..... 3 credits
CCJ 2250 Constitutional Law ..... 3 credits
Foreign Language various credits
DRAMA
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
CORE CURRICULUM
TPP 2652 Play Analysis ..... 3 credits
THE 1000 Introduction to Drama 3 credits
TPA 1210C Beginning Stagecraft ..... 2 credits
PERFORMANCE MAJORS
ORI 1001 Oral Interpretation ..... 3 credits
TPP 1800 Theatre, Voice, \& Speech ..... 3 credits
TPP 1110 Acting I 3 credits
TPP 1290L Rehearsal and Performance Lab I ..... 2 credits
MVV 1211A Applied Voice I ..... 1 credit
MVV 1211 B Applied Voice II ..... 1 credit
ART 1300C Introduction to Drawing ..... 3 credits
COURSE ELECTIVES
THE 2284 Readings in Theatre History 3 credits
TPP 1111 Acting II 3 credits
MUO 1020 Music Theatre I ..... 3 credits
TPP 2300 Play Direction ..... 3 credits
TPP 1291L Rehearsal and Performance Lab II ..... 2 credits
TPP 1292L Rehearsal and Performance Lab III 2 credits
TPP 1293L Rehearsal and Performance Lab IV 2 credits
Foreign Language various credits
EDUCATION
(ELEMENTARY, SECONDARY* OPTION)
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
EDF 2070 Social Foundations of Education.EDF 2020 Human Development3 credits
EDP 2002 Educational Psychology 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
REA 1206 Advanced College Reading II ..... 3 credits
SYG 2010 Social Problems. ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language various credits*(Consult Educational Services for Secondary Education Option)
ENGINEERING
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
MAC 2311 Calculus I 6 credits
MAC 2312 Calculus II ..... 3 credits
MAC 2313 Calculus III ..... 5 credits
MAS 2103 Linear Algebra ..... 3 credits
MAP 2302 Differential Equations ..... 3 credits
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
CHM 2210C Organic Chemistry I ..... 5 credits
PHY 2049C Physics for Engineers II 5 credits
STA 2014 Elementary Statistics ..... 3 credits
EGS 1110C Engineering Graphics ..... 3 credits
CGS 2420 Computer Programming for Engineers ..... 3 credits
EGS 1130C Descriptive Geometry ..... 3 credits
Foreign Languagevarious credits
ENGLISH
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
LIT 2110 World Literature I 3 credits
LIT 2120 World Literature II 3 credits
ENL 2010 English Literature I ..... 3 credits
ENL 2020 English Literature II ..... 3 credits
AML 2010 American Literature to 1865 ..... 3 credits
AML 2022 American Literature after 1865 ..... 3 credits
SPC 1300 Interpersonal Communications ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
CRW 2001 Creative Writing I ..... 3 credits
CRW 2002 Creative Writing II ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language various credits
FORESTRY
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
BSC 1010C General Biology I ..... 4 credits
BSC 1011C General Biology II ..... 4 credits
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
PHY 2053C General Physics I ..... 4 credits
PHY 2054C General Physics II 4 credits
MAC 2311 Calculus I ..... 6 credits
MAC 2312 Calculus II ..... 3 credits
MAS 2103 Linear Algebra 3 credits
ECO 2013 Principles of Economics I 3 credits
ECO 2023 Principles of Economics II ..... 3 credits
STA 2014 Elementary Statistics 3 credits
SPC 1010 Introduction to Speech Communications 3 credits
COP 2110 FORTRAN 3 credits
Foreign Language various credits

## FRENCH

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

| FRE | 1100 | Elementary French I...................................... 4 credits |
| :---: | :---: | :---: |
| FRE | 1101 | Elementary French II...................................... 4 credits |
| FRE | 2200 | Intermediate French I..................................... 4 credits |
| FRE | 2201 | Intermediate French II.................................... 4 credits |
| INR | 2002 | Introduction to International Politics................ 3 credits |
| SPC | 1010 | Introduction to Speech Communications.......... 3 credits |
| Second Foreign Language ...............................................various credits |  |  |

## GEOLOGY

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

GLY 1015 Introduction to Physical Geology ..... 3 credits
GLY 1100 Historical Geology ..... 3 credits
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
PHY 2053C General Physics I 4 credits
PHY 2054C General Physics II ..... 4 credits
BSC 1010C General Biology I ..... 4 credits
BSC 1011C General Biology II ..... 4 credits
MAC 1114 Plane Trigonometry ..... 3 credits
MAC 2311 Calculus I ..... 6 credits
Foreign Language various credits
GERMAN
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
GER 1120 Elementary German IGER 1121 Elementary German II
4 credits
GER 2200 Intermediate German IGER 2201 Intermediate German II4 credits
INR 2002 Introduction to International Politics ..... 3 credits
EDP 2002 Educational Psychology ..... 3 credits
EDF 2020 Human Development ..... 3 credits
Second Foreign Language ..... various credits

## HEALTH EDUCATION

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

BSC 1010C General Biology I 4 credits
BSC 1011C General Biology II 4 credits
HSC 2100 Personal and Community Health. ..... 3 credits
HSC 2400 First Aid and Safety 3 credits
EDF 2020 Human Development ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
CHM 1045C General Chemistry I ..... 4 credits
POS 1041 American Government 3 credits
EDF 2070 Social Foundations of Education ..... 3 credits
Foreign Language various credits
HISTORY
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
AMH 2010 American History I ............................................. 3 credits
AMH 2020 American History II 3 credits
WOH 2040 The World in the Twentieth Century 3 credits
POS 1041 American Government ..... 3 credits
INR 2002 Introduction to International Politics 3 credits
POS 2112 State and Local Government 3 credits
EDP 2002 Educational Psychology 3 credits
AML 2022 American Literature after 1865 3 credits
PHI 1103 Critical and Creative Thinking 3 credits
Foreign Language various credits
HUMAN SERVICES
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
HUS 2500 Introduction to Ethics in Human Services ..... 3 credits
HUS 2025 Introduction to Interpersonal Behavior ..... 3 credits
HUS 2102 Introduction to Techniques of Interviewing andIntervention3 credits
EDF 2020 Human Development 3 credits
EDP 2002 Educational Psychology ..... 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
PPE 2000 Person and Personality Development ..... 3 credits
PHI 1103 Critical and Creative Thinking 3 credits
DEP 1001 Child \& Adolescent Psychology 3 credits
CLP 2140 Abnormal Psychology ..... 3 credits
ANT 2410 Introduction to Cultural Anthropology ..... 3 credits
ANT 2511 Introduction to Physical Anthropology ..... 3 credits
SYG 1410 Family Relations ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
HUS 1506 Introduction to Drugs of Abuse ..... 3 credits
PHI $1450 \quad$ Philosophy of Psychology ..... 3 credits
Foreign Language various credits
JOURNALISM
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
JOU 1100 News Reporting and Writing 3 credits
JOU 1420 Journalism Lab ..... 3 credits
JOU 1421 Journalism Laboratory II. ..... 3 credits
JOU 1422 Journalism Laboratory III ..... 3 credits
JOU 2200 Editing ..... 3 credits
MMC 1000 Surveying of Mass Communication ..... 3 credits
PUR 2000 Introduction to Public Relations. ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
AMH 2010 American History I ..... 3 credits
AMH 2020 American History II ..... 3 credits
CRW 2001 Creative Writing I ..... 3 credits
POS 1041 American Government ..... 3 credits
POS 2112 State and Local Government ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language various credits
JOURNALISM-PUBLIC RELATIONS
REQUIRED PROGRAM:See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
JOU 1100 News Reporting and Writing ..... 3 credits
JOU 1420 Journalism Lab ..... 3 credits
JOU 2200 Editing ..... 3 credits
MMC 1000 Survey of Mass Communication ..... 3 credits
PUR 2000 Introduction to Public Relations ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
STA 2014 Elementary Statistics ..... 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
AMH 2010 American History I ..... 3 credits
AMH 2020 American History II ..... 3 credits
CRW 2001 Creative Writing I ..... 3 credits
POS 1041 American Government 3 credits
POS 2112 State and Local Government ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
OST 1100 Elementary Typewriting ..... 3 credits
ACG 2001 Principles of Accounting I ..... 3 credits
ACG 2011 Principles of Accounting II ..... 3 credits
ACG 2450 Micro-Computers in Accounting ..... 1 credit
Foreign Language various credits
LIBERAL ARTS
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
MAC 1104 College Algebra 3 credits
and
MAC 1114 Plane Trigonometry ..... 3 credits
MAC 1135 Pre-Calculus 6 credits
AMH 2010 American History I ..... 3 credits
AMH 2020 American History II ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
ENL 2010 English Literature I ..... 3 credits
ENL 2020 English Literature II ..... 3 credits
AML 2010 American Literature to 1865 ..... 3 credits
AML 2022 American Literature after 1865 ..... 3 credits
LIT 2110 World Literature I ..... 3 credits
LIT 2120 World Literature II ..... 3 credits
Any elementary level foreign language and/or. various credits corresponding intermediate level course various credits
MARINE SCIENCE
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
OCB 2721 Fundamentals of Mariculture 3 credits
OCE 2001 Introduction to Oceanography. ..... 3 credits
OCB 2010C Introduction to Marine Biology ..... 4 credits
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
PHY 2053C General Physics I ..... 4 credits
PHY 2054C General Physics II ..... 4 credits
ZOO 2203C Invertebrate Zoology ..... 4 credits
ZOO 2303C Vertebrate Zoology ..... 4 credits
COP 2200 FORTRAN 3 creditsor
COP 2120 COBOL Programming 1 3 credits
or
COP 1170 BASIC Programming I 3 credits
OCG 1001 Marine Geology ..... 3 credits
PEN 1138 SCUBA - Advanced Rescue Diving ..... 3 credits
BSC 2910 Natural Science Directed Research Studies ..... 1-3 credits
Foreign Language various credits
MATH
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
CIS 1000 Introduction to Data Processing 3 credits
MAC 1114 Plane Trigonometry ..... 3 credits
or
MAC 1135 Pre-Calculus 6 credits
MAC 2311 Calculus I 6 credits
MAC 2312 Calculus II ..... 3 credits
MAS 2103 Linear Algebra ..... 3 credits
MAC 2313 Calculus III ..... 5 credits
MAP 2302 Differential Equations ..... 3 credits
COP 2200 FORTRAN ..... 3 credits
STA 2014 Elementary Statistics ..... 3 credits
PHY 2048C Physics for Engineers I ..... 5 credits
PHY 2049C Physics for Engineers II ..... 5 credits
Foreign Language ..... various credits
MATH EDUCATION
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
EDF 2020 Human Development 3 credits
MAC 1114 Plane Trigonometry ..... 3 credits
MAC 1135 Pre-Calculus ..... 6 credits
or
MAC 2311 Calculus I 6 credits
MAC 2312 Calculus II ..... 3 credits
MAS 2103 Linear Algebra ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
CIS 1000 Introduction to Data Processing ..... 3 credits
COP 2200 FORTRAN ..... 3 credits
MAC 2313 Calculus III ..... 5 credits
EDF 2070 Social Foundations of Education: ..... 3 credits
Foreign Language various credits

## MEDICAL TECHNOLOGY

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

$$
\text { CHM 1045C General Chemistry I............................................ } 4 \text { credits }
$$

CHM 1046C General Chemistry II........................................... 4 credits
CHM 2210C Organic Chemistry I........................................... 5 credits
CHM 2211C Organic Chemistry II .......................................... 5 credits
BSC 1010C General Biology I............................................... 4 credits
BSC 1011C General Biology II .............................................. 4 credits
MCB 2010C Microbiology ..................................................... 4 credits
PHY 2053C General Physics I............................................... 4 credits
PHY 2054C General Physics II............................................... 4 credits
MAC 1114 Plane Trigonometry ............................................ 3 credits
MAC 2311 Calculus I ........................................................... 6 credits
Foreign Language..................................................................various credits

## MEDICINE/DENTISTRY

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

CHM 1045C General Chemistry I........................................... 4 credits
CHM 1046C General Chemistry II.......................................... 4 credits
CHM 2210C Organic Chemistry I ........................................... 5 credits
CHM 2211C Organic Chemistry II .......................................... 5 credits
BSC 1010C General Biology I ................................................ 4 credits
BSC 1011C General Biology II .............................................. 4 credits
MCB 2010C Microbiology ...................................................... 4 credits
MAC 2311 Calculus I........................................................... 6 credits
MAC 2312 Calculus II ........................................................... 3 credits
PHY 2053C General Physics I............................................... 4 credits
PHY 2054C General Physics II.............................................. 4 credits
PHI 1103 Critical and Creative Thinking ........................... 3 credits
Any elementary level foreign language and/or......................various credits
corresponding intermediate level course ..............................various credits

## MUSIC <br> (EDUCATION, PERFORMANCE, THEORY)

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

MUH 2111 Survey of Music History I ..... 3 credits
MUH 2112 Survey of Music History II 3 credits
MUT 1111 Theory of Music I 3 credits
MUT 1112 Theory of Music II ..... 3 credits
MUT 2116 Theory of Music III ..... 3 credits
MUT 2117 Theory of Music IV 3 credits
MVK 1111 Class Piano I ..... 1 credit
MVK 1111 Class Piano II ..... 1 credit
MVK 2121 Class Piano III ..... 1 credit
MVK 2121 Class Piano IV ..... 1 credit
MUT 1241 Sight Singing and Ear Training I. ..... 2 credits
MUT 1242 Sight Singing and Ear Training II ..... 2 credits
MUG 1101 Basic Conducting ..... 2 credits
MUE 1450 Woodwind Techniques ..... 1 credit
MUE 1460 Brass Techniques ..... 1 credit
MUE 1470 Percussion Techniques ..... 1 credit
MVV 1111 Class Voice I 1 credit
Applied Music Lessons on principal instrument or voice each semester 4 credits
Performing Membership in College Chorale and/or
Organizations Symphonic Band each semester 4 credits
Optional Stage/Jazz Band, Jazz/Rock InstrumentalEnsemble "Company", Jazz/Rock VocalEnsemble "Company", Class Guitar, MusicTheatre, Survey of Music History, AppliedMusic lessons on secondaryinstruments.various credits
Foreign Language various credits
OCEAN ENGINEERING
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
BSC 1010C General Biology I ..... 4 credits
BSC 1011C General Biology II ..... 4 credits
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
CHM 2210C Organic Chemistry I ..... 5 credits
CHM 2211C Organic Chemistry II ..... 5 credits
MCB 2010C Microbiology ..... 4 credits
OCE 2001 Introduction to Oceanography ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
PHY 2048C Physics for Engineers I ..... 5 credits
PHY 2049C Physics for Engineers II ..... 5 credits
EGN 1120C Engineering Graphics ..... 3 credits
MAC 2311 Calculus I ..... 6 credits
MAC 2312 Calculus II ..... 3 credits
MAS 2103 Linear Algebra ..... 3 credits
MAP 2302 Differential Equations ..... 3 credits
BSC 2910 Natural Science Directed Research Studies ..... 1-3 credits
Foreign Language various credits
PHARMACY WITH SPECIALIZATION IN GENERAL PRACTICE
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
CHM 1045C General Chemistry I ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
CHM 2210C Organic Chemistry I ..... 5 credits
CHM 2211C Organic Chemistry II ..... 5 credits
BSC 1010C General Biology I ..... 4 credits
BSC 1011C General Biology II 4 credits
PHY 2053C General Physics I. ..... 4 credits
PHY 2054C General Physics II. ..... 4 credits
ECO 2013 Principles of Economics I ..... 3 credits
MAC 2311 Calculus I 6 credits
Foreign Language various credits
PHILOSOPHY
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
PHI 1010 Introduction to Philosophy ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
PHI 2100 Introduction to Logic ..... 3. credits
PHI 2660 Introduction to Ethics. ..... 3 credits
HSC 1160 Ethical Issues in Medicine ..... 3 credits
Foreign Language various credits
PHYSICAL EDUCATION/RECREATION
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
EDF 2020 Human Development 3 credits
EDP 2002 Educational Psychology ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
PEL 1341 Tennis I ..... 1 credit
PEN 1122 Swimming II ..... 1 credit
PEL 1620 Team Sports for Women and Men I ..... 1 credit
PEL 1111 Bowling ..... 1 credit
PEN 1113 Life Saving ..... 1 credit
HSC 2100 Personal and Community Health ..... 3 credits
HSC 2400 First Aid and Safety 3 credits
PEO 2013 Sports Officiating 3 credits
LEI 2433 Community Recreation ..... 3 credits
BSC 1010C General Biology I ..... 4 credits
PEL 1441 Racquetball ..... 1 credit
PEL 1121 Golf ..... 1 credit
HLP 1081 Personal Wellness ..... 3 credits
SYG 2010 Social Problems 3 credits
ECO 2013 Principles of Economics I 3 credits
EDF 2070 Social Foundations of Education ..... 3 credits
Foreign Language ..... various credits
PHYSICAL THERAPY
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
BSC 1010C General Biology I 4 credits
BSC 1011C General Biology II ..... 4 credits
ZOO 2203C Invertebrate Zoology ..... 4 credits
ZOO 2303C Vertebrate Zoology 4 credits
MCB 2010C Microbiology ..... 4 credits
CHM 1045C General Chemistry ..... 4 credits
CHM 1046C General Chemistry II ..... 4 credits
PHY 2053C General Physics I ..... 4 credits
PHY 2054C General Physics II ..... 4 credits
Foreign Language various credits

## PHYSICS

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

CHM 1045C General Chemistry I 4 credits
CHM 1046C General Chemistry II ..... 4 credits
PHY 2048C Physics for Engineers I ..... 5 credits
PHY 2049C Physics for Engineers II ..... 5 credits
MAC 1104 College Algebra ..... 3 credits
and
MAC 1114 Plane Trigonometry ..... 3 credits
or
MAC 1135 Pre-Calculus ..... 6 credits
MAC 2311 Calculus I ..... 6 credits
MAC 2312 Calculus II 3 credits
MAS 2103 Linear Algebra ..... 3 credits
MAC 2313 Calculus HI ..... 5 credits
MAP 2302 Differential Equations ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language various credits
PHYSICS EDUCATION
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
PHY 2053C General Physics I 4 credits
PHY 2054C General Physics II ..... 4 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
EDP 2002 Educational Psychology ..... 3 credits
EDF 2020 Human Development ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
MCB 2010C Microbiology ..... 4 credits
CHM 1045C General Chemistry 4 credits
CHM 1046C General Chemistry II ..... 4 credits
MAC 2311 Calculus I ..... 6 credits
EDF 2070 Social Foundations of Education. ..... 3 credits
Foreign Language various credits
POLITICAL SCIENCE
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
POS 1041 American Government ..... 3 credits
INR 2002 Introduction to International Politics ..... 3 credits
INR 1332 U.S. Foreign Policy \& Intelligence ..... 3 credits
POS 2112 State and Local Government ..... 3 credits
CPO 2002 Comparative Political Systems ..... 3 credits
AMH 2010 American History I ..... 3 credits
AMH 2020 American History II ..... 3 credits
WOH 2040 The World in the Twentieth Century . ..... 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
ANT 2511 Introduction to Physical Anthropology ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language. various credits
PSYCHOLOGY
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
BSC 1010C General Biology I ..... 4 credits
BSC 1011C General Biology II ..... 4 credits
ECO 2013 Principles of Economics I ..... 3 credits
EDP 2002 Educational Psychology ..... 3 credits
EDF 2020 Human Development ..... 3 credits
PHI 1010 Introduction to Philosophy 3 credits
STA 2014 Elementary Statistics ..... 3 credits
SYG 2010 Social Problems ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
Foreign Language various credits
SOCIAL STUDIES EDUCATION
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
AMH 2010 American History I 3 credits
AMH 2020 American History II ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
EDP 2002 Educational Psychology ..... 3 credits
EDF 2020 Human Development ..... 3 credits
SYG 2010 Social Problems ..... 3 credits
SYG 2420 The Family ..... 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
POS 1041 American Government ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
POS 2112 State and Local Government ..... 3 credits
EDF 2070 Social Foundations of Education ..... 3 credits
Foreign Language various credits
SOCIAL WELFARE/WORK
REQUIRED PROGRAM:
See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
SYG 2010 Social Problems ..... 3 credits
EDP 2002 Educational Psychology ..... 3 credits
EDF 2020 Human Development ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
HSC 2100 Personal and Community Health ..... 3 credits
SYG 2420 The Family ..... 3 credits
STA 2014 Elementary Statistics ..... 3 credits
ANT 2410 Introduction to Cultural Anthropology ..... 3 credits
ANT 2511 Introduction to Physical Anthropology ..... 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
POS 1041 American Government ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
POS 2112 State and Local Government ..... 3 credits
Foreign Language various credits

## SOCIOLOGY

## REQUIRED PROGRAM:

See pages 61-62 and consult Educational Services.

## SUGGESTED ELECTIVES:

SYG 2010 Social Problems 3 credits
SYG 2420 The Family ..... 3 credits
EDP 2002 Educational Psychology ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
STA 2014 Elementary Statistics ..... 3 credits
ANT 2410 Introduction to Cultural Anthropology ..... 3 credits
ANT 2511 Introduction to Physical Anthropology ..... 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
POS 1041 American Government ..... 3 credits
PHI 1103 Critical and Creative Thinking 3 credits
ECO 2023 Principles of Economics II ..... 3 credits
Foreign Language various credits
SPANISH
REQUIRED PROGRAM:See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
SPN 1120 Elementary Spanish I 4 credits
SPN 1121 Elementary Spanish II ..... 4 credits
SPN 2200 Intermediate Spanish I ..... 4 credits
SPN 2201 Intermediate Spanish II ..... 4 credits
EDP 2002 Educational Psychology ..... 3 credits
PHI 2100 Introduction to Logic ..... 3 credits
Any sequence of a second Foreign Language various credits
SPEECH
REQUIRED PROGRAM:See pages 61-62 and consult Educational Services.
SUGGESTED ELECTIVES:
SPC 1050 Speech Improvement ..... 3 credits
SPC 1300 Interpersonal Communications ..... 3 credits
SPC 1010 Intro. to Speech Communications. ..... 3 credits
EDF 2020 Human Development ..... 3 credits
PHI 1103 Critical and Creative Thinking ..... 3 credits
EDP 2002 Educational Psychology ..... 3 credits
ENL 2010 English Literature I ..... 3 credits
ENL 2020 English Literature II ..... 3 credits
LIT 2110 World Literature I 3 credits
LIT 2020 World Literature II ..... 3 credits
AML 2010 American Literature to 1865 3 credits
AML 2022 American Literature after 1865 3 credits
BSC 1010C General Biology 1 ..... 4 credits
BSC 1011C General Biology II ..... 4 credits
Foreign Language ..... various credits


## ASSOCIATE IN SCIENCE DEGREE PROGRAMS

Accounting Technology
Degree Option: Hightech Computer Accounting
Agricultural - Business Technology
Degree Options - Anmal Science Ctrus Landscape
Air Conditioning, Refrigeration $\&$ Heating Systems Technology
Architectural Design \& Construction Technology
Automotive Service Technology
Building Construction Technology
Business Administration and Management
Degree Option - Scuba Industry Administration and Supervision
Child Development and Education Degree Option - Teacher Alde
Computer Programining and Analysis
Criminal lustice Techolosy
Degree Option - Corrections
Dental Hygiene
Dental Laboratory Technology and Management
Drafting and Design Technology
Degree Options Civil Drafting Mechanical Drafting Commercial Art

Electronics Engineering Technology Degree Option - Computer Electronies
Emergency Medical Services Technology
Fashion Marketing Management
Financial Services
Degree Options - Banking Savings \& Loan
Fre Science Technology
Health Care Management
Human Services Technolosy
Interior Design Technology
Legal Assistant
Marketing Management
Medical Laboratory Technology
Nursing - R.N.
Office Systems Technology
Degree Options - Medical Records Legal Secretartal Medical
Secretarial
Word
Processing
Office
Management
Radiologic Technology
Restaurant Management
Degree Option - Food Service

## ASSOCIATE IN SCIENCE DEGREE

## College Programs

The Associate in Science Degree program is designed for the high school graduate who wishes to develop a technical skill and enter the world of work after completing a two-year college degree. Practically every type of industry in America is looking for technicians who have developed skills beyond high school.

The Associate in Science Degree requires the successful completion of 20-23 semester hours in the areas of English, Science/Math, Physical Education, Humanities, Reading, and Social Science, plus at least 41-44 semester hours in the specific technical field of the student's choice.

Indian River Community College offers the Associate in Science Degree in the following technical areas:

Accounting Technology
Degree Option: High-Tech
Computer Accounting
Agricultural - Business Technology
Degree Options - Animal Science Citrus Landscape
Air Conditioning, Refrigeration \& Heating Systems Technology
Architectural Design \&
Construction Technology
Automotive Service Technology
Building Construction Technology
Business Administration and Management
Degree Option - Scuba Industry
Administration and Supervision
Child Development and Education
Degree Option - Teacher Aide
Computer Programming and Analysis
Criminal Justice Technology Degree Option - Corrections
Dental Hygiene
Dental Laboratory Technology and Management
Drafting and Design Technology Degree Options - Civil Drafting Mechanical Drafting Commercial Art

Electronics Engineering Technology
Degree Option - Computer Electronics
Emergency Medical Services Technology
Fashion Marketing Management
Financial Services
Degree Options - Banking Savings \& Loan
Fire Science Technology
Health Care Management
Human Services Technology
Interior Design Technology
Legal Assistant
Marketing Management
Medical Laboratory Technology
Nursing - R.N.
Office Systems Technology
Degree Options - Medical Records Legal Secretarial Medical Secretarial Word Processing
Office
Management
Radiologic Technology
Restaurant Management
Degree Option - Food Service

## ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS

To meet the requirements of the Associate in Science Degree, the student must complete the required courses for graduation, 20-23 semester hours as listed below, plus at least 41-44 semester hours including those courses indicated as requirements or their equivalent in specific technical fields. A minimum of 64 semester hours must be earned for the A.S. Degree. In addition, the student must:

1. Submit the required placement scores upon acceptance to IRCC.
2. Achieve a grade point average of not less than 2.0 in all courses attempted (including transfer hours) and in all courses taken at Indian River Community College.
3. Meet the Communication and Computation Skills Requirement and successfully complete the College Level Academic Skills Test if intending to transfer to an upper division university. Consult Educational Services and see page 36 . It is the responsibility of the student, not the College, to check his or her records to be sure that all of the above graduation requirements are met. An Educational Services Counselor will assist at any time with course selections and in determining status toward meeting the graduation requirements.
4. Take the last 20 semester hours at this college unless written permission is granted by the Vice President of Academic Affairs.
5. Apply for graduation at the beginning of the semester or term in which the student plans to graduate. This application must include the payment of the graduation fee. See pages 8-13 for deadline dates.
6. Participate in all phases of graduation if graduating Spring Semester. (Those graduating in absentia will not receive the diploma.) Graduates from other semesters are welcome to take part in the Spring Commencement Ceremony.
7. Be recommended by the faculty to the President of the College for the confirmation of the degree.
8. (a) No Florida high school graduate shall be admitted to the Associate in Science degree program if he has not successfully completed the requirements set forth in S.232.246 or unless he has been awarded a general education development diploma, provided the examination completed for such diploma was in the English language.
(b) Nonresident students may be admitted to the community college upon such terms as the college may be established. However, effective August 1, 1987, such terms for non-residents admitted to the Associate in Science degree program shall include, but not be limited to: completion of a secondary school curriculum which includes 4 years of English and 3 years each of mathematics, science and social studies, or a high school equivalency diploma; however, in lieu of the English requirement, a foreign student may use 4 years of instruction in his native language or another language which was the language of instruction in the secondary school attended.

## SPECIAL REQUIREMENTS

In addition to specific prerequisites, applicants to the seven Health Education programs at IRCC are subject to special admission requirements and dates. Therefore, it is imperative that applicants who wish to enroll in the Associate Degree Nursing, Dental Assisting, Dental Lab Technology, Dental Hygiene, EMT/ Paramedic, Medical Lab Technology, and Radiologic Technology Programs consult with an IRCC counselor well before the term of enrollment. Special application deadlines are noted in the Academic Calendar near the front of this catalog. Additional General Education credits may be required for specialized programs.

## GENERAL EDUCATION REQUIRED COURSES FOR GRADUATION (A.S. DEGREE)

ENGLISH
6 semester hours
The English requirements may be met through completion of two courses from the following: ENC 1101, ENC 1102, COM 1130, ENC 2210, ENC 2200. Refer to specific degree requirements.
SCIENCE - MATHEMATICS
6 semester hours
The Mathematics-Science requirement may be met by completion of any of the following courses: MAC 1102, MGF 1113, MAC 1104, MGF 2202, MAC 1114, MAC 1135, MAC 2311, MAC 2312, MAS 2103, MAC 2313, STA 2014 or in biological or physical science courses.
PHYSICAL EDUCATION
2 semester hours
PEM 1101 and at least a one semester hour course in swimming will satisfy this requirement. The swimming requirement may be met by taking PEN 1121, PEN 1122, PEN 1136, or PEN 1113. Students who cannot participate in regular Physical Education classes because of medical limitations will have their participation modified accordingly. Waived credits must be made up. The Physical Education requirement is met through regular class participation. The Physical Education curriculum will be required of all students with the exception of those who have medical exemptions, those who are veterans, or those who are 26 years of age or older at the time of entrance.
HUMANITIES - SOCIAL SCIENCE
6 semester hours
The Humanities - Social Science requirement may be met by taking six semester hours from the following: EUH 1000, EUH 1001, ECO 2000, ECO 2013, ECO 2023, PSY 2012, PHI 1103, PHI 2100, PHI 2660, ANT 2410, POS 1041, POS 2112, HUM 1541, HUM 1533, SYG 2000, SYG 2010, SYG 2420.
READING Dependent on Placement Scores
Depending on the student's ACT or SAT score, a series of Reading classes may be required.
The above requirements must be met in order to earn the Associate in Science Degree. Forty-one to forty-four (41-44) additional hours must be taken in specific technical fields to complete the degree program. Technical course descriptions will be found in the Description of Courses section of this catalog. Also refer to Program Guidelines on the following pages, which state specific program requirements.

The student should consult with the Educational Services Division in the selection of the electives required for each special area of interest. The Associate in Science Degree program is a terminal program designed to provide the basic knowledge and manipulative skills required for the student to enter his or her own business or as an employee in industry.

## PROGRAM GUIDES

To earn the Associate in Science Degree, certain general education requirements and elective courses must be satisfactorily completed. It is in the elective area that the student must select courses which will best prepare him or her for the chosen career field. The following programs meet the requirements for the Associate in Science Degree and include the electives generally recommended for job preparedness.

In planning a program of study at Indian River Community College, the student is urged to consult frequently with an Educational Services Counselor; further, the student is advised to review the overall requirements of his or her chosen field of study before making selections from the courses acceptable for meeting general education requirements. The reason for this is that certain general education courses may be required for his or her particular field.

The suggested courses within programs listed below do not necessarily have to be taken in the order presented. In some cases, courses are not offered each semester, and the student is advised to plan ahead and to enroll in courses when they are available.

Final responsibility for choice of program and courses selected rests with the student.
ACCOUNTING TECHNOLOGY(WITH HIGH-TECH COMPUTER ACCOUNTING OPTION)
REQUIRED PROGRAM:English6 credits
ENC 1101 and ENC 2200
Math ..... 6 credits
MAC 1102 and STA 2014
Social Sciences 6 credits
ECO 2013 and PSY 2012
Physical Education2 creditsPEM 1101 and SwimmingReadingDependent on placement scores
CORE COURSES FOR MAJOR FIELD - ACCOUNTING OPTION (REQUIRED)

| ACG | 2001 | Principles of Accounting I ............................. 3 credits |
| :---: | :---: | :---: |
| ACG | 2011 | Principles of Accounting II ............................. 3 credits |
| ACG | 2450 | Microcomputers in Accounting I ....................... 1 credit |
| ACG | 2460 | Microcomputers in Accounting II ...................... 1 credit |

FIN 2001 Managerial Finance 3 credits
ECO 2023 Principles of Economics II ..... 3 credits
BUL 2111 Business Law I ..... 3 credits
And select two of the following:
ACG 2360 Cost Accounting ..... 3 credits
TAX 2000 Tax Accounting ..... 3 credits
ACG 2100 Intermediate Accounting I ..... 3 credits
Select one of the following:
CGS 1060 College Computing ..... 3 credits
CGS 1530 Lotus ..... 3 credits
CGS 1000 Introduction to Computer Usage 3 credits
COURSES FOR MAJOR FIELD - ACCOUNTING OPTION (Select 18 credits)
ACG 2110 Intermediate Accounting II 3 credits
GEB 1011 Introduction to Business ..... 3 credits
MAN 2021 Principles of Management ..... 3 credits
MAR 2011 Principles of Marketing ..... 3 credits
BUL 2112 Business Law II ..... 3 credits
MAN 2100 Human Relations in Business ..... 3 credits
CIS 1000 Introduction to Data Processing ..... 3 credits
COP 2120 COBOL Programming 1 ..... 3 credits
COP 2121 COBOL Programming II ..... 3 credits
COP 1170 BASIC Programming I ..... 3 credits
COP 1171 BASIC Programming II ..... 3 credits
ENC 2210 Technical Communications ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
Other courses offered through Accounting, maximum 3 credits.
CORE COURSES FOR MAJOR FIELD - HIGH TECH COMPUTER ACCOUNTING OPTION (REQUIRED)
ACG 2001 Principles of Accounting 1 ..... 3 credits
ACG 2011 Principles of Accounting II ..... 3 credits
COP 2120 COBOL Programming I ..... 3 credits
COP 2121 COBOL Programming II ..... 3 credits
COP 1170 BASIC Programming I ..... 3 credits
COP 1171 BASIC Programming II ..... 3 credits
CIS 1000 Introduction to Data Processing ..... 3 credits
ACG 2450 Micro Computers in Accounting I ..... 1 credit
ACG 2460 Micro Computers in Accounting II ..... 1 credit
And select two of the following:
ACG 2360 Cost Accounting ..... 3 credits
TAX 2000 Tax Accounting ..... 3 credits
ACG 2100 Intermediate Accounting I ..... 3 credits
Other courses offered through Accounting, maximum 3 credits.
COURSES FOR MAJOR FIELD - HIGH-TECH COMPUTER ACCOUNTING OPTION (Select 15 credits)
ACG 2110 Intermediate Accounting II 3 credits
ACG 2460 Micro Computers in Accounting II ..... 1 credit
GEB 1011 Introduction to Business ..... 3 credits
MAN 2021 Principles of Management ..... 3 credits
MAR 2011 Principles of Marketing ..... 3 credits
BUL 2111 Business Law I ..... 3 credits
BUL 2112 Business Law II ..... 3 credits
FIN 2001 Managerial Finance ..... 3 credits
ECO 2023 Principles of Economics II ..... 3 credits
ENC 2210 Technical Communications ..... 3 credits
SPC 1010 Intro. to Speech Communications ..... 3 credits
MAN 2100 Human Relations in Business ..... 3 credits
Other courses offered through Accounting, maximum of 3 credits.
AGRICULTURAL BUSINESS TECHNOLOGY
REQUIRED PROGRAM:
English ..... 6 credits
ENC 1101 and select from ENC 2200, ENC 1102, COM 1130, ENC 2210
Science/Math6 credits
Select from Biology, Chemistry, Geology, Physics, Physical Science, MTB1321, MGF 1113, MAC 1102, MAC 1104, MAC 1114, or MGF 2202
Physical Education2 credits
PEM 1101 and Swimming
Humanities-Social Science6 credits
ECO 2000 and select from ECO 2013, ANT 2410, EUH 1000, EUH 1001,SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533, PSY 2012, PHI1103, PHI 2100, POS 1041, POS 2112
Reading Dependent on Placement Scores
Business Core-Select from the following - 15 credits (Required)
GEB 1011 Introduction to Business ..... 3 credits
QMB 1001 Mathematics of Business ..... 3 credits
APA 1211 Office AccountingBUL 2111 Business Law 13 credits
MAR 2011 Principles of Marketing ..... 3 credits
MAN 2021 Principles of Management ..... 3 credits
Computer Course 3 credits
COURSES FOR MAJOR FIELD (REQUIRED):
Animal Science Option:
ANS 1003 Introduction to Animal Science ..... 3 credits
ANS 1401 Animal Nutrition ..... 3 credits
VES 1005 Animal Diseases and PestsASG 1253 Livestock Selection .................................................. 3 credits
ANS 1310 Animal Reproduction ..... 3 credits
ANS 1211 Farm and Ranch Management ..... 3 credits
Landscape Option:
HOS 1010 Fundamentals of Horticulture 3 credits
SOS 2102 Soils and Fertilizers 3 credits
PMA 2002 Insects and Diseases of Plants ..... 3 credits
ORH 2841 Landscape Installation 3 credits
ORH 2851 Landscape Design and Maintenance 3 credits
AEB 2104 Principles of Agricultural Economics ..... 4 credits
Citrus Option:
HOS 1010 Fundamentals of Horticulture 3 credits
SOS 2102 Soils and Fertilizers 3 credits
FRC 2211 Citrus Culture I ..... 3 credits
FRC 2220 Citrus Culture II ..... 3 credits
IPM 2671 Insects and Diseases of Citrus 3 credits
AEB 2104 Principles of Agricultural Economics ..... 4 credits
COURSES FOR MAJOR FIELD (Select 10-11 credits):
Select 10-11 additional credits from class offerings in the Agriculture field
AIR CONDITIONING, HEATING AND REFRIGERATION TECHNOLOGY
REQUIRED PROGRAM:
General Education 15 credits
Humanities or Fine Arts ..... 3 credits
Social or Behavioral Sciences ..... 6 credits
Natural Sciences or Mathematics ..... 6 credits
Business, Technical or Industrial ..... 16 credits
Select from the following:Drafting for the Air Conditioning Trades
Industrial Seminar
Business Mathematics
Combination Welding I
Auto Air Conditioning
Supervisory Personnel Management I
Entrepreneurship
Energy and Building Design
Reading
Dependent on Placement Scores
CORE COURSES FOR MAJOR FIELD (REQUIRED) ..... 33 credits
Recommended 1st Term
ACR 1000 Basic Refrigeration 3 credits
*ACR 1100 Basic Electricity I ..... 3 credits
*ACR 1101 Applied Electricity I ..... 3 credits
Recommended 2nd Term
ACR 1741 Components of Refrigeration ..... 3 credits
ACR 1102 Applied Electricity II ..... 3 credits
ACR 1103 Basic Electricity II ..... 3 credits
Courses for major field (select 12 credits)
ACR 2062 Heating and Cooling Load Calculation ..... 3 credits
ACR 2421 Duct Systems Design 3 credits
ACR 1600 Heat ..... 3 credits
ACR 1601 Heat Pump Systems ..... 3 credits
ACR 2071 Air Conditioning and
Heating Service Management 3 credits
ACR 2931 Air Conditioning - Special various credits
ACR 2932 Air Conditioning - Special various credits
ACR 2933 Air Conditioning - Special various credits
ACR 2934 Air Conditioning - Special various credits
ARCHITECTURAL DESIGN \& CONSTRUCTION TECHNOLOGY REQUIRED PROGRAM:
English 6 credits
ENC 1101 and select from ENC 2210, ENC 2200, ENC 1102, COM 1130 Science/Math. 6 credits
PSC 1311, PSC 1341 or any math class Physical Education 2 credits
Humanities - Social Science ..... 6 credits
Select from ANT 2410, EUH 1000, EUH 1001, ECO 2000, ECO 2013, ECO 2023, HUM 2511, PSY 2012, PHI 1103, PHI 2100, POS 1041, POS 2112, SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (Required)
EGS 1110C Engineering Graphics 3 credits
BCN 1250C Architectural Drafting Principles ..... 3 credits
MAC 1102 Basic College AlgebraBCN 1210 Materials of ConstructionBCN 2251C Architectural Drafting-Residential3 credits
BCN 2253C Architectural Drafting-Commercial ..... 3 credits
ETD 2820C Perspective Drafting ..... 3 credits
ETM 1111 Energy and Building Design ..... 2 credits
ETD 1310 CAD Familiarization 2 credits
COURSES FOR MAJOR FIELD (Select 22 credits)
BCN 1760 Building Codes, Ordinances and Specifications 3 credits
ETD 2320C Computer Aided Drafting ..... 4 credits
ETD 2840 Pictorial Drafting ..... 3 credits
SUR 1100C Elementary Surveying Mathematics ..... 3 credits
HOS 2025 Home Landscape \& Management ..... 3.credits
BCN 2616 Construction Estimating 3 credits
ETD 1544 Civil Drafting 1 3 credits
HHD 1234 Design of Interior Space ..... 3 credits
HHD 1611 Survey of Architectural and Furniture Style ..... 3 credits
ETD 2538 CAD—Architectural 4 credits
BCN 2616 Construction Estimating ..... 3 credits
CGS 1560 Disk Operating System I ..... 1 credit
CGS 1561 Disk Operating System II ..... 1 credit
Other courses offered through Graphics Design Technology, maximum of3 credits.
AUTOMOTIVE SERVICE TECHNOLOGY
REQUIRED PROGRAM:
General education courses 15 credits
A minimum of three credits in each of the following areas: the humanities, English or fine arts; the social or behavioral sciences; the natural sciences or mathematics.
Business, Technical or Industrial 14 credits
Select from: Introduction to Business, Business Mathematics, Office Accounting, Personnel Management, Graphics, Mid-Management Seminar or other elective designed to support and expand elective program.
Reading Dependent on Placement Scores
COURSES FOR MAJOR FIELD: (Select 35 credits)
AER 1000 Introduction to Automotive Technology . ..... 3 credits
Automotive Service and Minor Repair. AER 1001 Automotive Service and Minor Repair ..... 4 credits
AER 1100 Intro to Automotive Electrical Systems ..... 4 credits
AER 1151 Engine Tune-up and Emissions Controls ..... 4 credits
AER 2101 Advanced Automotive Electrical Systems ..... 4 credits
AER 2109 Computer Controls Fuel Injection ..... 4 credits
AER 2113 Automotive Engine Overhaul ..... 4 credits
AER 2136 Automatic Transmissions ..... 4 credits
AER 2138 Automotive Power Trains ..... 4 credits
AER 2161 Management of Auto Service Function ..... 3 credits
AER 2175 Auto Air Conditioning and Heating ..... 4 credits
AER 2931 Automotive Technology (Special Topics) ..... various
AER 2932 Automotive Technology (Special Topics) ..... various
AER 2933 Automotive Technology (Special Topics) ..... various
AER 2934 Automotive Technology (Special Topics) ..... various
AER 1270 Automotive Transaxles ..... 4 credits
AER 1450 Suspensions, Steering, and Alignment ..... 4 credits
AER 1410 Automotive Brake Systems ..... 4 credits
AER 1125 Preventive Maintenance Systems ..... 1 credit
AER 1263 Auto Body I ..... 4 credits
AER 1264 Auto Body II ..... 4 credits
DIM 1520 Air Brakes ..... 1 credit
AER 1771 Intro to Diesel Engines. ..... 4 creditsAER 1772 Diesel Engines Troubleshootingand Repair4 credits
DIM 1121 Intro to Diesel Fuel Systems ..... 1 credit
DIM 1131 Diesel Distributor and In-lineFuel Systems1 credit
DIM 1133 Cummins and Detroit Diesel Fuel Systems ..... 1 credit
AER 2881 Auto/Diesel Supervised Work
Experience I ..... 4 credits
AER 2882 Auto/Diesel Supervised Work Experience II ..... 4 credits
AER 2883 Auto/Diesel Supervised Work Experience III ..... 4 credits
AER 2884 Auto/Diesel Supervised WorkExperience IV4 credits
AER 2531 GM Computer Contr. Systems ..... 1 credit
AER 2532 Ford Computer Contr. Systems ..... 1 credit
AER 2533 Chrysler Comp. Contr. Systems ..... 1 credit
AER 2534 Bosch Computer Contr. Systems ..... 1 credit
BUILDING CONSTRUCTION TECHNOLOGY
REQUIRED PROGRAM:
English 6 credits
ENC 1101 and ENC 2200 or ENC 2210
Math 6 credits
MTB 1321 and MTB 1322
Physical Education ..... 2 credits
PEM 1101 and Swimming
Humanities - Social Science ..... 6 credits
ECO 2000 or ECO 2013 and Select from ANT 2410, EUH 1000, EUH 1001,ECO 2023, HUM 1541, HUM 1533, HUM 2511, PSY 2012, PHI 1103,PHI2100, POS 1041, POS 2112, SYG 2000, SYG 2010, SYG 2420
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (Required)
BCN 1210 Materials of Construction ..... 3 credits
BCN 1272 Plans Interpretation I ..... 3 credits
BCN 1701 Construction Office Practices ..... 3 credits
BCN 1721 Construction Accounting and Cost Control ..... 3 credits
BCN 1765 Contract Codes and Specifications ..... 3 credits
BCN 2616 Construction Estimating 3 credits
CORE COURSES FOR MAJOR FIELD (Select maximum of 26 credits)
BCN 1760 Building Codes, Ordinances and Specifications ..... 3 credits
BCN 2213 Concrete Construction Methods and Materials . ..... 3 credits
BCN 2211 Commercial Construction Materials ..... 3 credits
BCN 2275 Plans Interpretation II ..... 3 credits
BCN 2561 Mechanical and Electrical Systems ..... 3 credits
BCN 2614 Estimating and Bidding ..... 3 credits
BCN 2703 Field Management ..... 3 credits
BCN 2705 Office Management ..... 3 credits
ETM 1111 Energy and Building Design 2 credits
Other courses offered through Building Construction Technology maximum of 3 credits
BUSINESS ADMINISTRATION \& MANAGEMENT
REQUIRED PROGRAM:
English ..... 6 creditsENC 1101 and selected from ENC 2200, ENC 1102, COM 1130, ENC 2210Science/Math6 credits1321, MAC 1102, MAC 1104, MAC 1114, MGF 2202, or OCE 2001.
PEM 1101 and Swimming 2 credits6 credits
ECO 2000 or ECO 2013 and select from ECO 2023, PSY 2012, SYG 2000,SYG 2010
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (Required)
GEB 1011 Introduction to Business 3 credits
BUL 2111 Business Law 1 ..... 3 credits
MAN 2021 Principles of Management ..... 3 credits
MAR 2011 Principles of Marketing ..... 3 credits
MAN 2100 Human Relations in Business ..... 3 credits
or
MNA 2345 Supervision I 3 credits
MKA 1303 Mid-Management Seminar I ..... 4 credits
QMB 1001 Mathematics for Business ..... 3 credits
APA 1121 Office Accounting 3 credits
or
ACG 2001 Principles of Accounting I ..... 3 credits
CIS 1000 Introduction to Data Processing ..... 3 credits
COURSES FOR MAJOR FIELD (Select 16 Credits)
MNA 1801 Entrepreneurship 3 credits
MAR 2151 Principles of Retailing ..... 3 credits
MAR 2101 Salesmanship ..... 3 credits
ADV 2201 Advertising and Sales Promotion ..... 3 credits
MAN 2300 Personnel Management ..... 3 credits
MKA 2103 Principles of
Merchandise Display ..... 3 credits
BUL 2112 Business Law II ..... 3 credits
MKA 1313 Mid-Management Seminar II ..... 4 credits
MKA 2323 Mid-Management Seminar III ..... 4 credits
MKA 2333 Mid-Management Seminar IV ..... 4 credits
CGS 1000 Introduction to Computer Usage ..... 3 credits
CGS 1060 College Computing ..... 3 credits
Other courses offered through Business Administration and MarketingManagement, maximum of 3 credits.
SCUBA INDUSTRY ADMINISTRATION AND SUPERVISION DEGREE OPTION
REQUIRED PROGRAM:
English 6 credits
ENC 1101 and ENC 2210
Science ..... 7 credits
OCB 2001 Oceanography ..... 3 credits
OCB 2010C Marine Biology ..... 4 credits
Physical Education ..... 2 creditsPEN 1136 Basic Scuba
Humanities/Social Science6 credits
ECO 2000 and select from ECO 2013, HUM 1541, HUM 1533, PSY 2012,PHI 1103, SYG 2420, POS 1041, POS 2112, SYG 2010
Reading.Dependent on Placement Scores
BUSINESS COURSES FOR DEGREE PROGRAM(Required) 24 semester hours
GEB 1011 Intro to Business 3 credits
QMB 1001 Mathematics for Business ..... 3 credits
BUL 2111 Business Law ..... 3 credits
MAR 2141 Principles of Retailing ..... 3 credits
MAR 2101 Salesmanship ..... 3 credits
MAR 2011 Principles of Marketing ..... 3 credits
MAN 2021 Principles of Management ..... 3 credits
MKA 1303 Mid-Management Seminar 4 credits
CORE COURSES FOR MAJOR FIELD
(Required)
PEQ 2140 Medic First Aid Program ..... 1 credit
PEN 1138 Advanced Scuba/Rescue ..... 3 credits
PEQ 1137 Dive Master ..... 3 credits
PEQ 1131 Equipment Specialist ..... 2 credits
PGY 1244 Underwater Photography ..... 2 credits
PEQ 1139 Underwater Collecting ..... 1 credit
PEQ 1134 Drift Diving ..... 1 credit
PEQ 1135 Night Diving ..... 1 credit
PEN 2114 Advanced Life Saving ..... 2 credits
CHILD DEVELOPMENT AND EDUCATION (WITH TEACHER AIDE OPTION)
REQUIRED PROGRAM:
English ..... 6 creditsENC 1101 and select from ENC 1102, COM 1130, ENC 2210
Science/Math6 creditsSelect from Biology, Chemistry, Geology, Physics, Physical Science. MTB1321, MGF 1113, MAC 1102, MAC 1104, MAC 1114, MGF 2202, orOCE 2001
Physical Education ..... 2 credits
PEM 1101 and Swimming
Humanities - Social Science ..... 6 credits
PSY 2012 and select from ECO 2000, ECO 2013, ANT 2410, EUH 1000,EUH 1001, HUM 2511, PHI 1103, PHI 2100, POS 1041, POS 2112, SYG2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED) CHILD DEVELOPMENT AND EDUCATION OPTION
CHD 1220 Introduction to Child Development 3 credits
EEC 1001 Principles of Early Childhood Curriculum ..... 3 credits
CHD 1332 Creative Experiences for the Young ChildEEC 1260 Program Designs for Young Children3 credits
EDF 1031 Social Elements in Early Childhood Education ..... 3 credits
EEC 1946 Seminar in Early Childhood Education I ..... 4 credits
EEC 1947 Seminar in Early Childhood Education II 4 credits
EEC 2948 Seminar in Early Childhood Education III ..... 4 credits
EEC 2949 Seminar in Early Childhood Education IV ..... 4 credits
HUN 1410 Basic Childhood Nutrition ..... 3 credits
SLS 1421 Personal and Career Development ..... 3 credits
HHD 2001 Creative Art and Design Techniques ..... 3 credits
COURSES FOR MAJOR FIELD (Select 4 credits)
EDF 2005 Introduction to Education ..... 3 credits
SPC 1050 Speech Improvement ..... 3 credits
or
SPC 1010 Intro. to Speech Communications 3 credits
PHI 1103 Critical and Creative Thinking 3 credits
CORE COURSES FOR MAJOR FIELD (REQUIRED) TEACHER AIDE OPTION
CHD 1220 Introduction to Child Development ..... 3 credits
OST 1100 Elementary Typewriting ..... 3 credits
EEC 1946 Seminar in Early Childhood Education IEEC 1947 Seminar in Early Childhood Education II ........... 4 credits
EEC 2948 Seminar in Early Childhood Education III ..... 4 credits
EEC 2949 Seminar in Early Childhood Education IV ..... 4 credits
HUN 1410 Basic Childhood Nutrition ..... 3 credits
CHD 1332 Creative Experiences for the Young Child ..... 3 credits
HHD 2001 Creative Art and Design Techniques ..... 3 credits
SLS 1421 Personal and Career Development ..... 3 credits
EDF 1031 Social Elements in Early Childhood Education ..... 3 credits
EEC 1260 Program Designs for Young Children ..... 3 credits
CORE COURSES FOR MAJOR FIELD (Select 4 credits)
EDF 2005 Introduction to Education 3 credits
OST 2323 Reprographics ..... 3 credits
OST 1110 Intermediate Typewriting ..... 3 credits
FSS 2202C Food for the Family ..... 3 credits
COMPUTER PROGRAMMING AND ANALYSIS
REQUIRED PROGRAM:English.6-7 creditsENC 1101 and select from ENC 2200, ENC 1102 ENC 2210
Science/Math 6 creditsSelect from Biology, Chemistry, Geology, Physics, Physical Science, MAC1102, MAC 1104, MAC 1114, MGF 2202, or OCE 2001Physical Education2 creditsPEM 1101 and SwimmingHumanities - Social Science.6 credits
ECO 2000 or ECO 2013 and select from ANT 2410, EUH 1000, EUH 1001,HUM 2511, SYG 2000, SYG 2010, SYG 2420, PSY 2012, HUM 1541, HUM1533
Reading Dependent on placement scores

## *COURSES FOR MAJOR FIELD:

| COP | 2000 | Introduction to Computer Programming ........... 3 credits |
| :---: | :---: | :---: |
| CIS | 1000 | Introduction to Data Processing....................... 3 credits |
| COP | 1170 | BASIC Programming I.................................... 3 credit |
| COP | 2120 | COBOL Programming I .................................. 3 credit |
| CIS | 2321 | Computer Systems Design .............................. 3 credits |
| CGS | 1561 | Disk Operating System II ................................. 1 credi |
| CDA | 2500 | Data Communications ..................................... 1 credit |
| *CGS | 1530 | LOTUS - Integrated Software .......................... 3 credits |
| COP | 2701 | Data Base Programming ................................ 3 cred |
| ACG | 2001 | Principles of Accounting I ............................. 3 credit |
| ACG | 2450 | Microcomputers in Accounting ......................... 1 credit |
| COP | 2121 | COBOL Programming II ................................ 3 credits |

Three of the following:..............................................................total of 9 credits
${ }^{* *}$ COP 2110 Fortran
**CGS $2420 \quad$ Computer Programming for Engineers
COP 2400 ASSEMBLER Programming 1
CGS 2423 C Programming I
COP 1171 BASIC Programming II
Electives: (Select minimum of 5)
ACG 2011 Principles of Accounting II ................................. 3 credits
STA 2014 Elementary Statistics ............................................ 3 credits
Any programming course not taken as a requirement
***Any other course given through Computer Science

* Students should not take CGS 1510 Electronic Spreadsheet after having taken CGS 1530 LOTUS.
** Credit may not be given for both COP 2110 and CGS 2420.
*** Credit may not be given for both CGS 2100 Computer Applications and either CGS 1510 or COP 1700.


## CRIMINAL JUSTICE TECHNOLOGY (with Corrections Option)

## REQUIRED PROGRAM:

English................................................................................................ 6 credits
ENC 1101, ENC 1102, ENC 2210
Science/Math 6 credits
Select from Biology, Chemistry, Geology, Physics, Physical Science, MTB 1321, MAC 1102, MAC 1104, MAC 1114, MGF 2202, or OCE 2001
Physical Education 2 credits
Physical Fitness and Swimming
Humanities-Social Science
6 credits
Select from ANT 2410, EUH 1000, EUH 1001, ECO 2013, ECO 2023, HUM 2511, PSY 2012, PHI 1103, PHI 2100, POS 1041, POS 2112, SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading .......................................................... Dependent on placement scores
COURSES FOR MAJOR FIELD - Criminal Justice Option (Select 44 credits)
CCJ 2020 Introduction to Criminal Justice 3 credits
CCJ 2220 Criminal Law ..... 3 credits
CCJ 2400 Police Organization and Administration ..... 3 credits
CJT 2100 Criminal Investigation ..... 3 credits
CJD 1000 Intro to Police Procedures ..... 3 credits
CCJ 2231 Criminal Procedure. ..... 3 credits
CCJ 2200 Introduction to Courts ..... 3 credits
CCJ 2250 Constitutional Law ..... 3 credits
CCJ 2230 Rules of Evidence ..... 3 credits
CCJ 2300 Introduction to Corrections ..... 3 credits
CCJ 2330 Probation, Pardons and Parole ..... 3 credits
CJT 2110 Introduction to Criminalistics. ..... 3 credits
CCJ 2500 The Juvenile and the Law ..... 3 credits
SYG 2010 Social Problems ..... 3 credits
SYG 2320 Deviant Behavior ..... 3 credits
SYG 2323 Criminal and Delinquent Behavior ..... 3 credits
POS 1041 American Government ..... 3 credits
ECO 2013 Principles of Economics I ..... 3 credits
CGS 1000 Introduction to Computer Usage 3 credits
*Optional ElectivesMaximum 20 credits
COURSES FOR MAJOR FIELD - CRIMINAL CORRECTIONS OPTION (Select 44 credits)
CCJ 2020 Introduction to Criminal Justice ..... 3 credits
CCJ 2220 Criminal Law ..... 3 credits
CCJ 2250 Constitutional Law ..... 3 credits
CCJ 2300 Introduction to Corrections ..... 3 credits
CCJ 2281 Constitutional Rights of the Incarcerated ..... 3 creditsCCJ 2440 Correctional Institution Administrationand Organization3 credits
CCJ 2200 Introduction to Courts ..... 3 credits
CCJ 2330 Probation, Pardons and Parole ..... 3 credits
CCJ 2231 Criminal Procedure ..... 3 credits
CCJ 2500 The Juvenile and the Law ..... 3 credits
CJT 2100 Criminal Investigation ..... 3 credits
SYG 2010 Social Problems ..... 3 credits
SYG 2320 Deviant Behavior ..... 3 credits
SYG 2323 Criminal and Delinquent Behavior ..... 3 credits
CGS 1000 Introduction to Computer Usage ..... 3 credits
*Optional Electives

$\qquad$
Maximum 20 credits
*Certified Officers may use Advanced Training Courses offered for credittowards courses for Major Field. Recruit Training is offered for VocationalCredit. Students who have earned a minimum of 21 credit hours at IRCCtoward the A.S. Degree will be eligible to articulate an additional ninecredit hours for the completion of the CJSTC Minimum Standards BasicLaw Enforcement or Corrections Training.

## DENTAL HYGIENE <br> (SELECTIVE ADMISSION)

REQUIRED PROGRAM:English.9 credits
ENC 1101, ENC 1102, SPC 1010
Science. ..... 16 credits
APB 2203C, APB 2204C, MCB 2010, CHM 1033, DIE 2201
Physical Education 2 creditsPEM 1101 and SwimmingHumanities - Social Science.6 credits
PSY 2012 and SYG 2000
Reading
$\qquad$ Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
DEH 1090 Introduction to Clinical Dental Hygiene. 3 credits
DES 1000C Head, Neck and Dental Anatomy ..... 3 credits
or
DTE 1010 Oral Anatomy 2 credits
and
DTE 1020 Tooth Physiology and Anatomy 2 creditsand
DTE 1020L Tooth Physiology and Anatomy Lab 3 credits
DES 1100C Elements of Dental Materials 3 credits
DES 1200 Dental Radiology ..... 2 credits
DES 1200L Dental Radiology Lab ..... 1 credit
DES 1030 Oral Embryology and Histology ..... 2 credits
DEH 2702L Community Dental Health ..... 3 credits
DEH 2602 Periodontology ..... 2 credits
DES 1050 Pharmacology ..... 2 credits
DES 2044 General and Oral Pathology ..... 2 credits
DEH 2530L Expanded Functions for Dental Hygienists ..... 1 credit
DEA 1200 Dental Office Management ..... 3 credits
DEH 1820 Health Office Emergencies ..... 3 credits
DES 2051 Pain Control and Anesthesia ..... 1 credit
DEH 1800C Clinical Dental Hygiene I ..... 4 credits
DEH 1802C Clinical Dental Hygiene II ..... 4 credits
DEH 1804C Clinical Dental Hygiene III ..... 3 credits
DEH 2806C Clinical Dental Hygiene IV. ..... 6 credits
DEH 2808C Clinical Dental Hygiene V ..... 7 credits
REQUIRED COURSES FOR ADMISSION TO THE DENTAL HYGIENE PROGRAM:
APB 1150 Fundamentals of Biology 1 3 credits
or
BSC 1010C General Biology I ..... 4 credits
and
CHM 1015 Introduction to Chemistry ..... 3 credits
or
CHM 1045C General Chemistry I 4 credits
DENTAL LABORATORY TECHNOLOGY AND MANAGEMENT (SELECTIVE ADMISSION)
REQUIRED PROGRAM:
English ..... 6 credits
ENC 1101 and select from ENC 1102 or ENC 2210
Science 6 credits
CHM 1015, PHY 1020
Physical Education 2 credits
PEM 1101 and Swimming
Humanities - Social Science. 6 credits
Select from: POS 1041, SYG 2000, ECO 2000, ECO 2013, EUH 1000, AMH2010, AMH 2020, ANT 2410, PHI 2100, GEA 2002, PSY 2012, HUM 2511,POS 2112, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD:
DTE 1000 Orientation and Terminology ..... 1 credit
DTE 1010 Oral Anatomy 2 credits
DTE 1020 Tooth Physiology and Anatomy Theory ..... 2 credits
DTE 1020L Tooth Physiology and Anatomy Lab ..... 3 credits
DTE 1103 Complete Dentures Theory ..... 2 credits
DTE 1103L Complete Dentures Lab ..... 3 credits
DTE 2107 Partial Dentures Theory ..... 2 credits
DTE 2107L Partial Dentures Lab ..... 3 credits
DES 1140 Dental Materials - I ..... 2 credits
DTE 1132 Orthodontic and Pedodontic Theory ..... 1 credit
DTE 1132L Orthodontic and Pedodontic Lab ..... 2 credits
DTE 2030 Occlusal Topography Theory ..... 1 credit
DTE 2030L Occlusal Topography Lab ..... 2 credits
DES 2141 Dental Materials - II ..... 2 credits
DTE 2141 Ceramics Theory ..... 2 credits
DTE 2141L Ceramics Lab ..... 3 credits
DTE 2180 Dental Laboratory Operations ..... 2 credits
DTE 2200 Ethics and Jurisprudence ..... 1 credit
DTE 2191 Assimilation of Dental Technology ..... 2 credits
DTE 2150 Crown \& Bridge Theory 2 credits
DTE 2150L Crown \& Bridge Lab ..... 3 credits
DTE 2151 Advanced Prosthodontics Theory ..... 2 credits
DTE 2151L Advanced Prosthodontics Lab ..... 5 credits
DRAFTING AND DESIGN TECHNOLOGY (CIVIL DRAFTING OPTION)
REQUIRED PROGRAM:
English 6 credits
ENC 1101 and select from ENC 2200, ENC 1102, ENC 2210Science/Math.6 credits
PSC 1311, PSC 1341 or any math class
Physical Education ..... 2 credits
PEM 1101 and Swimming
Humanities - Social Science6 creditsSelect from ANT 2410, EUH 1000, EUH 1001, ECO 2000, ECO 2013, ECO2023, HUM 2511, PSY 2012, PHI 1103, PHI 2100, POS 1041, POS 2112,SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
EGS 1110C Engineering Graphics ..... 3 credits
EGS 1130C Descriptive Geometry ..... 3 credits
ETD 1544 Civil Drafting I ..... 3 credits
ETD 2540 Civil Drafting II ..... 3 credits
ETD 2125C Topographical Drafting ..... 3 credits
SUR 1100C Elementary Surveying with Math ..... 3 credits
MAC 1102 Basic College Algebra ..... 3 credits
ETD 1310 CAD Familiarization 2 credits
COURSES FOR MAJOR FIELD (Select 21 credits)
ETD 2320C Computer Aided Drafting 4 credits
ETD 1830 Charts \& Graphs ..... 3 credits
ETD 1230 Intersections and Developments ..... 3 credits
ETD 2840 Pictorial Drafting ..... 3 credits
GLY 1015 Introduction to Physical Geology ..... 3 credits
GEB 1011 Introduction to Business ..... 3 credits
AST 1002 Astronomy ..... 3 credits
ETD 2548 CAD-Civil ..... 4 credits
SUR 1101 Surveying I ..... 4 credits
CGS 1560 Disk Operating System I ..... 1 credit
CGS 1561 Disk Operating System II ..... 1 creditOther courses offered through Graphics Design Technology, maximum of3 credits.
DRAFTING AND DESIGN TECHNOLOGY (COMMERCIAL ART OPTION)
REQUIRED PROGRAM:
English 6 credits
ENC 1101 and select from ENC 2210, ENC 2200, ENC 1102 Science/Math 6 credits
PSC 1341, PSC 1311 or any math class Physical Education ..... 2 credits
PEM 1101 and Swimming
Humanities - Social Science ..... 6 credits
Select from ANT 2410, EUH 1000, EUH 1001, ECO 2000, ECO 2013, ECO 2023, GEA 2002, HUM 2511, PSY 2012, PHI 1103, PHI 2100, POS 1041, POS 2112, SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
ETD 2320C Computer Aided Drafting 4 credits
EGS 1110C Engineering Graphics 3 credits
ETD 2840 Pictorial Drafting ..... 3 credits
ETD 2801C Illustrations ..... 3 credits
ETD 2841 Airbrush Rendering ..... 3 credits
ETD 2820C Perspective Drafting ..... 3 credits
ETD 1310 CAD Familiarization ..... 2 credits
COURSES FOR MAJOR FIELD (Select 23 credits)
ART 1300C Introduction to Drawing 3 credits
ART 1301C Drawing ..... 3 credits
ART 1205C Color and Design I ..... 3 credits
ART 1206C Color and Design II ..... 3 credits
ART 2400C Graphics 3 credits
OST 2323 Reprographics ..... 3 credits
ADV 2201 Advertising and Sales Promotion ..... 3 credits
MKA 2103 Principles of Merchandise Display ..... 3 credits
MKA 1303 Mid-Management Seminar and
Work Experience I 4 credits
(Advertising Campaign)
ETD $1830 \quad$ Charts and Graphs 3 credits
ETD 1230 Intersections and Developments ..... 2 credits
DRAFTING AND DESIGN TECHNOLOGY (MECHANICAL DRAFTING OPTION)
REQUIRED PROGRAM:
English ..... 6 credits
ENC 1101 and select from ENC 2210, ENC 2200, ENC 1102 Science/Math ..... 6 credits
PSC 1341, PSC 1311 or any math class
Physical Education ..... 2 creditsPEM 1101 and SwimmingHumanities - Social Science.6 credits
Select from ANT 2410, EUH 1000, EUH 1001, ECO 2000, ECO 2013, ECO
2023, GEA 2002, HUM 2511, PSY 2012, PHI 1103, PHI 2100, POS 1041,POS 2112, SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
ETD 2320C Computer Aided Drafting 4 credits
EGS 1110C Engineering Graphics ..... 3 credits
EGS 1130C Descriptive Geometry ..... 3 credits
MAC 1102 Basic College Algebra ..... 3 credits
ETD 2707 Machine Drafting I ..... 3 credits
ETD 2712 Machine Drafting II ..... 3 credits
ETD 2240 Numerical Drafting ..... 2 credits
ETD 2528 CAD-Mechanical ..... 4 credits
ETD 1310 CAD Familiarization 2 credits
COURSES FOR MAJOR FIELD (Select 17 credits)
ETD $1830 \quad$ Charts and Graphs 3 credits
ETD 1230 Intersections and Developments ..... 2 credits
ETD 2840 Pictorial Drafting ..... 3 credits
ETD 2801C Illustrations ..... 3 credits
ETD 2841 Airbrush Rendering ..... 3 credits
ETD 2820C Perspective Drafting ..... 3 credits
CGS 1560 Disk Operating System I ..... 1 credit
CGS 1561 Disk Operating System II ..... 1 credit
Other courses offered through Graphics Design Technology, maximum of 3 credits.
ELECTRONICS ENGINEERING TECHNOLOGY (with Computer Electronics Option)
English 6 credits
ENC 1101 and 2210
Natural Science ..... 3 credits
PHY 1001
Physical Education ..... 2 creditsPEM 1101 and Swimming
Humanities - or Fine Art ..... 6 credits
HUM 2511, HUM 1541, HUM 1533
ReadingDependent on placement scores
COURSES FOR MAJOR FIELD - ELECTRONICS TECHNOLOGY
MTB 1321 Technical Math I ..... 3 credits
MTB 1322 Technical Math II ..... 3 credits
EET 1015C DC Circuits ..... 4 credits
EET 1025C AC Circuits 4 credits
EET 2106C Electronic Devices I 4 credits
EET 2107C Electronic Devices II ..... 4 credits
EET 2215C Electronic Instruments ..... 3 credits
EET 2325C Communication Circuits I 4 credits
EET 2335C Communication Circuits II 4 credits
CET 2114C Digital Circuits. 4 credits
CET 2123C Microprocessors I ..... 4 credits
CET 2131C Microprocessors II 4 credits
ETD 2614 Electronic Drafting ..... 4 credits
COP 1170 BASIC Programming 1 ..... 3 credits
COMPUTER ELECTRONICS - Degree Option
COURSES FOR MAJOR FIELD
MTB 1321 Technical Math IMTB 1322 Technical Math II ................................................ 3 credits
EET 1015C DC Circuits ..... 4 credits
EET 1025C AC Circuits ..... 4 credits
EET 2106C Electronic Devices I.EET 2107C Electronic Devices II
CET 2114C Digital Circuits ..... 4 credits
EET 2215C Electronic Instruments. ..... 3 credits
COP 1170 BASIC Programming I ..... 3 credits
COP 1171 BASIC Programming II ..... 3 credits
COP 2110 FORTRAN ..... 3 credits
or
COP 2120 COBOL Programming I ..... 3 credits
COP 2400 ASSEMBLER Programming 1 ..... 3 credits
CAP 2030 Computer Systems Design ..... 3 credits
CET 2123C Microprocessor I ..... 4 credits
CET 2131C Microprocessor II ..... 4 credits
EMERGENCY MEDICAL SERVICES TECHNOLOGY
REQUIRED PROGRAM:
English ..... 6 credits
ENC 1101 and select from ENC 1102 or ENC 2210
Science ..... 8 credits
APB 2203C or APB 2204C
Physical Education ..... 2 credits

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PEM 1101 and Swimming
Humanities - Social Science.6 credits
PSY 2012 and SYG 2000
ReadingDependent on placement scores

## CORE COURSES FOR MAJOR FIELD

| EMS | 1119C | Fundamentals of Emergency Care.................... 7 credits |
| :---: | :---: | :---: |
| EMS | 2234C | Paramedic I ................................................ 10 credits |
| EMS | 2435 | Paramedic Hospital/Field Experience............... 8 credits |
| EMS | 2235C | Paramedic II .............................................. 10 credits |
| EMS | 2436 | Paramedic Hospital/Field Experience................ 8 credits |
| EMS | 2450 | Paramedic Field Internship ............................. 5 credits |

## FASHION MARKETING MANAGEMENT

## REQUIRED PROGRAM:

English................................................................................................. 6 credits
ENC 1101 and select from ENC 2200, ENC 1102, COM 1130, ENC 2210
Science/Math......................................................................................... 6 credits
Select from Biology, Chemistry, Geology, Physics, Physical Science, MTB 1321, MGF 1113, MAC 1102, MAC 1104, MAC 1114, MGF 2202, or OCE 2001
Physical Education
2 credits
PEM 1101 and Swimming
Humanities - Social Science
6 credits
ECO 2000 and select from ECO 2013, ECO 2023, ANT 2410, EUH 1000,
EUH 1001, GEA 2002, HUM 2511, PSY 2012, PHI 1103, PHI 2100, POS 1041, POS 2112, SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading..........................................................Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
GEB 1011 Introduction to Business ..................................... 3 credits

QMB 1001 Mathematics of Business..................................... 3 credits
MKA 2041 Principles of Retailing........................................ 3 credits
MAR 2021 Salesmanship..................................................... 3 credits
MKA 1361 Seminar in Fashion Merchandising I.................. 4 credits
MKA 1362 Seminar in Fashion Merchandising II................. 4 credits
MAN 2300 Personnel Management ..................................... 3 credits
CTE 1300C Clothing Selection and Construction ................. 3 credits
CTE 1401 Introduction to Textiles....................................... 3 credits
HHD 2001 Creative Art and Design Techniques ................. 3 credits
MKA 2103 Principles of Merchandise Display .................... 3 credits
SLS 1421 Personal and Career Development .................... 3 credits
COURSES FOR MAJOR FIELD (Select 6 credits)

| MKA | 2363 | Mid-Management Seminar in <br> Fashion Merchandising III ............................ 4 credits <br> Mid-Management Seminar in <br> Fashion Merchandising IV............................ 4 credits |
| :--- | :--- | :--- |
| MKA 2364 | Advertising and Sales Promotion .................... 3 credits |  |

FINANCIAL SERVICES
(with Banking and Savings \& Loan Option)
REQUIREMENTSEnglish6 credits
ENC 1101 and select from: BAN 1605, ENC 2210, ENC 2200
Science/Math (Choose two of the following) 6 creditsBiology, Chemistry, Physics, Physical Science, MAC 1102, MAC 1104, MAC1114, MGF 2202, MAC 2233 or higher
Humanities (choose two of the following) 6 credits
ECO 2013, ECO 2023, ANT 2410, EUH 1000, EUH 1001, HUM 1541,
HUM 1533, PSY 2012, PHI 1010, PHI 1103, PHI 2100, POS 1041, POS2112, SYG 2000, SYG 2010, SYG 2420
Physical Education2 credits
PEM 1101 and Swimming
Reading
Dependent on placement Scores
CORE COURSES FOR MAJOR FIELD - BANKING OPTION (REQUIRED)
BAN 2004 Principles of Banking 3 credits
BAN 2500 Economics for Bankers 3 credits
BAN 1800 Law and Banking: Principles 3 credits
BAN 1801 Law and Banking: Applications ..... 3 credits
BAN 2511 Marketing for Bankers ..... 3 credits
ACG 2001 Accounting I (or ACG 2003 + ACG 2004) 3 credits
ACG 2011 Accounting II 3 credits
ACG 2450 Microcomputers in Accounting I ..... 1 credit
MAN 2100 Human Relations in Business ..... 3 credits
One computer class ..... 3 credits
COURSES FOR MAJOR FIELD - BANKING OPTION (ELECTIVES - Select 16 credits)
BAN 2501 Money and Banking ..... 3 credits
BAN 2210 Analyzing Financial Statements ..... 3 credits
BAN 2240 - Consumer Lending ..... 3 credits
BAN 2231 Introduction to Commercial LendingBAN 2142 Professional Teller Training ................................ 3 credits
MAN 2300 Personnel Management ..... 3 credits
BAN 2742 Bank Management ..... 3 credits
ACG 2451 Microcomputers in Accounting II ..... 1 credit
BAN 2400 The Trust Business ..... 3 credits
BAN 2935 Service and Sales in Banking ..... 3 credits
Other courses offered through Financial Services, maximum of 3 credits.
CORE COURSES FOR MAJOR FIELD - SAVINGS OPTION (REQUIRED)
SVL 2001 Introduction to the Savings Association Business 3 credits
SVL 2011 Money and Banking 3 credits
SVL 2113 Deposit Accounts and Services 3 credits
SVL 2122 Accounting Principles for Savings Institutions ..... 3 credits
SVL 2125 Introduction to Electronic Data Processing ..... 3 credits
SVL 2511 Marketing for Financial Institutions ..... 3 credits
SVL 2521 Human Relations in Business 3 credits
SVL 2532 Supervisory Personnel Management I ..... 3 credits
SVL 2801 Commercial Law I 3 credits
COURSES FOR MAJOR FIELD - SAVINGS OPTION (ELECTIVES - Select 17 Credits)
SVL 2015 Commercial Banking 3 credits
SVL 2101 Savings Institution Operations 3 credits
SVL 2111 Teller Operations 3 credits
SVL 2121 Managing Deposit Accounts and Services ..... 3 credits
SVL 2123 Accounting Practices for Savings Institutions ..... 3 credits
SVL 2201 Financial Statement Analysis ..... 3 credits
SVL 2211 Consumer Lending ..... 3 credits
SVL 2221 Residential Mortgage Lending ..... 3 credits
SVL 2223 Residential Appraising 3 credits
SVL 2231 Commercial Lending for Savings Institutions 3 credits
SVL 2241 Mortgage Loan ServicingSVL 2251 Real Estate PrinciplesSVL 2403 Rea Estate PrinciplesSVL 2403 IRA/KOEGH Accounts
SVL 2411 Techniques for Customer Counseling ..... 3 credits
SVL 2501 Economics I ..... 3 credits
SVL 2533 Supervisory Personnel Management II ..... 3 credits
SVL 2601 Effective Business Writing ..... 3 credits
SVL 2761 Branch Management 3 credits
Other courses offered through Financial Services, maximum of 3 credits.
FIRE SCIENCE TECHNOLOGY
REQUIRED PROGRAM:
English ..... 6 creditsENC 1101 and select from ENC 2210, ENC 2200, ENC 1102, COM 1130
Science 6 credits
CHM 1015 and PHY 1020
Physical Education2 credits
PEM 1101 and SwimmingHumanities - Social Science6 creditsECO 2000, ECO 2013, ECO 2023, ANT 2410, EUH 1000, EUH 1001, GEA2002, HUM 2511, PSY 2012, PHI 1103, PHI 2100, POS 1041, POS 2112,SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
FFP 1000 Introduction to The Fire Services 3 credits
*+FFP 1200 Fire Inspection Practices ..... 3 credits
*FFP 2500 Hazardous Materials I
3 credits
COURSES FOR MAJOR FIELD (Select 32 credits)
FFP 1040 Introduction to Marine Fire Protection 3 credits
FFP 1081 Basic Volunteer Firefighter Training ..... 3 credits
+FFP 1326 Plans Examination and Blueprint Reading ..... 3 credits
*+FFP 1620 Fire Protection and Detection Systems ..... 3 credits
FFP 1530 Private Fire Brigade ..... 3 credits
FFP 1930 . Fire Science Special Topics ..... 1-3 credits
FFP 2100 Municipal Fire Administration*FFP 2130 Company Officer Leadership.............................. 3 credits
*FFP 2150 Methods and Techniques of Instruction ..... 3 credits
FFP 2240 Fire Investigation and Arson Detection ..... 3 credits
CCJ 2270 Criminal Procedures ..... 3 credits
+FFP 2300 Building and Fire Codes I ..... 3 credits
FFP 2301 Building and Fire Codes II ..... 3 credits
FFP 1520 Chemistry for Firefighters ..... 3 credits
FFP 2527 Electrical Hazards for Firefighters ..... 3 credits
*FFP 2501 Hazardous Materials II ..... 3 credits
FFP 2640 Fire Hydraulics for Pump Operators ..... 3 credits
FFP 2949 Work Experience Internship ..... 3 credits
CJT 2100 Criminal Investigation I ..... 3 credits
EMS 1119 Fundamentals of Emergency Care ..... 7 credits
EMS 1335 Emergency Vehicle Driving ..... 1 credit
FFP 1130 Fire Supervision ..... 3 credits
FFP 1420 Engine and Truck Company Operations ..... 3 credits
FFP 1410 Multiple Alarm Response ..... 3 credits
+FFP 1320 Building Construction For the Fire Services ..... 3 credits

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## HEALTH CARE MANAGEMENT

## REQUIRED PROGRAM:

English................................................................................................. 6 credits
ENC 1101, ENC 1102
Math....................................................................................................... 6 credits
MAC 1102, MAC 1104
Physical Education
2 credits
PEM 1101 and Swimming
Social Science ....................................................................................... 6 credits
PSY 2012, SYG 2000
Reading
Dependent on placement scores
COURSES FOR MAJOR FIELD:
ACG 2001 Principles of Accounting I ................................. 3 credits
HSA 1220 General Administration and Management......... 6 credits
DEP 1930 Aspects of Aging................................................ 2 credits
ACG 2011 Principles of Accounting II ................................. 3 credits
HSA 1230 Long-term Care Management I.......................... 3 credits
CGS 1104 Accounting Applications for the
Microcomputer
3 credits
MAN 2300 Personnel Management ..................................... 3 credits
HSA 1231 Long-term Care Management II .......................... 3 credits
HSC 1590 Long-term Patient Care ...................................... 3 credits
HSA 2422 Legal Aspects of Long-term Care ....................... 3 credits
HSC 1160 Ethical Issues in Medicine ................................. 3 credits
HSA 2234 Health Care Planning and Delivery Systems...... 3 credits
HSC 1591 Long-term Patient Care II................................... 3 credits
HSA 2850 Nursing Home Experience................................... 4 credits
At the completion of the courses outlined above, students will be required to complete a 1000-hour college affiliated internship in a nursing home.

## HUMAN SERVICES TECHNOLOGY

## REQUIRED PROGRAM:

English.
6 credits
ENC 1101 and ENC 2210
Math/Science. 6 credits
Select from: Biology, Chemistry, Physics, Physical Science, MTB 1321, MGF 1113, MAC 1102, MAC 1104, MAC 1114, MGF 2202
Physical Education
2 credits
PEM 1101 and Swimming
Social Sciences.
6 credits
PSY 2012, SYG 2000
Reading.......................................................... Dependent on placement scores

## REQUIRED COURSES FOR MAJOR FIELD: (36 hours)

| HUS | 2500 | Introduction to Ethics in Human Services......... 3 credits |
| :---: | :---: | :---: |
| CLP | 2140 | Abnormal Psychology.................................... 3 credits |
| HUS | 1200 | Group Dynamics .......................................... 3 credits |

HUS 1506 Introduction to Drugs of Abuse ..... 3 credits
HUS 1820 Human Service Practicum I ..... 3 credits
HUS 1821 Human Service Practicum II ..... 3 credits
HUS 1822 Human Service Practicum III ..... 3 credits
HUS 2025 Introduction to Interpersonal Behavior ..... 3 credits
HUS 2102 Introduction to Techniques of Interviewing andIntervention.HUS 2110 Counseling Techniques3 credits
HUS 2531 Substance Abuse and Treatment. ..... 3 credits
SYG 1410 Family Relations ..... 3 credits
ELECTIVE COURSES FOR MAJOR FIELD: (Select 9 credits)
PPE 2000 Person and Personality Development ..... 3 credits
DEP 1001 Child and Adolescent Psychology ..... 3 credits
GEY 1000 Introduction to Gerontology ..... 3 credits
SYG 2010 Social Problems ..... 3 credits
SYG 2320 Deviant Behavior ..... 3 credits
HSC 2400 First Aid and SafetyHUS 1001 Introduction to Human Services3 credits
PHI 1450 Philosophy of Psychology ..... 3 credits
INTERIOR DESIGN TECHNOLOGY
REQUIRED PROGRAM:
English 6 credits
ENC 1101 and select from ENC 1102, ENC 2200
Science/Math6 credits
Select from Biology, Chemistry, Geology, Physics, Physical Science, MTB1321, MGF 1113, MAC 1102, MGF 2002, MAC 1104, MAC 1114, or OCE2001
Physical Education ..... 2 credits
PEM 1101 and Swimming
Humanities-Social Science ..... 6 credits
ECO 2000 and select from WOH 2040, ECO 2013, ECO 2023, ANT 2410,EUH 1000, EUH 1001, GEA 2002, HUM 2511, PSY 2012, PHI 1103, PHI2100, POS 1041, POS 2112, SYG 2000, SYG 2010, SYG 2420, HUM 1541,HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
HHD 1321 Introduction to Interior Design ..... 3 credits
HHD 1614 Survey of Architectural Designs and Furniture Styles 3 credits
or
ARH 2051 History of Art 3 credits
CTE 14()1 Introduction to Textiles ..... 3 credits
IND 1420 Materials and Sources of Interior Design ..... 3 credits
HHD 20) Creative Art and Design Techniques ..... 3 credits
ART 1205C Color and Design I ..... 3 credits
BCN 1250C Architectural Drafting-Principles 3 credits
BCN 2251C Architectural Drafting-Residential ..... 3 credits
ART 1300C Drawing I ..... 3 credits
HHD 1234 Design of Interior Space ..... 3 credits
HHD 1930 Seminar in Interior Design I ..... 4 credits
COURSES FOR MAJOR FIELD (Select 10 hours)
GEB 1011 Introduction to Business 3 credits
ETD 1310 CAD Familiarization ..... 2 credits
ART 2050 Introduction to the History of Art ..... 3 credits
SLS 1421 Personal and Career Development ..... 3 credits
ETD 2831C Perspective Drafting ..... 3 credits
HHD 1931 Seminar in Interior Design II ..... 4 credits
LEGAL ASSISTANT TECHNOLOGY
REQUIRED PROGRAM:English6 credits
ENC 1101, ENC 1102 or ENC 2210
Science/Math6 credits
Select from Biology, Chemistry, Geology, Physics, Physical Science, MTB1321, MGF 1113, MAC 1102, MAC 1104, MAC 1114, MGF 2202, orOCE 2001
Physical Education 2 credits
Physical Fitness and Swimming
Humanities-Social Science6 credits
Select from ANT 2410, EUH 1000, EUH 1001, ECO 2013, ECO 2023, PSY2012, PHI 1103, PHI 2100, POS 1041, POS 2112, SYG 2000, SYG 2010,SYG 2420, HUM 1541, HUM 1533
ReadingDependent on placement scores
CORE COURSES FOR MAJOR FIELD - LEGAL ASSISTANT OPTION (REQUIRED)
PLA 2003 Intro to Legal Assistant Technology 3 credits
PLA 2059 Survey of Law ..... 3 credits
PLA 2105 Legal Research 3 credits
PLA 2155 Legal Writing ..... 3 credits
PLA 2208 Legal Systems and Litigation Procedures ..... 3 credits
PLA 2873 Intro to Court Administration Procedure 3 credits
COURSES FOR MAJOR FIELD (Select 32 credits)
CGS 1260 Electronic Access to Information 1 credits
PLA 1200 Civil Litigation ..... 3 credits
PLA 1504 Real Estate Law and Property ..... 3 credits
PLA 1763 Law Office Management Practice ..... 3 credits
PLA 2302 Criminal Law and Procedures ..... 3 credits
PLA 2433 Corporation and Business Organization Law ..... 3 credits
PLA 2465 Bankruptcy Law ..... 3 credits
PLA 2483 Administrative Law ..... 3 credits
PLA 2641 Estate Planning and Probate Administration. ..... 3 credits
PLA 2663 Federal and State Tax Law. ..... 3 credits
PLA 2803 Family Law ..... 3 credits
PLA 2930 Professional Responsibilities ..... 3 credits
Contact Discipline Leader for information regarding Basic Certified Legal
Assistant Examination (CLA) and the National Association of Legal Assistants (NALA).
MARKETING MANAGEMENT
REQUIRED PROGRAM:
English ..... 6 credits
ENC 1101 and selected from ENC 2200, ENC 1102, COM 1130, ENC 2210
Science/MathSelect from Biology, Chemistry, Geology, Physics, Physical Science, MTB1321, MFG 1113, MAC 1102, MAC 1104, MAC 1114, MGF 2202, or OCE2001
Physical Education ..... 2 credits
PEM 1101 and Swimming
Humanities - Social Science6 credits
ECO 2000 and select from ECO 2013, ECO 2023, ANT 2410, EUH 1000,EUH 1001, GEA 2002, HUM 2511, PSY 2012, PHI 1103, PHI 2100, POS1041, POS 2112, SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
GEB 1011 Introduction to BusinessQMB 1001 Mathematics for Business ..................................... 3 credits
BUL 2111 Business Law I ..... 3 credits
MKA 2041 Principles of Retailing ..... 3 credits
MAR 2101 Salesmanship ..... 3 credits
MAN 2021 Principles of ManagementMAR 2011 Principles of MarketingADV 2201 Advertising and Sales Promotion ........................ 3 credits
MKA 1303 Mid-Management Seminar I ..... 4 credits
MAN 2300 Personnel Management ..... 3 credits
APA 1211 Office Accounting ..... 3 credits
COURSES FOR MAJOR FIELD (Select 10 credits)
MKA 2103 Principles of Merchandise Display ..... 3 credits
MAN 2100 Human Relations in Business ..... 3 credits
BUL 2112 Business Law II ..... 3 credits
MKA 1313 Mid-Management Seminar II ..... 4 credits
MKA 2323 MId-Management Seminar III ..... 4 credits
MKA 2333 Mid-Management Seminar IV ..... 4 credits
MNA 2345 Supervision I ..... 3 credits
MAN 2342 Supervisory Personnel Management II ..... 3 creditsOther courses offered through Business Administration and MarketingManagement, maximum of 3 credits.
MEDICAL LABORATORY TECHNOLOGY
REQUIRED PROGRAM:
English ..... 6 credits
ENC 1101, ENC 1102
Biological Science ..... 8 credits
Select 2 of the following: BSC 1010C or APB 2203C plus APB 2204C orMCB 2010C (*Micro. only if you have Biology or Anatomy)
Chemistry ..... 8 credits
CHM 1015, CHM 1045C, CHM 1033, CHM 1046
Physical Education ..... 2 credits
PEM 1101 and Swimming
Humanities ..... 6 credits
SYG 2000 or PSY 2012 (and select from the following): ECO 2000, ECO2013, ANT 2410, EUH 1000, EUH 1001, SYG 2010, POS 1041, HUM1541, HUM 1533
Mathematics ..... 3 credits
MAC 1102
ReadingDependent on placement scores
CORE COURSES FOR MAJOR FIELD
MLT 1000C Introduction to MLT 2 credits
MLT 1300C Hematology ..... 6 credits
MLT 1335C Coagulation and Blood Banking ..... 6 credits
MLT 1542C Serology and Urinalysis ..... 4 credits
MLT 2620C Clinical Chemistry ..... 7 credits
MLT 2401C Clinical Microbiology ..... 7 credits
MLT 2033 Medical Laboratory Career Orientation ..... 1 credit
MLT 2804L Clinical Practicum I ..... 6 credits
MLT 2805L Clinical Practicum II ..... 6 credits*Students must meet prerequisites
NURSING
(SELECTIVE ADMISSION)
REQUIRED PROGRAM:
English ..... 6 credits
ENC 1101, ENC 11028 creditsAPB 2203C and APB 2204C
Physical Education ..... 2 creditsPEM 1101 and Swimming
Humanities - Social Science6 credits
PSY 2012 and SYG 2000
ReadingDependent on placement scores

CORE COURSES FOR MAJOR FIELD (REQUIRED)
NUR 1020C Nursing Fundamentals ..... 7 credits
NUR 1210C Medical Surgical Nursing I ..... 5 credits
NUR 1211C Medical Surgical Nursing IINUR 2213C Medical Surgical Nursing III ............................... 7 credits
NUR 2520C Psychiatric - Mental Health Nursing ..... 5 credits
NUR 2423C Maternity Nursing ..... 4 credits
NUR 2310C Pediatric Nursing ..... 5 credits
NSP 2132 Nursing Management ..... 1 credit
DIE 2201 Nutrition and Diet Therapy ..... 3 credits
NUR 2810C Practicum ..... 3 credits
MCB 2010C Microbiology ..... 4 credits
EDF 2020 Human Development ..... 3 credits
Recommended courses for application to Nursing Program:
PEM 1101 Fitness through Physical Activity 1 credit
APB 1150 Fundamentals of Biology I ..... 3 credits
or
BSC 1010C General Biology. 4 credits
MAC 1102 Basic College Algebra ..... 3 credits
NURSING LPN / ADN TRANSITIONAL PROGRAM(SELECTIVE ADMISSION)
COURSES REQUIRED BEFORE ENTERING PROGRAM:
Science. ..... 4 credits
APB 2203C
Communications 3 credits
ENC 1101
Physical Education ..... 1 credit
PEM 1101
REQUIRED PROGRAM:
English ..... 6 credits
ENC 1102
Science. 8 credits
APB 2203C, APB 2204C
Physical Education 1 credit
Swimming
Humanities - Social Science ..... 6 credits
SYG 2000, PSY 2012
ReadingDependent upon placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
NUR 1210C Medical Surgical Nursing I ..... 5 credits
NUR 1211C Medical Surgical Nursing II ..... 5 credits
NUR 2213C Medical Surgical Nursing and Practicum III ..... 7 credits
NUR 2520C Psychiatric - Mental Health Nursing ..... 5 credits
NUR 2423C Maternity Nursing 4 credits
NUR 2310C Pediatric Nursing 5 credits
NSP 2132 Nursing Management ..... 1 credit
NUR 2810C Nursing Practicum ..... 3 credits
DIE 2201 Nutrition and Diet Therapy ..... 3 credits
MCB 2010C Microbiology ..... 4 credits
EDF 2020 Human Development 3 credits
RECOMMENDED COURSES FOR APPLICATION TO THE LPN TRANSITIONAL PROGRAM:
PEM 1101 Fitness through Physical Activity 1 credit
APB 1150 Fundamentals of Biology I ..... 3 credits
Or
BSC 1010C General Biology 4 credits
MAC 1102 Basic College Algebra 3 credits
OFFICE SYSTEMS TECHNOLOGY
REQUIRED PROGRAM:
English 3 credits
ENC 1101
Science/Math ..... 6 credits
Select from Biology, Chemistry, Geology, Physics, Physical Science, MAC1102, MAC 1104, MAC 1114, MGF 2202, or OCE 2001.
Physical Education ..... 2 credits
Humanities/Social Sciences ..... 6 credits
ECO 2000 and select from ANT 2410, EUH 1000, EUH 1001, HUM 1541,HUM 1533, HUM 2511, PHI 1103, PHI 2100, POS 1041, POS 2112, ECO2013, ECO 2023, PSY 2012, SYG 2000, SYG 2010.
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED) Office Systems Technology Option:

| ENC | 2200 | Business Communications ............................. 3 credits |
| :---: | :---: | :---: |
| *OST | 1110 | Intermediate Typewriting ................................ 3 credits |
| *OST | 1120 | Advanced Typewriting................................... 3 credits |
| **OST | 1211 | Introductory Shorthand ................................... 3 credits |
| **OST | 1212 | Intermediate Shorthand.................................. 3 credits |
| OST | 2401 | Office Practice.............................................. 3 credits |
| QMB | 1001 | Mathematics of Business................................ 3 credits |
| APA | 1211 | Office Accounting ......................................... 3 credits |
| OST | 2491 | Office Seminar and Supervised <br> Work Experience. $\qquad$ 4 credits |
| OST | 2601 | Machine Transcription I................................. 3 credits |

[^3]OST 2323 Reprographics 3 credits
OST 2320 Business Machines 3 credits
OST 1711 Word Processing I 3 credits
OST 1712 Word Processing II ..... 3 credits
MNA 2345 Supervision I 3 credits
CORE COURSES FOR MAJOR FIELD (REQUIRED) Legal Secretarial Option
ENC 2200 Business Communications 3 credits
**OST 1212 Intermediate Shorthand
*OST 1110 Intermediate Typewriting
QMB 1001 Mathematics of Business
APA 1211 Office Accounting
OST 2621 Legal Terminology and Transcription I ..... 3 credits
OST 2622 Legal Terminology and Transcription II ..... 3 credits
OST 2421 Legal Office Practice I ..... 3 credits
OST 2422 Legal Office Practice II ..... 3 credits
OST 1711 Word Processing I ..... 3 credits
OST 2431 Legal Secretarial Practices and Procedures I. ..... 3 credits
OST 2432 Legal Secretarial Practices and Procedures II. ..... 3 credits
BUL 2111 Business Law ..... 3 credits
OST 2491 Office Seminar and Supervised Work Experience 4 credits
MNA 2345 Supervision I 3 credits
CORE COURSES FOR MAJOR FIELD (REQUIRED)
Medical Records/Transcription Option
ENC 2200 Business Communications 3 credits
OST 2611 Medical Transcription I ..... 3 credits
OST 2612 Medical Transcription II ..... 3 credits
OST 2613 Medical Transcription III ..... 3 credits
HSC 2531 Medical Terminology I ..... 3 credits
HSC 2532 Medical Terminology II ..... 3 credits
MRE 1003 Medical Records I ..... 3 credits
MRE 1005 Medical Records II ..... 3 credits
APB 2190 Fundamentals of Medical Science ..... 3 credits
OST 1711 Word Processing I ..... 3 credits
OST 2604 Central Information Management Systems ..... 3 credits
OST 2461 Medical Office Practice I ..... 3 credits
MRE 2825 Medical Office Internship ..... 4 credits
MRE 2826 Medical Office Externship ..... 4 credits
MNA 2345 Supervision I 3 credits

[^4]CORE COURSES FOR MAJOR FIELD (REQUIRED)Medical Secretarial Management Option
ENC 2200 Business Communications 3 credits
MNA 2345 Supervision I*OST 1110 Intermediate Typewriting3 credits
OST 2461 Medical Office Practice I ..... 3 credits
OST 2462 Medical Office Practice II ..... 3 credits
QMB 1001 Mathematics of Business. ..... 3 credits
APA 1211 Office Accounting ..... 3 credits
HSC 2531 Medical Terminology I 3 credits
MRE 1003 Medical Records I ..... 3 credits
OST 2611 Medical Transcription I ..... 3 credits
APB 2190 Fundamentals of Medical Science ..... 4 credits
DEH 1820 Health Office Emergencies ..... 3 credits
OST 1711 Word Processing I ..... 3 credits
MRE 2825 Medical Office Internship ..... 4 credits
MRE 2826 Medical Office Externship ..... 4 credits
CORE COURSES FOR MAJOR FIELD (REQUIRED) Office Management Option
ENC 2200 Business Communications 3 credits
MNA 2345 Supervision I 3 credits
OST 1100 Elementary Typewriting ..... 3 credits
Or
OST 1141 Keyboarding for Information Processing 3 credits
QMB 1001 Mathematics of Business ..... 3. credits
APA 1211 Office Accounting ..... 3 credits
OST 2401 Office Practice ..... 3 credits
MAN 2021 Principles of Management 3 credits
OST 2491 Office Seminar and Supervised Work Experience 4 credits
OST 1711 Word Processing I ..... 3 credits
OST 1712 Word Processing II ..... 3 credits
GEB 1011 Introduction to Business ..... 3 credits
BUL 2111 Business Law I ..... 3 credits
OST 2604 Central Information Management Systems ..... 3 credits
OST 2320 Business Machines 3 credits
OST 2823 Reprographics ..... 3 credits
*Students who have satisfactorily completed one year of high school typewriting should enroll in OST 1110. Students who have satisfactorily completed two years of high school typewriting should enroll in OST 1120.

## CORE COURSES FOR MAJOR FIELD (REQUIRED) Word Processing Option

ENC 2200 Business Communications 3 credits
MNA 2345 Supervision I ..... 3 credits
QMB 1001 Mathematics of Business ..... 3 credits
OST 2601 Machine Transcription I. ..... 3 credits
*OST 1110 Intermediate Typewriting ..... 3 credits
*OST 1120 Advanced Typewriting ..... 3 credits
OST 1701 Introduction to Word Processing(Word Perfect).3 credits
OST 1711 Word Processing I ..... 3 credits
OST 1712 Word Processing II ..... 3 credits
OST 2604 Central Information Management Systems ..... 3 credits
APA 1211 Office Accounting ..... 3 credits
OST 2401 Office Practice ..... 3 credits
OST 2323 Reprographics ..... 3 credits
OST 2800 Desktop Publishing ..... 3 credits
OST 2491 Office Seminar and Supervised Work Experience ..... 4 credits
ELECTIVE COURSES FOR MAJOR FIELDAll courses offered through Office Systems Technology, Computer Science,Accounting, and Business Administration/Marketing Management may beselected as electives.
RADIOLOGIC TECHNOLOGY
(SELECTIVE ADMISSION)
REQUIRED PROGRAM:
English ..... 6 creditsENC 1101, ENC 1102, or ENC 2210
Science 8 credits
APB 2203C and APB 2204C
Humanities - Social Science. ..... 6 credits
SYG 2000 and PSY 20122 credits
PEM 1101 and Swimming
ReadingDependent on placement scores
CORE COURSES FOR MAJOR FIELD
RTE 1001 Radiologic Terminology ..... 1 credit
RTE 1308 Radiation Protection and Biology ..... 2 credits
RTE 1504C Radiologic Positioning I ..... 4 credits

[^5]RTE 1002 Radiologic Techniques I 3 credits
RTE 1514C Radiologic Positioning II ..... 4 credits
RTE 1411 Radiologic Techniques II ..... 3 credits
RTE 1814L Radiologic Clinical Education ..... 3 credits
RTE 1523C Radiologic Positioning III ..... 3 credits
RTE 1822L Radiologic Clinical Education ..... 2 credits
RTE 1832L Radiologic Clinical Education ..... 3 credits
RTE 2532L Radiologic Positioning IV ..... 2 credits
RTE 2613 Radiologic Techniques III ..... 3 credits
CGS 1040 Introduction to Computer Literacy for Radiology 1 credits
RTE 1473 Introduction to Quality Assurance ..... 1 credit
RTE 2838L Radiologic Clinical Education. ..... 4 credits
RTE 2563 Special Radiologic Procedures ..... 3 credits
RTE 2780 Radiologic Disease ..... 2 credits
RTE 2848L Radiologic Clinical Education ..... 4 credits
RTE 2852L Radiologic Clinical Education ..... 2 credits
RTE 2866L Radiologic Clinical Education ..... 3 credits
RTE 2933 Radiologic Comprehensive Seminar ..... 2 credits
MAC 1102 Basic College Algebra ..... 3 credits
RESTAURANT MANAGEMENT
(with Food Service Option)
REQUIRED PROGRAM:
English 6 credits
ENC 1101 and select from ENC 1102, COM 1130, ENC 2210
6 credits Science/Math
Select from Biology, Chemistry, Geology, Physics, Physical Science, MTB1321, MGF 1113, MAC 1102, MAC 1104, MAC 1114, MGF 2202, or OCE2001
Physical Education ..... 2 credits
PEM 1101 and Swimming
Humanities - Social Science 6 credits
Select from ECO 2000, ECO 2013, ANT 2410, EUH 1000, EUH 1001, GEA2002, PSY 2012, PHI 1103, PHI 2100, POS 1041, POS 2112, ECO 2023,HUM 2511, SYG 2000, SYG 2010, SYG 2420, HUM 1541, HUM 1533
Reading Dependent on placement scores
CORE COURSES FOR MAJOR FIELD (REQUIRED)
FSS 2284 Food Service Special .......................................... 3 credits
FSS 2303 Food Service Seminar and Supervised Work Experience I 4 credits
FOS 2201 Sanitation and Safety ..... 3 credits
FSS 2401 Use and Care of Kitchen Equipment ..... 3 credits
FSS 2246 Quantity Baking 3 credits
FSS 2263 Food Merchandising and Service. ..... 3 credits
FSS 2300 Food Service Supervision and Management ..... 3 credits
HUN 1201 Nutrition ..... 3 credits
or
HUN 1410 Basic Childhood Nutrition ..... 3 credits
or
DIE 2201 Nutrition and Diet Therapy 3 credits
FSS 2221 Food Preparation I 3 credits
COURSES FOR MAJOR FIELD (Select 16 credits)
FSS 2222 Food Preparation II 3 credits
BUL 2111 Business Law I 3 credits
GEB 1011 Introduction to Business ..... 3 credits
MAN 2300 Personnel Management ..... 3 credits
SLS 1421 Personal and Career Development ..... 3 credits
QMB 1001 Mathematics of Business ..... 3 credits
MAN 2021 Principles of Management ..... 3 credits
COURSES FOR MAJOR FIELD (REQUIRED) - Food Service Option
FSS 2221 Food Preparation I ..... 3 credits
FSS 2222 Food Preparation II ..... 3 credits
FOS 2201 Sanitation \& Safety ..... 3 credits
FSS 2300 Food Service Supervision \& Management ..... 3 credits
FSS 2303 Food Service Seminar I. ..... 4 credits
FSS 2304 Food Service Seminar II ..... 4 credits
FSS 2305 Food Service Seminar III ..... 4 credits
FSS 2306 Food Service Seminar IV 4 credits
COURSES FOR MAJOR FIELD (SELECT ADDITIONAL CREDITS TO = 64 CREDITS TOTAL)
FSS 2401 Use and Care of Kitchen Equipment. ..... 3 credits
FSS 2263 Food Merchandising \& Service ..... 3 credits
FSS 2284 Food Services Special 3 credits
BUS 2111 Business Law I ..... 3 credits
MAN 2100 Human Relations in Business ..... 3 credits
MAN 2300 Personnel Management 3 credits
SLS 1421 Personal and Career Development ..... 3 credits
QMB 1001 Business Math ..... 3 credits
ACC 2001 Principles of Accounting I ..... 3 credits
GEB 1011 Introduction to Business 3 credits
CIS 1000 Introduction to Data Processing ..... 3 credits

# TECHNICAL CERTIFCATE PROGRAMS 

Accounting Applications
Business Data Processing
Emergency Medical Technolosy
Oifice Systems Technology
Paramedic
Small Business Management

## TECHNICAL CERTIFICATE

The Technical Certificate is awarded to a student who has completed 30 college credit hours of a two-year A.S. Degree program with a cumulative GPA of 2.0 or higher. It is designed to prepare the student to obtain employment as a skilled/para-professional worker after one year of full-time study. The student may then complete the remaining requirements for the Associate in Science Degree program while employed.

The Technical Certificate can be earned in the following technical specialities:
Accounting Applications
Business Data Processing
Emergency Medical Technology
Office Systems Specialist
Paramedic
Small Business Management

## CERTIFICATE IN ACCOUNTING APPLICATIONS

A minimum of 30 credits should be selected from the following courses. Total required credit for a certificate - 30 hours.

| ACG | 2001 | Principles of Accounting I - Financial............... 3 credits |
| :---: | :---: | :---: |
| ACG | 2011 | Principles of Accounting II - Managerial .......... 3 credits |
| ACG | 2100 | Intermediate Accounting I .............................. 3 credits |
| ACG | 2110 | Intermediate Accounting II ............................. 3 credits |
| ACG | 2450 | Micro Computers in Accounting........................ 1 credit |
| ACG | 2360 | Cost Accounting ........................................... 3 credits |
| TAX | 2000 | Tax Accounting ............................................ 3 credits |
| CGS | 1530 | LOTUS........................................................ 3 credits |
| CIS | 1000 | Introduction to Data Processing....................... 3 credits |
| COP | 2120 | COBOL Programming I .................................. 3 credits |
| COP | 2121 | COBOL Programming II ................................. 3 credits |
| COP | 1170 | BASIC Programming I ..................................... 3 credits |
| COP | 1171 | BASIC Programming II .................................... 3 credits |
| BUL | 2111 | Business Law I.............................................. 3 credits |
| ECO | 2013 | Principles of Economics I-Macroeconomics .... 3 credits |
| ENC | 2210 | Technical Communications ............................ 3 credits |

## CERTIFICATE IN BUSINESS DATA PROCESSING (SPECIALTY IN COMPUTER PROGRAMMING)

A minimum of 30 credits should be selected from the following courses:

## REQUIRED:

| COP | 2000 | Introduction to Computer Programming ........... 3 credits |
| :---: | :---: | :---: |
| CIS | 1000 | Introduction to Data Processing....................... 3 credits |
| COP | 1170 | BASIC Programming I .................................... 3 credits |
| COP | 2120 | COBOL Programming I ................................. 3 credits |
| CIS | 2321 | Computer Systems Design .............................. 3 credits |
| CGS | 1561 | Disk Operating System II .................................. 1 credit |
| COP | 2121 | COBOL Programming II ................................. 3 credits |

Three of the following:

| *COP | 2110 | Fortran |
| :--- | :--- | :--- |
| *CGS | 2420 | Computer Programming for Engineers |
| COP | 2400 | ASSEMBLER Programming I |
| CGS | 2423 | C Programming I |
| COP | 1171 | BASIC Programming II |

Electives
Any course offered in the Department of Computer Programming and Analysis
ACG 2001 Principles of Accounting I
MAC 1102 Basic College Algebra or any higher math class
*Credit may not be given for both COP 2110 and CGS 2420.

## (Specialty in Computer Applications)

A student must complete at least 30 hours from the following list of courses to earn a certificate.
REQUIRED:

| CIS | 1000 | Int |
| :---: | :---: | :---: |
| CGS | 1500 | Micro-Word Processing |
| COP | 2701 | Data Base Programming |
| CGS | 1530 | LOTUS - Integrated Software .......................... 3 cred |
| CGS | 1561 | Disk Operating System II................................ 1 cred |
| CDA | 2500 | Data Communications .................................... 1 credit |
| COP | 2000 | Introduction to Computer Programming ........... 3 cred |
| COP | 1170 | BASIC Programming I................................... 3 |
| ACG | 2001 | Principles of Accounting |

## Electives

Any other courses offered in the Department of Computer Programming and Analysis.
Students should not take CGS 1510 Electronic Spreadsheet after having taken CGS 1530 LOTUS.
Credit may not be given for both CGS 2100 Computer Applications and either CGS 1510 Electronic or COP 1700 Introduction to Data Base Management.

## CERTIFICATE IN EMERGENCY MEDICAL TECHNOLOGY PROGRAM

EMS 1119C Fundamentals of Emergency Care (O) ............... 8 credits

## CERTIFICATE IN OFFICE SYSTEMS TECHNOLOGY

An Office Systems Specialist One-Year Certificate may be earned from the following options. Total required credits for certificate - 30 hours minimum.

## Office Systems Technology Option

ENC 2200 Business Communications 3 credits
QMB 1001 Mathematics of Business 3 credits
*OST 1110 Intermediate Typewriting 3 credits
**OST 1212 Intermediate Shorthand ..... 3 credits
OST 2401 Office Practice ..... 3 credits
APA 1211 Office Accounting ..... 3 credits
OST 2601 Machine Transcription I ..... 3 credits
OST 1711 Word Processing I ..... 3 credits
OST 2323 Reprographics ..... 3 credits
OST 2320 Business Machines 3 credits
Legal Secretarial Option
ENC 2200 Business Communications 3 credits
**OST 1212 Intermediate Shorthand ..... 3 credits
APA 1211 Office Accounting ..... 3 credits
OST 2621 Legal Terminology and Transcription I ..... 3 credits
OST 2622 Legal Terminology and Transcription II ..... 3 credits
OST 2421 Legal Office Practice I ..... 3 credits
OST 2422 Legal Office Practice II ..... 3 credits
OST 1711 Word Processing I ..... 3 credits
OST 2431 Legal Secretarial Practices and Procedures I ..... 3 credits
OST 2432 Legal Secretarial Practices and Procedures II 3 credits
Medical Records Option
ENC 2200 Business Communications 3 credits
OST 1711 Word Processing I ..... 3 credits
APB 2190 Fundamentals of Medical Science ..... 4 credits
OST 2611 Medical Transcription I ..... 3 credits
OST 2612 Medical Transcription II ..... 3 credits
OST 2613 Medical Transcription III ..... 3 credits
HSC 2531 Medical Terminology I ..... 3 credits
HSC 2532 Medical Terminology II ..... 3 credits
MRE 1003 Medical Records I ..... 3 credits
OST 2461 Medical Office Practice I ..... 3 credits
Medical Secretarial Option
ENC 2200 Business Communications ..... 3 credits
OST 1110 Intermediate Typewriting ..... 3 credits
OST 2461 Medical Office Practice ..... 3 credits
OST 2462 Medical Office Practice II ..... 3 credits
APA 1211 Office Accounting ..... 3 credits
HSC 2531 Medical Terminology I ..... 3 credits
OST 2611 Medical Transcription I ..... 3 credits
APB 2190 Fundamentals of Medical Science ..... 4 credits
OST 1711 Word Processing I ..... 3 credits
MRE 1003 Medical Records I 3 credits

## Word Processing Option

ENC 2200 Business Communications 3 credits
OST 2601 Machine Transcription 1 ..... 3 credits
*OST 1110 Intermediate Typewriting ..... 3 credits
OST 1701 Introduction to Word Processing(Word Perfect)3 credits
OST 1711 Word Processing I ..... 3 credits
OST 1712 Word Processing II ..... 3 credits
OST 2800 Desktop Publishing ..... 3 credits
APA 1211 Office Accounting 3 credits
OST 2401 Office Practice 3 credits
OST 2323 Reprographics 3 credits
CERTIFICATE IN PARAMEDIC PROGRAM (41 CREDIT HOURS)
EMS 2234C Paramedic I 10 credits
EMS 2235C Paramedic II 10 credits
EMS 2435 Paramedic Hosp/Field Exp. I ..... 8 credits
EMS 2436 Paramedic Hosp/Field Exp. II ..... 8 credits
EMS 2450 Paramedic Internship ..... 5 credits
CERTIFICATE IN SMALL BUSINESS MANAGEMENT CORE COURSES FOR MAJOR FIELD (REQUIRED): Management Option
CGS 1060 College Computing ..... 3 credits
GEB 1011 Introduction to Business ..... 3 credits
MAN 2021 Principles of Management ..... 3 credits
Or
MNA 2345 Supervision 1 3 credits
APA 1121 Office AccountingQMB 1001 Mathematics for BusinessMAN 2300 Personnel Management3 credits
BUL 2111 Business Law I 3 credits
ACG 2001 Principles of Accounting ..... 3 credits
COURSES FOR MAJOR FIELD (SELECT 6 CREDITS):
MAN 2100 Human Relations in Business ..... 3 credits
MNA 1801 Entrepreneurship ..... 3 credits
MKA 2041 Principles of Retailing ..... 3 credits
BUL 2112 Business Law II ..... 3 credits
CGS 1000 Introduction to Computer Usage ..... 3 credits
CGS 1060 College Computing ..... 3 credits
MNA 2346 Supervision II ..... 3 credits
MKA 1303 Mid-Management Seminar I-IV ..... 4 credits
MAR 2011 Principles of Marketing ..... 3 credits
ECO 2000 Introduction to Economics ..... 3 credits
or
ECO 2013 Principles of Economics 3 credits
Seminar courses offered through Business Administration/MarketingManagement
CORE COURSES FOR MAJOR FIELD (REQUIRED): Marketing Option
GEB 1011 Introduction to Business ..... 3 credits
MAR 2011 Principles of Marketing ..... 3 credits
BUL 2111 Business Law 1 ..... 3 credits
APA 1121 Office Accounting ..... 3 credits
CGS 1060 College Computing ..... 3 credits
ADV 2201 Advertising and Sales Promotion ..... 3 credits
MKA 2021 Salesmanship 3 credits
COURSES FOR MAJOR FIELD (SELECT 6 CREDITS):
MAN 2021 Principles of Managment 3 credits
QMB 1001 Mathematics for Business ..... 3 credits
MKA 1303 Mid-Management Seminar I ..... 4 credits
BUL 2112 Business Law II ..... 3 credits
ACG 2001 Principles of Accounting I ..... 3 credits
Seminar courses offered through Business Administration/Marketing Management
MAN 2300 Personnel Management 3 credits
*TOTAL REQUIRED CREDITS - 30 HOURS*
CORE COURSES FOR MAJOR FIELD (REQUIRED): Retailing Option
GEB 1011 Introduction to Business ..... 3 credits
QMB 1001 Mathematics for Business 3 credits
MKA 2041 Principles of Retailing ..... 3 credits
MAR 2101 Salesmanship ..... 3 credits
MAN 2021 Principles of Management ..... 3 credits
MKA 2103 Principles of Merchandise Display ..... 3 credits
MAN 2100 Human Relations in Business ..... 3 credits
COURSES FOR MAJOR FIELD (Select 9 credits):
CGS 1060 College Computing 3 credits
BUL 2111 Business Law I ..... 3 credits
ADV 2201 Advertising and Sales Promotion ..... 3 credits
MKA 1303 Mid-Management Seminar I ..... 4 credits
APA 1211 Office Accounting ..... 3 credits
MNA 1801 Entrepreneurship ..... 3 credits
Seminar courses offered through Business Administration/Marketing Management
*TOTAL REQUIRED CREDITS - 30 HOURS*

## CAREER TRAINING PROGRAMS

Cosmetology
Dental Assistant
Practical Nursing
Patient Care Assistant
Nursing Assistant

## CAREER TRAINING PROGRAMS

## CAREER TRAINING PROGRAMS

COSMETOLOGY (1260 hrs)
(Offered for Vocational Credit Only)

## REQUIRED PROGRAM:

Florida Law
Sterilization and Sanitation
Bacteriology
Shampoos and Related Chemistry
Hairstyling
Chemistry of Hair and Skin
Hair and Scalp Treatments
Manicuring and Pedicuring and Related Anatomy
Facials and Related Anatomy
Massage and Related Anatomy
Hair Cutting
Hair Coloring and Related Chemistry
Permanent Waving and Related Chemistry
Thermal Pressing and Curling
Wigs and Hair Pieces
Light Therapy and Related Anatomy
Beauty Salon Management

## COSMETOLOGY <br> REFRESHER COURSE

## REVIEW IN THE FOLLOWING SUBJECTS:

Florida Law
Sterilization and Sanitation
Bacteriology
Shampoos and Related Chemistry
Hairstyling
Chemistry of Hair and Skin
Hair and Scalp Treatments
Manicuring and Pedicuring and Related Anatomy
Facials and Related Anatomy
Massage and Related Anatomy
Hair Cutting
Hair Coloring and Related Chemistry
Permanent Waving and Related Chemistry
Chemical Hair Straightening and Related Chemistry
Thermal Pressing and Curling
Wigs and Hair Pieces
Light Therapy and Related Anatomy

## COSMETOLOGY ELECTROLYSIS (60 hrs)

## REQUIRED PROGRAM:

Electrolysis
Analysis of the Hair and Skin
Bacteriology and Disinfection
Thermolysis
The Blend
The Needle
General Treatment

## COSMETOLOGY ESTHETICS (260 hrs)

Esthetics
Sterilization and Sanitation
Physiology and History of the Skin
Disorders of the Skin
Procedure for Consultation and Skin Analysis
Cleansing the Skin and Preparation of Client
Techniques for Professional Massage
Electricity, Machines, and Apparatus

## COSMETOLOGY <br> MANICURING/PEDICURING WITH NAIL EXTENSIONS (120 hrs)

## REQUIRED PROGRAM:

Basic and Advanced Manicuring:
History
Bacteriology
Sterilization and Sanitation
Care of Hands and Feet
Massage
Anatomy

## COSMETOLOGY <br> ADVANCED TECHNIQUES OF HAIR SHAPING <br> (FOR LICENSED COSMETOLOGISTS ONLY) (60 hrs)

## Lectures on:

Transitions in Methods
Changes in Education Involved in the Application of These Methods
Trends of Changing Hairstyles
Defining Methods of Haircutting with Application
Practical Application
Instructors' Demonstration
Student Application
Student Evaluation

## COSMETOLOGY

TECHNIQUES OF MAKE-UP APPLICATION (60 hrs)
Beginning and Advanced Techniques of Application Designed for Multiple Purposes:

Make-Up
Face
Eyes
Brows
Cheeks
Theory of Skin Care

## COSMETOLOGY <br> ADVANCED SYSTEMATIC APPROACH TO HAIR COLORING (FOR LICENSED COSMETOLOGISTS ONLY) ( 60 hrs )

Color Theory
Practical Use of Haircolors
Chemistry of Hair Coloring
Complexion Versus Hair Color
Application Bottle and Brush (Where, When, How)
Practice
Client Approach
What Client Wants
What Client Tells You
What You Think is Best
Final Procedure
Home Maintenance
Compatible Hair Coloring and Hair Color

## COSMETOLOGY <br> *TECHNIQUES OF SHAMPOOS FOR LICENSURE (80 hrs)

## REQUIRED PROGRAMS:

Sanitation \& Sterilization
Alkaline \& Acid Products
P.H. Scale

Procedures \& Massage

## COSMETOLOGY <br> FULL SPECIALIST (500 hrs)

## REQUIRED PROGRAM:

Florida Law
Sterilization and Sanitation
Bacteriology
Shampoos and Related Chemistry
Manicuring and Pedicuring and Related Anatomy
Facials and Related Anatomy
Massage and Related Anatomy

## DENTAL ASSISTANT

Introduction to Dental Assisting
Head, Neck and Dental Anatomy
Elements of Dental Materials
Related Dental Theory I
Related Dental Theory II
Clinical Practice I
Clinical Practice II
Clinical Practice III
Intraoral Auxiliary Procedures I
Intraoral Auxiliary Procedures II
Dental Radiology
Dental Radiology Lab
Dental Office Management
Health Office Emergencies
PRACTICAL NURSING
PRN V 400C PRACTICAL NURSING 1375 HOURS
Fundamentals of Nursing
Medical-Surgical Nursing I (intro)
Medical-Surgical Nursing II
Medical-Surgical Nursing III
Body Structure and Function
Drugs and Solutions I
Drugs and Solutions II
Maternity and Infant Nursing
Vocational Adjustments
Life Span
Nutrition
Pediatric Nursing
PATIENT CARE ASSISTANT
HCP V 600 PATIENT CARE ASSISTANT 300 HOURS
NURSING ASSISTANT
HCP V 100 NURSING ASSISTANT 120 HOURS

## CORRECTIONAL OFFICERS (411 HOURS)

## FIREFIGHTING (280 HOURS)

## LAW ENFORCEMENT (520 HOURS)

## VOLUNTEER FIRE FIGHTING (40 HOURS)

## ADVANCED VOLUNTEER FIRE FIGHTING (80 HOURS)

## WASTEWATER TREATMENT PLANT OPERATIONS (160 HOURS)

A, B, and C Course

WATER TREATMENT PLANT OPERATIONS (160 HOURS)
$A, B$, and C Course

## AWARD OF ACHIEVEMENT

Automotive Technology<br>Child Care Center Management Fashion Marketing Management Home Service Management Fashion Production Management<br>Restaurant Management Scuba Industry

AWARD OF ACHIEVEMENT IN AUTOMOTIVE SERVICE TECHNOLOGY
CORE COURSES (Required)
AER 1000 Intro to Automotive Technology 3 credits
AER 1001 Automotive Service \& Minor Repair ..... 3 credits
Credit may be articulated from an approved High School program. Requiredcourses may be waived if one year full-time employment in the field isdocumented.
COURSES FOR MAJOR FIELD (select 23 credits)
AER 1100 Intro to Automotive Electrical Systems 4 credits
AER 1151 Engine Tune-up \& Emissions Controls 4 credits
AER 1263 Auto Body I ..... 4 credits
AER 1264 Auto Body II ..... 4 credits
AER 1270 Automotive Transaxles 4 credits
AER 1410 Automotive Brake Systems ..... 4 credits
AER 1450 - Suspension, Steering and Alignment ..... 4 credits
AER 1771 Intro to Diesel Engines 4 credits
AER 2101 Advanced Automotive Electrical Systems ..... 4 credits
AER 2109 Computer Controls \& Fuel Injection ..... 4 credits
AER 2113 Automotive Engine Overhaul ..... 4 credits
AER 2136 Automatic Transmissions 4 credits
AER 2138 Automotive Power Trains 4 credits
AER 2161 Management of Auto Service Function ..... 3 credits
AER 2175 Auto AC and Heating 4 credits
AER 2881 Auto/Diesel Supervised Work Experience I ..... 4 credits
AER 2882 Auto/Diesel Supervised Work Experience II ..... 4 credits
AER 2931 Automotive Technology (Special Topics) ..... various
AER 2932 Automotive Technology (Special Topics) ..... various
AER 2932 Automotive Technology (Special Topics) various
PMT 1121 Electrical Welding ..... 3 credits
or
PMT 1123 Combination Welding I 3 credits
AWARD OF ACHIEVEMENT IN AUTOMOTIVE SERVICE TECHNOLOGY DIESEL OPTION
CORE COURSES (Required)
AER 1771 Intro to Diesel Engines ..... 4 credits
AER 1772 Diesel Engines Troubleshooting \& Repair ..... 4 credits
DIM 1121 Intro to Diesel Fuel Systems ..... 1 credit
DIM 1131 Diesel Distributor and In-line Fuel Systems ..... 1 credit
DIM 1133 Cummins and Detroit Diesel Fuel Systems ..... 1 credit
DIM 1520 Air Brakes ..... 1 credit
AER 1050 Preventive Maintenance Systems ..... 1 credit
COURSE FOR MAJOR FIELD (select 17 credits)
AER 1000 Intro to Automotive Technology ..... 3 credits
AER 1001 Automotive Service \& Minor Repair ..... credits
AER 1100 Intro to Automotive Electrical Systems. ..... 4 credits

| AER | 2101 | Advanced Automotive Electrical Systems ......... 4 credits |
| :---: | :---: | :---: |
| AER | 2138 | Automotive Power Trains ............................... 4 credits |
| AER | 2161 | Management of Auto Service Function............. 3 credits |
| AER | 2175 | Auto AC and Heating ..................................... 4 credits |
| AER | 2931 | Automotive Technology (Special Topics)............ various |
| AER | 2932 | Automotive Technology (Special Topics)............ various |
| AER | 2933 | Automotive Technology (Special Topics)............ various |
| AER | 2934 | Automotive Technology (Special Topics)............ various |
| PMT or | 1121 | Electrical Welding ........................................ 3 credits |
| PMT | 1123 | Combination Welding I ................................. 3 credits |
| AER | 2881 | Auto/Diesel Supervised Work Experience I........ 4 credits |
| AER | 2882 | Auto/Diesel Supervised Work Experience II....... 4 credits |

## AWARD OF ACHIEVEMENT IN CHILD CARE CENTER MANAGEMENT:

A minimum of 30 credits should be selected from the following courses. Total required credits - 30 hours.
CHD 1220 Introduction to Child Development................... 3 credits

EEC 1001 Principles of Early Childhood Curriculum ......... 3 credits
CHD 1332 Creative Experiences for the Young Child ......... 3 credits
EDF 1031 Social Elements in Early Childhood Education .. 3 credits
EEC 1946 Seminar in Early Childhood Education I............ 4 credits
EEC 1947 Seminar in Early Childhood Education II ........... 4 credits
HUN 1410 Basic Childhood Nutrition ................................. 3 credits
EEC 2948 Seminar in Early Childhood Education III .......... 4 credits
EEC 2949 Seminar in Early Childhood Education IV.......... 4 credits
SLS 1421 Personal and Career Development .................... 3 credits
EEC 1260 Program Designs for Young Children ................. 3 credits

## AWARD OF ACHIEVEMENT IN RESTAURANT MANAGEMENT CORE COURSES (REQUIRED)

| FSS | 2221 | Food Preparation I........................................ 3 credits |
| :---: | :---: | :---: |
| FSS | 2222 | Food Preparation II........................................ 3 credits |
| FOS | 2201 | Sanitation \& Safety ........................................ 3 credits |
| FSS | 2300 | Food Service Supervision \& Management ......... 3 credits |
| FSS | 2303 | Food Service Seminar I................................... 4 credits |
| FSS | 2304 | Food Service Seminar II.................................. 4 credits |
| FSS | 2305 | Food Service Seminar III................................. 4 credits |
| FSS | 2306 | Food Service Seminar IV ................................ 4 credits |

Courses for Major Field (Select Additional Credits to $=30$ Credits total)
FSS 2401 Use and Care of Kitchen Equipment.................. 3 credits
FSS 2263 Food Merchandising \& Service........................... 3 credits
FSS 2284 Food Services Special 3 credits
BUL 2111 Business Law I 3 credits
MAN 2100 Human Relations in Business ..... 3 credits
MAN 2300 Personnel Management ..... 3 credits
SLS 1401 Personal and Career Development ..... 3 credits
QMB 1001 Business Math ..... 3 credits
or
ACG 2001: Principles of Accounting I 3 credits
GEB 1011 Introduction to Business ..... 3 credits
CIS 1000 Introduction to Data Processing. 3 credits
AWARD OF ACHIEVEMENT IN HOME SERVICE MANAGEMENT

A minimum of 30 credits should be selected from the following courses. Total required credits for the award - 30 hours.

| CTE | 1300C | Clothing Selection and Construction ................ 3 credits |
| :---: | :---: | :---: |
| CTE | 1743 | Pattern Design .............................................. 4 credits |
| HUN | 1001 | Principles of Nutrition ................................... 3 credits |
| or |  |  |
| HUN | 1410 | Basic Childhood Nutrition .............................. 3 credits |
| CTE | 1401 | Introduction to Textiles.................................. 3 credits |
| EEC | 1001 | Principles of Early Childhood Curriculum ........ 3 credits |
| COA | 1100 | Consumer Finance ......................................... 3 credits |
| FSS | 2202C | Food for the Family ....................................... 4 credits |
| HHD | 2001 | Creative Art and Design Techniques ............... 3 credits |
| EEC | 1946 | Seminar in Early Childhood Education I........... 4 credits |
| SLS | 1421 | Personal \& Career Development ..................... 3 credits |

AWARD OF ACHIEVEMENT IN FASHION MARKETING MANAGEMENT

A minimum of 30 credits should be selected from the following courses. Total required credits for the award - 30 hours.

| QMB | 1001 | Mathematics of Business................................ 3 credits |
| :---: | :---: | :---: |
| MKA | 1491 | Seminar in Fashion Merchandising I................. 4 credits |
| MKA | 1492 | Seminar in Fashion Merchandising II................ 4 credits |
| CTE | 1300C | Clothing Selection and Construction ................ 3 credits |
| CTE | 1401 | Introduction to Textiles................................... 3 credits |
| HHD | 2001 | Creative Art and Design Techniques ................ 3 credits |
| MKA | 2103 | Principles of Merchandise Display .................. 3 credits |
| GEB | 1011 | Introduction to Business ................................. 3 credits |
| MKA | 2041 | Principles of Retailing.................................... 3 credits |
| MAR | 2101 | Salesmanship ............................................... 3 credits |
| SLS | 1421 | Personal \& Career Development ..................... 3 credits |

## AWARD OF ACHIEVEMENT IN FASHION PRODUCTION MANAGEMENT

A minimum of 30 credits should be selected from the following courses. Total required credits for the award - 30 hours.

CTE 1300C Clothing Selection and Construction ................. 3 credits
CTE 1743 Pattern Design ................................................... 4 credits
CTE 1401 Introduction to Textiles....................................... 3 credits
COA 1100 Consumer Finance.............................................. 3 credits
CTE 2340 Advanced Clothing Construction ....................... 4 credits
HHD 2001 Creative Art and Design Techniques .................. 3 credits
MKA 1491 Mid-Management Seminar in 4 credits
MKA $1492 \begin{aligned} & \text { Mid-Management Seminar in } \\ & \text { Fashion Merchandising II ............................... } 4 \text { credits }\end{aligned}$
MKA $2493 \begin{aligned} & \text { Mid-Management Seminar in } \\ & \text { Fashion Merchandising III .............................. } 4 \text { credits }\end{aligned}$
MKA $2494 \quad \begin{gathered}\text { Mid-Management Seminar in } \\ \text { Fashion Merchandising IV.............................. } 4 \text { credits }\end{gathered}$

## AWARD OF ACHIEVEMENT IN SMALL BUSINESS MANAGEMENT FOR THE SCUBA INDUSTRY

Total credits required for the award - 30 credits
Order in which courses should be scheduled:
PEN 1136 Scuba I.............................................................. 2 credits
PEN 1138 Rescue Advanced Scuba..................................... 3 credits
PEQ 1137 Dive Master ....................................................... 3 credits
Specialty Courses - prerequisite PEQ 1137 - may be taken in any order
PEQ 1131 Equipment Specialist.......................................... 2 credits
PEQ 1139 : Underwater Collecting........................................... 1 credit
PEQ 1134 Drift Diving .......................................................... 1 credit
PEQ 1135 Night Diving.......................................................... 1 credit
PGY 1244 Underwater Photography .................................... 2 credits
Final Courses - must be taken in this sequence:
PEQ 1132 Instructor Development Preparatory Course ...... 2 credits
PEQ 1133 Instructor Development Course ......................... 3 credits
PEQ 1138 Instructor Evaluation Course ............................... 2 credits
Additional courses required:

| PEQ | 2140 | Medic First Aid ............................................. 1 credit |
| :---: | :---: | :---: |
| PEN | 2114 | Advanced Life Saving ................................... 2 credits |
| MNA | 2931 | Mid Management Seminar............................. 3 cred |




COURSES

## COURSE DESCRIPTIONS*

All college credit courses can be used for degree purposes. The Educational Services Division will counsel each student to determine specific needs and the appropriate required and elective courses for individual degree-seeking purposes.

The term "credit" as used in this catalog refers to semester hours. Generally, one class hour per week throughout the semester is equal to one semester hour. A two- or three-hour laboratory period is equivalent to one semester hour. The code letter " $\mathrm{P}^{\prime}$ designates professional or academic courses. Dual or " D " courses are permitted in the Associate in Arts Degree only if required for the student's major field of study; they cannot be used as general electives. Occupational or "O" courses are designed for A.S. Degree programs only.

## ACCOUNTING TECHNOLOGY

ACG 2001 Principles of Accounting I (D) (Financial)
3 credits
Fundamental principles and procedures of recording, classifying, and summarizing financial data. Includes accruals and deferrals, depreciation, inventory, payroll, cash control, and notes payable. Co-requisite: ACG 2450.
ACG 2003 Basic Accounting I (D)
3 credits
This course provides the student with the fundamental principles and procedures of recording, classifying, and summarizing financial data. It covers the basic accounting cycle and includes cash, notes, sales, purchases, payments, and elementary statements.

## ACG 2004 Basic Accounting II (D)

3 credits
This is a continuation of ACG 2003 and will emphasize asset control, payrolls, vouchers, special journals, inventory, and deferrals and accruals. Prerequisite: ACG 2003
ACG 2011 Principles of Accounting II (D) (Managerial) 3 credits The study of special systems for internal control, long-term asset analysis, the equity structure of partnerships, and corporations. Includes cost and statement analysis. Prerequisite: ACG 2001 with a grade of C or higher.
ACG 2100 Intermediate Accounting I(O)
3 credits
This course is a continuation of accounting principles with emphasis on theory and concepts involving a deeper inspection of balance sheet and income statement topics. Some of the added discussions include decisions by management, creditors, and stockholders. Prerequisite - ACG 2011.

ACG 2110 Intermediate Accounting II (O)
3 credits
This course is a continuation of ACG 2100 with emphasis on long-term assets and liabilities, statement of changes, corporation capital, and pensions. Prerequisite - ACG 2100.
ACG 2360 Cost Accounting (O)
3 credits
Concentrated study of costs and relationships in businesses. Involves budgeting, job-order, standard costs, systems design, overhead control, absorption costing, inventory planning. Prerequisite: ACG 2011.

TAX $1020 \quad$ Personal Income Tax Accounting (O)
2 credits
This course will assist the student in keeping adequate records and in preparation of personal income tax forms, including some basic tax laws.

TAX 2000
Tax Accounting (O)
3 credits
Review of new tax laws, comprehensive study of individual tax structure, preparation of individual return: (1040).

FIN $2001 \quad$ Managerial Finance (D) 3 credits
This course examines the process of acquiring, allocating, and supervising use of resources with special emphasis on the tools and instruments for managing the finances of the firm, including solvency, liquidity, profitability, and capital budgeting. Prerequisite: ACG 2011.

ACG $2450 \quad$ Microcomputers in Accounting I (D) 1 credit Accounting applications are studied by actual use of microcomputers and simulated business situations. Corequisite: ACG 2001.
ACG 2460 Microcomputers in Accounting II (D) 1 credit Continuation of ACG 2450 - Microcomputers in Accounting I.
APA 1002 Accounting for Small Business (O) 3 credits
A lecture-demonstration, laboratory with use of transparencies of the problems assigned for journals, ledgers, financial statements, cash control, and computer applications.

## AGRIBUSINESS TECHNOLOGY

HOS $1010 \quad$ Fundamentals of Horticulture (D) 3 credits
The fundamental principles of commercial horticulture crop production.
ANS 1211 Farm and Ranch Management ( O ) 3 credits
An analysis of agricultural resources, including land, labor, capital, management and governmental controls. Emphasis will be placed in record keeping, budgeting and analysis for more efficient resourse use.
ANS 1401 Animal Nutrition (O) 3 credits
A study of the feeds and feeding of ruminant and non-ruminant animals.
VME $1005 \quad$ Animal Diseases and Pests ( $O$ ) 3 credits
A study of the prevention, treatment, and control of common disease, internal and external pests.

ASG 1253 Livestock Selection (O)
3 credits
The visual and scientific process in selecting livestock for this regional area. Major emphasis on dairy and beef cattle with minor emphasis on horses, bovines and sheep.

ANS 1310 Animal Reproduction (O) 3 credits A study of animal reproduction including pregnancy determination, artificial breeding, reproductive diseases and disorders.
SOS 2102 Soils and Fertilizers (O) 3 credits
A study of soil usage and fertility including fertilizing practices.
HOS 2025 Home Landscaping and Management (O) 3 credits A basic course in landscape management including the use of plants and their aesthetic values.
FRC $2211 \quad$ Citrus Culture I (O) $\mathbf{3}$ credits
A study of propagation methods, nursery practices, and the origin and history of citrus and the citrus industry.

A study of the care and maintenance of a citrus nursery and of a mature grove, including cultivation, fertilization, spraying, irrigation, and water.
ORH 1930 Agricultural Special Topics -
Home Gardening ( O )
Various credits
This course teaches how to prepare a seed bed determining which plants are better planted from seeds or seedlings. How to plant seeds. How to tend plants through the growing season and during summer. How and when to harvest vegetables. How to winter-over flowers and vegetables.
ORH $1520 \quad$ Plant Identification ( $O$ ) 3 credits
A study which will enable the student to identify the types and characteristics of foliage and flowering plants commonly grown and sold by the Nursery and Floriculture Industry.
ORH 1231 Lawn Care Maintenance and Techniques (O) 3 credits An introduction to standard techniques \& practices, including identification of local turf grasses, selection \& use of equipment, identification of insects \& diseases, instruction in fertilizers and herbicides, proper techniques of spraying and cost analysis \& job bidding.
FRC $1222 \quad$ Citrus Varieties and Rootstocks (O) 3 credits This course begins with a short history of citrus origins, concentrates on identification of common citrus varities and common rootstocks, and includes testing for fruit maturity.

## PMA 2001 Insect and Diseases of Plants ( O ) 3 credits

 An analysis of the major citrus insects and diseases that affect the agricultural industry in Florida.ANS 1003 Introduction to Animal Science (D) 3 credits An introduction to the production, classification, and marketing of farm animals.

AEB 2304 Agricultural Marketing, Processing and Management ( O )

4 credits Marketing, processing, and management of agricultural products and firms. Students will have an opportunity to become familiar with problems of local marketing, processing and management operations. The basic principles of budgeting and the success and failure in farming and ranching will be analyzed.
PMA 2201 Insects and Diseases of Citrus (O) 3 credits An analysis of the major citrus insects and diseases that affect the agricultural industry in Florida.
ORH $2510 \quad$ Ornamental Plant Identification (O) 3 credits Identification and use of plants in the landscape of South Florida.
ORH 2841 Landscape Installation (O)
3 credits
Covers information desired by the conscientious landscape installer. Motivation, sales, blueprint reading, laying out and staging, construction, soil modification, purchasing plant materials, safe handling of tools and equipment, planting and staking, estimating, landscape plants and other information.
ORH 2851 Landscape Design and Maintenance (O)
3 credits
Facets of effective and profitable landscape maintenance techniques. Public relations, motivation, efficiency, plant growth management, turfgrass management, pest management, proper selection and safe use of equipment, first aid and many other areas of information.

ORH $2255 \quad$ Nursery Sales and Management (O)
3 credits
Studies in the field of horticultural services and sales. Includes management of the nursery and sales functions.

AEB $2104 \quad$ Principles of Agricultural Economics (D) 4 credits A study of the principles of economics as they apply to agriculture; basic production problems of agriculture and agricultural policy.

AGG 2941 Agricultural Employment Experience (O) 4 credits This course will give students practical experience working in the agricultural field of their specialization.

AGG 2940 Farm and Ranch Job Skills and Development (O) 3 credits The principles of jobs, skills and new developments in production agriculture.

## AIR CONDITIONING, REFRIGERATION AND HEATING SYSTEMS TECHNOLOGY

ACR $1000 \quad$ Basic Refrigeration ( O ) 3 credits Introduction to refrigeration - the history, refrigeration cycle, tools of the trade, tubing skills, charging techniques, safety and principles of service management. 5 class hours per week.
ACR 1100 Basic Electricity I (Air Conditioning) (O) 3 credits Introduction to electricity covering sources, measuring devices, Ohm's law, circuits, and service management. 3 class hours per week.

ACR 1103 Basic Electricity II (Air Conditioning) (O) 3 credits Covers the 3 basic types of electrical devices. Also covers electric motors, relays, solenoids, heat strips, capacitors, thermostats, solid state controls, and service management. 3 class hours per week.

ACR 1601 Heat Pump Systems (O)
1 hr . lec. -4 hrs. lab- 3 credits This course is designed to give the student an understanding of the principles of heat pump and their applications. The course will also give the student installation, service and maintenance skills on heat pumps. Prerequisites: ACR 1100, ACR 1000, ACR 1101.

ACR 1101 Applied Electricity I (Air Conditioning) (O) 3 credits Introduction to test equipment and circuit protection - practical circuits and power, energy, motors, controls, and service management. 5 class hours per week.

ACR 1102 Applied Electricity II (Air Conditioning) (O) 3 credits Advanced history of electrical motors, transformers, control devices, circuit reading, and service managements. 5 class hours per week.
ACR $1741 \quad$ Components of Refrigeration ( $O$ ) 3 credits Introduction to compressors, condensors, evaporators, metering devices, service procedures and service management. 5 class hours per week.
ACR 2062 Heating and Cooling Load Calculation (O) 3 credits Heating and cooling loads. Calculating of heating and cooling loads and service management. 3 class hours per week.
ACR 2421 Duct Systems (Air Conditioning and Heating) (O) 3 credits Introduction to the construction layout and balancing to a duct system and service management.

ACR 1600
Heat (O)
3 credits
Introduction to electrical gas, oil heating systems, and service management. 5 class hours per week.
ETD 1503 Drafting for the Air Conditioning Industry (O) 3 credits Basic Drafting and applications to the HVAC trades including house plan layouts, sections, details and isometrics.

ACR 2071 Air Conditioning and Heating Service Management (O) 3 credits Principles and theory of business, customer, employer and employee relations.
ACR 2931 Air Conditioning - Special (O) various credits
Special courses or seminars as developed to meet the needs of the community. Class hours per week - varies.
ACR 2932 Air Conditioning - Special (O) various credits Special course or seminar as developed to meet the needs of the community.
ACR 2933 Air Conditioning - Special (O) various credits Special course or seminar as developed to meet the needs of the community.
ACR 2934 Air Conditioning - Special (O) various credits
Special course or seminar as developed to meet the needs of the community.

## ANTHROPOLOGY

ANT 2402 Anthropology and Modern Life (P) 3 credits
An examination of contemporary American culture from a holistic and comparative perspective. Topics include race, sex, religion, language, politics, and popular culture. Corequisite: ENC 1101 or permission of instructor.
ANT 2930 Anthropology and the Paranormal (P) $\mathbf{3}$ credits A critical, scientific examination of the entire range of paranormal beliefs in contemporary American culture. Coverage includes such parapsychological and pseudoscientific topics as ESP, psychokinesis, disembodied spirits, astrology, UFO's, and cryptozoology. Corequisite: ENC 1101 or permission of instructor.
ANT 2410 Introduction to Cultural Anthropology (P)
3 credits
An introduction to the holistic and comparative discipline of cultural anthropology. Focus of the course is on culture as the human system of adaptation, with special attention to language, subsistence, political and economic structures, and ideological systems. Corequisite: ENC 1101 or permission of instructor.
ANT 2511 Introduction to Physical Anthropology (P) $\mathbf{3}$ credits
An introduction to biological anthropology and archeology. Topics include the principles of biological evolution, the evolution of the human species, the evolution of culture, and human prehistory. Corequisite: ENC 1.101 or permission of instructor.

## ART

ARH 1000 Art Appreciation (P)
2 credits
An introduction to major periods of art history. Emphasis is on evaluation and interpretation of various art media.

ARH 2050 Introduction to the History of Art
(Prehistoric through Renaissance) ( $\mathbf{P}$ )
3 credits
A detailed, in-depth study of the development of art as it relates to cultures, individual artists and comparative relationships.

ARH $2051 \quad$ History of Art (Baroque through Modern) (P) 3 credits
A survey of each period's styles and artists with emphasis on architecture, sculpture, and painting relationships.


#### Abstract

ART 1173C Beginning Costume Jewelry ( $\mathbf{P}$ ) 1 credit This is an introductory course on the making of costume jewelry. How to select materials, use tools, and how to design jewelry pieces will be emphasized. Materials used are those which are found around the house or which may be easily purchased in a store.


ART 1174C Intermediate Costume Jewelry ( $\mathbf{P}$ ) 1 credit
This is a continuation of ART 1173C Costume Jewelry I. In this course, more emphasis is placed on the creative design of costume jewelry. Also, more emphasis is placed on the use of semi-precious stones and metals.

## ART 1175C Advanced Costume Jewelry ( $\mathbf{P}$ ) <br> 1 credit

This is a continuation of ART 1174C Costume Jewelry III. The course emphasizes personal creativity and the use of non-standard materials. Design and composition with color and material combinations are emphasized.
ART 1190C Beginning Ceramics ( $\mathbf{P}$ )

1 credit

This is an introductory course on handling, preparing, glazing, joining, and dec
orating ceramics. It emphasizes separate techniques featuring various types of
glazes.

ART 1191C Intermediate Ceramics ( $\mathbf{P}$ )
1 credit
This is a continuation of ART 1190C. Course emphasizes decorating of ceramics through the use of stains and glazes, including both opaque and translucent stains and glazes. Special effects such as Mother of Pearl and Marbelizer are studied.

## ART 1194C Beginning Basketry (P) <br> 1 credit

This is an introductory course on basket weaving and emphasizes Appalachian style basket forms. Styles included are the Fanny basket, Hen basket, Key basket, and the Potato basket.
ART 1195C Intermediate Basketry ( $\mathbf{P}$ )
1 credit
This is a continuation of ART 1194C Basketry I. This course emphasizes materials rather than a particular style. Included are round basketry materials, flat materials, and flexible materials.
ART 1196C Advanced Basketry (P)
1 credit
This is a continuation of ART 1195C Basketry II. The course emphasizes personal creativity and the design of specialty baskets. Students are assumed to be proficient at basic techniques of handling basketry materials.
ART 1205C Color and Design I (P) 5 hours- 3 credits Fundamentals of design (visual composition) with emphasis on the art elements, media and creativity. An analytical approach to problem solving using materials and methods.
ART 1206C Color and Design II (P) 5 hours- 3 credits A continuation of Color and Design I with emphasis on independent design projects. Prerequisite: ART 1205C.
ART 1300C Introduction to Drawing (P) 5 hours-3 credits An introduction to the basic techniques used in drawing including contour, gesture and modeling. Emphasis is on seeing and utilization of various media.

[^6]ART 1330C Beginning Life Drawing (P) 1 credit
This is an introductory level and first in a series of drawing courses in the methods needed to properly execute the human figure in a classical manner.

ART 1331C Intermediate Life Drawing ( $\mathbf{P}$ ) 1 credit This is an introductory level (continuation of series) drawing course which emphasizes techniques of drawing proportion and perspective of the human figure. Prerequisite: ART 1330C.
ART 1332C Advanced Life Drawing (P) 1 credit
This is an advanced drawing course which emphasizes the use of a live model for the purpose of creating classical or creative drawings of the subject. Prerequisite: ART 1331C.
ART 1350C Beginning Drawing ( $\mathbf{P}$ )
1 credit
This is the first in a series. A drawing course which emphasizes the elements of composition and the materials and methods used in drawing as well as critique techniques.
ART 1351C Intermediate Drawing ( $\mathbf{P}$ )
1 credit
This is a continuation of Beginning Drawing and emphasizes composition through the use of negative and positive shapes and value studies with knowledge critiquing. Prerequisite: ART 1350C.
ART 1352C Advanced Drawing ( $\mathbf{P}$ ) 1 credit This course is a continuation of a series and involves the introduction of the gesture and contour methods of drawing using critique methods. Prerequisite: 1351C.
ART 1540C Beginning Watercolor ( $\mathbf{P}$ )
1 credit
Beginning Watercolor is an introductory-level art course which will emphasize the principles of composition, basic elements of drawing, and fundamental techniques of watercolor. Included in the course will be paper techniques, consisting of wet and dry methods.
ART 1560C Intermediate Watercolor (P)
1 credit
Intermediate Watercolor is the second phase of a series of introductory art classes. This course, which emphasizes the study of artistic composition, includes attention to shapes, angles, and perspective. Specialized techniques associated with watercolor painting are developed, along with the production of three-dimensional appearance and design.
ART 1561C Advanced Watercolor (P)
1 credit
Advanced Watercolor is the third phase of a series of introductory art classes. This course emphasizes painting techniques associated with outdoor scenes or of real items indoors. Although traditional drawing and perspective will be covered, loose non-photographic methods will also be included.
ART 1590C Beginning Painting ( $\mathbf{P}$ ) 1 credit This is an introductory course in painting which emphasizes materials and equipment and their use in producing compositions of still life and landscape.
ART 1591C Intermediate Painting ( $\mathbf{P}$ ) 1 credit
This is a continuation of ART 1590C, which emphasizes composition through the use of perspective and gradation.
ART 1592C Advanced Painting ( $\mathbf{P}$ )
This course is a continuation of ART 1591C and emphasizes the use of the color wheel and its applications to painting. These applications may be either direct or indirect.

ART 1593C Beginning Collage Painting ( $\mathbf{P}$ )
1 credit
This is an introductory level course which emphasizes the techniques and ideas of collage, including color, composition, texture, and design.

ART 1594C Intermediate Collage Painting (P) 1 credit
This is an intermediate level course and continuation of Beginning Collage Painting which emphasizes development of personal style and more advanced techniques than those employed in Beginning Collage Painting. Prerequisite: ART 1593C.

ART 1595C Advanced Collage Painting ( $\mathbf{P}$ )
1 credit
This is an advanced level course which emphasizes contemporary materials and creativity in collage painting. Imagery, abstraction, and surrealism will be included. Prerequisite: ART 1594C.

ART 1596C Beginning Porcelain Painting (P)
1 credit
This is an introductory course which will develop the following skills: 1 ) analysis of physical objects into design elements, 2) esthetic evaluation of potential design elements, and 3) elaboration of chosen design elements using overglaze paints on fired porcelain.

ART 1597C Intermediate Porcelain Painting ( $\mathbf{P}$ )
1 credit
This is a continuation of ART 1596C. This course also stresses design, but assumes the china items will be fired. Emphasis is placed on technique with backgrounds, brush strokes, and design modification. Included will be the use of gold, lustre, enamels, and raised paste.

ART 1598C Advanced Porcelain Painting (P)
1 credit
This is a continuation of ART 1597C. This course emphasizes development of personal creativity and style. Also included is the study of such motifs as roses, various fruits, pine cones, and small birds. Included will be a study of the point system used for judging painted china.

ART 1701C Sculpture ( $\mathbf{P}$ ) 5 hours- 3 credits
An introduction into materials and techniques of three-dimensional sculpture using additive, subtractive, and assemblage methods.

ART 1717C Metal Casting Studio I (P)
1 credit
This is an introductory course in the technique of lost wax casting procedures. The class is intended for beginners and includes preparation of the model, molding, and foundry procedure.

ART 1718C Metal Casting Studio II (P)
1 credit
This is an intermediate course in sculpting using lost wax casting procedures. The class emphasizes the technical details necessary for successful bronze casting. Also, design concepts for statues are stressed. Prerequisite: ART 1717C.

ART 1719C Metal Casting Studio III (P)
1 credit
This is an advanced course in sculpting using lost wax casting procedures. This course emphasizes design of statues and assumes basic knowledge of the student in the use of lost wax casting procedures. Prerequisite: ART 1718C.

## ART 1750C Beginning Sculpture ( $\mathbf{P}$ )

1 credit
This is an introductory level course in sculpture and emphasizes a basic beginning approach to sculptural possibilities using both the additive and subtractive methods.

ART 1751C Intermediate Sculpture (P)
1 credit
This is a continuation of ART 1750C. It is a course in sculpture from the perspective of ceramics. The hand building of creative sculptures with the slab, coil, or combination methods will be emphasized. Prerequisite: ART 1750C.
ART 1752C Advanced Sculpture ( $P$ )

1 credit

This is an advanced course in sculpture which emphasizes experimentation with
creative methods using such materials as fibers, fabrics, and dough. Prerequisite:
ART 1751C.

ARH $1835 \quad$ Living the Life of an Artist ( $\mathbf{P}$ ) 3 credits An introduction to the educational, operational and production techniques used by people working in Art related businesses or institutions. Visits to special places, i.e. businesses, art galleries, or schools.

ART $1920 \quad$ Chinese Bamboo Brush Painting (P) 1 credit An introduction to the classical and modern approach to Oriental art. Study of "Koule" and "Moku" brush styles.
ART 2110C Ceramics I (P) 2 credits Fundamentals of pottery making.
ART 2111C Ceramics ( P ) 5 hours- 3 credits This is an introduction to pottery making with an emphasis on creativity.
ART 2112C Ceramics II (P) 2 credits
This course teaches the use of the potter's wheel for producing basic types of ceramic items such as bottles, pots, plates, and vases. The course will also teach the use of glazes and how to fire items.
ART 2113C Ceramics III (P) 2 credits
This course emphasizes use of glazes in decoration of pottery and the construction of pottery by use of slip. Also included, is the combination of hand built and thrown pieces, along with construction of larger items.
ART 2306C Drawing I (P)
1 credit
This intermediate course is designed to teach drawing methods including cartooning, realism and abstraction through form analysis. Prerequisite: Any drawing course.
ART 2316C Drawing II (P) 1 credit This course emphasizes figure and portrait studies through the study of right and left brain technique using critiques of techniques. Prerequisite: ART 2306C.
ART 2326C Drawing III (P) 1 credit This drawing course is an advanced materials and methods class with emphasis on creativity and process. It involves research into history of drawing and its development. Prerequisite: ART 2316C.
ART 2399C Drawing with Ink (P) 2 credits This is a course on drawing with pen and ink through application of line drawing, cross hatching, tonal and value expression, stiple, and techniques of a master etcher.

## ART 2400C Graphics (P)

5 hours- 3 credits Basic printing techniques with emphasis on the silkscreen process.
ART 2510C Introduction to Painting ( $\mathbf{P}$ ) 5 hours- 3 credits Basic painting techniques in acrylics and oil. Instruction in composition, technique and exhibition included.

A continuation of ART 2510C. This course emphasizes individual styles and problems. Exhibiting required. Prerequisite: ART 2510C.
ART 2511C Painting I (P) 2 credits
This is an intermediate level course which emphasizes compositional techniques with the use of elements and principles. Personal creativity is stressed. Prerequisite: ART 1592C.

ART 2522C Painting II (P)
2 credits
This is a continuation of ART 2511C. Painting II, which emphasizes more personal creativity and a more advanced use of composition. Prerequisite: ART 2511C.

## ART 2533C Painting III (P)

2 credits
This course emphasizes a knowledge of painting styles, as expressed by specific artists, and history of art. Included would be such styles as cubism, expressionism, etc. Prerequisite: ART 2522C.

ART 2543C Oil and Acrylics I (P) 2 credits
This course emphasizes fundamentals of oils and acrylics. Included are how to use the colors, basic composition, uses of brushes and knives, and a summary of related art materials available.
ART 2544C Oil and Acrylics II (P) 2 credits
This course teaches both the wet-on-wet and the wash, lift, and paint methods of painting. Knowledge and use of color to achieve creative compositions is emphasized. Prerequisite: ART 2543C.
ART 2545C Oil and Acrylics III (P)
2 credits
This course emphasizes composition, perspective, forms, proportions of the human head, and colors. Subjects may include landscape, seascape, marina scenes, still life, and portrait. Prerequisite: ART 2544C.
ART 2700C Sculpture I (P) 2 credits
This is a sculpture class which will emphasize figure sculpture using a variety of materials such as clay, wax, and plaster of Paris.
ART 2702C Sculpture II (P) 2 credits
This is an intermediate level course in sculpture and emphasizes the history and techniques of casting forms.
ART 2703C Sculpture III (P)
2 credits
This is an advanced level sculpture class which will emphasize creativity in the use of various media such as clay, wax, wood, and plaster of Paris.
ART 2713C Wood Sculpture (P) 2 credits
This is a course on the use of wood as a sculptural material and how to use it to produce both classical and contemporary forms.
ART 1287C Beginning Calligraphy ( $P$ ) 1 credit
This is an introductory course which will teach the basic mode of calligraphy using the Chancey Cursive technique. Emphasis is on proper selection and use of tools and on correct usage of tools.
ART 1288C Intermediate Calligraphy (P) 1 credit
This is an intermediate course which emphasizes pen and ink drawing techniques as applied to calligraphy. Italic forms in a drawing context are studied extensively and basic layout and production are introduced. Prerequisite: ART 1287C.

ART 1289C Advanced Calligraphy (P)
1 credit
This course teaches students forms of lettering such as Gothic, Script or Descriptive. Also, uses of calligraphy such as personal greetings, invitation cards, posters, catalogs, and manuscripts are taught. Prerequisite: ART 1288C.

IDS 2905 Individual Problems (P) (Specify Subject Area by Title)

1-4 credits
A special course designed to offer work of an advanced nature, in any field, that is not offered in a course listed in the catalog. Prerequisite: Permission of Instructor.

## AUTOMOTIVE SERVICE TECHNOLOGY

AER 1000 Introduction to Automotive Technology (O) 3 credits
An introduction to the automobile, the automotive industry and the basics of automotive services. Safety, tools and equipment, service manuals, certification requirements, and vehicle maintenance will be stressed.

AER 1001 Automotive Service and Minor Repair (O) 4 credits
Basics of the automobile and its many systems. Diagnosis, service and minor repair procedures of the power train, suspension, steering, brakes, electrical, body, chassis, engine and related systems. Safety and proper tool/equipment usage will be stressed.

AER 1100 Introduction to Automotive Electrical Systems (O) $\mathbf{4}$ credits Theory and application of electricity and electronics as applied to the modern automobile. Series and parallel circuits, schematics, diagnosis, wire repair, electronics, and microprocessors.
AER 1125 Preventive Maintenance Systems (O) 1 credit
Fleet prevention maintenance systems, record keeping, pm forms, computer applications and service interval adjustment techniques. Preventive and predictive maintenance procedures for all heavy duty vehicle systems.
AER 1151 Engine Tune-Up and Emission Controls (O) 4 credits
Theory, adjustment and repair procedures for automotive engine performance related systems; including carburetors, mechanical fuel injection, point and solid state ignition, emission controls and turbo-chargers.
AER 1263 Auto Body I (O)
4 credits
Body shop operations and equipment. Metal, surface preparation, abrasives, plastics, primers, topcoats and application.
AER 1264 Auto Body II (O) 4 credits
Specialized body shop skills. Welding, metal work, collision damage, alignment, panel replacement, glass, anti-corrosion, damage estimating application of paints and restoration.

AER 1270 Automotive Transaxles (O)
4 credits
Diagnosis and rebuild of manual and automatic transaxle assemblies. Removal, complete teardown, repair, rebuild, reassembly and replacement procedures for foreign and domestic units.

## AER 1410 Automotive Brake Systems (O)

4 credits
Fundamental principles, operation, diagnosis, repair, and rebuild of modern automotive manual and power brake systems. Brake service to include troubleshooting, minor repair through rebuilding, drum and disk resurfacing.

## DIM 1520 Air Brakes (O)

1 credit
Theory, operation, maintenance and troubleshooting of modern dual air brake systems as used on heavy trucks and equipment. Valve rebuilding, system troubleshooting and preventive maintenance will be included.
AER 1450 Suspension, Steering and Alignment (O) 4 credits
Diagnosis, repair, overhaul and adjustment of suspension and steering systems as used in modern automobiles. Tire balancing, steering component rebuild, shock absorbers, suspension systems, wheel bearings, two- and four-wheel alignment will be covered.

AER 1771 Intro to Diesel Engines (O)
4 credits
Introduction to the diesel engine and its related systems. Engine operation and combustion theory. Theory, operation, troubleshooting and repair of engine mechanical, diesel fuel injection, lubrication, cooling, electrical, intake and exhaust systems. Hands-on practice on small industrial diesels is included.
AER $1772 \quad$ Diesel Engines Troubleshooting \& Repair (O) $\quad \mathbf{4}$ credits
Troubleshooting, repair and rebuild techniques of modern diesel engines as used
in automotive, industrial, agricultural and marine service.
DIM 1121 Intro to Diesel Fuel Systems (O) 1 credit
Theory and operation of diesel fuel injection systems and components. System testing, troubleshooting and maintenance procedures, testing, rebuild and adjustment of diesel fuel injectors.
DIM 1131 Diesel Distributor and In-line Fuel Systems (O) 1 credit Theory, operation, test and rebuild on in-line and distributor type fuel injection systems and components. Rebuild and calibration of fuel injection pumps.
DIM 1133 Cummins and Detroit Diesel Fuel Systems (O) 1 credit Theory, operation, test and rebuild of cummins and detroit diesel fuel injection systems and components. Rebuild and calibration of injectors and injection pumps.
AER 2101 Advanced Automotive Electrical Systems (O) 4 credits Theory, operation, diagnosis and repair of automotive electrical and electronic systems and components including; batteries, charging systems, starting systems, lighting circuits, driver information systems and electrical accessories.
AER 2109 Computer Controls and Fuel Injection (O) 4 credits
Theory, operation, testing and repair procedures for computer controlled engine performance related systems and electronic fuel injection as used by G.M., Ford, Chrysler and Bosch.

## AER 2113 Automotive Engine Overhaul (O)

4 credits
Automotive engine overhaul and repair. Proper and safe tool and equipment usage. Complete teardown, repair, machining, and reassembly of modern automotive engines.

AER 2136 Automatic Transmissions (O) 4 credits Theory, operation, maintenance, diagnosis, and repair of automatic transmissions; both foreign and domestic.
AER 2138 Automotive Power Trains (O) 4 credits
Diagnosis, repair and rebuild of automotive power trains and components, including; drivelines, u-joints, clutches, linkages, axles and bearings, differentials, and manual transmissions.

AER 2161 Management of Automotive Service Function (O)
3 credits Management and supervision within the automotive service industries. Writing and processing of work orders, warranty claims, and technical reports. Facility planning, parts and equipment control, personnel management and business management. Employability skills, including; job search, interview skills, applications and resume writing.

AER 2175 Auto Air Conditioning and Heating (O) 4 credits Theory, fundamentals and operation of automotive air conditioning and heating systems. Diagnosis, repair, and replacement of $A / C$, heating, vacuum and electrical control systems and components.
AER 2531 General Motors Computer Controlled Systems (O) 1 credit Theory, operation, testing and repair procedures for computer controlled engine performance related sytems and electronic fuel injection as used by G.M.
AER 2532 Ford Computer Controlled Systems (O)
1 credit
Theory, operation, testing and repair procedures for computer controlled engine performance related systems and electronic fuel injection as used by Ford.
AER 2533 Chrysler Computer Controlled Systems (O) : 1 credit Theory, operation, testing and repair procedures for computer controlled engine performance related sytems and electronic fuel injection as used by Chrysler.

## AER 2534 Bosch Computer Controlled Systems (O) 1 credit

Theory, operation, testing and repair procedures for computer controlled engine performance related sytems and electronic fuel injection as used by Bosch.
AER 2881 Auto/Diesel Seminar \& Supervised Work Experience I 4 credits Seminar for students enrolled in the automotive service technology program. The seminars meet a minimum of one hour each week for discussions and reports concerning the supervised work experience. A minimum of fifteen hours of supervised on-the-job training required in the automotive/diesel industry per week.

AER 2882 Auto/Diesel Seminar \& Supervised Work Experience II 4 credits Seminar for students enrolled in the automotive service technology program. The seminars meet a minimum of one hour each week for discussions and reports concerning the supervised work experience. A minimum of fifteen hours of supervised on-the-job training required in the automotive/diesel industry per week.

AER 2883 Auto/Diesel Seminar \& Supervised Work Experience III 4 credits Seminar for students enrolled in the automotive service technology program. The seminars meet a minimum of one hour each week for discussions and reports concerning the supervised work experience. A minimum of fifteen hours of supervised on-the-job training required in the automotive/diesel industry per week.
AER 2884 Auto/Diesel Seminar \& Supervised Work Experience IV 4 credits Seminar for students enrolled in the automotive service technology program. The seminars meet a minimum of one hour each week for discussions and reports concerning the supervised work experience. A minimum of fifteen hours of supervised on-the-job training required in the automotive/diesel industry per week.
AER 2931 Automotive Technology (Special Topics) (O) various credits Special courses or seminars as developed to meet the needs of the community. Class hours per week - various.

AER 2932 Automotive Technology (Special Topics) (O) various credits Special course or seminar as developed to meet the needs of the community.

AER 2933 Automotive Technology (Special Topics) (O) various credits
Special course or seminar as developed to meet the needs of the community.
AER 2934 Automotive Technology (Special Topics) (O) various credits
Special course or seminar as developed to meet the needs of the community.

## BIOLOGY

## APB 2203C Anatomy and Physiology I (P)

3 hrs. lecture- 2 hrs. lab-4 credits First semester of a two-semester sequence, this course studies regional and systemic anatomy and physiology of the human body. Emphasis will be placed on histology and the integumentary, skeletal, muscular, and nervous systems. During the first two weeks of class, students will be tested in prerequisite materials such as simple chemistry, cell structure, biochemistry, metabolism, and molecular genetics. Prerequisite: APB 1150 or BSC 1010C.

APB 2204C Anatomy and Physiology II (P)
3 hrs. lecture- 2 hrs. lab- 4 credits A continuation of APB 2203C, studying the anatomy and physiology of human systems. Those to be covered are the circulatory, digestive, respiratory, excretory, endocrine, and reproductive systems. Prerequisite: APB 2203C.
BOT $1800 \quad$ Plants and Man ( $\mathbf{P}$ ) 3 hrs. lecture-3 credits Significance of plants in the origin and development of human cultures, the economic importance of plants, ecological relationships, and basic botanical concepts relating to the structure and function of plants.
BOT 2010C General Botany I (P) 3 hrs. lecture-2 hrs. lab-4 credits The non-flowering plants; taxonomy, ecology, evolution and diversity of the lower kingdom. Prerequisite: BSC 1010C or permission of instructor.
BOT 2011C General Botany II (P) 3 hrs. lecture-2 hrs. lab-4 credits The diversity of flowering plants, taxonomy, ecology and physiology. Prerequisite: BOT 2010C or permission of instructor.
APB $1150 \quad$ Fundamentals of Biology I (P) 3 hrs. lecture-3 credits An introductory level biology course for non-science majors seeking a general education. Topics will include an introduction to scientific thinking, the cell theory, the chemistry of life, cell division, animal tissues, and the integumentary, digestive, circulatory, immune, and respiratory systems of the human body. It is recommended that students taking this course continue in APB 1151. Corequisite: ENC 1101.
APB 1151 Fundamentals of Biology II (P) 3 hrs. lecture-3 credits Continuation of APB 1150. Emphasis will be placed on the human excretory, nervous, musculoskeletal, endocrine, and reproductive systems. Also studied are topics in human genetics and the principles of ecology. Prerequisite: APB 1150 or permission of instructor.
APB 1153C Biology with Lab (P)
4 credits
This course is an introductory-level biology course with lab for non-science majors seeking to meet their laboratory course requirement needed at most universities. The application of the scientific method will be emphasized in problem-solving of daily concerns and biological research. Major topics include: cell structure and function, cardiovascular system, immunity, inheritance, plant structure and function, and ecological principles. Corequisite: ENC 1101. This course must be paired with a physical science course to meet the A.A. Degree requirements.
*BSC 1010C General Biology I (P)
3 hrs. lecture- 2 hrs. lab- 4 credits
An introductory level biology course designed for students needing a lab science for transfer to a university. The first semester will cover cell structure and function, the chemical basis for life, cell metabolism, cell reproduction and inheritance, and a survey of viruses, bacteria, and fungi. Laboratory exercises are designed to give the student "hands-on" experiences concerning topics presented in lectures. It is recommended that students taking this course continue in BSC 1011C. Corequisite: ENC 1101.
BSC 1011C General Biology II (P) 3 hrs. lecture-2 hrs. lab-4 credits Continuation of BSC 1010C. Topics include a survey of the plant and animal kingdoms, comparative physiology of vertebrate systems, plant and animal development, and ecology. Laboratory exercises are designed to give students "hands-on" experiences concerning topics presented in lectures. Prerequisite: BSC 1010C or permission of instructor.
APB $1161 \quad$ Human Genetics ( $\mathbf{P}$ ) 3 credits Human Genetics will emphasize the underlying biology of human condition. By relating principles of inheritance to the human condition the course will prepare students to consider some controversial issues involving the science of genetics in contemporary society.

## APB 1120 Introduction to Ecology (P) <br> 3 credits

A survey of the interrelationships between living organisms and their physical environment, including an overview of animal and plant physiology, chemical cycles, and the various ecosystems on earth. Present day ecological problems are discussed, along with ecological aspects of humans and implications for the future.
MCB 2010C Microbiology (P)
3 hrs. lecture- 2 hrs. lab- 4 credits A survey of the structure, physiology, genetics, and control of microorganisms, including an overview of the medical importance of viruses, bacteria, protozoans, and multicellular parasites. Immunological reactions are discussed. Lab studies complement lecture material, including exercises on morphology, aseptic transfer, straining physiology, control, and identification of bacteria. Prerequisite: BSC 1010C and BSC 1011C or APB 2203C, or permission of the instructor.
**BSC 2910L Natural Science Directed Research Studies (P) $\mathbf{1 - 3}$ credits The student in this class engages in a basic research project under the guidance of a professional scientist or faculty member of the science department. The student should be a second year science major.
ZOO 2203C Invertebrate Zoology (P) 3 hrs. lecture-2 hrs. lab-4 credits A survey of the taxonomy, morphology, physiology, and ecology of the major invertebrate phyla (Protozoa through Cephalochordata). Field work is required. Prerequisite: BSC 1010C or BSC 1011C, or permission of instructor.
ZOO 2303C Vertebrate Zoology ( $\mathbf{P}$ ) 3 hrs. lecture- 2 hrs. lab- $\mathbf{4}$ credits The taxonomy, morphology, physiology, evolution and ecology of vertebrate animals. Prerequisite: BSC 1010C and BSC 1011C.

## ISC 2601 Science and the Scientific Method (D)

30 hrs. Lecture-10 hrs. lab-3 credits The purpose of this course is to study the differences between basic and applied research along with practical applications of the scientific method. Students undertake actual scientific studies and small research projects both in the laboratory and in the field. Prerequisites: College biology, chemistry or physics.

[^7]
## BLACK CULTURE STUDIES

AFA 2000 Afro-American Studies (P) $\mathbf{3}$ credits
A survey course will be taught chronologically and serve as an introduction to the literature and history of the Black American experience. The course begins with the oral tradition of the slave narratives and spirituals and continues through the most current writings available.

## BROADCAST COMMUNICATIONS

RTV 1000 Introduction to Broadcasting (D)
3 credits
This course provides composite study of radio history, theory, law, news preparation and presentation, editorial comment, and copy preparation. Attention is given to the requirements for work in an industry regulated by the Federal Communications Commission. Prerequisite: ENC 1101.
RTV $1941 \quad$ Broadcast Practicum I (D) 10 hours lab, 2 credits In this course, the student will become familiar with all equipment and basic operations of a small FM radio station. Prerequisite: RTV 1000.

## RTV 1942 Broadcast Practicum II (D) 10 hours lab, 2 credits

In this course, the student will prepare specially taped programs for use on a small FM radio station as well as assist in remote broadcasts when applicable. Practice time in control and production rooms of radio station will be provided. Prerequisite: RTV 1941.

RTV 2003 Introduction to Radio News (D) 3 credits
This course will provide for the planning, organization, and writing of various broadcast announcements and news. Program continuity will be stressed. Prerequisite: RTV 1000.

## BUILDING CONSTRUCTION TECHNOLOGY

BCN 1272 Plans Interpretation I (O)
3 credits
The student will master the terminology currently used in the construction trade, and the meanings of symbols, abbreviations and line weight. The student will demonstrate the ability to use architect's scales efficiently, and will learn basic methods employed in residential construction. The student will locate specific information contained in blueprints, and the student will also learn to do basic architectural sketching.
BCN 1701 Construction Office Practices (O)
3 credits
The student will study the systems and operations found in construction offices. This includes code restrictions, standards, specifications, legal documents, CPM schedules, project scheduling, planning, and other aspects of running a construction office. The student will study the general laws pertaining to contracts, warrantees, guarantees, setting up a business, bonds, business licenses, joint ventures, qualifying agents, partnerships, corporations, expressed and implied warranties, Federal and State Tax Laws, Federal and State Labor Laws, and laws regulating certification of contractors.
BCN 1721 Construction Accounting \& Cost Control (O)

3 credits The student will plot job progress, draw schedules, and study cash flow, billing, financing, job ledgers, inventory, collection methods, payroll, overhead, financial statements, balance sheets, income statements, net worth, equipment and property purchases, credit and borrowing, principles, term interest, points and closing cost,
depreciation, and financial ratios. The student will study the effects on pricing of variation in delivery time, quantities, payment terms, purchase orders, sub-contracting, inventory and other aspects of cost control.

BCN 1210 Materials of Construction (D)
3 credits
A study of the materials used in the building construction industry. The production, composition, properties and available forms of wood, wood products, concrete, ceramic products, steel, non-ferrous materials, gypsum, glass, bituminous products, composite materials and plastics.

BCN 1610 Contract Cost Estimating (O)
3 credits
The determination of the methods, materials and labor involved in construction in order to arrive at an accurate and profitable estimate of total project costs.

BCN $1765 \quad$ Contract Codes \& Specifications (O)
3 credits
The student will receive an overview of the construction industry including: Type of businesses and forms of ownership, contracts and contract bonds, insurance, business methods, labor laws, and O.S.H.A. regulations. The student will become familiar with the various forms and documents used in construction, legal and contractual requirements, and insurance for construction projects.

BCN 2616 Construction Estimating (O)
3 credits
The student will be given sets of plans and price sheets, and will estimate the amounts of materials and costs for doing different jobs. The student will use the appropriate forms to record take-offs and prices. The type of plans employed will be similar to those used on the Florida State Contractor Exam. The student will study earthwork, evacuation, surveying principles and types of carpentry dealing with wood structures.

BCN 1760 Building Codes and Specifications ( $O$ ) 3 credits The student will study the Standard Building Code. Subjects addressed will include basic definitions, fire zones, construction types, construction regulations, signs, electrical, wood, sanitation regulations and selected specialized subjects. The student will learn how to locate needed information in the building codes and O.S.H.A. regulations. The student will also be exposed to questions similar to the ones appearing on the Florida State Certification Exams.

BCN 2213 Concrete Construction Material \& Methods (O)

3 credits
Students will conduct comparative analysis of selected equipment as to effectiveness in job performance. The student will also solve problems relating to equipment usage, as well as shore and form capacities and pile capacities. Student in addition will solve problems similiar to those on the Florida State Contractor Exam. The student will study the various types of concrete forms and will develop and design systems to meet the needs of projects assigned to them. The student will prepare designs in accordance to codes similar to those found on the Florida State Contractor Exams.

BCN 2211 Commercial Construction Materials (O)
3 credits
The student will study steel, concrete, concrete panels, and other elements found in the construction of multi-story buildings. The student will learn to take quantities of these items from blueprints. The student will also study questions similar to the ones found on the Florida State Certification Exam.

BCN 2275 Plans Interpretation II (O)
3 credits
The student will move forward from residential to commercial construction drawings. The student will interpret symbols, abbreviations and other pertinent information found on a set of blueprints. The student will determine dimensions and figure areas of various structural components.
BCN 2561 Mechanical and Electrical Systems (O)
3 credits
The student will receive an overview of the plumbing, electrical and mechanical systems found in the construction industry. The student will study code requirements, working principles, and terminology of the specific trades.
BCN 2614 Estimating and Bidding (O)
3 credits
The student will analyze a set of drawings, apply the theories and principles of system estimating and forecast construction cost by preparing a total bid package for a prospective client.
BCN 2703 Field Management (O) 3 credits
The student will study the Critical Path Method, Job Cost Accounting, O.S.H.A. Requirements, draw schedules, percentage of completion, record keeping, inventory control, and scheduling, organization and management theory. The student will also study elements of leadership and human relations.
BCN $2705 \quad$ Office Management (O) 3 credits The student will study bookkeeping, record keeping, estimating, Lien law, contracts, finance, selling, cost estimating and analysis, contracts, closing, AIA Documents, draw schedule and permitting.
ETM $1111 \quad$ Energy and Building Design (O) 2 credits The student will study the Florida Energy Codes, and will learn to do energy calculations required for permitting a structure.
BCN 2742 Preliminary Comprehensive Exam (O) 3 credits A preliminary exam designed to introduce the student to the conditions and types of material found on the Florida State Contractors Exam.

BCT 1421 Brick and Block Construction I (O) 3 credits Introductory phases of masonry construction including the tools of the trade, material and types of brick and block, and the laying and bonding of all types of brick and block construction.

BCT $1422 \quad$ Brick and Block Construction II (O) 3 credits A continuation of BCT 1421 with related topics of blueprint reading, design layout and job estimations. Prerequisite: BCT 1421.
BCT 1423 Brick and Block Construction III (O) 3 credits A continuation of BCT 1422 with emphasis on various concrete designs and layout. Prerequisite: BCT 1422.
BCT 1424 Brick and Block Construction IV (O)
3 credits
A continuation of BCT 1423 with emphasis on various brick and stone work. Prerequisite: BCT 1423.

## BUSINESS ADMINISTRATION AND MANAGEMENT

ADV 2201 Advertising and Sales Promotion (D) 3 credits
This course is designed to provide students with an understanding of basic advertising terminology and strategy. It focuses on target analysis, media analysis, ad development, scheduling and budgets, resulting in the individual development of an advertising campaign.

## BUL 2111 Business Law I (D)

3 credits
This course provides students with an understanding of American Law, Contract Law and Article II of the Uniform Commercial Code, which deals with the sale of goods. Through study of content and cases, the course teaches the fundamentals of preventive law, tort law, criminal law, the court system and legal terminology.

BUL 2112 Business Law II (D) $\mathbf{3}$ credits
This course is designed for business students and is a continuation of Business Law I. It focuses on commercial paper, debtor-creditor relations, agency law, business organizations, insurance, wills, estates and trusts.

GEB 1011 Introduction to Business (D)
3 credits
This course is designed to provide students an overview of the various disciplines within business, including marketing, management, banking, human relations, business law, personnel management, and accounting. In it, students are also exposed to career considerations existent within the major areas of business. This course should be completed before more specialized and advanced courses are attempted.

MAN $2021 \quad$ Principles of Management (D)
3 credits
This course introduces business students to management theories and processes, needed by managers in nearly any modern organization. A variety of techniques are utilized to aid students in developing practical management skills.

MAN 2100 Human Relations in Business (D)
3 credits
This course is designed to help business management students build their awareness of the major interpersonal challenges facing modern managers. Through theory and experiential activities, the student develops skills in leadership, communications and motivation.

MAN 2300 Personnel Management (D)
3 credit
This course emphasizes the functions of a modern Personnel/Human Resources Department, and helps students gain the knowledge and interpersonal skills needed to succeed in this setting. Content includes sound hiring and termination decisions, understanding of applicable Federal and State employment legislation, labor relations, employee discipline, performance appraisals, as well as wages and benefits.

## MAN 2934 Productivity (O)

1 credit
This short course stresses the effective setting of performance standards, controlling for quality and quantity and important human productivity concerns, such as motivation. The scope of this course may be broad or narrow, depending upon its student makeup.

MAR $2011 \quad$ Principles of Marketing (D)
3 credits
This course is designed to present basic marketing concepts to A.S. degree students, by focusing on the market mix, target marketing, primary marketing functions and implementation of marketing strategies in a modern organization.

MKA 2045 Customer Relations (O) 1 credit
This course is designed to increase awareness of quality customer service and develop an appreciation for its vital importance in today's marketing businesses. The content includes customer service techniques, customer communication skills, dealing with challenging customers, and the development and implementation of a quality customer service philosophy.

1 credit
This course focuses on those activities which support a marketing firm's personal selling, advertising and publicity efforts, including development of sales aids, contests and premiums, which are often fundamental in the customer's decision to buy.
MKA 2701 Market Development (O)
1 credit This short course examines effective procedures for systematically collecting and analyzing data about the current and future market, in order to facilitate predicting of buying patterns and solving a variety of marketing problems.
MKA 1301 Mid-Management Seminar I (O) 4 credits This course provides A.S. Degree students with an opportunity to immediately apply fundamental management and marketing concepts. Topics for each seminar rotate through a two-year cycle and include communications, promotional strategies, career development, retail merchandising and others.
MKA 1313 Mid-Management Seminar II (O)
4 credits
This course is the second of four and provides A.S. Degree students with an opportunity to immediately apply fundamental management and marketing concepts. Topics for each seminar rotate through a two-year cycle and include communications, promotional strategies, career development, retail merchandising and others.
MKA 2323 Mid-Management Seminar III (O)
4 credits
This course is the third of four and provides A.S. Degree students with an opportunity to immediately apply fundamental management and marketing concepts. Topics for each seminar rotate through a two-year cycle and include communications, promotional strategies, career development, retail merchandising and others.

## MKA 2333 Mid-Management Seminar IV (O)

4 credits
This course is the last of four and provides A.S. Degree students with an opportunity to immediately apply fundamental management and marketing concepts. Topics for each seminar rotate through a two-year cycle and include communications, promotional strategies, career development, retail merchandising and others.
MKA 1351 Mid-Management Seminar (O) 2 credits
MKA 1352
Offered during summer terms only, this course is designed for business students pursuing the A.S. degree. It emphasizes effective decision making within a variety of marketing and management topic areas, which are rotated to include merchandising, communications and career development.
MKA 2021 Salesmanship (O)
3 credits
This course is designed for marketing and management students and emphasizes the development of effective sales qualifying, presentation and follow-up skills fundamental to success in any career in today's complex marketplace.

## MKA $2041 \quad$ Principles of Retailing (D) <br> 3 credits

This course focuses on the development, present status and opportunities of the retailing structure and aids the student in developing analytical skills in the major store functions: buying, promotion, selling, store operations, accounting and control.
MNA 1801 Entrepreneurship (O)
3 credits
This course is designed for students interested in starting or buying their own business. It focuses on research and development of the various elements in a business plan, including financing, marketing and bookkeeping.

MNA 2345 Supervision I(O)
3 credits
This course is designed primarily for practicing or aspiring supervisors who hold or will hold first-line or middle-level management positions. Topics include goal setting, giving effective praise/reprimands, and practical, low-cost methods of motivation.

MNA $2781 \quad$ Communications in the Workplace ( $O$ ) 1 credit
This short course is designed to help students develop and refine skills necessary to promote effective organizational skills in oral, nonverbal and written communications.

MNA 2767 Basic Supervision (O)
1 credit
This short course is designed to provide practicing or aspiring supervisors with the skills necessary to increase their effectiveness in first-line or middle-management positions.

MNA 2932 Executive Development (O)
1 credit
This course is designed for students to develop and refine skills and traits necessary to increase their promotion potential, including time and stress management, decision making, motivation and techniques of networking.

## MNA 2787 Decision Making (O) <br> 1 credit

This short course is designed to help students develop and refine efficient and effective decision making skills. It emphasizes a systematic approach to problem solving and explores the strengths and weaknesses of various techniques, including group decision making.

MNA 2765 Staffing (O)
1 credit
This short course, designed for students having a present or future need for information in personnel/human resource management, focuses on effective screening and hiring decisions, consistent with current Federal and State employment legislation.

MNA $2761 \quad$ Strategic Planning (O)
1 credit
Recognizing that today's business environment is changing quickly and significantly, this course focuses on the enterprise's need to engage in systematic longterm planning. The course emphasizes thorough environmental analysis, extensive internal analysis, overall strategy development, implementation and control.

MNA 2772 Human Relations in the Workplace (O)
1 credit
This short course provides students with skills necessary to improve the quality of their interpersonal relationships, emphasizing, through an experiential approach, the development of a personal sense of positive self image and control.

## QMB 1001 Mathematics of Business (O) <br> 3 credits

This course seeks to develop in students those mathematical concepts required for success in a variety of business careers, including among others, payroll calculations, markups and markdowns, discounts, commissions and profit calculations.

REE 1040 Real Estate Principles \& Practices (O)
4 credits
This course is designed specifically for students wishing to comply with the Florida Real Estate Commission's requirements for licensing as a Florida Real Estate Sales Associate. Passing the course's final exam with at least $70 \%$ is a prerequisite for the student to apply to take the State license exam.
REE 1100 Real Estate Residential Appraising (O)
4 credits
This course is designed to teach students the proper way to complete an appraisal on a single-family residential property, focusing on the proper completion of the Uniform Residential Appraisal Report Form. The course satisfies the Florida Real Estate Commission's pre-licensing CA I requirements.
REE 1932 Condominium Living \& Association Management (O) 1 credit This course is designed for entry-level managers, board members and unit owners, introducing the student to condominium operations and lifestyles. Definitions of pertinent aspects of condominiums are emphasized. Basic information on the legal structure of condominiums, financial operations and board responsibilities are stressed.

## REE 2041 Real Estate Principles, Practices <br> \& Law (O)

5 credits
This course seeks to prepare students wishing to satisfy the State of Florida's prelicensing requirements to obtain a Real Estate Broker's license. The class focuses on appraising, management, law, closing statements and other critical aspects of the industry.

REE 2102 Commercial Appraising (O)
4 credits
This course is designed to teach the proper way to complete an appraisal on commercial property. The course satisfies the Florida Real Estate Commission's pre-licensing CA II requirement.
REE $2541 \quad$ Condominium \& Property Management (O) 1 credit This course is designed to prepare students interested in becoming Florida licensed Condominium and Property Managers to take the state exam, by focusing on State law, budgets, contracts, insurance, regulations and licensing.
SLS $1215 \quad$ Self Awareness in the Workplace (O) 1 credit
Self Awareness in the Workplace is designed to prepare students to become effective office supervisors or managers through the process of goal setting. The student will also learn to make the most of his/her unique talents by building self confidence and value clarification.
SLS $1220 \quad$ Assertiveness in the Workplace (O)
1 credit
Assertiveness in the Workplace is designed to prepare students to take charge of their own lives in the business world through the use of assertive behavior. The student will learn the difference between assertive and agressive behaviors and will learn to identify and appropriately deal with interpersonal problems. Effective job search skills will be discussed such as resume writing and interview techniques.
SLS 1227 Managing Anger in the Workplace (O)
1 credit Managing Anger in the Workplace is designed to explore the causes and effects of anger in the workplace. The student will explore personal responses to anger and be given appropriate methods of dealing with angry behavior.
SLS $1223 \quad$ Managing Stress in the Workplace (O)
1 credit Managing Stress in the Workplace is designed to prepare the student to effectively deal with stress in the business world. The student will learn the physical and psychological effects of stress. The student will learn relaxation techniques as a way to deal with stress.
SLS 1365 Developing Leadership Skills (O) 1 credit Object of the class is to analyze the impact of political, psychological, sociological issues in leadership roles. Examine masculine \& feminine stereotypes related to leadership. Explore personal \& group skills necessary for leadership success.

## CHEMISTRY

CHM 1015 Introduction to Chemistry (P)
3 credits
A study of the elementary principles of general chemistry for the non-science major.
CHM 1033 Biochemistry for Health Professionals (O) 1 credit Designed to cover the essentials of chemistry and biochemistry for students in health-related fields. Emphasis will be placed on chemical and biochemical applications to the health-related fields, and on understanding the structure and function of lipids, carbohydrates and proteins.
CHM 1045C General Chemistry I (P) 3 hrs. lecture-3 hrs. lab-4 credits A study of the principles of chemistry, atomic and molecular structure, chemical bonding, properties of gases, stoichiometry, liquids and solids. Related laboratory experiments. Prerequisite: MAC 1102 or high school Algebra II.
CHM 1046C General Chemistry II (P) 3 hrs. lecture-3 hrs. lab-4 credits A continuation of CHM 1045C including equilibrium, kinetics, electrochemistry and descriptive chemistry of some elements. Related laboratory experiments in qualitative analysis of some cations and anions. Prerequisite: CHM 1045C.
CHM 2210C Organic Chemistry I (P) 3 hrs. lecture-6 hrs. lab-5 credits A study of the nomenclature, preparations, reactions, mechanisms and electronic and structural features of carbon-containing compounds. Related laboratory experiments. Prerequisite: CHM 1046C.
CHM 2211C Organic Chemistry II (P) 3 hrs. lecture- 6 hrs lab- 5 credits A continuation of CHM 2210C. Prerequisite: CHM 2210C.

## COLLEGE PREPARATORY - Placement Testing Required

See the following sections under descriptions in this catalog:

1. English: ENC 0080 Basic English Review; ENC 1001 Fundamentals of Writing
2. Mathematics: MAT 0002 Basic Mathematics Review; MAT 1024 Introductory Algebra
3. Reading: REA 0001 College Prep Reading I; REA 0002 College Prep Reading II

In addition to class time, this course requires two (2) hours per week in the Center for Personalized Instruction.

## COLLEGE ORIENTATION

SLS $1101 \quad$ Principles of Academic/Personal Development (P) 3 credits The course provides an extensive orientation to the college, helps students develop a more positive attitude toward learning, and offers instruction in learning skills and strategies.

## COMPUTER PROGRAMMING AND ANALYSIS

CEN 2500 Data Communications (O) 1 credit
This course is designed to give the student a "hands on" introduction to data communications on the IBM personal computer. The student will be introduced to the fundamentals of telecommunications using communications software and digital communications equipment. Several electronic data banks will be explored.

CGS 1000 Introduction to Computer Usage (O)
3 credits
This course introduces students to the use of microcomputers in the home and in business environments. Topics include an introduction to the following: writing programs in the language BASIC, use of a data base, use of an electronic spreadsheet and use of a word processing program. (S/U credit)

CGS 2100 Business Computer Applications (O)
3 credits
This course introduces professional quality word processing, data management and electronic spreadsheet software. Topics covered are Wordperfect, dBase and LOTUS. (S/U credit)

## CIS $1000 \quad$ Introduction to Data Processing (D) 3 credits

Establishes an understanding of the fundamentals required for further study in the field through a general survey of the methods and techniques of processing data. Emphasis is on the general purpose computer and its use in business and industry.
COP 1170 BASIC Programming I (D)
3 credits
Beginning course in the BASIC programming language stressing programming logic and techniques. Includes assignment statements, input and output, control statements, arrays, subscriptive variables, editing and debugging programs. Prerequisite: COP 2000.

## COP 1171 Business Programming in BASIC (D) 3 credits

A continuation of COP 1170 using more advanced coding techniques. Includes disk operations, disk files, multi-dimensional arrays, test files, and advanced algorithms. Prerequisite: COP 1170.

COP $2120 \quad$ COBOL Programming I (D) 3 credits
A beginning course in the COBOL programming language stressing efficient programming logic and techniques. Includes the solution of elemental commercial computer programs using the Common Business Oriented Language. (COBOL). Prerequisite: COP 2000.

## COP 2121 COBOL Programming II (D) <br> 3 credits

A continuation of COP 2120 using more advanced coding techniques. Emphasizes the use of COBOL in file maintenance and report writing. Prerequisite: COP 2120.

## COP 2200 FORTRAN (D)

3 credits
Computer programming and application using FORTRAN. Emphasis on scientific and business oriented problems. Prerequisite: MAC 1102 or MGF 2202. COP 2000 recommended.

COP $2210 \quad$ PASCAL I (D)
3 credits
Introduces the principles and concepts of structured program design, algorithm development and documentation using the standard PASCAL language. Topics include sequences, decisions, loops, procedures and functions, arrays, records, and sets.

CIS 2321 Computer Systems Design (D)
3 credits
A discussion with case studies and class problems of how business procedures can be applied most effectively to the computer.
CET $1151 \quad$ PC Maintenance and Repair (O)
1 credit
This course provides a fundamental overview of computer hardware, terminology and other factors involved in minor maintenance and repair to personal computers. It includes: routine preventive maintenance to disk drives and other devices. The course requires no previous computer knowledge.

CGS 1412 LOGO Usage Workshop (O)
2 credits
The purpose of this course is to teach LOGO to students in grades 3-12.
CGS 1560 Disk Operating System I (O) 1 credit
This course covers the fundamental commands of the IBM PC (Microsoft) operating system. Fundamental commands and how to use them to generate personalized batch files and directories are covered. ( $\mathrm{S} / \mathrm{U}$ credit.)
CGS $1460 \quad$ Basic Usage Workshop (O) 2 credits
This course is intended to give an overview of the BASIC language. Fundamental structures including sequence, selection, and repetition are emphasized. Also included in the course is an introduction to the graphics features of the language BASIC.
CGS 1561 Disk Operating System II (O) 1 credit
This course is intended to be a continuation of CGS 1560 (Disk Operating System I). It is designed to broaden the student's skills in using DOS. The course includes hands-on instruction using the IBM-PC Disk Operating System. Emphasis is placed on fixed disk operations and intermediate DOS commands.
CGS $1570 \quad$ High Tech Usage Workshop (O) 2 credits This Course was designed for the purpose of developing introductory level skills on operating a microcomputer. This course includes hands on instruction with beginning software. Students learn to use word processing techniques, and create data base files. Students use null modems for telecommunications.
COP 2000 Introduction to Computer Programming (P)
3 credits
Introduction to Computer Programming provides the beginning programming student with the techniques necessary to write well-documented structured computer programs. The course is intended to emphasize the planning process using examples involving sequence, decision and iteration. Although the emphasis is on algorithm development, programs will be coded and implemented using Pascal. The course is designed to promote good programming practices for further study of other programming languages. Prerequisite: None (For beginners only)
COP 2701 Data Base Programming (O)
3 credits
This course is designed to teach the fundamentals of using dBase III + and the programming language available with dBase III + .
COP 2400 ASSEMBLER Programming I (D) 3 credits
This course is designed to teach the fundamental instruction set of the 8088 microprocessor, as well as the fundamental design and execution of ASSEMBLER programs. Some topics include registers set, interrupts, stack applications, sub routines, linkage with other languages, and data files. Prerequisite: working knowledge of a high-level language with the use of data files.
CGS $1510 \quad 1$ credit This course introduces the student to the fundamental commands in an Electronic Spreadsheet program and to some common uses of such a program. ( $\mathrm{S} / \mathrm{U}$ credit.)
COP $1700 \quad$ Data Base Management (O) 1 credit
This course introduces a student to the use of a relational data base management program on a microcomputer. Emphasis is toward business application. (S/U credit)
CGS 1500 Micro-Word Processing (O) 1 credit
This course introduces a student to the use of a professional quality word processor on a microcomputer. Emphasis is given to learning commands and applying them to production of documents. (S/U credit)

CGS 1530 Lotus-Integrated Software (O)
3 credits
This course is a beginning level course examining the functional capabilities and applications for integrated software through hands on usage of the Lotus package. Focuses are electronic spreadsheet, data base management and computer generated charts and graphs. (S/U credit.)
CGS $1370 \quad$ Choosing Your Microcomputer (O) 1 credit This course provides a fundamental overview of computer hardware, software, terminology and other factors necessary in making an educated decision on the choice of a computer. This includes how to identify and obtain resources necessary to install and support an effective computer system.
CGS 1101 Personal Computer Finance (O) 3 credits This course teaches the student to operate such common financial programs as home accounting and income tax software (S/U credit.)
CGS $1060 \quad$ College Computing ( P )
3 credits
This course is designed to teach the college student the fundamentals of using the computer. Students will learn the disk operating system, word processing and an electronic spreadsheet. Emphasis is placed on using the computer in an academic environment (i.e. writing term papers, preparing reports, etc.).
CGS 1111 Computer Literacy for the Classroom (O)
3 credits
This course is an overview on how to use PFS First Choice, an integrated software package, which includes a text generator, data base and electronic spreadsheet. Documents will be created for generating data graphs for bar, pie and area, and a data base file with reports for table and label format.
CGS 2423 Introduction to C Programming I (D)
3 credits This is a beginning course in the C Programming language for students with prior knowledge of programming logic. This course is designed to teach the basics of the $C$ language. Some of the course content includes program structure, data types and variables, operators, loops, functions, pointers, files and command line arguments. Prerequisite: working knowledge of a high-level language with use of data files.
COP 2001 Introduction to Computer Programming I (D) 3 credits This course is a continuation of COP 2000. The course will focus on the design and analysis of simple algorithms and data structures. Assignments will be given in the Pascal programming language. Topics shall include arrays, stack, queues, linked lists, tree structures, sorting and searching. Prerequisite: COP 2000 or COP 2210.

CGS $1050 \quad$ Electronic Access to Information (D) 1 credit This course will examine access to books, databases, library holdings, newspapers, and several indexes through computer linkages to electronic databases and compact disks.
CGS 2570 Appleworks (O)
3 credits
This course is intended to familiarize students with the Appleworks program and the use of the Apple computer. Emphasis is placed on using the menu driven program to create documents for word processing, data files, and electronic spreadsheet. (S/U credit.)
CGS 2420 Computer Programming for Engineers (D)
3 credits
This course is an introduction to computer programming using the scientific oriented computer language FORTRAN. Emphasis will be placed on solving mathematical and engineering problems similar to those solved in Calculus 1. Corequisite is MAC 2311. COP 2000 recommended.

CGS 1110 Computer Literacy for Educators (O)
3 credits
This course introduces educational applications of document creation, data base management and the electronic spreadsheet. Hands-on instruction will include how to use some of the most popular software packages to print course outlines, curriculum, tests, and grade sheets. (S/U credit.)

CGS 1511 Advanced Lotus (O)
1 credit
This course is intended to develop an understanding of such features of Lotus as international formats, automatic macros, COMPOSE, HIDDEN FORMAT, selfmodifying macros, macro libraries, and data validation.

CGS 1411 Educational Programming (O)
3 credits
This course introduces BASIC, DOS, LOGO, and software evaluation for teachers. Hands-on instruction includes modifying programs for individual classroom instruction and an organized approach to evaluating software for classroom use. (S/U credit.)

## CRIMINAL JUSTICE TECHNOLOGY

CCJ $2020 \quad$ Introduction to Criminal Justice (D)
3 credits
The historical and philosophical background of criminal justice and agencies involved in the administration of criminal justice will be introduced to the student. Development and objectives of criminal systems together with organization, administration and technical problems of local, state and federal agencies will be emphasized. The student will be oriented to the purposes, requirements and opportunities of the criminal justice career field.

CJT $2100 \quad$ Criminal Investigation (D) $\mathbf{3}$ credits
Fundamentals of investigation; duties and responsibilities of the detective's interrogation techniques; search and techniques of protecting the crime scene; collection and preservation of evidence; modus operandi systems; scientific aids and other sources of information; court preparation and case followup.
CJT $2110 \quad$ Introduction to Criminalistics (D) $\mathbf{3}$ credits
Basic scientific techniques of collection, identification, preservation and transportation of physical evidence. Familiarization with, demonstration of, and work experience in laboratory criminalistics emphasized while demonstrating the capabilities and limitations of the laboratory. Prerequisite: CJT 2100.

## CCJ 2220 <br> Criminal Law (D)

3 credits
A course designed to provide law enforcement personnel and other students of the Criminal Justice System with a framework of criminal law and how it has developed, its basic concepts and how they apply in our society today. Emphasis will be given to Florida criminal law.

CJT 2121 Arson Investigation (D)
3 credits
Instruction in determination of cause and origin in the investigation of suspicious fires. This includes evidence collection and examination of arson statutes.

CCJ 2231 Criminal Procedure (D)
3 credits
Fundamentals of constitutional, criminal and civil law. Principles, duties and mechanics of criminal procedures in Florida as applied to arrest, search, seizure, and court processing. A functional analysis of the rules of evidence in court procedures.

The principles and methods of parole and probation systems at federal, state and local levels; court procedures, the role of the probation and parole officers and their associates in the rehabilitation process; and the procedures for granting pardons.

## CCJ 2300 Introduction to Corrections (D)

3 credits
An overview of the American corrections system; correctional theories, history, problems and procedures will be examined. Special emphasis will be given to Florida's correction system.
CCJ $2440 \quad$ Correctional Institution Administration and Organization (O)

3 credits
An analysis of the problems encountered by the corrections system relating to principles of management, supervision, and administration. The supervisor's role in rehabilitation will be examined in depth.
CCJ $2250 \quad$ Constitutional Law (D)
3 credits
A study of the history of the United States Supreme Court and its philosophy; a review of the appellate courts of the United States and Florida; the history, scope, purpose, and application of the Constitutions of the United States and Florida, as related primarily to the law enforcement officer.
CCJ $2230 \quad$ Rules of Evidence (D)
3 credits
An examination of the rules governing the admissibility of evidence, specifically as they affect the Law Enforcement officer, in the processes of arrest, force, search, seizure, preservation, custody, testimony and courtroom procedure.

## CCJ 2500 The Juvenile and the Law (O) <br> 3 credits

The course deals with the effects of contemporary cultural environment on adolescents and juvenile offenders. An in-depth study of the causes, classifications and interpersonal relationships of deliquency as seen by the family, school, police officer, youth services and courts. This course, while presenting a highly intellectual approach with the analysis of the societal factors that influence juvenile behavior, will also answer the questions of those who encounter juvenile offenders as part of their careers, in criminal justice, education, social services and related fields.
CCJ $2281 \quad$ Constitutional Rights of the Incarcerated (D) 3 credits
This course will give students a basic understanding of the constitutional rights of incarcerated individuals, including the historical perspective, the evolution of judicial thought and standards, and the contemporary requirements imposed on correctional authorities. It will illuminate the issues still incompletely defined by the courts, as well as the procedures advisable pending a definitive judicial ruling.
CCJ $2200 \quad$ Introduction to the Courts ( $O$ ) 3 credits
Examination of the functions, organization, and management of U.S. courts with special emphasis on Florida's courts.
CJD $1682 \quad$ Civil Liabilities and Legal Issues (O)
1 credit
The examination of civil liability and legal issues related to law enforcement agencies. These include vicarious liability, negligence in training and legal issues in personnel matters.
CCJ $2400 \quad$ Police Organization and Administration (O) 3 credits
Principles of organization and administration in law enforcement; fundamentals of police planning; budget analysis, recruitment, training, and assignments; disciplinary problems and methods of control; cooperation with other agencies; public relations; records and inspection.

CJD V480 Basic Corrections Probation and Parole Program (O)
320 hours
The training program is an overview of the Criminal Justice System and provides training in operations, criminal investigations, basic law, legal procedures, human skills and proficiency skills to train Probation \& Parole officers for the skills and responsibilities required in the performance of their duties.
CJD V000 Basic Law Enforcement Training (O) $\mathbf{5 2 0}$ hours This course provides the Florida minimum standards education for entrance into the police profession in the State of Florida. The curriculum includes Florida Criminal Law, Criminal Investigation, Patrol Procedures, Traffic Control, Human Skills, Defensive Tactics, Physical Conditioning, and Firearms Training. Prerequisite: Permission of Department Chairman, Criminal Justice.
CJD V450 Basic Corrections Training (O) 411 hours
This course provides the Florida minimum standards education for entrance into the corrections profession in the State of Florida. The curriculum includes Florida Criminal Law, operational procedures, principles of supervision, inmate behavior, and technical skills. Prerequisite: Permission of Department Chairman, Criminal Justice.
*CJT $2210 \quad$ Fingerprint Science ( $O$ ) 5 credits
The course is designed to impart an understanding of the science of fingerprints, or Dactyloscopy. Upon completion, the student will be able to classify, search and file fingerprint classification formulas in accordance with the Henry System of Fingerprint Classification as modified by the F.B.I.
*CJD $2660 \quad$ Crime Scene Photography (O)
3 credits
This presentation will provide the basic knowledge regarding camera familiarization, light, film, lenses, photographic techniques and procedures. Role and rules of police photography will be stressed and elective topics will be discussed.
*CJT $2230 \quad$ Chemical Test for Intoxication/ Breathalyzer Technician (O)

2 credits This 40-hour course is designed to evaluate and qualify chemical tests technicians. Course covers history of alcohol, its effects on the human body, and alcohol tolerance. Arrest and courtroom procedures are outlined.
*CCJ 1611 Child Abuse Exploitation (O)
3 credits
The causes and effects of child abuse, role of the professional, criminal prosecution, evidence, interviewing children, and treatment successes are covered. Also included are developing rapport, writing reports, intake decision making, school prevention programs and preparing the child witness.
*CJD $1255 \quad$ Basic Instructor-Self Defense/Use of Force (O) $\mathbf{3}$ credits
This course is designed to prepare the participant to teach the basic controlling techniques and self defense course that is offered in the Basic Corrections Academy. It is primarily on the very gentle Japanese Martial Art of Akido. This will also prepare the trainee to teach the Advanced Self Defense/Use of Force Course for Corrections. Prerequisite: CJD 1253.
*CJD 1443 Basic Environmental Health Training (O)
3 credits
This course is designed for individuals employed by a Correctional Institution to meet Environmental Health Standards through standard operating procedure.
*Prerequisite: Florida State Certified Law Enforcement, Corrections and Probation Officers only or Permission of Criminal Justice Department.
*CJD 1607 Background Investigations (O)
3 credits
The student will possess an understanding of the importance of the background investigation in the overall selection process, and the impact that negligent retention and vicarious liability has on an employing agency. He/She will possess the knowledge of the role of the Training Commission in ensuring statutory and rule compliance with officer qualifications criteria. Prerequisites: CJD 2000 or CJD 2450.
*CJD 1608 Advanced Traffic Accident Investigation (O)
5 credits
This course is designed to provide the police accident investigators with additional skills and abilities to perform indepth accident investigations, and to gain an insight into how to interpret the physical evidence at the scene of an accident. Prerequisite: CJD 2000.
*CJD 1312 Investment in Excellence (O)
3 credits
This course, through class discussion and participation in applications exercises, enables the student to utilize more of his skills and abilities to accomplish departmental or individual goals. There is a strong emphasis on goal-setting and motivation. The course provides the learning foundation and specific tools to motivate others and motivate self. Prerequisite: CJD 2000 or CJD 2450.
*CJD 1672 School Resource Officer (O)
3 credits
This course is designed to provide the participant with the history, philosophy and basic skills necessary to serve as a School Resource Officer. Participants will receive instruction in juvenile law, counseling skills, the development of a referral network, identification and ways to handle exceptional students, and classroom instruction techniques. Prerequisite: CJD 2000.
*CJD $1630 \quad$ Basic Firearms Instructor Training (O) 3 credits This course is designed to provide specific skills to those officers who will instruct recruit level trainees and in-service officers in the skills and judgement to do whatever is required of them in the lawful use of firearms. Prerequisite: CJD 2501.
*CJT 1311 Advanced Firearms Training (O)
3 credits
This course will stress proficiency in the use of police firearms. Emphasis will be placed on the skilled use of pistols; however, an introduction to the use of shotguns and rifles will be given. Prerequisite: A bassic law enforcement firearms course or permission of instructor.
*CJD $1673 \quad$ Crime Prevention (O)
3 credits
A course in crime prevention as it exists today in America. Study includes residential, personal and commercial crime prevention and includes crime prevention resources, crime analysis and current legal implications. Designed primarily for in-service law enforcement officers but will not be limited to such personnel.
*CJD $1693 \quad$ Crisis Intervention ( $O$ ) 3 credits
A study of the nature and causes of human stress in crisis situations involving criminal justice practitioners to include law enforcement, judicial and correctional personnel: definitions, recognition and assessment, general calming techniques, intervention: safety, abnormal behavior and suicide, role playing, causes of psychological and physiological stress agents inherent in the duties of criminal justice practitioners and countermeasures to anxiety and stress reduction. Permission of the instructor needed.
*Prerequisite: Florida State Certified Law Enforcement, Corrections and Probation Officers only or Permission of Criminal Justice Department.
*CJD 1471 Discipline and Special Confinement Techniques (O) 3 credits The student is introduced to the essentials of discipline and special confinement techniques necessary for the corrections profession. The topics to be introduced include physical operation, physical force, recognizing abnormal behavior, verbal and nonverbal communication.
*CJD 2602 Narcotics Identification and Investigation (O)
3 credits
This introductory course in narcotics investigation and identification is designed to provide the student with an overview of narcotics and the role of the investigative agencies, drug traffic flow patterns, major classes of drugs and the drug profit traffic. Instruction will cover techniques of investigative observation, patrol and case development, physical identification of drugs, symptoms of abuse, methods of abuse and appropriate Florida Statutes. This is also a Criminal Justice Standards and Training Commission advanced course.
*CJD 2250 Investigative Interviews (O) $\mathbf{3}$ credits An advanced course designed to cover the techniques, methods, principles, and issues of interviewing and interrogations. Course meets Florida Police Standards Salary Incentive Requirements.
*CJD $1253 \quad$ Self Defense and Use of Force (O) 3 credits This course is designed to qualify students and especially in-service law enforcement and correctional officers in the art of defensive tactics and self-defense; to include the legal aspects of the use of force; pre-conditioning, defense and injury protection, defenses to unarmed attack, defenses against armed attacks, and the regulations, laws and techniques relating to the use of force.
*CJD $1468 \quad$ Youthful Offenders (O) 3 credits A course designed to provide the student with an overview and awareness of Florida youthful offender programs to include: facilities and specialized programs, staff-inmate relations, one-way/two-way communications and effective communications and effective communications skills, positive characteristics for staff working with youthful offenders; the helping relationship inventory, local treatment programs, opportunities and alternatives, treatment, problem solving and other techniques relating to youthful offenders.
*CJD $1501 \quad$ Criminal Justice Instructor Techniques (O) $\mathbf{3}$ credits A basic course in instrumental principles designed to equip the law enforcement specialist with techniques of classroom and field training methods.
*CJD $1632 \quad$ Field Training Officer Techniques (O) $\mathbf{3}$ credits Designed to introduce the criminal justice student (law enforcement and corrections) to all aspects of field training and evaluation programs to include adult learning and instruction, evaluation, role responsibilities and characteristics of the Field Training Officer (F.T.O.), communications techniques, counseling techniques, legal and ethical issues and human motivation.
*CJD 1681 Case Preparation and Court Presentation (O)
3 credits Fundamentals of criminal case preparation and court presentation for the law enforcement and/or correctional officer to include case files, pre-trial discovery, depositions, plea bargaining, court testimony, moot court, post adjudication responsibilities, case studies and a practical exercise.

[^8]Course emphasizes preliminary investigation techniques, crime scene protection, recording, processing, collection and preservation of evidence, fingerprint technology and legal aspects of evidence.
*CJD $1310 \quad$ Line Supervision (O) 5 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: The purpose of this course is to introduce law enforcement and correctional officers to the concept and key components for effective and successful supervision in the jobs they perform. This will enhance both productivity and morale.
*CJD $2320 \quad$ Middle Management (O)
5 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: This course was designed for the law enforcement or correctional officer in a management or supervisory position to enhance and build on basic skills, knowledge and abilities and to develop leadership skills which are necessary for successful performance in the criminal justice field.
*CJD 1330 Developing and Maintaining a
Sound Organization (O)
3 credits
Intended Students: FDLE - CJSTC Advanced Training Stüdents. Major topics: This course was designed to acquaint the criminal justice officer with the general concepts and principles of organization and organizational structures.
*CJD $2331 \quad$ Planning the Effective Use of Financial Resources ( O )

3 credits Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: To acquaint the criminal justice officer with general financial concepts and terms, financial systems, budgets, and the effective uses of financial information within a criminal justice agency. An eight hour practicum has been provided in this course to allow the students to actually develop and justify a working budget.
*CJD 1332 Building and Maintaining
Sound Behavioral Climate (O)
3 credits Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: To acquaint the criminal justice officer with behavioral concepts, management techniques, motivational techniques, and the role of communication in criminal justice administration. Hour practicum has been provided in this course to allow the students to actually develop and justify the working budget.
*CJD 2476 Firefighting for Correctional Officers (O)
3 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: Provides the officer with effective firefighting and rescue techniques. A basic knowledge of fire behavior and the various role of law enforcement and correctional personnel with the fire department.
*CJD 2603 Sex Crimes Investigation (O)
3 credits
Intended Students: FDLE - CJSTC Advanced Training. Students. Major topics: An overview of sex crimes investigation for the patrol officer and investigator with limited experience in this field. Provides an understanding of the problematic, legal, investigative and evidentiary aspects of sex crimes.

[^9]*CJD 2604 Injury and Death Investigation (O)
3 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: Gives the patrol officer and investigator with limited experience in injury and death investigation a general insight into investigative, legal and evidentiary compounds.
*CJD $2605 \quad$ Traffic Homicide Investigation (O) $\mathbf{3}$ credits Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: Provides specific insight into traffic homicide investigation for the law enforcement patrol officer and investigator. The course is designed to develop existing skills and abilities of traffic homicide and accident reconstruction.
*CJD $2609 \quad$ Traffic Accident Reconstruction (O) 5 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: Designed to provide the police accident reconstructionist with the skills needed to reconstruct serious injury and fatal accidents. The student will gain an understanding of how to analyze data collected at the scene and use it to reconstruct the accident. Also, the required training, when combined with the experience, will allow the student to be qualified as an expert witness in judicial proceedings.
*CJD $2661 \quad$ Special Tactical Problems (O)
3 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: An overview of special tactical problems for officers. This course will provide the trainee with an understanding as well as working knowledge of special problems faced by law enforcement or corrections to include natural and man-made disorders.
*CJD 2663 Report Writing Development (O)
3 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: To provide a focused review and practice of the basic elements necessary for effective writing in any situation or any type of report.
*CJD $2664 \quad$ Underwater Police Science and Technology (O) 5 credits
Major topics: Organized and developed to enhance the law enforcement officer's knowledge. Skills and abilities to effectively and efficiently contribute to underwater investigation or recoveries and other law enforcement related activities which may occur in areas of ocean or inland waterways.
*CJD 1665 Computer Applications (O)
3 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Major topics: Provides instruction for the use of the computer in criminal justice operations. The participant will be introduced to prepackaged software and the process used to modify the package to criminal justice usage. This will include an electronic filing system designed to store, review, and update data which can be manipulated into printed reports for daily or periodic usage.
*CJD 1677 Drug Abuse Awareness and Education (O)
3 credits
Intended Students: FDLE - CJSTC Advanced Training Students. Provides the informed law enforcement officer with the methodologies necessary to educate members of the community. This is achieved through various modes of presentation on current and critical issues relevant to drug abuse.
*CJD 1615 Radar Operators (O)
3 credits
This course is designed to provide the law enforcement officer with the fundamental concepts of radar. The student will learn all radar operating procedures, courtroom testimony and qualify as a law enforcement radar operator.
*Prerequisite: Florida State Certified Law Enforcement, Corrections, and Probation Officers only or Permission of Criminal Justice Department.

This course is intended to acquaint the officer with effective medical procedures and life saving techniques for handling emergency illness or injury should he/she be the first to arrive at a scene where such aid is required.
*CJD $1662 \quad$ Tactical Police Driving (O) 3 credits
This course is designed to enhance the officers knowledge, skill and ability in tactical vehicle operation. This will include pursuit and emergency driving, fleet accident awareness and liability. A portion of the course will be devoted to practical driving skills development.
*CJD 1601 Traffic Accident Investigation (O) $\mathbf{3}$ credits
This course was designed as a basic presentation of traffic accident investigation for the patrol officer and investigator with limited expertise in this area. Traffic laws and arrest procedures will be examined as well as accident investigation and traffic accident reports.
*CJD 1691 Stress Awareness and Resolution (O)
3 credits
This course is designed to enhance the officers ability to deal with stressfull situations that may be inherent to the criminal justice profession. A general awareness of the causes of stress, types of stress and solutions to stress, if applied properly, should provide for more effective job performance.
*CJD $1696 \quad$ Community and Human Relations ( $O$ ) 3 credits This course is intended to introduce the criminal justice officer to the effects of stress, morale, and communications skills on his/her relationships with different citizens groups within the community, and to provide training on techniques relating to effective community relations procedures.
CJD V007 Law Enforcement Supplemental Training 106 hours
Course designed for those who were previously certified who desire to reactivate
their certificates. Prerequisites: Previous certification.
CJD V008 Law Enforcement Supplemental Training
300 hours Course designed for previously certified law enforcement officers to help reactivate their certification. Prerequisites: Previous certification.
CJD V002 Law Enforcement - Cross Training (O) 273 hours Course is designed for certified correctional officers who desire to be cross trained in law enforcement and become certified. Prerequisite: Correctional Officer.
CDT V001 Law Enforcement Auxiliary (O)

97 hours

Course designed to impart basic policing skills to potential police auxiliary officers.
State mandated for certification as an auxiliary officer. Prerequisite: Auxiliary
Officer Candidate.
*CJD $1256 \quad$ Handgun Retention Instructor (O) 1 credit
To develop the students skill and teaching ability to train others on how to safely prevent attempts on handgun disarming.
*CJD $1614 \quad$ Standardized Field Sobriety Testing (O) 1 credit
This program is intended to provide Law Enforcement Officers with the techniques used in standardized field sobriety testing. Course also consists of D.U.I. detection, enforcement, video procedures and courtroom testimony. Prerequisite: Current employment as Police Officer.

[^10]*CJD $1650 \quad$ Selective Patrol Drug Enforcement (O) 3 credits
The administration, orientation and overview of illicit drugs - to include evidence collection, patrol procedures and drug recognition.
*CJD 1667 Driving Instructor Training (O) 3 credits
Course covers basic driving techniques and how to teach them to law enforcement personnel.
CJD V006 Corrections Supplemental Training (O) 250 hours
This course is designed for previously certified Corrections officers to reactivate their certification in the State of Florida. Prerequisite: Previous certification.
*Prerequisite: Florida State Certified Law Enforcement, Corrections and Probation Officers only or Permission of Criminal Justice Department.

## DENTAL SCIENCE

DEA 1000 Introduction to Dentistry (O)
1 credit
History of dentistry, duties of the dental assistant, the dental health team, code of ethics, state laws and jurisprudence, dental specialties, certification requirements, professional organizations, personal appearance and grooming, conduct and attitudes, professional and patient relations.
DEA 1200 Dental Office Management (O)
3 credits A course to acquaint students with telephone techniques, appointment book control, records management, inventory control, and purchasing associated with the dental office.
DEA 1820C Intraoral Auxiliary Procedures I (O) 2 hrs. lecture2 hrs. lab- 3 credits Introductory course designed to offer student participation in specified intraoral procedures.
DEA 1821C Intraoral Auxiliary Procedures II (O) 2 hrs. lecture2 hrs. lab- 3 credits
Continuation of DEA 1820C.
DEA 1800C Clinical Practice I (O) 2 hrs. lecture-9 hrs. lab-5 credits Each student will receive individualized instruction in all phases of chairside dental assisting.
DEA 1801C Clinical Practice II (O) 2 hrs. lecture-9 hrs. lab-5 credits A continuation of DEA 1800C.
DEA 1850C Clinical Practice III (O) 2 hrs. lecture- 30 hrs. lab-6 credits A continuation of DEA 1801C.
DES 1000C Head, Neck, and Dental Anatomy (O) 2 hrs. lecture-2 hrs. lab 3 credits
Head, Neck, and Dental Anatomy is the study of tooth morphology and the relationship of teeth to one another and to their surrounding structure. Coverage is given to bones of the skull, muscles, nerves, blood vessels, and occlusion of the teeth.
DES 1200 Dental Radiology (O) 3 credits
This course is designed to acquaint the student with the nature, physical behavior, biological effects, methods of control and safety precautions utilized when exposing dental radiographs. Technique theory is presented.
DES 1200L Dental Radiology Lab (O) 2 hrs. lab-1 credit A continuation of DES 1200. The student applies those principles learned in DES 1200 in the clinical setting. Techniques for obtaining periapical, bitewing, occlusal, panoramic, and lateral-jaw radiographs are covered.

DEA 1120 Related Dental Theory I(O)
2 credits
This course is a study of these scientific areas related to the field of Dentistry: Microbiology, Pathology, and Embryology/Histology.
DEA 1121 Related Dental Theory II (O) 3 credits
A continuation of DEA 1120. This course is a study of these scientific areas related to the field of Dentistry: Human Anatomy and Physiology, Nutrition, and Pharmacology. Prerequisite: DEA 1120.

DES 1100C Elements of Dental Materials (O) 2 hrs. lecture, 2 hrs. lab 3 credits A series of lecture-demonstrations designed to acquaint the student with the nomenclature, characteristics, and application of the materials used in the laboratory and clinical practice of dentistry. Laboratory procedures will include proper manipulation of these materials.

## DTE 1000 Orientation and Terminology (O)

1 hr . lecture-1 credit
This course is designed to teach the student the role of the dental technician as a.member of the dental health team and to familiarize him with the terms peculiar to the dental profession. It will include familiarization with the dental practice act, dental work authorizations, and current trends in dental lab technology.

DTE $1010 \quad$ Oral Anatomy (O) 2 hrs. lecture-2 credits Course will emphasize identification of anatomical features of the head and oral cavity. Topics include: nerve and blood supply, origins and insertions of muscles of mastication, anatomical features of the Alveolar process, and movements of the temporal-mandibular joint.

## DTE 1020 Tooth Physiology and Anatomy Theory (O)

2 hrs. lecture-2 credits Course will emphasize the theory of teeth and their supporting structures. Topics include: written definitions of relevant nomenclature, dental occlusion, and function.

DTE 1020L Tooth Physiology and Anatomy Lab (O) 8 hrs. lab-3 credits Student will draw different peripheral views of Maxillary and Mandibular teeth and will carve natural size teeth in wax medium.
DTE $1103 \quad$ Complete Denture Theory (O) 2 hrs. lecture-2 credits Course will emphasize the steps of denture construction. Topics include: identification of lab stone and plaster, acrylic resins and the descriptions of the theory inherent in denture construction, investing, finishing, rebasing, relining, and repair of dentures.

## DTE 1103L Complete Denture Theory Lab (O) <br> 8 hrs. lab- 3 credits

The student will be called upon to use lab stone and plaster, acrylic resins and articulators, and will construct individual casts, trays, baseplates, and Occlusal rims. The student will work with the theory inherent in denture construction and will set up teeth for different classes of arch forms. Included will be: investing, finishing, rebasing, relining and repair of dentures. Course will emphasize steps of denture construction.

DTE 2107 Partial Denture Theory (O)
2 hrs. lecture-2 credits Course will emphasize the theory and nomenclature of partial denture construction.

DTE 2107L Partial Denture Theory Lab (O)
8 hrs. lab-3 credits
Laboratory application of the theory of partial dental construction in which the student will identify and use plaster, stone, waxes, and acrylic resins. The student will describe and plan, design and survey partial dentures. The student will construct a refractory cast, set up teeth with partial frames, and repair partial dentures.

DTE $2030 \quad$ Occlusal Topography (O) $1 \mathbf{h r}$. lecture-1 credit Course will emphasize the theory of dental occlusion, including surfaces of teeth.

DTE 2030L Occlusal Topography Lab (O)
4 hrs. lab-2 credits
Laboratory application of the theory of topography.
DES 1140C Dental Materials I (O) 2 hrs. lecture-2 credits Course will emphasize the identification of physical and mechanical properties of dental materials. Topics include: waxes, acrylics, and other materials used in the laboratory.

DTE 1132 Orthodontics and Pedodontic Theory (O) 1 hrs. lecture-1 credit Course will emphasize theory in the fabrication of removeable orthodontic appliances. Topics include Hawley retainers, tooth movement appliances, functional appliances and orthodontic study models.
DTE 1132L Orthodontic and Pedodontic Lab (O) . 4 hrs. lab-2 credits Laboratory application of orthodontic and pedodontic theory.

DTE $2141 \quad$ Ceramic Theory (O)
2 hrs. lecture-2 credits Course will emphasize the theory and nomenclature of dental ceramics. A study of the basic principles of metal ceramic crowns and bridges.

DTE 2141L Ceramic Lab (O)
8 hrs. lab- 3 credits Students will construct substructures for single and multiple unit ceramic restorations. The student will use porcelain and equipment in the fabrication of fixed appliances.
DTE $2150 \quad$ Crown and Bridge Theory (O) 2 hrs. lecture-2 credits Course will emphasize the theory and nomenclature of elementary crown and bridge construction.

DTE 2150L Crown and Bridge Lab (O)
8 hrs. lab-3 credits
The student will construct stone dies, acrylic, veneers, inlays, onlays, three-quarter crowns, full crowns and bridges. The student will operate and become familiar with crown and bridge equipment.

## DTE 2151 Advanced Fixed Prosthodontics Theory (O)

2 hrs. lecture- 2 credits A study of advanced techniques in the construction of prosthetics. Precision and semi precision attachments and current restorative techniques will be covered.

DTE 2151L Advanced Prosthodontics Lab (O) 14 hrs. lab-5 credits The student will construct more complex prosthetics with an emphasis on developing proficiency. The student will also gain practical clinical experience four hours per week in a commercial dental laboratory.

DES 2141C Dental Materials II (O)
2 hrs. lecture- 2 credits Study of various materials enabeling the student to achieve desired results in the fabrication of dental prosthetics. This course will cover recently developed materials, techniques and equipment.

DTE 2180 Dental Laboratory Operations (O)
2 hrs. lecture-2 credits
Course will emphasize the study of day-to-day operation of a dental laboratory. Topics include: accounting principles, ordering supplies, maintaining inventory, effective professional behavior, and dental laboratory layout and design.
DTE 2191 Assimilation of Dental Technology (O) 2 hrs. lecture-2 credits Course will emphasize a complete review of the topics of the dental technology curriculum. Topics include: comprehension of diagnostic terms and techniques of construction of oral appliances. The student will be called upon to demonstrate his mastery of materials and topics of the dental technology field through successful completion of a certified dental technology exam.
DTE 2200 Ethics and Jurisprudence (O)
1 hr . lecture-1 credit
Course will emphasize the ethics and jurisprudence of the dental technology profession. Topics include: ethical standards of the dental profession, legal requirements of the dental technician, and the responsibility of the technician to the patient. The course will also cover infection control in the dental laboratory.
DEH 1820 Health Office Emergencies (O)
2 hrs. lecture- 2 hrs. lab- 3 credits This course is designed to prepare the Health Occupations student for medical emergencies that may arise in the office. Prerequisite: Enrollment in Dental Assistant, Dental Hygiene, Medical Secretary, or Medical Records Program or permission of instructor.
DES $1030 \quad$ Oral Embryology and Histology (O) 2 hrs. lecture - 2 credits This course is a study of the early embryonic development of the face and oral cavity and the process of tooth development. Included is a study of the microscopic structure and morphology of the tissues of the teeth and supporting structures. Prerequisite(s): Dental Anatomy.

## DEH 1090 Introduction To Clinical 7 hrs. lecture Dental Hygiene (O) 3 credits

 This course is an introduction to the practice of dental hygiene. The dental health team, educational requirements, professional associations, and the dental hygienist's role in patient care is introduced. The philosophy of preventive dentistry and methods of plaque control are emphasized.DEH 1800C Clinical Dental Hygiene I (O) 2 hrs. lecture - 9 hrs. lab 4 credits
This course introduces the student to the theory and practical skills necessary to become a dental hygienist. Obtaining and recording medical and dental histories, dental charting, the principles and practice of asepsis, sterilization techniques, maintenance of equipment, plaque control, and instrumentation skills are areas of major emphasis. Prerequisite(s): DES 1090C. Corequisites(s) DES 1200, DES 1200L.
DEH 1802C Clinical Dental Hygiene II (O) 2 hrs. lecture - 8 hrs. lab 4 credits This course is a continuation of Clinical Dental Hygiene I. The student will continue to progressively develop instrumentation skills. Beginning patient care including medical histories, extraoral and intraoral exams, instrumentation, radiographic techniques, and fluoride application is emphasized. Instrument sharpening, dental hygiene treatment planning, and plaque control instruction procedures are included. Prerequisite(s): Clinical Dental Hygiene I; DES 1200, DES 1200L. Corequisite(s): DEA 1820.

DEH 1804C Clinical Dental Hygiene III (O)
3 hrs. lecture - 9 hrs. lab -
3 credits
This course is a continuation of Clinical Dental Hygiene II. A continued development of clinical skills will enable the student to provide an increasingly comprehensive service to the patient including dental hygiene treatment planning, and patient education. Prerequisite(s): Clinical Dental Hygiene II.

## DEH 2530L Expanded Functions for Dental Hygienists (O)

1 hr . lecture - 1 hr . lab 1 credit This course is designed to provide the basic knowledge and clinical practice necessary for the dental hygienist to perform the expanded functions permitted by the Rules and Regulations of the Florida State Board of Dentistry. Prerequisites: None.

DEH 2806C Clinical Dental Hygiene IV (O) 2 hrs. lecture - 12 hrs. lab 6 credits This course is a continuation of Clinical Dental Hygiene III. The course will enable the student to demonstrate independence and to use judgement learned in previous clinical instruction for planning patient services. Proficiency in all areas of dental hygiene will be stressed. Case documentation, recall motivation, care for the special patient, more advanced skills such as ultrasonic scaling, gingival curettage, and nutritional counseling are included. Prerequisite(s): Clinical Dental Hygiene III. Corequisite(s): Nutrition and Diet Therapy.

## DEH 2808C Clinical Dental Hygiene V (O) 2 hrs. lecture - 16 hrs. lab -

 7 creditsThis final course in the clinical dental hygiene series will enable the student to demonstrate independence and to use judgement learned in previous clinical instruction for planning patient services. Proficiency in all areas of dental hygiene will be stressed. Care for the special patient, myofunctional therapy, ethics, jurisprudence and the Florida State Dental Practice Act is included. Prerequisite: DEH 2806C.

DES 2044 General and Oral Pathology (O)
2 credits
This course is a study of the principles of general pathology with consideration of the more common diseases affecting the human body. Major emphasis is given to the study of pathological conditions of the teeth, soft tissues, and supporting structures of the oral cavity. Prerequisite(s): Anatomy and Physiology I and II; Microbiology; Oral Embryology and History.

DES $1050 \quad$ Pharmacology ( O ) 2 hrs. lecture - 2 credits This course is a study of the usage, administration, indications, contraindications, adverse reactions, and precautions of pharmaceutical preparations. Special consideration is given to the therapeutic agents used in the treatment of dental disease. Prerequisite(s): Anatomy and Physiology I. Corequisite(s): Anatomy \& Physiology II.

DES 2051 Pain Control and Anesthesia (O) 1 hr. lecture-1 credit This course is a study of pain perception, pain reaction, methods of pain control, and the use of nitrous oxide-oxygen conscious sedation in dentistry. The relevance of psychosomatic pain control and topical and local anesthesia to dental hygiene practice is emphasized. Prerequisite(s): Pharmacology. Corequisite(s); Health Office Emergencies.

DEH 2602
Periodontology (O)
2 hrs. lecture - 2 credits
This course is a study of the characteristics, etiology, prognosis, and treatment of periodontal disease. Periodontal examination, treatment planning, and the dental hygienist's role in periodontal therapy are emphasized. Prerequisite(s): Oral Embryology and Histology and General and Oral Pathology.

DEH 2702C Community Dental Health (O) 2 hrs. lecture - 3 hrs. lab 3 credits
This course is a study of the essential concepts of community and public health dentistry. Basic statistical concepts, program development, implementation, research, and evaluation are included. The role of the dental hygienist in community dental programs and dental health education is emphasized. Prerequisite(s): Introduction to Speech Communications; Nutrition and Diet Therapy.
CHM 1033 Biochemistry for Health Professionals (O) $1 \mathbf{h r}$. lecture 1 credit Designed to cover the essentials of chemistry and biochemistry for students in health-related fields. Emphasis will be placed on chemical and biochemical applications to the health-related fields, and on understanding the structure and function of lipids, carbohydrates and proteins.

## DRAFTING AND DESIGN TECHNOLOGY

EGS 1110C Engineering Graphics (D) 1 hrs. lecture-4 hrs. lab-3 credits Basic graphical communications. Use of instruments; lettering, scales including metrics, engineering geometry; orthographic projection; sections; pictorials; dimensioning and tolerancing; and working drawings.
EGS 1130C Descriptive Geometry (D) $1 \mathbf{h r}$. lecture-4 hrs. lab-3 credits Continues spatial relationship of points, lines and planes; primary and successive auxiliary views; revolutions; intersections, and vector graphics. Prerequisite: EGS 1110C.

ETD 1230 Intersections and Developments (O)
1 hr . lecture- 2 hrs. lab- 2 credits Determination of intersecting solids and their surface developments. Prerequisite: EGS 1110C.

ETD 1310 CAD Familiarization (O) 3-6 hrs. lecture-10-13 hrs. lab-2 credits An overview of CAD systems presently used in the drafting industry. CAD functions emphasized with limited hands on operation of CAD systems.
ETD 1503 Drafting for Air Conditioning Industry (O)
1 hr . lecture-4 hr lab 3 crd. Basic Drafting and applications to the HVAC trades including house plan layouts, sections, details and isometrics.
ETD $1544 \quad$ Civil Drafting I (O) 1 hr. lecture-4 hrs. lab-3 credits Basic land measurements of scales, angles, bearing and azimuth; traverse layout by deflection angles, rectangular ordinate, etc; legal descriptions; interpreting field notes; and basic plan profile sheets.
ETD $1830 \quad$ Charts and Graphs (O) 1 hr. lecture-2 hrs. lab-3 credits Graphical analysis of tabular data. Includes inking paste-ups and CAD.
ETD 2125C Topographical Drafting (O) 1 hr. lecture-4 hrs. lab-3 credits Plotting of contours; map and contour reading; stereoaerial photographic reading; contour revisions; cuts and fill; cross and profile sections. Prerequisite: ETD 1544.

ETD $2240 \quad$ Numerical Drafting (O)
2 hr. lecture- 2 hrs. lab- 2 credits
Study of numerical controlled machine tools and their required drafting procedures. Prerequisite: EGS 1110C.
ETD 2320C Computer Aided Drafting (O)
1 hr . lecture -6 hrs. lab-4 credits A thorough review of CAD systems used in the industry, the individual operation of each unit in the production of drawings. Generation of a variety of drawings using the CAD system. Prerequisite: Basic drafting courses or industrial experience in drafting and ETD 1310 or individual CAD experience.
ETD 2538 CAD—Architectural (O) 1 hr. lecture - 6 hrs. lab-4 credits Completion of a full set of architectural plans via a computer aided drafting system. Prerequisites: ETD 2320C and BCN 2251C.

## BCN 1250C Architectural Drafting Priniciples (D)

1 hr . lecture-4 hrs. lab-3 credits Basic architectural drafting principles, including lettering, dimensioning symbols, door and window details, other architectural details, foundation and wall sections, elevations, framing plans, landscape and site drawings, plot and plan details.
BCN 2251C Architectural Drafting - Residential (O)
2 hrs. lectrue- 2 hrs. lab- 3 credits Architectural drafting for a residential home. Architectural design and floor plan layout is emphasized. Prerequisite: BCN 1250C or high school Architectural Drafting.
BCN 2253C Architectural Drafting - Commercial (O)
2 hrs. lecture- 2 hrs. lab- 3 credits Specific requirements for commercial construction including code and zoning requirements. Prerequisite: BCN 1250C or high school Architectural Drafting.
ETI 2411 Methods of Fabrication (O)
3 credits The methods and machines used to shape and form industrial products. Includes both hot and cold processing, compression, cutting abrasive forming, and tuotmatic and numerical controlled machines.
ETD 2528 CAD—Mechanical (O) 1 hr. lecture - 6 hrs. lab-4 credits Completion of a series of mechanical drawings via a computer aided drafting system. Prerequisites: ETD 2320C or instructor permission.
ETD $2540 \quad$ Civil Drafting II (O) 1 hr. lecture-4 hrs. lab-3 credits Site plan development including contour revisions, grading, drainage, utilities, street and road layout. Pipe drawings, both flat and pictorial, utility and working drawings, limited CAD use. Prerequisite: ETD 1544.
ETD 2548 CAD—Civil (O)
1 hr. lecture - $\mathbf{6}$ hrs. lab-4 credits Completion of a series of civil and surveying type drawings via a computer aided drafting system. Prerequisites: ETD 2320C and ETD 1544.
ETD 2707 Machine Drafting I (O) 1 hr. lecture-4 hrs. lab-3 credits Assembly and detail drawings of threads and fasteners, cams, and welded or machined parts. Prerequisite: EGS 1110C.
ETD 2712 Machine Drafting II (O) 1 hr. lecture-4 hrs. lab-3 credits Continuation of ETD 2707. Including linkage mechanisms, gears, jig and fixtures, vector analysis and Kenamatics. Prerequisite: ETD 2707.
ETD 2801C Illustrations ( $O$ ) 1 hr . lecture-4 hrs. lab-3 credits Methods of preparing illustrations for reproduction. Line and area shading; coquille and scratch board; direct copy methods; lettering; desk-top publishing.

ETD 2820C Perspective Drafting (O)
1 hr. lecture-4 hrs. lab-3 credits Illustrative layout using parallel and angular perspective with emphasis to architectural details. Parallel and oblique shadow casting visual effect. Prerequisite: BCN 1250C or basic drafting skills.

ETD $2840 \quad$ Pictorial Drafting (O) 1 hr. lecture-4 hrs. lab-3 credits
Pictorial layout of axonometric and oblique. Parallel and oblique shadow casting. Prerequisite: EGS 1110C.

ETD 2841 Airbrush Rendering (O) 1 hr. lecture-4 hrs lab-3 credits Basic techniques in the use of airbrush for illustrations to emphasize three-dimensional characteristics.

## DRAMA

## THE 1000 <br> Introduction to Drama (P) <br> 3 credits

An introduction to the dramatic arts from the point of view of the audience. Historical and aesthetic considerations are included as keys to appreciation, as well as the basic principles of dramatic criticism. Students gain a knowledge of substance, form, and technique of the various artists involved a dramatic production: playwright, director, actor, scene designer, lighting designer, costume designer, music composer, and sound man. The five major types of drama are studied and evaluated for literary and theatrical qualities. Students will attend and evaluate dramatic performances in the area, and will present scenes from plays for class evaluation.

## ORI $1001 \quad$ Oral Interpretation (P)

3 credits
The art of oral interpretation through a study of the structure and content of the best literature of the ages, the techniques in communicating it, and the use of the body as an agent of expression. Through study and class participation, the student will develop skills in the use of the voice in the process of emotional and intellectual perception. He will study the best methods of program construction and presentation.

## THE 1950L Theatre Workshop I (P)

1-5 credits
Three dramatic performances, one musical and an outside twilight cabaret before each of the dramatic performances.

THE 1951L Theatre Workshop II (P) 1-5 credits
Continued growth in dramatic and music performances from Theatre Workshop I. Includes participation in three dramatic performances, some directing dramatically/musical.
TPP $1800 \quad$ Theatre, Voice, \& Speech ( $\mathbf{P}$ ) 3 credits An introduction to acceptable theatre speech including sound production, diction, projection, and dramatic interpretation. The course will include the study of the physiological components of speech as well as the evaluation and analysis of dialect.

TPP $1110 \quad$ Acting I (P)
3 credits
Stage movement and business, pantomime and improvisation. Included are the analysis of roles and developments of characterization as well as acting exercises, scenes, critiques, and discussions. course will be a study in the changing styles of dramatic presentation.
TPP 1190 Rehearsal and Performance Lab I (D) 5 hrs. lab-2 credits Practical application of performance techniques including production of scenes and complete plays.
TPP 1191 Rehearsal and Performance Lab II (D) 5 hrs. lab-2 credits Practical application of performance techniques including production of scenes and plays. Prerequisite: TPP 1290L.
TPP 1192 Rehearsal and Performance Lab III (D) 5 hrs. lab-2 credits Practical application of performance techniques including production of scenes and plays. Prerequisite: TPP 1291L.

TPP 1193 Rehearsal and Performance Lab IV (D) 5 hrs. lab-2 credits Practical application of performance techniques including production of scenes and plays. Prerequisite: TPP 1292L.

TPP $2300 \quad$ Play Direction ( $\mathbf{P}$ ) 2 hrs. lecture- 2 hrs. lab- 3 credits Course includes lecture and discussions of directing for the stage followed by practical application and procedures. Students will be assigned directional roles. May be repeated for credit.
TPA $1200 \quad$ Beginning Stagecraft (D) 2 credits An introduction and application of the basic principles of stagecraft. The student will study the basic materials, tools, and equipment used in the construction of stage properties. The student will also learn the basic scenic construction and scenic painting techniques.

## ECONOMICS

ECO 2000 Introduction to Economics (P)
3 credits
A survey course designed to give students a basic understanding of economic problems that will affect their lives, such as inflation, unemployment, monetary policy, ecology, and international trade.

ECO 2013 Principles of Economics I (P) (Macroeconomics) 3 credits The nature and scope of economic problems and principles including the role of the Federal Budget, public debt, and money in determining income, employment, and prices; current problems such as inflation, unemployment, poverty, growth, and development. Corequisite: ENC 1101 or permission of instructor.

ECO 2023 Principles of Economics II (P) (Microeconomics) 3 credits Continuation of ECO 2013 emphasizing competition, monopoly, allocation of resources among competing uses; wages, interest, rent, and profits; international trade, balance of payments, foreign lending, gold flows, and comparisons of economic systems. Prerequisite: ECO 2013.

## EDUCATION

EDF 2070 Social Foundations of Education (P)
3 credits
Social structures, forces, and values affecting education. Contributions of philosophical, historical, psychological, and social foundations of education to curriculum designs and methods of instruction. Corequisite: ENC 1101 or permission of instructor.

EDF $2020 \quad$ Human Development (P)
3 credits Introductory course of human life span, integrating basic concepts of physical, intellectual, social, and emotional development at each major stage. Theoretical viewpoints and recent developmental research are considered in respect to their practical application. Corequisite: ENC 1101 or permission of instructor.

EDG 2930 Introduction to Classroom Management (P) 3 credits Introduction to Classroom Management is a specialized course for IRCC adjunct faculty. The course will introduce, review and encourage teaching methods applicable to the adult learner. Procedures associated with teaching at IRCC, such as; starting a class, registration, pay forms, attendance and evaluations will be discussed. This class may be used for recertification of adjunct faculty.

EDG 2001 Teacher Capability Development (P) 3 credits Develops skills in asking creative, evaluation, comprehension and memory questions. Helps prepare for reading student's non-verbal communication and to build a symmetry of classroom rewards and penalties.

## ELECTRONIC ENGINEERING TECHNOLOGY

EET 1015C DC Circuits ( $O$ ) 3 hrs. lecture- 2 hrs. lab-4 credits This course will provide the student with the basic electrical knowledge to analyze D.C. circuits. Topics include current and voltage, resistance, Ohm's Law, power, energy, series and parallel circuits, methods of analysis, network theorems and capacitors. LAB. Identification of components, measuring voltage and current of circuits constructed in the lab and the use of test instruments and power supplies. Prerequisites: MTB 1322 and COP 1170.

EET 1025C AC Circuits (O)
3 hrs. lecture- 2 hrs. lab- 4 credits Magnetic circuits, inductance, AC generation, phasors, series and parallel impedances, AC power, transformers, and polyphase are topics under study. LAB: the oalloscope and signal generator are introduced to analyze circuits constructed in the lab dealing with inductors and capacitors. Prerequisite: EET 1015C.

EET 2106C Electronic Devices I (O) 3 hrs. lecture-2 hrs. lab-4 credits Diodes, bipolar and field effect transistors are studied in this course. The theory, characteristics and application of solid state devices are examined. Selected topics include h-parameters, AC and DC load lines and biasing, thermal stability, construction, specifications and performance. LAB: Determine volt-ampere characteristics of diodes and transistors and experiment with different transistor base, emitter, collector, configurations. Prerequisite: EET 1025C.
EET 2107C Electronic Devices II (O) 3 hrs. lecture-2 hrs. lab-4 credits SCR's, TRIAC's, opto-electronic devices, operational amplifiers and integrated circuits are covered in theory and usage. An introduction to feedback amplifiers and oscillators are included. LAB: Bread boarding of circuits involving the above devices and analysis of these circuits utilizing various testing techniques. Prerequisite: EET 2106C.

Topics covered are - AM transmission and reception, single sideband, FM transmission and reception. LAB experiments covering resonant circuits, oscillators, frequency response and receivers. Prerequisite: EET 2106C.
EET 2335C Communication Circuits II (O)
3 hrs. lecture- 2 hrs. lab- 4 credits
This course is a continuation of ETE 2325C going on to cover Digital Communications, transmission lines, wave propagation, antennas, waveguides, fiber optics, microwaves and lasers, and lab work on practical equipment. Prerequisite: EET 2325C.
CET 2114C Digital Circuits (O) 3 hrs. lecture-2 hrs. lab-4 credits This course is a study of the logic concepts and circuits used in digital systems. Topics covered include logic gates, truth tables, timing diagrams and boolean equations. From these topics the theory of flip flops, registers, counters and latches is developed. LAB: A digital logic trainer is utilized to allow the student to experiment with the various devices and construct working digital circuits.
EET 2215C Electronic Instruments (O) 2 hrs. lecture-3 hrs. lab-3 credits Included in this course are the theory and operation of the oscilloscope, volt-ohm-amp meters, signal generators, frequency counters, and other common test equipment. Prerequisite: EET 1025C.
ETD $2614 \quad$ Electronic Drafting (O) 2 hrs. lecture-4 lab-4 credits Basic graphical communications as applied to the electronics industry. Electronic topics include symbols, schematic diagrams, circuit layouts, block diagrams, printed circuitry, and production drawings. LAB: The student will complete drawing projects and make blue prints utilizing various techniques common to the electronics field.
CET 2123C Microprocessors I(O)
4 hrs. lecture- 4 credits An introduction to the microcomputer and the study of the microprocessor hardware and software. Microprocessor trainers are utilized to allow the student to program and operate the circuits of the microprocessor. Subjects include microprocessor architecture, programming in assembly language and input-output interfacing. Prerequisite: CET 2114C.
CET 2131C Microprocessors II (O) 4 hrs. lecture - $\mathbf{4}$ credits This course will continue the study of microprocessors and include interfacing concepts with emphasis on the peripheral interface adapter (PIA), digital to analog and analog to digital converters. Prerequisite: CET 2114C.
MTB 1321 Technical Mathematics I (D)
4 credits
Fundamentals of mathematics applied to modern technology, covering algebra, geometry, graphs, factoring, and determinants. Prerequisites: MAT 1024 or 1 1/ 2 years of high school algebra with a " $\mathrm{B}^{\prime}$ " or better and an ACT score of 12. Corequisite: MTB 1322.
MTB $1322 \quad$ Technical Mathematics II (D) 4 credits A continuation of MTB 1321. Topics included are quadratic equations, trigonometry, complex numbers, and many word problems. Corequisite: MTB 1321.
PHY 1001 Physics for Electronics
Engineering Technology ( O )
3 hrs. lecture-3 credits
Topics covered are Properties of Solids, Liquids, and Gases, System of Measurements, Mechanics, Heat, Light and Sound (No Electricity). Prerequisite: MTB 1322.

## ENGLISH

*ENC 0080 Basic English Review *3 credits
A detailed consideration of the basics of grammar and such related elements as punctuation, capitalization, and allied mechanics of writing with an emphasis on drill and individualized instruction. Placement testing required for admission.
*ENC 1001 Fundamentals of Writing *3 credits
The relationship of sentence structure to ideas: theory, practicum, and application. Placement testing required for admission.
ESL 1181 English as a Foreign Language (P) *3 credits
The oral and written fundamentals of English, designed to give the foreign student a level of comprehension and understanding that will prepare him for academic success. Emphasis upon drills, tapes, other audiovisual materials, and both individualization and counseling. Use of group activity, interaction with American students, and foreign language consultants whenever feasible. Prerequisite: Level of ability determined through test scores.

## ENC 1101 Communications I (P)

3 credits
The analysis through critical and creative discussion of the modern essay and the writing of short units of composition, with an emphasis on methods, relevancy, logic, and adequacy of organization and development, and especially the relationship of content to form. No prerequisite. Student must produce 4000 words of acceptable written material and earn a grade of $\mathrm{C}^{\prime \prime}$ or better in this course. Placement testing required for admission.
ENC 1102 Communications II (P)
3 credits
The analysis through critical and creative discussion of the short story, novel, poetry, and drama. The writing of short and long units of purposeful composition, with an emphasis on the principles of structure, development, and thought. Prerequisite: ENC 1101. Student must produce 4000 words of acceptable written material and earn a grade of " C " or better in this course.
ENC $2090 \quad$ Essential Skills in English (P)
2 credits
This course is designed to prepare students for the English section of the CollegeLevel Academic Skills Test. Instruction focuses on the development of skills in word choice, usage, sentence structure, standard English grammar, spelling, punctuation, and capitalization, as well as comprehensive skills in both the literal and critical areas. Test-taking strategies are emphasized. Recommended for students taking the CLAST.
EDG $2010 \quad$ Techniques of Writing (O) 2 credits Writing for a variety of purposes and experimenting with various forms and styles of writing.
ENC 2210 Technical Communications (O) 3 credits
Designed to meet the needs of technical, vocational, and mid-management students. Emphasis is placed on types of writing that the student may expect to do in his field. Letter writing, memo writing, report writing, and oral presentations are covered.

## LIT $2110 \quad$ World Literature I (P) <br> 3 credits

Academic survey of significant authors and their works from Homer to the Renaissance with emphasis on literary trends, forms, and appreciation. Prerequisite: ENC 1101 or permission of instructor.

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## LIT $2120 \quad$ World Literature II (P)

3 credits
Continuation of LIT 2110 from the Renaissance into the 20th century. Prerequisite: ENC 1101 or permission of instructor.
ENL $2010 \quad$ English Literature I (P) $\mathbf{3}$ credits
Introduction to English literature based upon selected masterpieces from Beowulf to Samuel Johnson. Prerequisite: ENC 1101 or permission of instructor.
ENL $2020 \quad$ English Literature II (P)
3 credits
A continuation of ENL 2010, from the Romantic Movement to the present. Prerequisite: ENC 1101 or permission of the instructor.

## LIT 2300 Special Themes in Literature (P)

3 credits
Intensive reading in a particular concept or topic of popular literary appeal. Examples include Horror Stories, Mystery Stories, Women in Literature, Science Fiction, Literature of the Occult. May be repeated for credit with a change of topic.
CRW 2001 Creative Writing I (P)
3 credits
Creative writing skills developed under workshop-lab conditions of group analysis and discussion. Specific techniques in both prose and poetry. Prerequisite: ENC 1101 or permission of instructor.
CRW 2002 Creative Writing II (P)
3 credits
This course is an extension of CRW 2001. A significant writing project is required for class presentation and class evaluation. Each student will submit at least two additional written works of high quality during the semester. Prerequisite: CRW 2001 or permission of instructor.
AML 2010 American Literature to 1865 (P)
3 credits
Introduction to American literature through American verse and prose, reflecting the motivating ideas in the American scene; attention to literary forms and the development of appreciation. Prerequisite: ENC 1101 or permission of instructor.
AML 2022 American Literature after 1865 (P)
3 credits
Continuation of AML 2010 through American verse and prose from 1865 to the present. Prerequisite: ENC 1101 or permission of instructor.
LIT $2330 \quad$ Children's Literature ( $\mathbf{P}$ ) $\mathbf{3}$ credits
A survey of children's literature with emphasis on children's needs and interests, criteria for judgment, and history and trends in the field. The arts of story telling and oral reading will be stressed as vehicles for bringing literature to children.
ENC $1083 \quad$ Beginning Creative Writing (P) 1 credit Beginning Creative Writing is an introductory level course designed to develop skills in creative writing by composing units of written communication. Students will concentrate on short fiction. Basics of figurative language will be stressed. Basic rules of grammar and punctuation will be reviewed.
ENC 1084 Intermediate Creative Writing (P)
1 credit
Intermediate Creative Writing is a continuation in a series of Creative Writing courses designed to concentrate on real life experiences and to effectively draw on these to compose non-fiction works. Compositions will focus on journalistic pieces, autobiography and/or biographical works. Prerequisite: ENC 1083.
ENC 1085 Advanced Creative Writing (P)
1 credit
Advanced Creative Writing is the third course in a series. This course is designed to develop skills in creative writing by composing units of poetry and/or drama. A study in the elements of poetry and understanding imagery, as well as the basics of a one-act play, will be described. Prerequisite: ENC 1084.

## EMERGENCY MEDICAL SERVICES TECHNOLOGY

EMS 1059C First Provider Concepts of Emergency Care (O)
2 hrs. lecture-2 hrs. lab-3 credits This course covers emergency medical care that will be required by the public to provide basic life support measures until professional assistance arrives. This course does not qualify the student to take the state EMT examinations. Requires a $\$ 15$ lab fee.
EMS 1119C Fundamentals of Emergency Care (O)
6 hrs. lecture-4 hrs. lab-8 credits Instruction in the basic theory and skills of emergency care with practical training in ambulance and hospital emergencies. Medial terminology is integrated throughout the course. Successful completion will qualify the student for the state registration examination for Emergency Medical Technician 1.
EMS P381 Emergency Medical Care Refresher (O) 32 hours The refresher training course has been developed as part of a career structure for the Emergency Medical Technician. It is designed to assure maintenance of a uniformly high level of training among EMT's who hae successfully completed the basic training program in Emergency Medical Care. This course is a state requirement for EMT re-certification. Prerequisite: Registered EMT in the State of Florida.
EMS 2234C Paramedic I (O)
10 credits
The initial course of study leading to state registration as a Paramedic. This course provides didactic information and lab practice relating to the materials covered in the DOT curriculum Division I; Pre-hospital Environment Division II; Preparatory and Division IV Medical Sections One thru ten. Topics such as roles and responsibilities, medical terminology, assessment, respiratory, pharmocology, medical emergencies with an introduction to cardiovascular. Prerequisites: EMS 1119C and recent experience as a state registered EMT.
EMS $2435 \quad$ Paramedic Hospital/Field Experience I(O) 8 credits
This course will provide hospital observation and training in the emergency room, operating room, respiratory therapy department, intensive care unit, and Advanced Life Support Ambulances. Co-requisite: EMS 2234.
EMS 2235C Paramedic II (O)
10 credits
This course is a continuation of EMS 2234C, with an emphasis on DOT Division IV, V, VI, Cardiovascular/ACLS. Additional topics will be Division II trauma and pediatrics, OB/GYN/neonatal and behavioral emergencies.
EMS $2436 \quad$ Paramedic Hospital/Field Experience II (O) 8 credits Students will perform clinical rotations through ALS ambulance units, emergency departments, CCU, PCU, IV Team and Pediatric department.
EMS $2450 \quad$ Paramedic Field Internship (O) 5 credits Student will perform clinical rotations on ALS ambulance units.
EMS 1335 Ambulance Emergency Vehicle Operators Course 1 credit This course certifies EMT/Paramedics, First Aiders, etc., to meet Florida State HRS/ EMS requirements to operate an emergency vehicle.
EMS 2938 Advanced Arrhythmia Interpretation (O) 16 hrs. lecture 1 credit This course will present material for allied health professionals on identifying complex cardiac arrhythmias. Prerequisites: Paramedic, Basic EKG, ACLS or 12 Level EKG.

EMS 2375 Paramedic State Exam Review (O)
1 credit
This course is designed as a comprehensive review of Paramedic curriculum, preparing students to successfully complete the Paramedic State Certification examination. This is also open to certified paramedics and other interested allied health professionals. Prerequisites: Complete the Paramedic Program or current certification as a paramedic or allied health professional.
EMS 1321 Advanced Life Support for EMT's (O) 1 credit This course will prepare the Emergency Medical Technician to work with the Paramedic in an advanced Life Support Ambulance System. Topics and skills to be discussed and/or practiced are Endotrachael Intubations, Esophageal Obrurator airways, Intravenous solutions, Emergency Drugs, EKG monitoring, MAST suit, and ACLS Protocols. Prerequisite: EMT certification course.

## EMS 2930 Advanced Cardiac Life Support (O) <br> 1 credit

Introduction to Advanced Cardiac Life Support including Dysrhythmias, Mega Codes, Airway Management, Defibrillation and Cardioversion, IV Therapy, and Drug Therapy; no certification.

## EMS 2935

12 Lead EKG (O)
1 credit
Cardiac Anatomy \& Physiology - Cardiac Electric Activity, Identify normal and abnormal Cardiac Rhythms. Prerequisite(s): R.N., L.P.N., Paramedic, E.M.T., E.K.G. Tech.

EMS 1936 EMT Review (O) 1 credit EMT Review is a comprehensive review of all major topics taught in Basic EMT Course (EMS 1119C), preparing student to successfully complete EMT State Certification Examination. Also open to certified EMT and Paramedics and other Allied Health Professionals. Prerequisite: EMS 1119C or current certification as EMT, Paramedic or Allied Health Professional.

## EMS 2934 Basic Cardiac Rhythm Interpretation (O) 1 credit

This course will cover basic cardiac anatomy and electrophysiology. Normal and abnormal monitor tracings will be discussed including Atrial, Junctional and ventricular dysrhythmias. Prerequisites: R.N., L.P.N., Paramedic, EMT, EKG Tech.

## ENVIRONMENTAL CONTROL

OCB 1652 Pollution of Coastal Waters (O)
3 credits
A description of physical, chemical, and biological characteristics, discussion of bio-degradable, non-degradable, and thermal pollutants, turbidity and their impact, and specific analyses of small structures and related activities on the coastal marine environment.
EVS 2600 Introduction to Environmental Services (O) 3 credits Designed to acquaint the student with the major concerns of environmental health in relation to the environment that comes under the influence of the sanitarian. A general presentation to the origin and progress of the environmental health field is included.

## FINANCIAL SERVICES

BAN 1401 Wills, Trusts, and Estates (O)
1 credit
This course is designed to teach the layman the rudiments of basic Florida estate planning as it relates to their economic situation, giving them a basic working knowledge of wills, trusts, and tax law. This knowledge is designed to facilitate the transfer of their estate in the least amount of time at the least cost.

BAN 1605 Communications for Bankers (O)
3 credits
This course provides the student with the elements for effective communication through oral and written communication skills.

BAN 1800 Law and Banking: Principles ( $O$ ) 3 credits
This course is a guide to law and legal issues with special emphasis on the Uniform Commercial Code and includes summaries of law pertaining to contracts, real estate and bankruptcy.

BAN 1801 Law and Banking: Applications (O)
3 credits
This course addresses laws pertaining to secured transactions, letters of credit, the bank collection process, and check losses and legal issues related to processing checks.

BAN 2004 Principles of Banking (O)
3 credits This course provides an understanding of the basic functions of banking and a working knowledge of the operations of a bank.
BAN $2142 \quad$ Professional Teller Training (O) 3 credits This course provides the basic skills and information needed to perform effectively as a bank teller.

BAN 2210 Analyzing Financial Statements (O) $\mathbf{3}$ credits
This course focuses on the basic analytical techniques of analyzing financial statements to provide the framework for financial performance evaluation.
BAN 2231 Introduction to Commercial Lending (O) $\mathbf{3}$ credits
This class will provide entry-level commercial lending personnel and trainees with the knowledge to effectively service the needs of the bank's corporate clients.
BAN 2240 Consumer Lending ( $O$ ) 3 credits This course provides a thorough presentation of the consumer credit function.

BAN $2400 \quad$ The Trustee Business ( $O$ ) $\mathbf{3}$ credits
This class introduces the student to the elements of the trust industry including terminology, fiduciary responsibilities, corporate and individual trust services, and trust department operations. Prerequisite: BAN 2004.

BAN 2500 Economics for Bankers (O) 3 credits
This course provides bankers with an introduction to the fundamental principles of economics relating to the financial industry.

BAN 2501 Money and Banking (O)
3 credits
This course stresses the practical aspects of money and banking and emphasizes the basic monetary theory needed by banking students to apply their knowledge to a particular job.

BAN 2511 Marketing for Bankers (O)
3 credits
This course looks at marketing, motivation, integration of public relations with advertising and sales promotion, and discusses service distribution functions at the bank.

BAN 2742 Bank Management (O) 3 credits
This course presents new trends in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management.

BAN 2935 Service and Sales in Banking (O)
3 credits
This course is designed to develop an awareness of customer service and sales as an integral part of the banking industry. Students will study the uniqueness of an intangible sales industry, examining the elements of a sales process, customer buying behavior, and techniques for quality customer service. Prerequisite: BAN 2004.

FIN $1101 \quad$ Personal Financial Planning (O)
1 credit
This course will offer the student a basic understanding of financial planning and cover insurance, annuities, fixed income, equities, mutual funds, taxes, and estate planning.

FIN $1105 \quad$ Personal Investing (O)
1 credit
This course will give the student a basic understanding of investment planning through a "path" to follow in their financial concerns.

SVL 2001 Introduction to the Saving Association Business(O) 3 credits This course explores the role of savings institutions in the modern business world, covering historical development of savings institutions, present day dynamics and trends in the business.

SVL 2011 Money and Banking (O)
3 credits
This course will explain the relationships of the financial aspects of the institutions, including the Federal Reserve involvement, FSLIC, interest rate postures, and definitions of financial terms dealing with basic functions of the financial industry.

SVL 2015 Commercial Banking (O) 3 credits
This course supplies students with knowledge of other financial institutions to allow them to provide valuable help to customers who seek information.

SVL 2101 Savings Institution Operations (O)
3 credits
This course provides an overview of the internal operations of savings institutions with emphasis on the functions of various departments.

SVL 2111 Teller Operations ( $\mathbf{O}$ ) 3 credits
This course provides tellers with the knowledge to provide expert and efficient service to their customers by providing a conceptual understanding of the financial service business.

SVL 2113 Deposit Accounts and Services (O)
3 credits
This course describes all forms of deposit accounts, the laws and regulations governing these accounts and how accounts are enhanced by new services offered by savings institutions.

SVL $2121 \quad$ Managing Deposit Accounts \& Services (O) 3 credits This class provides students with an overview of all aspects of administering deposit accounts with emphasis on governmental regulations.

SVL 2122 Accounting Principles for Savings Institutions (O) $\mathbf{3}$ credits
This course introduces the student to basic accounting principles as they apply to savings institutions.

SVL 2123 Accounting Practices for Savings Institutions (O) 3 credits This course reviews basic accounting principles and covers FASB rules, depreciation, statement of cash flows, investments, borrowed funds, net worth, and auditing. Prerequisite: SVL 2122.

SVL $2125 \quad$ Introduction to Electronic Data Processing (O) 3 credits
This course introduces basic data processing principles and their application to the savings and loan business exploring concepts in processing systems, hardware, system application, languages, and considerations in acquiring computer resources.
SVL $2201 \quad$ Financial Statement Analysis (O) 3 credits
This course provides basic skills needed to analyze financial statements for loan approval.
SVL $2211 \quad$ Consumer Lending ( $O$ ) 3 credits
This course provides a thorough presentation of the consumer credit function.
SVL $2221 \quad$ Residential Mortgage Lending (O) 3 credits
This course provides the student an overview of all aspects of making a residential mortgage loan.
SVL 2223 Residential Appraising (O) 3 credits
This course introduces the student to the basic principles of residential appraising, emphasizing the specialized vocabulary employed by appraisers.
SVL 2231 Commercial Lending for Savings Associations (O) 3 credits
This course provides a basic overview of important terms, concepts and techniques to prepare the commercial lending practitioner.
SVL $2241 \quad$ Mortgage Loan Servicing (O) 3 credits
This course focuses on the procedures used in the daily operations of loan servicing departments from the time the loan is closed until the final payment is made.
SVL $2251 \quad$ Real Estate Principles I (O) 3 credits
This course provides the basic principles of real estate administration with the emphasis on the physical, legal and economic aspects of real estate.
SVL 2403 IRA/KEOGH Accounts (O) $\mathbf{3}$ credits
This course provides the student with information on the types of retirement plans available and the rules on participation, contributions, vesting, and reporting. It also covers administering, monitoring, maintaining, and distribution of IRA accounts.
SVL $2411 \quad$ Techniques for Customer Counseling (O) 3 credits
This course for financial counselors covers customer needs, financial services that can satisfy those needs and the relationship between the customer and the financial institution.
SVL 2501 Economics I (O) 3 credits
This course presents a basic usable picture of how our modern economy operates by providing the necessary analytical tools with which to properly evaluate fundamental economic behavior.
SVL $2511 \quad$ Marketing for Financial Institutions (O) 3 credits
This course introduces students to fundamental concepts of marketing and explores applications of these concepts in a financial institution setting.
SVL $2521 \quad$ Human Relations in Business ( $O$ ) 3 credits
This course introduces participants to behavioral concepts and techniques that they can use to improve their business relationships with customers and coworkers.
SVL 2532 Supervisory Personnel Management I(O) 3 credits
This course provides potential supervisors with the basic knowledge and concepts necessary to be effective supervisors.

SVL 2533 Supervisory Personnel Management II (O)
3 credits
This course provides the basic knowledge and concepts necessary to be effective supervisors with experience in supervisory skills through classroom situations.

## SVL 2601 Effective Business Writing (O) <br> 3 credits

A comprehensive study of the various areas of business communication with emphasis on the writing of business letters and reports. Designed for business administration and pre-business education students.
SVL $2761 \quad$ Branch Management (O) 3 credits
This course covers management issues and responsibilities from the special perspective of managing a semi-autonomous unit operating within a larger business organization. It covers the roles of branch management as leader, recruiter, staff trainer, performance manager, community relations financial manager, marketing manager, resource manager, security manager and change agent.
SVL 2801 Commercial Law I (O) 3 credits
This course provides an introduction to principles of business that relate directly to how savings institutions conduct business including contracts, remedies, instruments, liability, common law, and security for lenders.

## FIRE SCIENCE TECHNOLOGY

FFP $1000 \quad$ Introduction to the Fire Services ( $\mathbf{O}$ )
3 credits
An introduction to the history of fire services in the U.S., including the philosophy and traditions of the fire service and career orientation.
FFP $1130 \quad$ Fire Supervision (O)
3 credits
This course will provide the information and skills to be an effective supervisor. The basic principles of management will be covered in this course.
***FFP 1200 Fire Inspection Practices (O) 3 credits
Familiarize student with state and local statutes and ordinances relating to fire prevention, survey national fire codes, Underwriters Laboratories, South Florida Building codes, N.F.P.A. manuals. Develop an appreciative understanding of the making of inspections or surveys, and report findings.
FFP V005 Basic Fire Recruit Training (O)
280 hours
Indoctrination into the fire services designed to enable the recruit to perform the duties of a fire fighter. Student must meet state requirements of Fire Standards. Prerequisite: Permission of Fire Sciences coordinator.
FFP $1040 \quad$ Introduction to Marine Fire Protection (O) 3 credits Survey of agencies involved in marine safety, fire protection and cargo handling, familiarization with Federal, State and local fire protection ordinances. Develop an understanding of methods developed for control of fire aboard ships at sea and in port.
FFP V081 Basic Volunteer Firefighter Training (O)
40 hours
This course is the first in a series of certification courses that is offered to the volunteer service. Upon successful completion of the courses, which includes a written examination, the student will be certified by the Bureau of Fire Standards.
*FFP $1326 \quad$ Plans Examination and Blue Print Reading (O) 3 credits This course is designed to enable the student to have a better understanding of the plans-examination process and blue print reading as it pertains to the prospective Fire Inspector.
*One of five courses for Fire Inspector.
**One of seven courses for Fire Officer I.
***FFP 1620 Fire Protection and Detection Systems (O)
3 credits
This course explains in detail the various types of private fire protection systems, including Automatic Sprinklers and Standpipes. Part of State Inspectors program.

## FFP $1530 \quad$ Private Fire Brigade (O) <br> 3 credits

This course contains Basic Firefighting principles for the industrial worker covering such topics as Orientation, Fire Behavior, Hose Lines and Nozzles, Protective Breathing Apparatuses, Ladders, Ventilation, Water Distribution Systems, and Extinguishers.
FFP $1930 \quad$ Fire Service Special Topics (O) $\mathbf{1 - 3}$ credits
These special seminars are designed to bring top experts from the Fire Technology field to the Fire Science student.
FFP P085 Advanced Volunteer Firefighting (O) $\mathbf{8 0}$ hours
This course is designed for the Volunteer Firefighter who desires to improve his Firefighting skills. An indepth review of Fire Department Procedures and Application will be examined. Prerequisite: FFP V081.
**FFP $2130 \quad$ Company Officer Leadership (O)
3 credits
This course in leadership deals with the total aspects of management systems and theories, motivation, communication and individual behavior for the Firefighters soon to be Fire Officers. Part of Fire Officer I certification.
**FFP $2150 \quad$ Methods and Techniques of Instruction (O) $\mathbf{3}$ credits This course emphasizes techniques which have wide applications to many teaching situations, as well as devices for specific areas. It stresses the measuring of teaching effectiveness and studies devices used in the communication of ideas and ways of strengthening retention of knowledge and skills.
**FFP $2500 \quad$ Hazardous Materials I (O) $\mathbf{3}$ credits Study of the chemical and phyșical properties of matter and their possible reactions related to storage handling and transportation. The study will include flammable liquids, combustible solid oxidizing corrosives, and radioactive materials.
**FFP 2501 Hazardous Materials II (O) 3 credits This course provides Fire Service students with up-to-date knowledge on hazardous materials incidents and procedures for handling these incidents when they occur. Class is a follow-up to Hazardous Materials I. Prerequisite: FFP 2500.
**FFP $2410 \quad$ Firefighting Tactics \& Strategy I(O)
3 credits
Develop an understanding of efficient use of manpower, apparatus placement, and equipment available. Placing emphasis on pre-fire planning, fire ground decisions, and problem solving.
*FFP $2300 \quad$ Building and Fire Codes I (O) 3 credits
To study and compare national, state, and local building and fire codes emphasizing local laws and ordinances pertaining to building construction and design.
FFP $2527 \quad$ Electrical Hazards for Firefighters (O) 3 credits
To familiarize firefighters with the National Electrical Code. To teach them to recognize electrical hazards in building inspection tours and in buildings involved in fire. To suggest possible method of protecting fire personnel from electrical hazards and ways to correct faulty electrical conditions.
FFP $2640 \quad$ Fire Hydraulics for Pump Operators (O)
3 credits
Theory of hydraulics as applied to the fire service with emphasis on the mathematics and formula related to fire streams, master streams, and pump operations.

[^12]FFP $2240 \quad$ Fire Investigation and Arson Detection (O)
3 credits
Survey of arson laws and incendiary fires, determining the cause of fire, recognizing and preserving evidence, interviewing witnesses, handling juveniles, presentation of court testimony and court procedures. Familiarization with the pathology of fire setters.
FFP $2100 \quad$ Municipal Fire Administration (O)
3 credits
To develop an understanding of systems for appraising, upgrading and implementing fire protection services of local, county, and state governments. To further develop an appreciation for knowledge in the fields of personnel management, fire signal systems, fire insurance regulations, mutual aid systems, and extra department relations.
FFP $2949 \quad$ Work Experience Internship (O)
3 credits
To be prepared after proper agreements with local fire officials. Prerequisite: Approval of Fire Sciences coordinator and local fire personnel.
FFP $2301 \quad$ Building and Fire Codes II (O) 3 credits To provide more intense, in-depth, detailed study of the wide variety of complex Fire Safety and Building Codes. A continuation of FFP 2300. Prerequisite: FFP 2300 or permission of Fire Sciences coordinator.
*FFP $1320 \quad$ Building Construction for Fire Service $\mathbf{3}$ credits This course is designed for firefighters interested in gaining knowledge about construction as it relates to the spread of fire and/or inspection field. The course will cover general information about most building structures.
FFP 1520 . Chemistry for Fire Science ( $O$ ) $\mathbf{3}$ credits Course will provide an overview of the basic principles of Chemistry. Topics will be introduced with the use of Mathematics. Properties of Acids and bases, vapor pressure, gas laws, flammability of common accelerants, carcinogenic and toxic properties of common chemicals, naming compounds and their formulas are but a few of the topics to be covered in the course. Prerequisite: Permission of Fire Science Coordinator.
FFP 1921 Inservice Instruction and Training (O) 45 hrs. lecture 3 credits This course is for Inservice Fire Personnel. Topics may vary from Agency to Agency. Prerequisite: Employed with a Fire Agency.
FFP $1410 \quad$ Multiple Alarm Response (O) $\mathbf{3}$ credits Devoted to the proper handling of multiple alarms fires and other disasters which may engage fire department units, from outside your department.
FFP 1420 Engine and Truck Company Fireground Operations (O)
3 credits Detailed review of the operations of Engine and Truck Co. on the firegrounds. The objectives of the fireground operations and duties of the companies required to accomplish these objectives are covered. Apparatus positioning and building coverage are discussed in relations to the occupancy involved.

## FOOD SERVICE

HUN 1201 Nutrition (O)
3 credits
Food nutrients, their digestion and absorption, and the relationship of food to the development and maintenance of health. Includes a study of nutritional needs of all age groups and interpretation of the National Research Council's recommended dietary allowance.
*One of five courses for Fire Inspector.
${ }^{* *}$ One of seven courses for Fire Officer I.

FSS 2221C Food Preparation I (O)
3 credits
Procedures, safety sanitation, and quality involved in food preparation, including procedures and techniques in quantity food preparation with emphasis on quality and retention of nutritive values. Kitchen organization and planning of quantity production are included. Practice is provided in the production and service of meals, including evaluation and controls.
FSS 2222C Food Preparation II (O) 3 credits
Continuation of FSS 2221. Prerequisite: FSS 2221.
FOS 2201 Sanitation and Safety (O)
3 credits
Sanitation relating to the preparation, storage, and service of food. Study of foodborne diseases, food poisoning, and diseases transmitted by food and food handlers, including safety practices in the food service department.
FSS $2401 \quad$ Use and Care of Kitchen Equipment (O) 3 credits Proper use of food service equipment in the easiest, safest, and most effective way. Includes proper care of equipment, simple repair techniques, and preventive maintenance.
FSS 2246C Quantity Baking (O)
3 credits
Procedures and techniques used in quantity baking. Emphasis upon manipulation of recipes for the quantity baking of all types of breads, cakes, and pies.
FSS 2263
Food Merchandising and Service (O)
3 credits
Theory and practice in acceptable procedures in serving foods. Includes how to display and merchandise foods in an attractive manner and how to evaluate the food service operation.
FSS 2284C Food Services Special (O)
3 credits
This course includes the planning, preparation of, and presenting of special food functions such as buffets, banquets, receptions, etc. Emphasis will be on decorating and display of food.
FSS $2300 \quad$ Food Service Supervision and Management (O)
3 credits
Principles of management particularly as they apply to the food service industry. The role of the supervisor or manager in organizing and directing the work of his employees and his responsibility for planning and coordinating their activities is included.
DIE $2201 \quad$ Nutrition and Diet Therapy (O)
3 credits
An introductory course in the science of nutrition and principles of diet therapy. Fundamental principles of nutrition are studied and application of these principles to diet planning is covered.
FSS 2303 Food Service Seminar and Supervised Work Experience I (O)
4 credits
A seminar for students enrolled in the Food Service program. The seminars meet a minimum of one hour each week for discussions and reports concerning the supervised work experience. A minimum of fifteen hours of supervised on-thejob training required in the food industry per week. Prerequisite: permission of food services coordinator.
FSS 2304 Food Service Seminar and Supervised Work Experience II (O)
A continuation of FSS 2303.
FSS 2305 Food Service Seminar and Supervised Work Experience III (O)
4 credits
A continuation of FSS 2304.

FSS 2306 Food Service Seminar and Supervised Work Experience IV (O)
4 credits
A continuation of FSS 2305.

## FRENCH

FRE $1000 \quad$ French For Daily Use I (P) 2 credits
French for Daily Use I is a course for non-French speaking students. The student will be introduced to the French alphabet, basic vocabulary, expressions, set phrases and simple sentences.
FRE $1001 \quad$ French for Daily Use II (P) 2 credits French for Daily Use II is designed for beginning students and is a continuation of FRE 1000. Students gain experience in basic vocabulary from areas of daily living. Students will begin to read French materials. Grammar will be taught only as needed in connection with conversation being studied. Prerequisite: FRE 1000 or its equivalent.
FRE $1010 \quad$ Applied Conversational French I (P) 2 credits Applied Conversational French I is designed for the student with an existing basic knowledge of French. Some grammar will be taught in conversational context. The courses focuses on conversation dealing with the person and moves outward to the home and community. The student will gain experience in conversation and in understanding written communication. French culture will be introduced. Prerequisite: FRE 1000 and FRE 1001 or their equivalents.
FRE 1011 Applied Conversational French II (P) 2 credits Applied Conversational French II is designed for the student with a working knowledge of French. The student will gain conversational experience in subjects dealing with functioning in a community situation. Conversational fluency is practiced. French culture is studied. Correct grammatical form is taught in conversational context. Prerequisite: FRE 1000, 1001, 1010 or their equivalents.
FRE 1012 Applied Conversational French III (P) 2 credits Applied Conversational French III focuses on conversation and information needed in preparing for a trip and getting along in a French-speaking country. Correct conversational grammar, comprehension of written materials and fluency in oral communication will be stressed. Prerequisite: FRE 1000, 1001, 1010, 1011 or their equivalents.
*FRE $1120 \quad$ Elementary French I (P) 4 credits Fundamentals of speaking, reading, and writing. Corequisite: ENC 1101.
*FRE $1121 \quad$ Elementary French II (P) 4 credits Continuation of FRE 1120. Prerequisite: FRE 1120 or equivalent.

First-year language courses are intended for students who have no previous formal instruction in the language. Students with two years of high school French normally enter the second year courses.
*FRE $2200 \quad$ Intermediate French I (P)
4 credits
Continuation of FRE 1121, with review of first-year grammar. Discussion of several short reading selections. Prerequisite: FRE 1121 or equivalent.

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## GEOGRAPHY

GEA $2000 \quad$ World Geography (P)
3 credits
Basic principles of geography, as related to the global distribution of man and his natural environment, stressing the role of geography in interpreting human activities in the economic, cultural, and political areas.

## GEOLOGY

GLY 1010 Introduction to Physical Geology (P)
3 credits
Basic principles of geology relating to sedimentation, structural deformations, erosions, and weathering. The practical applications of geology as a profession and in research. Study of volcanism, earthquakes, and varieties of rocks. Study of geological theories.
GLY $1100 \quad$ Historical Geology (P)
3 credits
Evolution of life and the earth. Study of the growth of mountains, and the physiographic development of continents. Study of the development of North American stratigraphy and structure during different eras and periods, and record of life forms. Study of the origins of ores and petroleum.

## GERMAN

GER $1000 \quad$ German for Daily Use I (P) 2 credits German for Daily Use I is a course for non-German speaking students. The student will be introduced to the German alphabet, basic vocabulary, expressions, set phrases, simple sentences.

## GER 1001 German For Daily Use II (P) 2 credits

German For Daily Use II is designed for beginning students and is a continuation of GER 1000. Students gain experience in basic vocabulary from areas of daily living. Students will begin reading German material. Grammar will be taught only as needed in connection with conversation being studied. Prerequisite: GER 1000 or equivalent.

GER 1010 Applied Conversational German I (P)
2 credits Applied Conversational German I is designed for the student with an existing basic knowledge of German. Some grammar will be taught in a conversational context. The course focuses on conversational dealing with the person and moves outward to include home and community. The student will gain experience in conversation and in understanding written communication. German culture will be introduced. Prerequisite: GER 1001 or equivalent.
GER $1011 \quad$ Applied Conversational German II (P) 2 credits Applied Conversational German II is designed for the student with a working knowledge of German. The student will gain conversational experience in subjects dealing with functioning in a community situation. Conversational fluency is practiced. German culture is studied. Correct grammatical form is taught in a conversational context. Prerequisite: GER 1003 or equivalent.
GER 1012 Applied Conversational German III (P)
2 credits
Applied Conversational German III focuses on conversation and information needed in preparing for and embarking on travel to a German-speaking country. Correct conversational grammar, fluency in oral communication and comprehension of written materials will be stressed. Prerequisite: GER 1004 or equivalent.

First-year language courses are intended for students who have no previous formal instruction in the language. Students with two years of high school German normally enter the second year courses.
*GER $1120 \quad$ Elementary German I (P) 4 credits
Audio-lingual German. Fundamentals of speaking, reading, and writing.
*GER $1121 \quad$ Elementary German II (P) 4 credits Continuation of GER 1120. Prerequisites: GER 1120 or equivalent.
*GER $2200 \quad$ Intermediate German I (P) 4 credits
Continuation of GER 1121, with review of first-year grammar. Reading and discussion of several short reading selections. Prerequisite: GER 1121 or equivalent.
*GER $2201 \quad$ Intermediate German II (P) 4 credits
Continuation of GER 2200. Prerequisite: GER 2200 or equivalent.

## HEALTH CARE MANAGEMENT

HSA $1220 \quad$ General Administration and Management (O) 6 credits An introductory course in long-term care administration and management which includes background information on the history, philosophy, and trends in nursing homes; the management process and its application to nursing homes. Emphasis is placed on the special needs of the elderly and services provided.
HSA 1230 Long-term Care Management I (O) 3 credits A study of federal, state, and local regulations pertaining to long-term care. Application of standards on environmental health and safety including, hygiene and sanitiation, control of communicable diseases, care of the total environment, accident prevention, architectural needs, control of drugs, oxygen safety and patient care standards are emphasized. Licensure and accreditation are also included. Prerequisite: HSA 1220, General Administration and Management.
HSA 1231 Long-term Care Management II (O) 3 credits A study of the departmental organization and management within the long-term care facility and interrelationships between the long-term care facility and the community services and resources. Management prinicples relative to the establishment of departmental objectives, provision of services, reporting, accountability, and evaluation are studied. Interrelationships with physicians, rehabilitative and social services; schools; churches; governmental services; third party payers; health planning agencies; and volunteers are also studied. Prerequisite: HSA 1230, Long-term care Management I.
HSC 1590 Long-term Patient Care I (O) 3 credits A study of the psychosocial services provided to nursing home patients. Common problems associated with patients, such as, anxiety, depression, the use of drugs and alcohol, lack of motivation, and separation reaction are studied. Methods used in the creation of a therapeutic environment including individual plans, activities programming, and rehabilitation and restoration activities are also studied. Prerequisite: DEP 1930.
*These courses meet Foreign Language requirement for university admission. sional ethics are included. Prerequisite: HSC 1590.

## HSA $2850 \quad$ Nursing Home Experience (O)

3 credits
This experience assists students to apply classroom learning to long-term administration in nursing homes. Administration of the facility; personnel and financial management; the functions of the various departments; the physical facilities; and the application of federal, state and local regulations. Patient care practices and the interrelationships within the nursing home and with the community are also observed. Prerequisites: HSA 1220, HSA 1230, and HSC 1590.

HSA $2234 \quad$ Health Care Planning and Delivery Systems (O) 3 credits This course covers the multifaceted aspects of health care planning for facilities and servies for the elderly. Included in the course are: a history of health care planning, the roles of the federal and state governments, legislature affecting health care planning, and the types of health care services available, such as, skilled, intermediate, and acute long-tem care facilities; community resources, hospice care, home health care, and hospitals.

## HSA 2422

Legal Aspects of Long-term Care (O)
3 credits
This course covers the legal aspects of geriatric care and includes such topic as, health care financing, elder abuse, involuntary commitment, guardianship, power of attorney, informed consents, and issues affecting the care of the elderly. Insurance and legal protection are also included.

## HEALTH AND SAFETY

HSC $1130 \quad$ Holistic Health Care I (D)
1-3 credits
Designed to provide an understanding of the holistic and preventitive approach to health care.

HSC $2100 \quad$ Personal and Community Health (D)
3 credits
The physiological and psychological bases for health, health hazards, fitness, and family living.

HSC $2400 \quad$ First Aid and Safety (D) 3 credits
Basic and advanced instruction in principles and skills which will enable the individual to act in emergency situations. Standard and advanced Red Cross instruction is stressed.

HSC 2930 Allied Health Special (O)
various credits
A series of professional seminars designed for personnel associated with allied health occupations. The various topics presented address themselves to contemporary issues of interest to allied health personnel.
HSC $1160 \quad$ Ethical Issues in Medicine (P)
3 credits
This course is designed to provide the student with the intellectual machinery for formulating his/her own informed perspectives on the serious moral and legal issues arising in medical contexts. Among those issues discussed are euthanasia, abortion, death and dying, the allocation of scarce medical resources, human experimentation, psychosurgey, and genetic engineering.

## WST 1321 Women's Wellness (D)

1 credit
To educate the student in preventing illness and learning techniques to measure wellness, exploring pathways to wellness, there will be an emphasis on balancing our lifestyle on a physical and mental plane. Prerequisites: None.

## HISTORY

*EUH $1000 \quad$ History of Western Civilization I (P) $\mathbf{3}$ credits
Traces the development of Western Civilization from the Paleolithic Period through the Middle Ages. Prerequisite or corequisite: ENC 1101.
*EUH 1001 History of Western Civilization II (P) $\mathbf{3}$ credits Traces the development of Western Civilization from the Renaissance through the modern era. No prerequisite: but EUH 1000 recommended. Placement testing required. Prerequisite or corequisite: ENC 1101.
ASH 1040 Japan and the Japanese: A Perspective (P) $\mathbf{3}$ credits Japan and the Japanese: Historical and Cultural Perspectives. A survey of the history and culture of the people including religion, art, impact of China and the west.

AMH $2010 \quad$ American History to 1877 ( P ) 3 credits Political, economic, social, and intellectual development of the United States from Discovery of North America through reconstruction. Prerequisite: EUH 1000 and EUH 1001 suggested.

## AMH 2020 American History since 1877 (P) <br> 3 credits

Political, economic, social, and intellectual development of the United States from Reconstruction to the present. Prerequisite: EUH 1000, EUH 1001, and AMH 2010 suggested.
WOH 2040 The World in the Twentieth Century (P) $\mathbf{3}$ credits Emphasis placed on the causes and effects of World War I and II and the rise of communism and Fascism; followed by examination of contemporary areas of crises through the world.

## HOME SERVICE MANAGEMENT

## CTE 1300C Clothing Selection and Construction (D)

1 hr. lecture-4 hrs. lab-3 credits A study of design, color and fabric as they apply to the selection of clothing. Fundamental, commercial and domestic sewing techniques are taught while planning and constructing garments. A variety of commercial and domestic machines are used during clothing construction.

## CTE 1743 Pattern Design (O) <br> 4 credits

An introductory study of the flat pattern method of fashion design. After reviewing principles of good fit in clothing, patterns are created and garments constructed. Prerequisite: CTE 1300 or advanced sewing skills.

## HUN 1001 Principles of Nutrition (D) 3 credits

 An introductory course in the science of nutrition. Fundamental principles of nutrition, as they relate to developing and maintaining good health, are studied. Material is directed towards the health care and educational fields.[^15]HUN 1002 Understanding Eating Disorders (D)
1 credit
This course will help the student learn to analyze the Socio-Cultural factors contributing to eating disorders. To explore symptoms, complications and causes of disorders. Also to explore sources of treatment and assistance.
HUN 1410 Basic Childhood Nutrition (O)
3 credits
Course explains nutrition for teachers and others concerned with child health. The course consists of basic nutrition information: recommended dietary allowances, U.S. RDA's, metabolic functions of selected nutrients, and consumer information. Procedures for presenting nutritional information creatively to children are covered.
CTE $1401 \quad$ Introduction to Textiles (D) 3 credits Textiles, fibers, finishes and methods of fabric construction used in fashion and household merchandise are explored. Emphasis is on product knowledge for a marketing situation.
CHD $1220 \quad$ Introduction to Child Development (D) 3 credits A study of approaches to understanding and guiding the young child. Principles of growth and development are applied to the child in various settings. Emphasis of instruction is for potential employees in a child care situation.
EEC $1001 \quad$ Principles of Early Childhood Curriculum (D) 3 credits A study of the techniques used to develop effective teaching-learning situations with pre-school children. The teacher's role in determining these learning experiences and implementing them in a classroom is identified.
CHD 1332C Creative Experiences for the Young Child (O)
2 hrs. lecture-2 hrs. lab-3 credits An in-depth study of the creative activities enjoyed by pre-school children in language arts, math, science, social studies, art, music, and P.E. Techniques the teacher can use to stimulate creativity are identified.
EEC $1260 \quad$ Program Designs for Young Children (O) 3 credits
A study of principles and practices of programs for young children, current research in early childhood education, the role of the teacher, and selection of equipment and materials for use in the early childhood education program.

## HEV 1115 Statewide Child Care Training (O) <br> 1-3 credits

The four major areas of the child day care standards will be emphasized.
EDF $1031 \quad$ Social Elements in Early Childhood Education (D) 3 credits A study of the sociocultural elements of society and how these influence the child, the family, and the educational program. Emphasis is on 3 to 8 year old children.

## EEC 1946 Seminar in Early Childhood Education I (D)

2 hrs. lecture-4 hrs. lab-4 credits
Supervised participation in the Child Care Center. The student will plan and carry out specific activities providing experiences in working with preschool children individually and in groups.
EEC 1947 Seminar in Early Childhood Education II (D)
2 hrs. lecture-4 hrs. lab-4 credits
Prerequisite: EEC 1946.
EEX 1001C Seminar in Exceptional Child Education II (D)
2 hrs. lecture-4 hrs. lab-4 credits A general introduction to the field of special education. It offers the basic background needed to continue to understand all areas of exceptional childhood education. A minimum of 4 hours on-the-job training is required per week.

COA 1100 Consumer Finance (O)
3 credits
Application of basic principles of sound money management to every day life. Encourages the student to think wisely about buying, spending, and investing.

## EEC 2948 Seminar in Early Childhood Education III (D)

2 hrs. lecture- 4 hrs. lab-4 credits
Prerequisite: EEC 1947.

## EEC 2949 Seminar in Early Childhood Education IV (D)

2 hrs. lecture-4 hrs. lab-4 credits
Prerequisite: EEC 2948.
CTE 2340 Advanced Clothing Construction (O)
4 credits
A study and application of advanced commercial and domestic construction techniques. Emphasis is placed on problem solving and skill perfection. Fundamentals of the seamstress/clothing production businesses are covered.
FSS 2202C Food for the Family (D) 2 hrs. lecture-4 hrs. lab-4 credits Basic food preparation and applied nutrition to meet the family's need in today's economy. Includes planning, shopping, preparing, and serving meals that are nutritionally adequate and attractive. Also included is a study of convenience foods.
LEA $1932 \quad$ Consumer Legal Issues (P) 1 credit
An informative overview of major areas of contemporary law: insurance, probate, products liability, malpractice, family law, real estate and more.
HHD 2001 Creative Art and Design Techniques (O) 3 credits Application of basic principles of color and design as they apply to fashion merchandising and interior design.
SLS $1421 \quad$ Personal \& Career Development (O) 3 credits
Survey of factors influencing the modern person today: career choices, adjustment of changes in lifestyles, combining homemaking with career, human relations, and advancement into leadership positions.

## HUMANITIES

*HUM 1541 Humanities: Literature ( $\mathbf{P}$ )
3 credits
Specifically, this course seeks to examine the nature of Man as seen by representative writings through the ages so that we may learn what thinking has preceded us, so that we may better understand our present, so that we may better actualize our potential for the future. Prerequisite or Corequisite: ENC 1101.
*HUM 1533 Humanities: Philosophy (P)
3 credits
This course examines traditional philosophical problems arising in ethics, social philosophy, political philosophy, epistemology (theory of knowledge), philosophy of mind and philosophy of religion; and it shows how these problems can arise and be philosophically addressed within actual work contexts such as those of business, medicine, government, education, psychology, art, historiography, social services, criminal justice and religion. The purposes of this course are thus principally two: (1) to expose students to the range of traditional problems, theories, and methods of philosophy; and (2) to demonstrate the practical merits of these aspects of philosophy. Prerequisite or Corequisite: ENC 1101.
*Gordon Rule Courses. A minimum grade of " C " and 4,000 written words are required in each course.

HUM 2511 Humanities II: Art/Music (P)
3 credits
A humanities approach to the history of 19th and 20th Century art and music with emphasis on modern concepts.

## HUMAN SERVICES TECHNOLOGY

## CLP 2140 Abnormal Psychology (P)

3 credits
This course provides a review of psychological disorders. Common psychopathological conditions are described in terms of theoretical foundations and etiology. Current treatment approaches are reviewed with emphasis on identification using DSM-III-R criteria. Prerequisite: Permission of Instructor.
DEP $1001 \quad$ Child and Adolescent Psychology (P) 3 credits The mental, emotional and social development of children from infancy through adolescence is discussed. The course stresses identification of problems in this group and methods of effectively dealing with these problems. Prerequisites: None. Corequisites: None.
GEY $1000 \quad$ Introduction to Gerontology (D) 3 credits This course provides a broad review of issues that affect the elderly. Medical, psychological, and social problems of the elderly will be discussed. Relevant community and social services will be described. A wholistic approach to the overall wellbeing of the elderly will be presented. Prerequisites: None. Corequisites: None.
HUS 1001 Introduction to Human Services (D)
3 credits
This course provides an overview of the human services system. The history, funding, purpose and role of various federal, state, regional and local services are presented. Roles of personnel employed in the system will be described and the procedure for referral delineated. Prerequisites: None. Corequisites: None.

## HUS $1200 \quad$ Group Dynamics (D) 3 credits

This course is designed to provide students with a basic overview of the group experience. Its purpose, roles played, and essential characteristics of the effective group will be presented as well as the tasks and techniques of the group facilitator. Dynamics of the group experience will be stressed.
HUS $2500 \quad$ Introduction to Ethics in Human Services ( $\mathbf{P}$ ) $\mathbf{3}$ credits This course will address such topics as the nature of ethical decision making, the concept of responsibility, the therapist-client relationship, confidentiality, suicide \& intervention, involuntary institutionalization, the insanity defense, the ethics of behavior control, ethical problems in marriage, professional \& legal regulations, ethical theory \& counseling approaches, \& the place of values in counseling \& psychotherapy.
HUS 1820 Human Services Practicum I (O)
3 credits
This is an introductory human services practicum experience. Students will be placed in agencies based on their needs and interests and the availability of agencies. Under the direct supervision of agency professionals, it is designed to assist student in understanding the human service delivery system.Permission of instructor.
HUS 1821 Human Services Practicum II (O)
3 credits
This course will be an extension of HUS 1820, where students will be allowed to choose those agencies in which they have developed a specific interest for placement. Emphasis will be on a broad range of clinical experiences with professional personnel and administrative processes. Prerequisites: HUS 1820 and permission of instructor.

## HUS 1822 Human Services Practicum III (O)

3 credits
This course is an extension of HUS 1820 and HUS 1821. It provides the human services student with additional field experience in the student's chosen human services agency. The student will continue to practice under the supervision of a professional but will be expected to demonstrate a much higher level of skill and independence than in HUS 1820 and HUS 1821. Emphasis will be placed on group therapy experiences. Permission of instructor.

## HUS $2110 \quad$ Counseling Techniques (D)

3 credits
This course will provide the human services student with a more in-depth knowledge of individual, group, and family counseling skills to prepare them for their role as paraprofessionals in the human services delivery system. Theoretical, ethical and practical issues of counseling will be addressed and skill development will be encouraged through role play. Recommend: HUS 2102.

## HUS $2531 \quad$ Substance Abuse and Treatment (D)

3 credits
This course is an introduction to the field of substance abuse. It deals with the addicted person, his/her family, etiology of addiction and treatment approaches. Treatment emphasis will be based on the concept that addiction is a disease that affects the identified addict and family. Prerequisite: HUS 1506 or permission of instructor.

HUS $1506 \quad$ Introduction to Drugs of Abuse (D) 3 credits
The nature of drug addiction and dependence; classification of drugs, their originis, average dosages, short and long term effects, risk or dependence, and medical uses. Drug education, laws, treatment, and rehabilitation.

HUS 2025 Introduction to Interpersonal Behavior (P)
3 credits
Man's needs and fulfillment of these needs for personal and social adjustment and happiness; fundamental theories concerning mental health as applied to counseling and rehabilitaton of the chemically dependent.

## HUS 2102 Introduction to Techniques of Interviewing an Intervention (D)

3 credits Review of basic psychological definitions of person, self-image; heredity and environmental influences in the development of self-image and personality and as causes of emotional prolems and neurotic behavior. Basic techniques of interviewing, evaluation and intervention in general; specifically application of the above to the chemically dependent.

PPE $2000 \quad$ Person and Personality Development (P) 3 credits
This course is designed as a review of the major theories of personality development. The major theorists include Freud, Erikson, Jung, Adler, Laing, Fromm, Maslow, Skinner and Bowen. Introspection as a means of improving one's selfimage and the relationship to others is studied.

## INDIVIDUAL PROBLEMS

IDS 2905 Individual Problems ( $\mathbf{P}$ )
(Specify Subject Area by Title)
1, 2, 3, 4 credits
A special course designed to offer work of an advanced nature, in any major field, that is not offered in a course listed in the catalog. Prerequisite: permission of instructor.

## INDUSTRIAL

ETI $1948 \quad$ Industrial Seminar And Supervised Work Experience (O)
4 credits
Seminar for students enrolled in industrial programs. Seminar meets a minimum of one hour per week for discussion. Supervised work experience required of a minimum of 15 hours per week. Prerequisite: permission of Division Director.
ETI 1931 Industrial Seminar and Supervised Work Experience (O)
4 credits
Continuation of ETI 1948. Prerequisite: ETI 1948.

## INSURANCE

RMI $2500 \quad$ Individual Life and Health Insurance (O) $\mathbf{3}$ credits
The role of life and health insurance in meeting economic security needs, types of individual and special life annuity contracts, individual health insurance contracts including disability and medical expense insurance as related to premiums, reserves, non-forfeiture values, surplus and dividends.

RMI 2505 Life Insurance Law and Company Operations (O) 3 credits Legal aspects of contract formation, policy provisions, assignments, ownership rights, creditor rights, beneficiary designations, disposition of life insurance proceeds, and settlement options. Also includes types of insurers, risk selection, company investments, financial statements, and regulation and taxation of companies.
RMI $2506 \quad$ Group Insurance and Social Insurance (O) $\mathbf{3}$ credits Analysis of group life and group health insurance, including products, marketing, underwriting, reinsurance, premiums, and reserves. Also includes socio-economic problems related to old age, unemployment and disability, and various public plans that have been developed to meet these problems.
RMI 2507 Pension Planning (O)
3 credits
Tax considerations, cost factors, and funding instruments involved in private pensions, profit-sharing plans, and tax-deferred annuities.

FIN $2110 \quad$ Investments and Family Financial Management (O) $\mathbf{3}$ credits Various aspects of investment principles and their application to family financial management. Included are the subjects of yields, limited income securities, growth factors, and analysis of financial statements. Also discussed are family budgeting, property insurance, mutual funds, variable annuities, and aspects of other investment media.

RMI 2552 Business Insurance (O)
3 credits
Business uses of life and health insurance, including proprietorship, partnership, and corporation continuation problems and their solution through use of buy-sell agreements. Also discussed are key man insurance, non-qualified deferred compensation plans, and split-dollar plans. There is also a section of human behavior and ethics in business.

RMI 2509 Estate Planning and Taxation (O)
3 credits
Advanced concepts in life underwriting, emphasizing estate planning, disposition of property, administration of property in trusts and estates, taxation of estates and gift transfers, and the effective use of life insurance to minimize financial problems.

Property and Casualty Insurance is a course designed for students interested in obtaining a state of Florida Property and Casualty sales license. This is the state required " 220 " pre-licensing class. Topics include: auto, fire, liability, property, workman's comp, security bonds and other casulty insurance topics.

## INTERIOR DESIGN

HHD 1234 Design of Interior Space (O)
3 credits
A study of developing interior space for esthetically pleasing, efficient, safe, flexible usage. Prerequisite: BCN 1250C. Corequisite: None.
HHD 1321 Introduction to Interior Design (O) 3 credits An overview of the field of interior design. The principles and elements of design, use of interior space and employment opportunities are covered.
HHD 1614 Survey of Architectural Design and Furniture Styles (O)

3 credits
A study of the historical styles of architecture, furniture and decor to the present day.
HHD 1930 Seminar in Interior Design I (O) 3 hrs. lecture-2 hrs. lab-
4 credits
A survey of the creative and ever-changing field of Interior Design. The seminar includes a study of interior design history trends and cycles. Business concerns of the interior designer are addressed and the creation of a design board to present to a client. On-the-job training is included in the Interior Design Seminar.
HHD 1931 Seminar in Interior Design II (O) 3 hrs. lecture-2 hours lab4 credits
Will provide the student with additional preparation and focus on the interior design field. Specialized topics will be the core for student preparation. On-thejob training is included in this seminar.
IND 2420 Materials and Sources (O)
3 credits
A of the materials of Interior Design and sources of each. Topics include Textile and Non-Textiles Materials. Course emphasizes product information and includes customer and vendor relations. Prerequisites: None.

## JOURNALISM — PUBLIC RELATIONS

JOU 1100 News Reporting and Writing (D)
3 credits Instruction and practice in news writing, for newspaper and/or broadcast media. Functions of media, media organization, news standards, visits to communications media. Reporting techniques, interviewing and basic process of news production are covered. Corequisite: ENC 1101.
JOU 1420 Journalism Lab (D)
3 credits Journalism Lab emphasizes development of skills through practical experience by reporting and editing for the college paper and/or magazine. This includes workshop assignments with area newspapers, dailies and weeklies. Prerequisites: MMC 1000 Survey of Mass Communication. Requires Permission of Instructor.
JOU 1421 Journalism Laboratory II (D) $\mathbf{3}$ credits Journalism Lab II hands-on work to write, report, take photographs, edit, write headlines for and lay out the student newspaper and/or magazine. Students get assignments and meet deadlines in order to produce The Post. They report to editors and are responsible for the earlier practice of good journalism principles, learned in courses and honed in JOU 1420. Prerequisite: JOU 1420.

This is the third of a series of individual-based Journalism Labs featuring workshop assignments (story ideas, reporting, editing, layout and photography) for college newspaper with emphasis on accuracy, deadline and principles. This course gives specialized instruction in newspaper work, stressing editorial responsibilities. Prerequisite: JOU 1100.

JOU 2200 Editing (D) 3 credits
Editing teaches editing and rewriting of copy for publication, headline writing and development of news judgement. Students will gain experience in laboratory work in newspapers, and will study newspaper audiences and news placement. Prerequisite: JOU 1100.

MMC $1000 \quad$ Survey of Mass Communication (D) 3 credits
This course is an introduction to the various media of mass communication with special emphasis on the roles and responsibilities to society and the public served.

## PUR $2000 \quad$ Introduction to Public Relations (D) $\mathbf{3}$ credits

Introduction to Public Relations explores the nature and role of public relations, activities of PR Professionals, major influences that affect organizational behavior and the ethics and professional development of PR professionals.

## LEGAL ASSISTANT

PLA 2003 Introduction to Legal Assistant Technology (O) 3 credits Designed to provide an overview of the training and purpose of legal assistants. Examines the role of the lawyer and legal assistant in modern society, the ethical and professional practice standards applicable to both lawyer and assistant, and surveys the various fields of law that will be covered by the student during the program. A prerequisite for all other legal assistant courses. College level reading and writing skills recommended.

PLA 2873 Introduction to Court Administrative Procedures (O) 3 credits This course is designed to provide the student with a working knowledge of the functions of the Clerk of the Court's Office. Included will be contact with courtpromulgated forms and applicable rules of procedure.

## PLA $2641 \quad$ Estate Planning and Probate Administration (O) 3 credits

This course is designed to offer the legal assistant trainee a general understanding of the techniques and procedures involved in preparation of wills and trusts; estate planning; income, gift and inheritance taxes; probating of estates; and, estate accounting.

## PLA $1200 \quad$ Civil Litigation (O)

3 credits
This course is designed to prepare the legal assistant to assist the trial attorney in preparing for civil litigation in the Florida and Federal courts. The course covers substantive civil law, the Florida and Federal Rules of Civil Procedures and related matters including drafting of pleadings, pleadings, the discovery process, trail preparation and the appellate process.

PLA $2302 \quad$ Criminal Law and Procedures ( $O$ ) 3 credits This course is designed to prepare the legal assistant to assist the trial attorney in preparing for criminal litigation in the Florida and Federal courts. Special emphasis is placed on substantive criminal law, application of the state and federal Rules of Criminal Procedures.

## PLA 2105 Legal Research (O)

3 credits
A study of the primary and secondary sources of Anglo-American law with emphasis on the function of the law library and the acquisition of research skills through the use of digest, encyclopedias, reporter systems and practice manuals.

## PLA 2155 Introduction to Legal Writing (O)

3 credits
Covers the various writing techniques and strategies required in presenting the results of legal research in a legally-sound and acceptable fashion. Emphasis is on development of the document, legal argument, format and use of legal citations. Prerequisite: PLA 2059.

## PLA $2433 \quad$ Corporation and Business Organizations Law (O) 3 credits

This course offers instruction in all phases and aspects of corporation law and practice stressing procedures in corporations and organizations; dissolution, merger, rights, liabilities, duties and obligation of stockholders, directors and officers; amendments of Articles of Incorporation; a study of partnerships; and, business organization.

## PLA 1763 Law Office Management Practices (O)

3 credits
This course is designed to acquaint the student with fundamentals of management in general and their appreciation to the law office including a study of office equipment, a filing system, library management, accounting and billing procedures to reflect sound business principles and practices.

## PLA 2803 Family Law (O)

3 credits
This course is designed to familiarize the student with the fundamental principles and rules relating to Family Law involving a study of marriage relationships; legal problems affecting minor children; dissolution of marriage; custody; adoption; support provisions; separation agreements; property disposition; and, foreign divorces.

PLA 2663 Federal and State Tax Law (O)
3 credits
The student will become familiar with specialized sections of the Internal Revenue Code and the legal ramifications which arise therefrom. State Laws regarding taxes will be presented.

## PLA 2465 Bankruptcy Law (O)

3 credits
Examines the principles and procedures for filing bankruptcy and reorganizations under the bankruptcy laws including preparation of bankruptcy forms.

## PLA $2930 \quad$ Professional Responsibilities (O)

3 credits
This course will introduce the student to the professional responsibilities of the Legal Assistant as a practitioner. The rules and regulations of various certifying organizations will be presented and preparation provided for Certified Legal Assistant Examination. Employability skills will be shared.

## PLA 2059 Survey of Law (0)

3 credits
This introductory course will cover the study of new and developing theories relating to various areas of law including: property law, tort law, contract law, corporate law, criminal law and privacy law.

PLA 2208 Legal Systems and Litigation Procedures (0) 3 credits This course is designed to inform legal assistants about the objectives of civil litigation, the function of lawyers handling civil cases, the means by which the objectives may be obtained, and the limitations of a lawyer's authority and court's power.

PLA 1504 Real Estate Law and Property (0)
3 credits
This course provides an in-depth knowledge of real property and a survey of the more common types of real estate transactions. Major topics include deeds, contracts, leases, deeds of trusts, and the procedures and problems in drafting these conveyances.

## PLA 2483 Administrative Law (0) <br> 3 credits

This course will emphasize administrative law as it relates to the Administrative Procedures Act and to public agencies in the legal environment.

## MARINE SCIENCE

OCE 2001 Introduction to Oceanography (P)
3 credits
Fundamentals, principles, and procedures of physical, geological, chemical, and biological oceanography.
OCB 2010C Introduction to Marine Biology (P) 3 hrs. lecture-2 hrs. lab-
4 credits
An introductory study of marine and estuarine waters as biological environments. Emphasis will be placed on locally occurring flora and fauna and the interrelationship existing between these organisms and the physical, chemical, geological, and biological aspects of their environments. Field trips to local marine and estuarine areas will be required. Prerequisites: BSC 1010C, BSC 1011C with OCE 2001 recommended, or permission of the instructor.
OCG 1001 Marine Geology (P)
3 credits A broad overview of the relationship of ocean basins and the continental margin to plate tectonics, sedimentary processes active on the sea floor, and a comparison with the environments of deposition in developing ancient rock deposits. The course also includes a survey of the natural resources of the sea.
OCB 1019 Life on the Seashore ( $\mathbf{P}$ ) 2 credits A field study of wild-life along the eastern coast of Florida and the Florida Keys. Major emphasis is placed on the marine fauna and flora.
OCE 1921 Marine Science Workshop (P)
2 credits
Hands-on instruction in the field and laboratory exercises in marine science. Methods of collecting specimens, measuring data and recording data are learned. Field trips to various marine ecosystems are required. Prerequisites: None.
ISC $2601 \quad$ Science and the Scientific Method (P) $\mathbf{P}$ credits
This course is designed especially for school teachers of science or anyone who would like to increase their knowledge about the process of scientific investigation. The differences between basic research and applied research are discussed along with the practical application of the scientific method. Field and laboratory work are required. Prerequisites: College biology, chemistry or physics.
OCB 2721C Fundamentals of Mariculture ( $\mathbf{P}$ )
3 credits
This course takes a close look at the natural environment as a place to grow natural marine organisms. It explores the technology, techniques, and the future of mariculture. Students are required to work on individual projects and to participate in local field trips. Prerequisites: OCB 2010C and/or ZOO 2203C recommended.
GRA 2930 Technical Photography (P)
2 credits
Applications of photography in business and industry are studied. Techniques such as micro photography, high altitude photography, X-ray photography, and underwater photography will be covered. Previous experience in photography and film processing recommended.

## MATHEMATICS

*MAT 0002 Basic Mathematics Review 3 credits Major topics include fractions, decimals, percent, and algebra.
*MAT 1024 Introductory Algebra (P)
3 credits
This course is designed to prepare students for MAC 1102. Major topics include properties of integers and rational numbers, integer exponents, simple linear equations and inequalities, operations on polynomials including beginning techniques of factoring, introduction to graphing and introduction to operations on rational expression.
MTB 1321 Technical Mathematics I (D)
3 credits
Fundamentals of mathematics applied to modern technology, covering algebra, geometry, graphs, factoring, and determinants. Prerequisite: MAT 1024 or $1-1 / 2$ years of high school algebra with a "B" or better and an ACT score of $12+$. Corequisite: MTB 1322.
MTB 1322 Technical Mathematics II (D) 3 credits
A continuation of MTB 1321, topics included are quadratic equations, trigonometry, complex numbers, and many word problems. Corequisite: MTB 1321.
MGF $1113 \quad$ Foundations of Mathematics ( $\mathbf{P}$ ) $\mathbf{3}$ credits
Designed to provide insight into the nature and application of basic mathematics. Topics include: consumer applications, sequences, geometry, metric system, probability, statistics, and sets and logic.
MGF 2118 Essential Skills in Mathematics (P) 2 credits The purpose of this course is to meet the needs of students who must attain acceptable performance levels with regard to a specific set of required competencies in mathematics. Recommended for students taking the CLAST Exam.
MAE $2810 \quad$ Mathematics for Elementary Educators (P) $\mathbf{3}$ credits The major topics are whole numbers, integers and rationals, numeration systems, decimals, ratio, number theory, and informal geometry. Prerequisites: None.
**MAC 1102 Basic College Algebra ( $\mathbf{P}$ )
3 credits
Topics include solving linear, quadratic, rational, absolute value, and radical equations and inequalities, graphs of equations in two variables, operations on polynomials including factoring, rational exponents, rational expressions and radical expressions.
**MAC 1104 College Algebra (P)
3 credits A study of techniques for solving equations and inequalities, functions and graphs, complex numbers, polynomials, conic sections, systems of equations, and the binomial theorem. Prerequisite: MAC 1102 or equivalent.
**MAC 1114 Plane Trigonometry (P)
3 credits
A study of logarithmic, exponential, trigonometric and inverse trigonometric functions, solutions of trigonometric equations, trigonometric identities, complex numbers and DeMoivres theorem, graphing trigonometric and inverse trigonometric functions and applications. Prerequisite: MAC 1104.
*College Prep Course. Placement testing required for admission. Credit not applied toward degree. In addition to classroom time, this course requires two (2) hours per week in the Center for Personalized Instruction.
**For Gordon Rule fulfillment, a " C " must be earned in this course. Placement testing required for admission.


#### Abstract

**MAC 1135 Pre-Calculus (P) 6 credits MAC 1135 is MAC 1104 and MAC 1114 combined, designed for well prepared students intending to take calculus. Only offered in the Fall. A person receiving credit for either MAC 1104 or MAC 1114 may not take MAC 1135 for credit. Prerequisite: Three years of college preparatory high school math and Placement


 Scores.**MAC 2233 Business Calculus I (P)
3 credits
This course is for business students. Major topics include limits, differentiation and integration of algebraic functions, exponential and logarithmic functions, areas and volumes, and applications of the preceding topics to problems in business. Prerequisite: MAC 1104.
**MAC 2234 Business Calculus II (P)
3 credits
Topics include special integration techniques, systems of equations, matrices and determinants, partial differentiation, multiple integrals, applications to marginal analysis, LaGrange multipliers and differential equations. Prerequisite: MAC 2233 or MAC 2311.
MAC 1253 Technical Calculus (D)
3 credits
A one semester course in which the basic concepts of the derivative and the integral are developed. These concepts are then applied in solving a variety of problems encountered in technical areas. Prerequisite: MTB 1322.
STA $2100 \quad$ Statistical Simulation and Computation (P) 1 credit

1. Enter and update statisticl data 2. Operate a statistical program 3. Plot frequency distributions and histograms 4. Compute the mean and standard deviation of a given data set. 5. Computer the statistic for a data set. 6. Create and graph a random data set from a normal distribution and from a binomial distribution. 7. Use Venn diagrams to illustrate and compute the probability of certain events. Prerequisite or Co-requisite: STA 2014

## **STA 2014 Elementary Statistics (P) <br> 3 credits Measure of central tendency and variability, introduction to probability including permutations and combinations, random variables, normal and binomial distributions, confidence intervals and tests of hypothesis. Prerequisite: MAC 1102, MAC 1104 is strongly recommended.

**MAC 2311 Calculus I (P)
6 credits
Equation of a line, limits, differentiation of algebraic functions, applications of derivatives, the definite integral and its applications, integration and differentiation of exponential, logarithmic, and trigonometric functions. Prerequisites: MAC 1104 and MAC 1114 or MAC 1135.
**MAC 2312 Calculus II (P)
3 credits Techniques of integration, polar coordinates, indeterminant forms, improper integrals, sequences and series. Prerequisite: MAS 2311, Co-requisite: MAS 2103.
**MAS 2103 Linear Algebra ( $\mathbf{P}$ ) 3 credits Systems of linear equations, matrices, vector spaces, linear transformations, determinants, eigenvalues, spectral theorem, and geometric applications of vectors. Prerequisite: MAC 2311. Co-requisite: MAC 2312.
**For Gordon Rule fulfillment, a " C " must be earned in this course. Placement testing required for admission.

[^16]
## MEDICAL LABORATORY TECHNOLOGY

MLT $2040 \quad$ Basic Concepts in Phlebotomy (O) 2 credits To provide a general overview and update on those techniques, procedures, and issues pertaining to the proper collection of blood specimens for routine Clinical Laboratory testing, in order to develop well-trained, proficient and professional phlebotonist, and MLT students. No prerequisites.
MLT 1000C Introduction to MLT (O)
2 credits
An introduction to medical laboratory science and principles and skills common to all laboratory departments including lab math, computers, and safety rules. This course is open to general college students who are interested in a career in Medical Laboratory Technology. Prerequisite: Admission to MLT Program.
MLT 1300C Hematology (O) 4 hrs. lecture-7 hrs. lab-6 credits Study of basic hematological techniques. An in-depth study of normal hematology, blood cell disorders, and recognition of abnormal cells. Six hours of on-campus lab per week required. Required clinical time is 3 hours per week. Prerequisite: Must be admitted to the MLT Program.
MLT 1335C Coagulation and Blood Banking (O) 4 hrs. lecture-7 hrs. lab6 credits
Analysis of plasma coagulation components and associated disorders. The study of immunohematological principles and standard techniques in blood banks. Six hours of on-campus lab per week required. Required clinical time is 3 hours per week. Prerequisite: MLT 1000C and MLT 1300C.
MLT 1542C Serology and Urinalysis (O) 6 hrs. lecture-6 hrs. lab-4 credits Study of the formation, structure and action of antigen-antibody reactions with performances of sero-diagnostic test procedures. Principles of kidney function, chemical and microscopic examination of urine. Required clinical time is 3 hours per week. Prerequisite: MLT 1340C.

[^17]MLT 2400C Clinical Microbiology (O) 6 hrs. lecture-11 hrs. lab-7 credits An introduction to the general characteristics and classification of clinically important bacteria and the etiology of other microbial diseases including protozoans, fungi, and viruses. Six hours of on-campus lab per week. Additional required clinical time is 8 hours per week. Prerequisites: APB 2204C, MLT 1000C.
MLT $2620 \quad$ Clinical Chemistry ( O ) 6 hrs. lecture- 11 hrs. lab-7 credits Principles of chemical analysis of blood and other body fluids with emphasis on basic manual procedures, and including automated procedures and specialized techniques. Six hours of on-campus lab per week. Additional required clinical time is 8 hours per week. Prerequisites: CHM 1045C, MLT 1000C.
MLT 2800C Clinical Laboratory Practicum I (O) 6 credits Practical Clinical experience for a summer semester, 32 hours per week at one of three affiliated hospitals, plus 5 hours of lecture on campus to review information for State of Florida Licensure and National ASC Registry exam. Prerequisite: All previous MLT courses.
MLT 2801C Clinical Practicum II (O)
6 credits
This course provides clinical experience for a summer semester, 32 hours per week at one of three affiliated hospitals, plus 5 hours of lecture on campus to review information for the State of Florida Licensure and National ASC Registry Exam. Prerequisite: All previous MLT courses.
MLT $2931 \quad$ Medical Technology Review for State Exam (O) 2 credits This course prepares lab personnel for the State of Florida HRS licensure exam. The student will review the principles and techniques of lab tests performed in Hematology, Blood Banking, Serology, Chemistry, and Microbiology.
MLT $1937 \quad$ Clinical Microbiology Update (O) 2 credits
An update and review in theory and applications for clinical microbiology. Designed for individuals familiar with clinical microbiology through clinical lab work experience and/or clinical lab education. Major principles and concepts will be reviewed in addition to new methods, procedures, interpretations, application and instrumentation.
MLT $2934 \quad$ Immunohematology Update (O) 2 credits An update and review in the theory and application for clinical Immunohematology designed for individuals familiar with clinical immunohematology. Major principles and concepts will be reviewed in addition to new methods, procedures and applications.
MLT $2935 \quad$ Hematology and Coagulation Update (O) 2 credits
An update and review in theory and application for Hematology Coagulation. Designed for individuals familiar with clinical hematology through clinical lab work experience and a clinical lab education. Major principles and concepts will be reviewed in addition to new methods, procedures, interpretation application and instrumentation.
MLT $2932 \quad$ Clinical Chemistry Update (O) 2 credits
An update and review in theory and applications for clinical chemistry. Designed for individuals familiar with clinical chemistry through clinical lab work experience and/or clinical lab education. Major principles and concepts will be reviewed in addition to new methods, procedures, interpretations, applications and instrumentation.

MLT 2033 Medical Laboratory Career Orientation (O)
1 credit
A seminar course in the responsibilities and ethics of MLT, review of publications, human relations, unusual case histories. Prerequisite: Permission of instructor.
MLT 2933 Serology Update (O)
2 hrs. lecture 2 credits
An update and review in theory and applications for serology. Designed for individuals familiar with serology through clinical lab work experience and/or clinical lab education. Major immunological and serological principles will be reviewed in addition to new methods, procedures, interpretations, application and instrumentation.
MLT $2938 \quad$ Advanced Hematology (O) 15 hrs. lecture 1 credit Advanced Hematology is an update and review of disorders of red and white blood cells, such as anemia and leukemia with emphasis on the coulter 3 part histograms and Kodachrome slides. Prerequisite: MLT 1300C.
MLT $2937 \quad$ Advanced Clinical Microbiology (O) 15 hrs. lecture 1 credit This course is designed for 2nd year MLT students and lab personnel familiar with Clinical Microbiology, who want an update in current trends and theories of Clinical Microbiology. Corequisites: MLT 2401 or Practicing Lab Tech.
MCB $1000 \quad$ Introduction to Microbiology ( $\mathbf{P}$ ) 1 credit This course will introduce students to the Microbial World including viruses, bacteria, fungi, and parasites. Emphasis will be placed on terminology, bacterial structures, enzymes, toxins, and virulence mechanisms.

## METALLURGY

ETM 1800 Elementary Metallurgy (O)
3 credits A study of engineering materials in their origin and extraction and of the chemical and physical involvement essential to their acceptance for and into modern manufacturing. Prerequisite: High school chemistry and physics or permission of instructor.
EMT $1820 \quad$ Engineering Materials (O) 3 credits Production, composition, and properties of all materials used in engineering and related industries. Pure metals, alloys, woods, ceramics, polymers, and modified materials are studied.

## MOTORCYCLE REPAIR

SER $1600 \quad$ Introduction to Motorcycle Repair (O) 3 credits
Orientation to the field of motorcycle mechanics including shop procedure, safety practices, tool utilization, and motorcycle systems.
SER 1610 Intermediate Motorcycle Repair (O) 3 credits Basic servicing procedures, observation of safety precautions, and diagnosis and repair.

## MUSIC

MUH 1011 Introduction to Classical Music Appreciation (P) 3 credits
The course will explore music from the Middle Ages to the 20th century, but will focus on the Baroque, Classical and Romantic periods. The major premise of the course is that understanding the elements and forms that make up the music will greatly enhance one's enjoyment of it.
MUH 1951 Origins of Classical Music (P)
2 credits
The course will allow the student to experience the historical development of the composer's contribution to music by gaining an understanding of the culture and environment in which they lived. The various theories and styles of music will be examined in relation to the historical and geographic influences of the cities visited.
MUN $1270 \quad$ Orchestra ( P )
1 credit
The study and performance of works representative of a broad spectrum of orchestral literature.
IDS 2905 Individual Problems (P)
(Specify Subject Area by Title)
1-4 credits
A special course designed to offer work of an advanced nature, in any major field, that is not offered in a course listed in the catalog. Prerequisite: Permission of Instructor.
MUT 1001 Fundamentals of Theory (P)
3 credits
An intensive study of basic music fundamentals including notation, rhythm, scale building, chord structure, and understanding of intervals.

## MUT 1111 Theory of Music I (P) <br> 3 credits

An intensive study of the materials of music; notation, time and rhythm, chord structure. Prerequisite: Ability to play piano or comparable experience in band or chorus.
MUL $1010 \quad$ Music Appreciation (P) $\mathbf{1 - 3}$ credits
Emphasis will be placed on developing listening skills for structure and expression in music. Basic musical forms and syntax will be introduced.
MUT 1112 Theory of Music II (P)
3 credits A continuation of MUT 1111. Prerequisite: MUT 1111.

MUT 2116 Theory of Music III (P) 3 credits A continuation of MUT 1112, with emphasis on creativity and originality. Prerequisite: MUT 1112.
MUT 2117 Theory of Music IV (P) 3 credits A continuation of MUT 2116. Prerequisite: MUT 2116.

## MUH 2111 Survey of Music History I (Greek Heritage through the Early Classical Style) (P)

3 credits
The development of various styles, forms, and historical knowledge of the composers and their compositions from antiquity to the early 18th Century.
MUH $2112 \quad \begin{aligned} & \text { Survey of Music History II (Late 18th Century through } \\ & \text { the 20th Century) (P) }\end{aligned}$ The development of various styles, forms, and historical knowledge of the composers and their compositions from the late 18th Century to the present.

## MUT 1241 Sight Singing and Ear Training I (P)

2 credits
Drill in aural and visual recognition of melodies and harmonies. Prerequisite: MUT 1111 or one semester of applied music, or adequate choral or band experience.
MUT 1242 Sight Singing and Ear Training II (P) 2 credits A continuation of MUT 1241. Prerequisite: MUT 1241.
*MUO $1020 \quad$ Music Theatre I (P) 3 credits
Drama from the performer's point of view. A course covering acting, vocal response, dance, technical production, and experience in performing a complete musical.
*MUO 1021 Music Theatre II (P) 3 credits A continuation of MUO 1020. Prerequisite: MUO 1020.
*MUO 2022 Music Theatre III (P) 3 credits A continuation of MUO 1021. Prerequisite: MUO 1021.
*MUO 2023 Music Theatre IV (P) 3 credits A continuation of MUO 2022. Prerequisite: MUO 2022.
MUE $1450 \quad$ Woodwind Techniques ( $\mathbf{P}$ ) 2 hrs. lab-1 credit Basic fundamentals of performance techniques on all woodwind instruments with emphasis on clarinet and flute.
MUT $1460 \quad$ Brass Techniques ( $\mathbf{P}$ ) 2 hrs. lab-1 credit Basic fundamentals of performance techniques on all brass instruments with emphasis on trumpet and trombone.
MUE $1470 \quad$ Percussion Techniques ( $\mathbf{P}$ ) 2 hrs. lab-1 credit Basic skills on all percussion instruments with emphasis on rudimental drumming.
MUG 1101 Basic Conducting ( $\mathbf{P}$ )
2 credits
Provides the student with an introduction to basic techniques used in directing choral and instrumental rehearsals and performances.
MVK $1111 \quad$ Class Piano I (P) 2 hrs. lab-1 credit For beginning piano students meeting in groups. Emphasis placed on music reading and elementary techniques. Required of all music majors unless exempted.
MVK 1111 Class Piano II (P) 2 hrs. lab-1 credit
A continuation of Class Piano I. Prerequisite: Class Piano I.
MVK $2121 \quad$ Class Piano III (P) 2 hrs. lab-1 credit
A continuation of Class Piano II. Prerequisite: Class Piano II.
MVK $2121 \quad$ Class Piano IV (P) 2 hrs. lab-1 credit A continuation of Class Piano III. Prerequisite: Class Piano III.
MVS $1116 \quad$ Class Guitar I (P) 2 hrs. lab-1 credit The technique of playing guitar. General chords and single line melody. Class is taught to read music.
MVS 1116 Class Guitar II (P) 2 hrs. lab-1 credit A continuation of Class Guitar I. Prerequisite: Class Guitar I.
MVV $1111 \quad$ Class Voice (P) 2 hrs. lab-1 credit For singers desiring to further their vocal skills and instrumentalists wanting fundamental vocal knowledge. Emphasis is on choral diction, breathing, and tone production.

[^18]MUN 1310 College Chorale I (P) 3 hrs. lab-1 credit Ensemble including the study of choral works from the sixteenth century to current musical comedy. Voice production, diction, and the development of musical taste are included.
MUN $1310 \quad$ College Chorale II (P) 3 hrs. lab-1 credit Continuation of above course.
MUN $2310 \quad$ College Chorale III (P) 3 hrs. lab-1 credit Continuation of MUN 1310.
MUN $2310 \quad$ College Chorale IV (P) 3 hrs. lab-1 credit Continuation of MUN 1310.
MUN 1130 Symphonic Band I (P)
3 hrs. lab-1 credit Various styles of instrumental music in practice and performance. Open to instrumental players in the college and community. Prerequisite: knowledge and skill of an instrument.

MUN 1130 Symphonic Band II (P) 3 hrs. lab-1 credit Continuation of above course.

MUN 2130 Symphonic Band III (P) 3 hrs. lab-1 credit Continuation of MUN 1130.
MUN 2130 Symphonic Band IV (P) 3 hrs. lab-1 credit Continuation of above course.
MUN 1710 Stage/Jazz Band I (P) 3 hrs. lab-1 credit An instrumental organization specializing in music of the dance idiom. Emphasis is on reading and improvising toward performance. Prerequisite: Knowledge and skill of an instrument. Prerequisite: Audition.
MUN 1710 State/Jazz Band II (P) 3 hrs. lab-1 credit Continuation of above course.
MUN 2710 Stage/Jazz Band III (P) 3 hrs. lab-1 credit Continuation of MUN 1710.
MUN 2710 Stage/Jazz Band IV (P) 3 hrs. lab-1 credit Continuation of above course.
MUN 1720 Jazz/Rock Vocal Ensemble "Company" I (P) 6 hrs. lab2 credits Emphasis is on solo and ensemble performance of popular music, pop-choral music, and Broadway show music. Group performs on the average of three times weekly. Choreography is a part of the class. Prerequisite: Audition.
MUN 1720 Jazz/Rock Vocal Ensemble "Company" II (P) 6 hrs. lab-
2 credits
Continuation of above course.
MUN 2720 Jazz/Rock Vocal Ensemble "Company" III (P)
6 hrs. lab- 2 credits
Continuation of MUN 1720.
MUN 2720 Jazz/Rock Ensemble "Company" IV (P)
6 hrs. lab-2 credits
Continuation of above course.

MUN 1700 Jazz/Rock Instrumental Ensemble "Company" I (P)
3 hrs. lab-1 credit
Emphasis is on performing popular music, pop-instrumental music, and Broadway show music. Group performs on the average of three times weekly. Accompanies Vocal Ensemble. Prerequisite: Audition.
MUN 1700 Jazz/Rock Instrumental Ensemble "Company" II (P)
3 hrs. lab-1 credit
Continuation of above course.
MUN 2700 Jazz/Rock Instrumental Ensemble "Company" III (P)
3 hrs. lab-1 credit
Continuation of MUN 1700.
MUN 2700 Jazz/Rock Instrumental Ensemble "Company" IV (P)
3 hrs. lab-1 credit
Continuation of above course.
MUN 1381 Mixed Chorus I (P) $\mathbf{1 - 4}$ credits
This course is designed to improve musical voice skills as part of an ensemble. Will enhance choral tone and balance.
MUN $1382 \quad$ Mixed Chorus II (P) $\mathbf{1 - 4}$ credits
Continuation of above course.
MUN 1383 Mixed Chorus III (P) $\mathbf{1 - 4}$ credits
Continuation of above course.
MUN 1384 Mixed Chorus IV (P) $\mathbf{1 - 4}$ credits
Continuation of above course.

## MUSIC (APPLIED)

Applied Music Principal Instruments - Semesters I and II (P)
1 credit
Private instruction designed for music majors needing maximum proficiency on their principal instrument. One half-hour lesson is required each week in addition to five hours of practice. Recital required. No prerequisite. $\$ 75$ lab fee.
MVB 1311 Principal Applied Music - Trumpet I and II
MVB 1312 Principal Applied Music - French Horn I and II
MVB 1313 Principal Applied Music - Trombone I and II
MVB 1314 Principal Applied Music - Baritone Horn I and II
MVB 1315 Principal Applied Music - Tuba I and II
MVK 1311 Principal Applied Music - Piano I and II
MVK 1313 Principal Applied Music - Organ I and I!
MVP 1311 Principal Applied Music - Percussion I and II
MVS 1311 Principal Applied Music - Violin I and II
MVS 1312 Principal Applied Music - Viola I and II
MVS 1313 Principal Applied Music - Cello I and II
MVS 1314 Principal Applied Music - String Bass I and II
MVS 1316 Principal Applied Music - Guitar I and II
MVV 1311 Principal Applied Music - Voice I and II
MVW 1311 Principal Applied Music - Flute I and II

MVW 1312 Principal Applied Music - Oboe I and II
MVW 1313 Principal Applied Music - Clarinet I and II
MVW 1314 Principal Applied Music - Bassoon I and II
MVW 1315 Principal Applied Music - Saxophone I and II
Applied Music Principal Instruments - Semesters III and IV (P)
1 credit
MVB 2321 Principal Applied Music - Trumpet III and IV
MVB 2322 Principal Applied Music - French Horn III and IV
MVB 2323 Principal Applied Music - Trombone III and IV
MVB 2324 Principal Applied Music - Baritone Horn III and IV
MVB 2325 Principal Applied Music - Tuba III and IV
MVK 2321 Principal Applied Music - Piano III and IV
MVK 2323 Principal Applied Music - Organ III and IV
MVP $2321 \quad$ Principal Applied Music - Percussion III and IV
MVS $2321 \quad$ Principal Applied Music - Violin III and IV
MVS 2322 Principal Applied Music - Viola III and IV
MVS 2323 Principal Applied Music - Cello III and IV
MVS 2324 Principal Applied Music - String Bass III and IV
MVS 2326 Principal Applied Music - Guitar III and IV
MVV 2321 Principal Applied Music - Voice III and IV
MVW 2321 Principal Applied Music - Flute III and IV
MVW 2322 Principal Applied Music - Oboe III and IV
MVW 2323 Principal Applied Music - Clarinet III and IV
MVW 2324 Principal Applied Music - Bassoon III and IV
MVW 2325 Principal Applied Music - Saxophone III and IV
Applied Music Secondary Instruments - Semesters I and II (P) 1 credit
Private instruction designed for music students needing proficiency on an instrument other than their principal instrument. One half-hour lesson is required each week in addition to five hours of practice. Recital optional. No prerequisite. \$75 lab fee.

MVB 1211 Secondary Applied Music - Trumpet I and II
MVB 1212 Secondary Applied Music - French Horn I and II
MVB 1213 Secondary Applied Music - Trombone I and II
MVB 1214 Secondary Applied Music - Baritone Horn I and II
MVB 1215 Secondary Applied Music - Tuba I and II
MVK 1211 Secondary Applied Music - Piano I and II
MVK 1213 Secondary Applied Music - Organ I and II
MVP 1211 Secondary Applied Music - Percussion I and II
MVS 1211 Secondary Applied Music - Violin I and II
MVS 1212 Secondary Applied Music - Viola I and II
MVS 1213 Secondary Applied Music - Cello I and II
MVS 1214 Secondary Applied Music - String Bass I and II
MVS 1216 Secondary Applied Music - Guitar I and II
MVV 1211 Secondary Applied Music - Voice I and II
MVW 1211 Secondary Applied Music - Flute I and II
MVW 1212 Secondary Applied Music - Oboe I and II

MVW 1213 Secondary Applied Music - Clarinet I and II
MVW 1214 Secondary Applied Music - Bassoon I and II
MVW 1215 Secondary Applied Music - Saxophone I and II
Applied Music Secondary Instruments - Semesters III and IV (P)
1 credit
Continuation of Semesters I and II. Prerequisites: Semesters I and II. Recital optional. $\$ 75$ lab fee.
MVB 2221 Secondary Applied Music - Trumpet III and IV
MVB 2222 Secondary Applied Music - French Horn III and IV
MVB 2223 Secondary Applied Music - Trombone III and IV
MVB 2224 Secondary Applied Music - Baritone Horn III and IV
MVB 2225 Secondary Applied Music - Tuba III and IV
MVK 2221 Secondary Applied Music - Piano III and IV
MVK 2223 Secondary Applied Music - Organ III and IV
MVP 2221 Secondary Applied Music - Percussion III and IV
MVS 2221 Secondary Applied Music - Violin III and IV
MVS 2222 Secondary Applied Music - Viola III and IV
MVS 2223 Secondary Applied Music - Cello III and IV
MVS 2224 Secondary Applied Music - String Bass III and IV
MVS 2226 Secondary Applied Music - Guitar III and IV
MVV 2221 Secondary Applied Music - Voice III and IV
MVW 2221 Secondary Applied Music - Flute III and IV
MVW 2222 Secondary Applied Music - Oboe III and IV
MVW 2223 Secondary Applied Music - Clarinet III and IV
MVW 2224 Secondary Applied Music - Bassoon III and IV
MVW 2225 Secondary Applied Music - Saxophone III and IV
MUT 1238 Jazz Keyboard Fundamentals I (P) 2 credits
In these courses the student learns to use the keyboard to express diatonic jazz harmonies, bass lines, and melodic ideas. Keyboard principles can pursue the keyboard further to develop performance skills in various types of contemporary progressions.
MUT 1361 Jazz Harmony \& Theory I (P)
3 credits
Here the student acquires a strong working knowledge of the principles of contemporary music theory. By writing, reading, and reciting basic concepts of rhythm, melody, and harmony, the student also achieves basic music literacy. Modern conventions of notation and harmonization are thoroughly explored, as well as formal analysis of contemporary progression types.
MUT 1239 Jazz Keyboard Fundamentals II (P)
2 credits
From this course the student will acquire the ability to analyze and construct interesting, contemporary progressions, and to read and write rhythmic syncopations found so often in modern styles.
MUT 1640 Intro to Jazz Improvisation (P)
1 credit
This course is designed to prepare the student for the successful study of collegelevel improvisation. Scale and arpeggio patterns are played by the class to improve instrumental technique. Basic elements of jazz theory are discussed and analyzed.
This course is recommended for students who wish to perform instrumental jazz at the college level.

MUT 1641 Jazz Improvisation I (P)
2 credits
This course takes a "hands-on" approach to the mastery of instrumental techniques required for effective improvisation. The majority of each class hour is spent drilling exercises to strengthen the student's knowledge of various scales, arpeggios, and melodic patterns in all keys.
MUT 1642 Jazz Improvisation II (P) 2 credits
The student will play and memorize examples of classic jazz improvisations to assimilate proven ideas into his/her collection of "motifs". The result of this type of study is an increased awareness of the instrument, which allows the student to become more confident and aware when improvising in a group situation.
MUN 1711 Jazz Combo I (P)
2 credits
Actual performance is featured here. In these courses the student has the opportunity to actively interact with other musicians while playing and improvising on contemporary pieces. Classic jazz tunes, as well as pop and fusion pieces, give the student a chance to try out their ideas "live".
MUM 1623 Intro to Electronic Music ( $\mathbf{P}$ )
3 credits
Those interested in M.I.D.I. (Musical Instrument Digital Interface) technology and techniques of modern sound synthesis will benefit from this class. It is a survey course covering the basic aspects of a new and legitimate means of expressing musical ideas through a combination of lectures and hands-on experience. The student will learn the basic processes involved in setting up MIDI systems. No previous experience is necessary.

## NURSING SCIENCE

NUR 1020C Nursing Fundamentals (O) 7 credits
A course in the fundamentals of nursing which focuses on the history and trends in nursing, concepts of health, basic needs of individuals, and the nurse's role in assisting patients to meet these needs. The course includes background information about the nursing profession; the legal and ethical responsibilities of nurses; and an introduction to communication, observational and technical nursing skills. The subject matter is based on principles of the psychological, biological, and social sciences, and the nursing process is presented as the methodology for giving care to patients. Selected experiences in local nursing homes and hospitals are provided.
NUR 1210C Medical and Surgical Nursing I (O)
5 credits
An introductory course in medical-surgical nursing in which the principles derived from the psychological, biological and social sciences, humanities and nursing theories are utilized. The following conditions which interfere with physical functioning and self-care are studied: cell abberations, infectious diseases, surgical interference, and conditions of the digestive, genito-urinary and reproductive systems. Emphasis is on the applications of the nursing process in assisting individuals and families to obtain optimum levels of health and well-being. Selected clinical experiences are provided Prerequisite: NUR 1020C.

## NUR 1211C Medical and Surgical Nursing II (O)

5 credits
A continuation of NUR 1210C, in which scientific principles and nursing skills are utilized in the study of conditions of the respiratory, musculo-skeletal and sensoneural systems. Emphasis is on the application of the nursing process in assisting individuals and families to obtain optimum levels of health and wellbeing. Selected clinical experiences are provided. Prerequisite: NUR 1210C.

NUR 2213C Medical and Surgical Nursing III (O)
7 credits
A continuation of NUR 2211C, in which scientific principles and nursing skills are utilized in the study of allergic and autoimmune conditions, and conditions of the hemotologic, circulatory, endocrine, and integumentary systems. Nursing of persons in complex situations, such as in emergency and disaster situations, critical care units and in the community is studied. Emphasis is on the application of the nursing process in assisting individuals, families, and groups to obtain optimum levels of health. Selected clinical experiences are provided. Prerequisite: NUR 1211C.

NUR 2520C Psychiatric-Mental Health Nursing (O) 5 credits
A study of the communication and assessment skills required in caring for clients with behavioral problems. Emphasis is on the normal and psychopathological mental processes and the nurse's role in prevention of mental health problems and the promotion of mental health in primary, secondary and tertiary settings. Clinical experiences in a mental health center and field trips to other types of psychiatric facilities are provided. Prerequisite: PSY 2012 and NUR 1210C.
NUR 2423C Maternity Nursing (O)
4 credits
A course in maternity nursing concerned with the biologic, psychosocial and cultural forces influencing child-bearing, beginning with human sexuality and family planning and following through to pregnancy, birth and post-natal period. Normal phenomena are studied prior to complications. The nursing process is utilized in the assessment of the family during the child-bearing stage; the diagnosis of family problems; and in the planning, implementation and evaluation of nursing care. Clinical experiences in clinics and health agencies are provided. Prerequisite: NUR 1210C and DIE 2201.

## PRN V400 Practical Nursing 1375 hours

This course orients the student to the practical nursing program; outlines the development of practical nursing; defines the role and legal responsibilities of the practical nurse; and introduces health concepts relative to the individual, the family, and the community. It also assists the student to develop basic nursing skills needed in caring for patients and fundamental knowledge upon which subsequent nursing courses are built. The nursing process of assessing, planning, implementing and evaluating the patients response to nursing care is utilized. Consideration is given to the nursing needs of various age groups and cultures including the geriatric patient. Special certification for basic cardio-pulmonary resuscitation is included. Clinical experiences in acute care and geriatric settings are provided.
HCP V600 Patient Care Assistant
300 hours
This course is designed to prepare students to function as patient care assistants in hospitals, nursing homes, home health agencies, and private homes. The topics included: medical terminology; legal and ethical responsibilities; safe and efficient work practices; recording skills; basic patient care; life span, including gerontology; nutrition; health and safety, including CPR; and employability skills. Clinical experiences in a hospital and in a nursing home are provided. Successful completion of the program qualifies the student for certification as a nursing assistant.
HCP V500 Nursing Assistant
120 hours
This course is designed to prepare students for employment in nursing homes. The content includes: interpersonal skills, medical terminology, legal and ethical responsibilities, safe and efficient work practices, clerical skills, basic patient care, life span including gerontology, nutrition, pet facilitated therapy, health and safety including CPR, and employability skills. Successful completion of the program qualifies the student for certification as a nursing assistant.

NUR 2310C Pediatric Nursing (O)
5 credits
A study of the child from infancy through adolescence, designed to give the student an understanding of normal growth and developments and the child rearing process. In the course, the child is viewed as a human being, and a unique individual, who is holistic in nature. Emphasis is on the nursing process as a means of assessing the needs of the child in health and in pathophysiological situations which may occur. Attention is given to the diagnosis of problems; and the planning, implementation and evaluation of nursing care for the child and his family. Selective clinical experiences in local health facilities are provided. Prerequisites: NUR 1210C and EDF 2020.
NSP $2132 \quad$ Nursing Management (O)
1 credit
The course is designed to assist new graduates to assume leadership and management roles in nursing. It includes concepts of leadership and management, leadership styles, hospital and nursing organizational structures, and the management skills required of staff nurses.
NUR 2810C Nursing Practicum (O)
3 credits
This course is a culmination of all courses in the associate degree nursing program. It provides experiences in the clinical setting for managing and administering care to patients. These experiences approximate those required of a beginner associate degree nurse. Prerequisites: all courses in the ADN curriculum.
NSP $1760 \quad$ Pharmacology for Nurses (O) 1 credit Course is designed to provide information on the newest drugs available. In this class the student will review the psychodynamics of drug therapy, major drug classifications, generic and trade names and average doses of drugs.
NSP P702 Critical Care Nursing
Non Credit
Course provides registered nurses with information that will enable them to care for the critically ill or injured patient with skill and confidence. Prerequisite: Registered Nurse.
NSP P860 Professional Nursing Skills Update Non Credit A refresher course for R.N.s who have not actively practiced the profession and would like to update their skills in order to re-enter the job market. Prerequisite: R.N.

## OFFICE SYSTEMS TECHNOLOGY

OST $1100 \quad$ Elementary Typewriting (D) 3 credits Initial instruction in keyboard control, personal correspondence, business correspondence, centering and tabulation, outlines, and manuscripts.
OST $1110 \quad$ Intermediate Typewriting (D) 3 credits Development of skill in the typing of business correspondence, tables, manuscripts, and other business forms. Prerequisites: OST 1100 or equivalent.
OST $1120 \quad$ Advanced Typewriting (D) 3 credits Application of typewriting skills to specialized office situations, e.g., technical office, accounting office, professional office, etc. Prerequisite: OST 1110.
OST 1141 Keyboarding for Information Processing (O) 3 credits Initial instruction in the alpha-numeric QWERTY typewriter keyboard as well as initial instruction in the ten-key data entry pad using microcomputers. Specialized data entry exercises in BASIC and COBOL are included.

OST 1145 Data Entry Applications (O)
3 credits
Development of computer keyboarding skill in entering data for various specialized office applications.
OST 1211 Introductory Shorthand (D) 5 hours- 3 credits Initial instruction in Gregg Shorthand theory through speed-building dictation and typewritten transcription. Prerequisites: OST 1100 or equivalent.
OST 1212 Intermediate Shorthand (D)
5 hours- 3 credits
Application of Gregg Shorthand theory through speed-building dictation and typewritten transcription. Prerequisites: OST 1211 and OST 1100 or equivalent.

## OST 2213 Advanced Shorthand (D) <br> 3 credits

Development of shorthand transcription skills through production of mailable copy and continued development of dictation speed. Provides opportunity for specialization in general, scientific, legal, and medical terminology. Prerequisites: OST 1212 and OST 1110. (OST 1110 may be taken concurrently.)
OST 1201 ABC Shorthand I (Speedwriting) (O) $\mathbf{3}$ credits Initial instruction in ABC alphabet shorthand theory and introduction to dictation and transcription.
OST 1202 ABC Shorthand II (Speedwriting) (O)
3 credits Application of ABC alphabet shorthand theory through speed building dictation and typewritten transcription. Prerequisite: OST 1201.
OST 1221 Machine Shorthand I (O)
3 credits
Through touch control of 23 keys, machine shorthand operators write phonetically all sounds that make up the English language. Machine Shorthand I permits the attainment of writing skills from 60-80 words a minute or more. Prerequisite: one year of typing or completion of OST 1100.

## OST 2222 Machine Shorthand II (O) <br> 3 credits

Continuation of OST 1221. By the end of the semester, the student's speed skills will be built up to 120 words a minute or more, a marketable skill in machine shorthand. Prerequisite: OST 1221.
OST 2401 Office Practice (O)
3 credits
Principles of filing and the typing of letters and business forms at business production rates. For secretarial and career business students. Prerequisites: OST 1110 and COM 1130.

## OST 2323 Reprographics (O)

3 credits
Emphasis on decision making as to which equipment and/or technique to use in order to accomplish a duplication job with a minimum of time, cost, and maximum of quality. Hands-on experience in the production and photocopy process copies, fluid process master, stencil process master, and printing process masters. Handson experience in operation of the reprographics equipment. Prerequisite: OST 1100 or equivalent.
OST 2320 Business Machines (O)
3 credits
Operation of ten-key adding machines, printing calculators, and electronic calculators. Includes application of machine functions to various business computations.

OST 2601 Machine Transcription I (O) 3 credits
Transcription of mailable copy from a variety of office dictating machines. Provides opportunity for specialization in general, legal, and medical transcription. Designed for both the secretarial and clerical office student. Prerequisite: OST 1100 or equivalent.
OST 2602 Machine Transcription II (O)
3 credits
Increased development of machine transcription skill to the level where it may be used in place of manual shorthand in offices preferring machine dictation and transcription method. Students will qualify for the same civil service rating as students with manual shorthand skills. Designed for both the secretarial and clerical office student. Prerequisite: OST 2601.

## OST $1711 \quad$ Word Processing I (O)

3 credits
Emphasizes word/information processing concepts and terminology. Develops proficiency in keyboard operations, diskette handling, document formatting, and printer operations. Computer application includes creating, revising, paginating, and merging documents.
OST 1712 Word Processing II (O)
3 credits
Continuation of OST 1711. Computer application includes file design and management, merge/file tasks, records processing, lists and reports, repetitive letters, and business graphics. Prerequisite: OST 1711.
OST 1701 Introduction to Word Processing (O) 1-3 credits Introduction to word processing systems. Familiarizes students with a variety of word processing software applications.

## OST 2604 Central Information Management Systems (O)

2 hrs. lecture-15 hrs. lab-3 credits Students will be prepared to function and manage a central transcription system in terms of delegation of tasks, training and managing subordinates, meeting priority deadlines, information storage, retrieval and retention.
OST 2389 CPS Review and Supervised Work Experience Seminar (O) 2 hrs. lecture-15 hrs. lab-4 credits To prepare students for the Certified Professional Secretary Examination through a combination of study and on-the-job training. On-the-job training will be constituted by 15 hours employment per week. Prerequisite: OST 2491 or permission of instructor.
OST 2491 Office Seminar and Supervised Work Experience (O) 4 credits A culmination of secretarial knowledge and skills as they apply to on-the-job training. A minimum of 15 hours of supervised office internship is required each week. Seminar discussion includes topic relevant to the office experiences. Prerequisite: permission of instructor.
COM $1130 \quad$ Secretarial Communications (O) 3 credits The writing of business letters and short reports. Emphasizes both content and form and includes a review of the mechanics of writing, e.g., punctuation, capitalization, and spelling of business terms. Designed for secretarial science students. Prerequisite: OST 1100 or equivalent.

ENC 2200 Business Communications (D)
3 credits
A comprehensive study of the various areas of business communication with emphasis on the writing of business letters and reports. Designed for business administration and pre-business education students. Prerequisite: ENC 1101.

## OST 2421 Legal Office Practice I (O)

3 credits
Instruction and application in typing non-court documents (real estate and property transfer; wills, estates and guardianships; partnerships and corporations). Emphasis on proper client relationships and the role and responsibilities of the legal secretary. Prerequisites: OST 1211 and OST 1100 or equivalents.
OST 2422 Legal Office Practice II (O) 3 credits Continuation of OST 2421. Instruction and application in typing a variety of court documents (summons, complaints, answers and counterclaims, interrogatories, depositions, notices and motions, subpoenas). Continued emphasis on proper client relationships and the roles and responsibilities of the legal secretary through simulated office experiences. Prerequisite: OST 2421.
OST V061 Office Skills Training various Office Skills Training includes basic typing, filing, communications, bookkeeping, ten-key calculator touch, transcription, word processing, and office etiquette skills.
OST 2431 Legal Secretarial Practices and Procedures I (O) $\mathbf{3}$ credits The practices and procedures of the legal office. Designed for: the student now in training for a career as a legal secretary, the general secretary whose goal is a legal office position, and the legal secretary who would like more background in law office procedures. Prerequisite: one year of typing or completion of OST 1100.

OST 2432 Legal Secretarial Practices and Procedures II (O) 3 credits Continuation of OST 2431. Prerequisite: one year of typing or completion of OST 1100.

OST 2621 Legal Terminology and Transcription I (O) $\mathbf{3}$ credits A specialized terminology and transcription course for the beginning legal terminology secretarial student. Legal transcription and terminology skills will be measured by transcription production tests. Prerequisite: OST 1100 or equivalent.
OST 2622 Legal Terminology and Transcription II (O) $\mathbf{3}$ credits Advanced transcription course for legal secretary majors. Develops proficiency in preparing a variety of legal correspondence and documents. Specific emphasis on transcription of documents in litigation, real estate, probate, and corporate law. Prerequisite: OST 2621.
OST 2611 Medical Transcription I (O)
3 credits
A specialized transcription course for the beginning medical transcriptionist, receptionist, and insurance clerk. Exposes the student to the structure and content of the standard medical history and physical report. They will learn to prepare patient histories, physical reports, and format for office chart notes. Prerequisite: HSC 2531 and OST 1100 or equivalent.
OST 2612 Medical Transcription II (O) 3 hrs. lab-1 hr. lecture-3 credits Familiarizes the student with the phraseology and language of the various medical specialties. In addition, the student will understand the structure of a discharge summary, a death summary and a consultation report, and be able to transcribe these with a degree of accuracy consistent with employment standards. Prerequisite: OST 2611.

OST 2613 Medical Transcription III (O) 3 hrs. lab-1 hr. lecture-3 credits Stresses form and content of operative reports, including various methods of administration of anesthesia, surgical positions, types of incisions, suture materials and techniques. The student will understand the need for relating words to the content of the surgery being performed because of similarity in sound of many anatomical structures dictated. Prerequisite: OST 2612.
MRE 1003 Medical Records I (O)
3 credits
Development, analysis and use of the medical record, numbering and filing, indicating what constitutes an acceptable medical record, assisting the physician, and an overall introduction to concepts vital to a medical record.
MRE $1005 \quad$ Medical Records II (O) 3 credits Introduction to management techniques, understanding of interdepartmental relationships, use of medical records in medical care evaluation, medical legal applications, and standard of accreditation and certification. Prerequisite: MRE 1003.

MRE 1031 Medical Word Processing I (O)
3 credits
To equip the student to use the most current time and labor-saving equipment in the word processing field. It will enable the student to make correct decisions in its use for a myriad of medical business records tasks. Information storage and retrieval are stressed. Prerequisite: OST 1100 or equivalent.
MRE $1032 \quad$ Medical Word Processing II (O) 3 credits A continuation of MRE 1031.
APB $2190 \quad$ Fundamentals of Medical Science (O) $\mathbf{3}$ credits A specially designed course for students in medical business programs. Stresses the classification of the organs of the body, bones, glands, nervous system, muscles, etc., and how they function.
OST $2461 \quad$ Medical Office Practice I (O) 3 credits
Provides students with a background in professional etiquette and medical ethics. The study of privileged communication, telephone appointment techniques, pegboard accounting and day sheets, billing, medical business forms, and general correspondence.
OST 2462 Medical Office Practice II (O)
3 credits
Using simulated patient charts and ledgers, the student learns the applications of relative value units, conversion factors and the categories of medical, surgical, radiological, and pathological services. OST 2461 is not a prerequisite.
HSC 2531 Medical Terminology I(O)
3 credits
The foundation for true understanding of the language of medicine. By beginning with roots, suffixes, and prefixes, the student learns to interpret and recognize, system by system, the fascinating world of medical terminology.
HSC 2532 Medical Terminology II (O) 3 credits
Extends the study of the language of medicine into special areas; such as, Radiology, Clinical Laboratory, Pathology, Anesthesiology, Dental, Operative Terminology, and Pharmacology. Prerequisite: HSC 2531.
WCL $1940 \quad$ Ward Clerk Practicum (O) 6 credits A specialized health related course to prepare the student to operate the hospital nursing unit communications systems; to order diets and laboratory tests by transcribing doctors' orders; to perform nonclinical tasks for patient admission, transfer, discharge, preoperative and postoperative procedures; and to maintain patients' charts and nursing unit supplies. Students will be able to assume the nonclinical management of a hospital based nursing unit.

3 hrs. lab-1 hr. lecture-

4 credits
Internship is medical business office experience provided in an on-campus allied health facility. The student's job training and course instruction are correlated for maximum learning. Prerequisite: OST 1100 and permission of instructor.

## MRE 2826 Medical Office Externship (O)

4 credits
On-the-job experience in a health facility in the community. Fifteen hours of work per week is required. The coordinator works closely with the employing facility to insure that course instruction enhances this practical experience. Prerequisite: MRE 2825.

## PHILOSOPHY

PHI $1010 \quad$ Introduction to Philosophy (P)
3 credits
This course is a survey of the history of philosophy and addresses the enduring problems of knowledge, reality, science, religion, politics and ethics as they arise in the thought of great Western philosophers. Ideas of representative thinkers from ancient, medieval, modern and contemporary periods are chronologically examined and related. Corequisite: ENC 1101 or permission of instructor.

## PHI $1103 \quad$ Critical and Creative Thinking (P)

3 credits An introduction to logic which stresses practice and application. The point of the course is to provide practice in recognizing and avoiding inaccurate or fallacious thinking as well as to promote correct and creative thinking. Theory and theoretical principles are kept at a minimum; practice in applied logic - in straight thinking - at a maximum. Corequisite: ENC 1101 or permission of instructor.

PHI $2100 \quad$ Introduction to Logic (P)
3 credits
A study of methods and principles philosophers use to distinguish intelligent from unintelligent thinking. The study is divided into two parts deductive logic and inductive logic. Most of the semester will be concerned with deductive logic and will center around techniques for describing logical validity. Recommended as a companion course to follow PHI 1103. Not offered every semester.

## PHI $2101 \quad$ Applied Logic (P) <br> 3 credits

This course shall apply the techniques of deductive and inductive logic to ordinary language arguments for purposes of analyzing and assessing their soundness. Topics will include informal fallacies, Aristotelian logic, symbolic logic, inductive logic, and the probability calculus. Prerequisite: None. PHI 1103 is recommended.

## PHI $1450 \quad$ Philosophy of Psychology (P)

3 credits
This course investigates key philosophical assumptions, theories and concepts underlying the theory and practice of psychotherapy and psychology. Such items to be investigated include the nature of mental illness, perception and mental activity, consciousness, the emotions and values.
PHI $2130 \quad$ Symbolic Logic (P)
3 credits
This course will systematically develop a symbolic language suitable for formalization of ordinary language arguments and proof construction. Both sentential and predicate logics will be developed. Recommended as a companion course to follow PHI 2100. Prerequisite: PHI 2100 and/or PHI 1103 is recommended.

PHI $2660 \quad$ Introduction to Ethics (P) $\mathbf{3}$ credits
The purpose of this course is to introduce the student to the field of philosophy which deals with human value and commitment - with the activity of decision and action. Special emphasis will be placed on moral values and actions, which we will be attempting to describe precisely. We will also attempt to discover principles basic in distinguishing moral from immoral, right from wrong, and good from bad.

## HSC $1160 \quad$ Ethical Issues in Medicine ( $\mathbf{P}$ ) $\mathbf{3}$ credits

This course is designed to provide the student with the intellectual machinery for formulating his/her own informed perspectives on the serious moral and legal issues arising in medical contexts. Among these issued discusses are euthanasia, abortion, death and dying, the allocation of scarce medical resources, human experimentation, psychosurgery, and genetic engineering.

## PHOTOGRAPHY

PGY 1101C Beginning Photography (P)
1 credit
This course introduces the student to the camera itself, lenses and film. It explains the effects of light on film, and how light is controlled by the camera to expose film properly.
PGY 1110C Intermediate Photography (P)
1 credit
This course is composed of a study of color and lighting, as an introduction to basic color photography. It also includes basic elements of composition. Prerequisite: PGY 1101C.
PGY 1102C Advanced Photography ( $\mathbf{P}$ ) 1 credit This course assumes that the student is familiar with the operation of a camera, and ready to address more complicated issues in composition, including perspective controls, tonal contrasts, and various types of action. Prerequisite: PGY 1110C.
PGY 1120C Beginning Dark Room Photography (P) 1 credit This course teaches the student how to properly prepare, develop, and dry black-and-white film according to standard procedures. Prerequisite: PGY 1101C.

## PGY 1121C Intermediate Dark Room Photography (P) 1 credit

 This course teaches the student how to process and control the print process. It also acquaints the student with the Zone System. Prerequisite: PGY 1120C.PGY 1122C Advanced Dark Room Photography (P) 1 credit This course will instruct the student in drying prints, spotting, matting and mounting. It also acquaints the student with some special printing techniques, and helps the student begin his own portfolio. Prerequisite: PGY 1121C.

## PHYSICAL EDUCATION

PEM 1101 Fitness through Physical Activity (P) 2 hours-1 credit
The understanding and appreciation of the contribution of physical fitness through conditioning exercises. Lectures with emphasis on the body systems, and participation in a variety of vigorous activities.
PEM 1140 Aerobic Conditioning (P)
1 credit
Designed to decrease body fat and increase muscle tone through loss of weight and exercise.

Instruction and participation for the beginner or non-swimmer in the basic swimming strokes and skills, safety skills, and survival techniques including "drown proofing", and elementary forms of rescue and mouth-to-mouth resuscitation.

## PEL 1341

Tennis I (P)
2 hours-1 credit
Instruction and participation in the basic skills, strategy, techniques, and rules of tennis.
PEL 1342 Tennis II (P) 2 hours-1 credit Instruction and participation in the basic skills, strategy, techniques, and rules of tennis.

## DAA 1010 Stage Movement and Theatre Dance (P)

1 credit
An introduction to Basic Dance technique and movement. Class study includes warm-up conditioning, execution of steps and combinations, with emphasis on body isolation and placement technique.

## PEL 1111

Bowling ( $\mathbf{P}$ )
2 hours-1 credit
Instruction and participation in the basic skills, straiegy, techniques, and rules of bowling.
PEL 1620 Team Sports for Women and Men I (P) 2 hours-1 credit Instruction and participation in the basic skills, strategy, officiating techniques, and rules of basketball and volleyball.
PEN $1122 \quad$ Swimming II (P) 2 hours- 1 credit Instruction and participation in intermediate skills and techniques of swimming with emphasis on survival techniques.
PEL 1441 Racquetball (P) 2 hours-1 credit Instruction and participation in the basic skills, strategy, techniques, and rules of racquetball.
PEL 1442 Racquetball II (P) 2 hours-1 credit
A continuation of PEL 1441, this course provides further instruction and participation in the skills, strategy, techniques and rules of racquetball.
PEL 1121 Golf (P)
2 hours-1 credit
Instruction and participation in the basic skills, strategy, techniques, and rules of golf.
PEL 1511 Soccer (P) 2 hours-1 credit
Instruction and participation in the basic skills, strategy, officiating techniques, and rules of soccer.
PEM 1405 Self-Defense (D) 2 credits
Physical Self-Defense Comprehensive hand and foot techniques that will enhance self-defense.
PEN 1113 Life Saving (P) 2 hours- $\mathbf{1}$ credit
Red Cross Life Saving Course with survival skills and drown-proofing. Prerequisite:
PEN 1121 or permission of instructor.

PEN 2114 Advanced Life Saving (Guard Training) (D) 2 credits
The course will provide the following:

1. regular participation in physical activity.
2. learning self-survival and safety skills in and around the water.
3. learning to save others and prevent emergencies in and around the water.
4. obtaining the Red Cross Life Saving Certificate which qualifies an individual for position of lifeguard and is a pre-requisite for water safety instructor.

## PEN 1136 SCUBA - Basic (P)

2 hours-2 credits
Instruction and participation in the basic skills and techniques of SCUBA diving, including scientific principles, study of marine life, and principles of water safety.

PEQ 1137 Dive Master Specialty (O)
3 credits
This course is an introductory level course in the management and structure of PADI courses. The course contains watermanship skills, knowledge of diving and teaching techniques and practical application of all diving skills. Prerequisite: PEN 1138.

## PEQ 1131 Equipment Specialty (O) <br> 2 credits

This course is designed to train qualified divers in the philosophy and development of specialized diving equipment. Prerequisite: PEN 1136.
PEQ $1139 \quad 1$ credit
This course is designed to train qualified divers in the philosophy and development of underwater hunting. This course is necessary for Master certification. Prerequisite: PEN 1136.
PEQ 1134 Drift Diver (O) 1 credit
This is a performance based course designed to train certified divers in the philosophy and development of drift diving. This course provides the required training for certification as a Drift Diver. Prerequisite: PEN 1138.
PEQ $1135 \quad$ Night Diver (O) 1 credit This course is designed to train qualified divers in the philosophy and development of night diving. This course is required for certification as a Master Diver. Prerequisite: PEN 1136.
PGY $1244 \quad$ Underwater Photography (O) 2 credits This course is a performance-based course designed to train qualified divers in the philosophy and development of underwater photography. Prerequisite: PEN 1136.

PEQ 1132 Instructor Development Prep Course (O) 2 credits This course provides qualified Dive Masters with an indepth knowledge of diving theory, diving skills and teaching of those skills. Prerequisite: PEQ 1137.
PEQ $1133 \quad$ Instructor Development Course (O) 3 credits This course is designed as a preparatory course. It includes 26 segments which include lectures, workshops and practice sessions in the classroom and open water diving requirements and techniques. Prerequisite: PEQ 1132.
PEQ 1138 Instructor Evaluation Prep Course (O) 2 credits This course is a performance based course to prepare instructor candidates for certification as an Open Water Scuba Instructor. Major topics include pool skill assessment, rescue skills, demonstrations and practice for diving instructor. Prerequisite: PEQ 1133.
PEQ $2140 \quad$ Medic First Aid (P)
1 credit
This course meets the Professional Association of Diving Instructors requirements for emergency training for rescue divers.
PEN $1138 \quad$ SCUBA - Advance Rescue ( $\mathbf{P}$ )
2 hours- 3 credits
Instruction and participation in the advanced skills and techniques of SCUBA diving, including scientific principles, study of marine life, and principles and application of water safety. Prerequisite: PEN 1136.

PEO 2013 Sports Officiating (D)
3 hours- 3 credits
Theory and practice of officiating football, basketball, and baseball.
PEL 2620 Team Sports for Women and Men II (P) 2 hours-1 credit
Instruction and participation in the basic skills, strategy, officiating techniques, and rules of basketball and softball.

## LEI 2433 Community Recreation (D) <br> 3 hours- 3 credits

Instruction and practical experiences in designing and setting up recreational programs for schools, recreation departments, and other agencies.
HLP 1081 Personal Wellness (D)
3 credits
This course will establish in students a lifestyle conducive to total wellness which involves an awareness and appreciation for all the concomitant values of holistic health and physical fitness. May be used for PEM 1101 \& two elective activity courses.
PEM $1930 \quad$ Physical Education: Special Topics (P) Various Credits Special Course or Seminar developed to meet the needs of the students.
PEM $1931 \quad$ Physical Education: Special Topics (P) Various Credits Special Course or Seminar developed to meet the needs of the students.
PEM 1932 Physical Education: Special Topics (P) Various Credits Special Course or Seminar developed to meet the needs of the students.

## PEM 1933 Physical Education: Special Topics (P) Various Credits

 Special Course or Seminar developed to meet the needs of the students.
## PHYSICAL EDUCATION — RECREATION

PEM 1953 Cheerleading
1 credit
Training and instruction for the mastering of skills necessary for varsity cheerleading. May be repeated for credit.

## PEL 2219 Baseball <br> 1 credit

Fundamental skills, techniques of participation, strategy and rules of baseball.
Permission of instructor only. May be repeated for credit.

## PEL 2624 Basketball

1 credit
Fundamental skills, techniques of participation, strategy, and rules of basketball. Permission of instructor only. May be repeated for credit.
PEN 2124 Swimming 1 credit
Fundamental skills, techniques of participation, strategy and rules of swimming. Permission of instructor. May be repeated for credit.

## PEL $2124 \quad$ Golf (P)

1 credit
Fundamental skills, techniques of participation, strategy and rules of golf. Permission of instructor only. May be repeated for credit.
PEL 2344 Tennis for Men and Women (Varsity) (P)
1 credit
Fundamental skills, techniques of participation, strategy, and rules of tennis. Permission of instructor only. May be repeated for credit.

## PEL 2324 Volleyball (P)

1 credit
Fundamental skills, techniques and rules of volleyball. Permission of instructor only. May be repeated for credit.
PEN 2151 Springboard Diving (P)
1 credit
Coaching, training, and instruction in the skills necessary to achieve a high level of proficiency in springboard diving. Permission of instructor only. May be repeated for credit.

## PHYSICAL SCIENCES

## AST 1002 Astronomy (P)

3 credits
The methods and instruments used by astronomers; understanding the earth as an astronomical body; and the solar system and its relation to the galaxy. Corequisite: ENC 1101.
PSC $1311 \quad$ Physical Science I (P)
3 credits
Basic principles of astronomy, geology, and meterology. Includes various rock types, sedimentations, geologic structure, the earth and its origins, the solar system, the universe including modern theories, weather systems and how weather is predicted. Corequisite: ENC 1101.
PSC $1341 \quad$ Physical Science II (P)
3 credits
Basic principles of physics and chemistry, with practical application of the laws of science in problems. Includes Newton's law of motion, forces, work, energy, Periodic Law, chemical elements, compounds, and mixtures. Prerequisite: MAC 1102.

## PSC 1342C Physical Science with Lab

4 credits
This course is a study of the basic principles of physics and chemistry. Topics include: Newton's laws of motion, forces, work, energy, electricity, magnetism, the periodic table, atomic structure and chemical reactions. Lab work will enable the student to collect and analyze data and verify the physical and chemical principles covered in class. Prerequisite: MAC 1102. This course must be paired with a biological science course to meet A.A. Degree requirements.

## PHYSICS

PHY $1020 \quad$ Physics for Non-Science Majors (P) 3 credits
Physics for non-science majors. A one semester course dealing with the major concepts of physics and their impact on our society, developed from a historical viewpoint using a minimum amount of mathematics.

PHY 2053C General Physics I (P) 3 hrs. lecture-3 hrs. lab-4 credits A non-calculus approach to physics emphasizing the quantitative aspects of mechanics, heat, electricity, sound, light, atomic structure, and nuclear energy. Prerequisite: MAC 1104. Corequisite: MAC 1114. Requires a $\$ 20.00$ lab fee.
PHY 2054C General Physics II (P) 3 hrs. lecture-3 hrs. lab-4 credits A continuation of PHY 2053C. Prerequisite: PHY 2053C. Requires a $\$ 20.00$ lab fee.

PHY 2048C Physics for Engineers I (P) 4 hrs. lecture-3 hrs. lab-5 credits A calculus approach to the physics of mechanics, heat, and sound. Prerequisite: MAC 2311. Requires a $\$ 20.00$ lab fee.
PHY 2049C Physics for Engineers II (P) 4 hrs. lecture-3 hrs. lab-5 credits A continuation of PHY 2048C including electricity, magnetism, and radiation. Prerequisite: PHY 2048C. Requires a $\$ 20.00$ lab fee.

## POLITICAL SCIENCE

INR 2002 Introduction to International Politics (P)
3 credits
A survey of the basic workings of the international system, with special emphasis on nationalism, sovereignty, ideology, the role of force, the balance of power, peacekeeping, and an analysis of contemporary global patterns.

CPO 2002 Comparative Political Systems ( $\mathbf{P}$ ) 3 credits
Examination of the basic concepts of the political order, including authority, legitimacy, national identity, and modernization, and will survey the political systems of selected major nations. Prerequisite: Sophomore standing.

POS 2112 State and Local Government (P)
3 credits
Historical, social, and legal basis of local and state government in the United States, the administrative methods and machinery of local and state governmental systems with special emphasis on Florida. Prerequisite: Sophomore standing.

INR $1332 \quad$ U.S. Foreign Policy and Intelligence (P)
3 credits
This course will introduce the student to the fascinating world of intelligence gathering and its impact on world events. Covert and overt techniques will be examined along with countries' espionage activities. The world's major intelligence organizations including the KGB, CIA, M15 and others.

## PSYCHOLOGY

PSY $2012 \quad$ Introduction to Psychology (P) $\mathbf{3}$ credits
Fundamentals, facts and laws of psychology and their applications to understanding of human behavior, the relation of psychology to other fields, and the various problems and fields of psychology. Given without laboratory experiments. Student must produce 4000 words of acceptable written material and earn a " $\mathrm{C}^{\prime}$ " or better in this course. Placement testing required. Prerequisite or corequisite: ENC 1101.

## EDP 2002 Educational Psychology (P)

3 credits
Theories of learning and the literature dealing with education from pre-school to college level, including principles of development, learning, motivation, problem solving, individual differences, adjustment, guidance, and measurement. Corequisite: ENC 1101 or permission of instructor.

DEP $1930 \quad$ Aspects of Aging ( $\mathbf{P}$ ) Various Credits Stimulate an awareness of the aging process. A general overview of the psychological, biological and physiological changes associated with aging. A look at the social issues involving the aging in America today.

SLS 1211 Self Awareness (O) Various Credits
Career choices, adjustment to changes in lifestyle, group support, self-esteem, confidence building, decision making, job search skills.

SLS 1212 Self Development (O)
Various Credits
Better job relationships. Self-discovery through a personal growth experience that improves interpersonal relationships. This class will stress the development of positive self-image and goals. Students will learn how to handle daily problems with ease and assurance; conquer moods of discouragement, doubt and frustration; use the mental secrets that provide energy, drive and motivation; break crippling attitudes that are hindering in daily life.

SLS $1224 \quad$ Coping With Loneliness and Grief (D) 1 credit This class will teach reactions during a loss, how to help others through grief, and to know what to expect.

SLS 1213 Constructive Anger (O)
1 credit
The student will be able to identify causes of hostility in a group or in interpersonal relationships. The student will learn to use hostility in a positive way in dealing with people as well as within thus creating better self-esteem and better relationships with others.

## RADIOLOGIC TECHNOLOGY

RTE 1001 Radiologic Terminology (O)
1 credit
The course will cover origins of words, word building, the more common medical terms (particularly those related to Radiology) and Radiologic terms of Positioning. Other related material as deemed necessary by the instructor.
RTE 1308 Radiation Protection and Biology (O)
2 credits
The course will cover the need for radiation protection, the basic interactions of radiation with matter, quantities and units, biological effects, patient protection, personnel protection, maximum permissible dose, and personnel exposure monitoring. Co-requisite: RTE 1002.
RTE 1504C Radiologic Positioning I (O) 3 hrs. lecture-2 hrs. lab-4 credits Radiologic positioning and anatomy of the chest, abdomen, upper and lower extremities and positioning terminology associated with radiologic positioning. Use of the energized lab is used to reinforce lecture and give the student an opportunity to demonstrate competencies. Prerequisite: RTE 1002.
RTE 1002 Radiologic Techniques I (O) 3 hrs. lecture- $\mathbf{3}$ credits An introduction into the history and hospital organization (administration) of Radiology. The course core is designed to familiarize the student with radiographic factors in formulating radiographic technique; darkroom techniques are taught.
RTE 1514C Radiologic Positioning II (O) 3 hrs. lecture 2 hrs. lab-4 credits Radiographic positioning and anatomy of the pelvic girdle, hips, and spinal column as well as the basic positions for the cranial vault are taught during this course. Use of the energized lab to reinforce lecture and give the student an opportunity to demonstrate competencies. Prerequisite: RTE 1504C.

## RTE $1411 \quad$ Radiologic Techniques II (O) 3 hrs. lecture- 3 credits

A continuation of RTE 1002, with emphasis on the qualities produced by a combination of radiographic factors to familiarize the student with the use and application of accessory devices used in radiographic technique. Prerequisite: RTE 1002.

RTE 1523C Radiologic Positioning III (O) 3 hrs. lecture- 1 hrs. lab-3 credits Radiologic positioning and anatomy of the facial bones and paranasal sinuses and special views of the skull are taught in this course. Prerequisite: RTE 1514C or permission of instructor.
RTE 2532 Radiologic Positioning IV (O) 2 credits Radiographic positioning, anatomy, and physiology of gastrointestinal, colon, biliary and urinary tract. Contrast media used; nursing and pediatric procedures as they pertain to radiology are taught in this course. Prerequisite: RTE 1523C or permission of instructor.
RTE 2613 Radiologic Techniques III (O) 3 hrs. lecture- 3 credits The fundamentals of electrical and radiation physics is covered, with a review of radiation hazards and protection. Prerequisite: RTE 1411 or permission of instructor.

The course involves the more complex and advanced procedures such as vascular and arterial radiographs. Positioning, technical factors, and film critique are held on each special procedure. Co-requisite: RTE 2848L.
RTE $2780 \quad$ Radiologic Diseases ( $O$ ) 2 credits
The course provides a survey of medical and surgical diseases and the changes that occur in disease and injury with application of x-ray technology.

## RTE 1814L Radiologic Clinical Education (O): Freshman Spring

3 credits
Hospital-clinical experience within a department of radiology.
RTE 1822L Radiologic Clinical Education (O):
Freshman-Summer I
2 credits
Hospital-clinical experience within a department of radiology.
RTE 1832L Radiologic Clinical Education (O):
Freshman-Summer II
3 credits
Hospital-clinical experience within a department of radiology.
RTE 2838L Radiologic Clinical Education (O):
Sophomore-Fall
4 credits
Hospital-clinical experience within a department of radiology.
RTE 2848L Radiologic Clinical Education (O):
Sophomore-Spring
4 credits
Hospital-clinical experience within a department of radiology.

| RTE 2852L | Radiologic Clinical Education (O): <br> Sophomore-Summer I |
| :---: | :--- |
| Hospital-clinical experience within a department of radiology. | $\mathbf{2}$ credits |

RTE 2866L Radiologic Clinical Education (O):
Sophomore-Summer II
3 credits
Hospital-clinical experience within a department of radiology.
RTE 2933 Radiologic Comprehensive Seminar (O) 2 credits
A comprehensive study of all aspects of Radiologic Technology. Provides an update on Radiologic Technology and covers changes, revisions, advancements that have occurred since a specific topic was covered in a previous class.

## RTE 1004 Introduction to Radiologic Technology 3 hrs. lecture-

 2 hrs. lab-4 creditsThrough this course, the student will learn patient care, ethics and the basic duties of the technologist in their role as a member of the health-care team. Medical terminology and radiation protection will also be covered on a limited basis.

## RTE 1473 Introduction to Quality Assurance <br> 1 credit

This course will provide the student with an introduction to the evaluation of radiographic systems to assure consistency in the production of quality images. The components involved in the radiography system will be identified. Tests and procedures to evaluate these components will be discussed. State and federal impacts will be described.
CGS 1040 Introduction to Computer Literacy for Radiology 1 credit This course gives an overview of the hardware and software in modern computers. Also, activities specific to radiology are addressed. Finally, applications such as record keeping, scheduling, and documenting are studied.

## READING

*REA 0001 College Prep Reading I *3 credits
This course provides the student with individualized and group instruction in reading skills through diagnostic/prescriptive techniques. All aspects of the reading process are taught: word analysis skills, sight vocabulary, word meaning, spelling, study skills, comprehension skills, and reading fluency. The instructor determines student progress by means of mastery tests at each skill level and by nationallynormed reading tests. Students must achieve a score of 10.0 grade level on these tests to be eligible for a passing grade.
*REA $0002 \quad$ College Prep Reading II
*3 credits
The course is designed to improve a student's reading comprehension skills and reading rate. Learning activities include individualized and group instruction. Study skills are taught and applied as well. Students must achieve a score of grade 13.0 (College Level) on a Standardized Reading Test to be eligible for a passing grade.
REA 1205 Advanced College Reading I (P)
3 credits
Major topics in this course include vocabulary expansion, test-taking techniques, rapid reading, rate flexibility, and critical reading skills. Expected outcomes are to show improvement in all areas listed above and to demonstrate analytical thinking skills such as determining valid arguments, drawing logical conclusions and inferences, detecting bias and prejudice, and finding the author's purpose and tone. Placement testing required.
REA 1208 Advanced College Reading II (P)
3 credits
This course provides a review of literal comprehension skills and emphasizes critical and affective comprehension skills. Instruction includes such areas as author's intent and attitude, critical judgments, author's tone or mood, recognizing figurative language, and reading imaginative literature. Rapid reading techniques are also taught. Placement testing required.
REA 1125 Reading Review - CLAST (P) 1 credit
The course is designed to prepare students for the Reading Section of the CollegeLevel Academic Skills Test. In-depth instruction centers on development of rate flexibility and of comprehension skills in both the literal and critical areas. Testtaking strategies are emphasized to help reduce anxiety and to increase testwiseness.

## SOCIOLOGY

SYG 2000 Introduction to Sociology (P)
3 credits
The study of patterns of human interaction as they occur in social relationships, groups, organizations, communities and societies. Emphasis is placed on presentday American society; however, comparisons will be made with other societies or other periods of history where appropriate. Student must produce 4000 words of acceptable written material and earn a grade of " C " or better in this course. Placement testing required. Prerequisite or corequisite: ENC 1101.
*College Preparatory Course. Credit not applied toward degree. Placement testing required for admission. In addition to classroom time, this course requires two (2) hours per week in the Center for Personalized Instruction.

SPA $1332 \quad$ Sign Language I (P)
1-3 credits
This course is an introduction to sign language. Various structured activities will be used to enforce and reinforce sign usage.
SPA $1334 \quad$ Sign Language II (P) $\mathbf{1 - 3}$ credits
This course is a continuation of SPA 1332, with an emphasis on added vocabulary and ability to communicate with sign. Prerequisite: SPA 1332 or equivalent.

## SURVEYING

SUR 1100 Elementary Surveying Mathematics (O)
3 credits
This course includes mathematical computations using compass (bearing and agimuth); surveyor's chain, rods, level and Transit; angles; basic geometry; running, closing and calculating areas.
SUR 2101C Surveying I (O)
3 credits
This course includes field surveying measurements techniques, taping corrections, angles by repetition, differential lending, note reduction, instrument adjustments, traverse closure and area computations.

## SUR 1321 Survey Drafting (O)

3 credits
This course includes familiarization with basic drafting equipment; plotting technique, basic surveying understanding; plotting of traverses, plotting from legal descriptions; 21 HH standards; plotting of contours; $x$-sections; plotting of Topographic surveys.

## WATER/WASTEWATER TREATMENT

EVS V333 Wastewater "C" Certification
160 hours
This is a preparatory course to provide students with basic knowledge and skills necessary to operate treatment plants. The development of treatment process control skills will be emphasized. This training course meets the minimum training requirements for certification at the " C " level. No prerequisite.
EVS P343 Wastewater "B" Certification $\mathbf{1 6 0}$ hours
This course is designed to provide an in-depth look at the wastewater process that was begun in wastewater "C" level. It covers treatment systems typical of larger operations, and because of their more complex nature, places a greater concentration on the biological aspects of treatment. This course also stresses the study of issues and techniques that small plant managers and first-line supervisors need to become familiar with. The course will provide the instruction required for the State of Florida " $B^{\prime \prime}$ Level Wastewater Treatment educational component. Prerequisite: " C " level certification.
EVS P221 Wastewater " A " Certification
160 hours
This course is designed to provide information in advanced wastewater treatment. It will cover treatment of large operations along with advanced effluent disposal and sludge treatment handling. This course will stress the importance of proper supervisory techniques in personnel, budget preparations and the setting and conducting of training programs. The course will provide the instruction required for the State of Florida " A " Level Wastewater Treatment educational component. Prerequisite: " B " level Certification.

EVS V133 Water "C" Certification
160 hours
This is a preparatory course to provide students with basic knowledge and skills necessary to operate treatment plants. The development of treatment process control skills of lime softening plants will be emphasized. This training course meets the minimum training requirement for certification at the " C " level. No prerequisite.

## EVE P247 Water "B" Certification

160 hours
This course is designed to provide an in-depth look at the water treatment process that was begun in Water "C" Certification. It covers treatment systems typical of larger operations, and because of their more complex nature, places a greater concentration on the chemical and biological aspects of treatment. Intermediate Treatment Plant Operations also stress the study of issues and techniques that small plant managers and first-line supervisors need to become familiar with. This course will provide the instruction required for the State of Florida "B" Level Water Treatment educational component. Prerequisite: " C " level certification.

## EVS P241 Water "A" Certification

160 hours
This course is designed to provide the student with the theoretical and technical knowledge to become a licensed " A " Drinking Water Treatment Plant Operator. It is directed towards the individual that has achieved " $C$ " and " $B$ " level Florida certifications and concentrates on two main areas; managing treatment plant operations and advanced and innovative techniques. The material will be offered using a problem-solving approach, where students will find their own solutions to problems and critique them as to practicality in cost, labor, materials and safety. This course will provide instruction required for Florida " $A$ " Level Water Treatment educational component. Prerequisite: " B " level certification.

## WELDING

## PMT 1121 Electric Welding I

3 credits
Shielded metal arc welding safety, equipment, basic joint configurations, codes and standards. Extensive practice in the flat position and beginning work in the vertical position.

## PMT 1122 Electric Welding II

3 credits
Course Description: Advanced Electric Welding Techniques. Shielded metal arc welding (SMA) in the vertical position. Theory, set-up and practice in molybdenum inert gas (MIG) and tughsten inert gas (TIG) welding of ferrous and non-ferrous metals. Prerequisite: Electric Welding I (PMT 1121) or consent of instructor.

## PMT 1123 Combination Welding I

3 credits
Course Description: Fundamental theory of all types of conventional welding. The welding industry and its many career offerings. Theory and laboratory exercises to develop proficiency in oxy-fuel welding, cutting, brazing and soldering.
PMT 2930 Welding - Special (O) Various credits Special course or seminar developed to meet the needs of the community.
PMT 2931 Welding - Special (O) Various credits Special course or seminar developed to meet the needs of the community.
PMT 2932 Welding - Special (O) Various credits Special course or seminar developed to meet the needs of the community.
PMT 2933 Welding - Special (O) Various credits Special course or seminar developed to meet the needs of the community.

## WOODWORKING

BCT V111 Basic Woodworking (O) 2 hrs. lecture-3 hrs. lab-45 hours Basic Woodworking provides an overview of basic woodworking process. It covers materials, tools, and machine forming techniques of fastening, finishing and related technical information and safety skills.
BCT V121 Woodworking Workshop (O) 1 hr. lecture-4 hrs. lab-45 hours The workshop is designed to give students the opportunity to improve and refine techniques learned in Basic Woodworking. Prerequisite: BCT V111.


## COILEGE ORGANIZATION

## INDIAN RIVER COMMUNITY COLLEGE

## ADMINISTRATION

Edwin R. Massey<br>President<br>B.S., Millsap College<br>M.S., University of Southern Mississippi<br>Ph.D., University of Southern Mississippi<br>John W. Muir Vice President of Academic Affairs<br>A.A., St. Petersburg Junior College<br>B.A., University of Florida<br>M.A.T., University of Florida<br>Ph.D., University of Georgia

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B.A., Florida Atlantic University
B.S., Florida Atlantic University
M.Ed., Florida Atlantic University

Ed.D., Florida Atlantic University
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Vice President of Instructional Services
B.S., Appalachian State Teachers College
M.S., Appalachian State Teachers College

Ed.D., Florida Atlantic University
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B.A., Muskingum College
M.S., Rollins College

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Dean of Vocational Education
B.S., University of Tennessee
M.S., University of Tennessee

Ed.D., University of Tennessee
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B.S., Maryville College
M.S., University of Tennessee

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M.Ed., Florida Atlantic University
C. Raymond Lunceford.........................................................Provost — Vero Beach
B.M., Western Kentucky State University
M.Ed., University of Florida

Ed.D., Florida Atlantic University
Wendell Martin ............................................................................ Provost — Stuart
B.S., Fort Valley State College
M.S., Fort Valley State College

Kay Mullins ........................................................................ Provost - Okeechobee
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M.S., Northeastern University
M.B.A., Florida Institute of Technology
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B.A., Florida Atlantic University
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M.D., University of Miami
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M.D., University of Cincinnati College of Medicine
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| .S.N., Florida International University |  |
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## MASTER COURSE DIRECTORY

## COURSE OFFERINGS* <br> ACCOUNTING

PAGE
ACG 2003 Basic Accounting I (O) ............................................... 142
ACG 2004 Basic Accounting II (O) .............................................. 142
ACG 2001 Principles of Accounting I (D) (Financial) ................... 142
ACG 2011 Principles of Accounting II (D) (Managerial).............. 142
ACG 2100 Intermediate Accounting I (O) ..................................... 142
ACG 2110 Intermediate Accounting II (O) .................................... 142
ACG 2360 Cost Accounting (O) ................................................... 142
APA 1002 Accounting for Small Business (O) ............................. 143
TAX 2000 Tax Accounting (O) .................................................... 143
ACG 2450 Microcomputers in Accounting I (D) .......................... 143
ACG 2460 Microcomputers in Accounting II (D) ......................... 143
FIN 2001 Managerial Finance (O) .............................................. 143
TAX 1020 Personal Income Tax Accounting (O) ......................... 142
AGRI-BUSINESS TECHNOLOGY
ORH 1231 Lawn Care Maintenance and Techniques (O)............ 144
HOS 1010 Fundamentals of Horticulture (D) ............................... 143
ANS 1211 Farm and Ranch Management (O).............................. 143
ANS 1401 Animal Nutrition (O) .................................................. 143
VME 1005 Animal Diseases and Pests (O) ................................... 143
ASG 1253 Livestock Selection (O) ............................................... 143
ANS 1310 Animal Reproduction (O) ........................................... 143
SOS 2102 Soils \& Fertilizers (O)................................................... 143
PMA 2001 Insects and Diseases of Plants (O) .............................. 144
FRC 1222 Citrus Varieties and Rootstocks (O) ............................. 144
HOS 2025 Home Landscaping and Mangement (O).................... 143
FRC 2211 Citrus Culture I (O) ...................................................... 143
FRC 2220 Citrus Culture II (O) ..................................................... 144
ORH 1520 Plant Identification (O) ................................................ 144
ORH 1930 Agricultural Special Topics - Home Gardening (O) ... 144
AEB 2304 Agricultural Marketing, Processing and Management (O)144
PMA 2201 Insects and Diseases of Citrus (O) ..... 144
ORH 2510 Ornamental Plant Identification (O) ..... 144
ORH 2841 Landscape Installation (O) ..... 144
ORH 2851 Landscape Design and Maintenance (O) ..... 144
ORH 2255 Nursery Sales and Management (O) ..... 145
AEB 2104 Principles of Agricultural Economics (D) ..... 145
AGG 2941 Agricultural Employment Experience (O) ..... 145
AGG 2940 Farm and Ranch Job Skills and Development (O) ..... 145

[^19]AIR CONDITIONING, REFRIGERATION AND HEATING SYSTEMS TECHNOLOGY
AC ..... 1000
Basic Refrigeration (O) ..... 145
ACR 1100 Basic Electricity I (Air Conditioning) (O) ..... 145
ACR 1103 Basic Electricity II (Air Conditioning) (O). ..... 145
ACR 1101 Applied Electricity I (Air Conditioning) (O) ..... 145
ACR 1102 Applied Electricity II (Air Conditioning) (O) ..... 145
ACR 1741 Components of Refrigeration (O) ..... 145
ACR 2062 Heating and Cooling Load Calculation (O) ..... 145
ACR 2421 Duct Systems (Air Conditioning and Heating) (O) ..... 145
ACR 1600 Heat (O) ..... 146
ACR 2071 Air Conditioning and Heating Service Management (O) ..... 146
ACR 2931 Air Conditioning - Special (O) ..... 146
ACR 2932 Air Conditioning - Special (O) ..... 146
ACR 2933 Air Conditioning - Special (O) ..... 146
ACR 2934 Air Conditioning - Special (O) ..... 146
ACR 1601 Heat Pump Systems (O) ..... 145
ETD 1503 Drafting for the Air Conditioning Industry (O) ..... 146
ANTHROPOLOGY
ANT 2402 Anthropology and Modern Life (P) ..... 146
ANT 2410 Introduction to Cultural Anthropology (P) ..... 146
ANT 2511 Introduction to Physical Anthropology (P) ..... 146.
ANT 2930 Anthropology and the Paranormal (P) ..... 146
ART
ART 1300C Introduction to Drawing (P) ..... 147
ART 1301C Drawing (P) ..... 147
ART 1205C Color and Design I (P) ..... 147
ARH 1835 Living the Life of Artist (P) ..... 150
ART 1206C Color and Design II (P) ..... 147
ART 1701C Introduction to Sculpture ..... 149
ART 2510C Introduction to Painting (P) ..... 150
ART 2520C Painting (P) ..... 151
ARH 2050 Introduction to the History of Art (Prehistoric through Renaissance) (P) ..... 146
ARH 2051 History of Art (Baroque through Modern) (P) ..... 147
ART 2110C Introduction to Ceramics (P) ..... 150
ART 2111C Ceramics (P) ..... 150
ART 2400C Graphics (P) ..... 150
ARH 1000 Art Appreciation (P) ..... 146
ART 1173C Beginning Costume Jewelry (P) ..... 147
ART 1174C Intermediate Costume Jewelry (P) ..... 147
ART 1175C Advanced Costume Jewelry (P) ..... 147
ART 1194C Beginning Basketry (P) ..... 147
ART 1195C Intermediate Basketry (P) ..... 147
ART 1196C Advanced Basketry ..... 147
ART 1540C Beginning Watercolor (P) ..... 148
ART 1560C Intermediate Watercolor (P) ..... 148
ART 1561C Advanced Watercolor (P) ..... 148
ART 1593C Beginning Collage Painting (P) ..... 149
ART 1594C Intermediate Collage Painting (P) ..... 149
ART 1595C Advanced Collage Painting (P) ..... 149
ART 2511C Painting I (P) ..... 151
ART 2522C Painting II (P) ..... 151
ART 2533C Painting III (P) ..... 151
ART 2306C Drawing I (P) ..... 150
ART 2316C Drawing II (P) ..... 150
ART 2326C Drawing III (P) ..... 150
ART 2543C Oil and Acrylics I (P) ..... 151
ART 2544C Oil and Acrylics II (P) ..... 151
ART 2545C Oil and Acrylics III (P) ..... 151
ART 1717C Metal Casting Studio I (P) ..... 149
ART 1718C Metal Casting Studio II (P) ..... 149
ART 1719C Metal Casting Studio III (P) ..... 149
ART 1287C Beginning Calligraphy (P) ..... 151
ART 1288C Intermediate Calligraphy (P) ..... 151
ART 1289C Advanced Calligrahy (P) ..... 152
ART 1330C Beginning Life Drawing (P) ..... 148
ART 1331C Intermediate Life Drawing ( $P$ ) ..... 148
ART 1332C Advanced Life Drawing (P). ..... 148
ART 1596C Beginning Porcelain Painting (P). ..... 149
ART 1597C Intermediate Porcelain Painting (P) ..... 149
ART 1598C Advanced Porcelain Painting (P) ..... 149
ART 2110C Ceramics I ..... 150
ART 2111C Ceramics ..... 150
ART 2112C Ceramics II (P) ..... 150
ART 2113C Ceramics III (P) ..... 150
ART 2399C Drawing with Ink (P) ..... 150
ART 2700C Sculpture I (P) ..... 151
ART 2702C Sculpture II (P) ..... 151
ART 2703C Sculpture III (P) ..... 151
ART 2713C Wood Sculpture (P) ..... 151
ART 1190C Beginning Ceramics (P) ..... 147
ART 1191C Intermediate Ceramics (P) ..... 147
ART 1350C Beginning Drawing (P) ..... 148
ART 1351C Intermediate Drawing (P). ..... 148
ART 1352C Advanced Drawing (P) ..... 148
ART 1590C Beginning Painting (P) ..... 148
ART 1591C Intermediate Painting (P). ..... 148
ART 1592C Advanced Painting (P) ..... 148
ART 1750C Beginning Sculpture (P) ..... 149
ART 1751C Intermediate Sculpture (P) ..... 150
ART 1752C Advanced Sculpture (P) ..... 150
AUTOMOTIVE SERVICE TECHNOLOGY
AER 1000 Introduction to Automotive Technology (O) ..... 152
AER 1001 Automotive Service and Minor Repair (O) ..... 152
AER 1100 Introduction to Automotive Electrical Systems (O) ..... 152
AER 1410 Automotive Brake Systems (O) ..... 152
AER 1151 Engine Tune-Up and Emission Controls (O) ..... 152
AER 1270 Automotive Transaxles (O) ..... 152
AER 1450 Suspension, Steering and Alignment ..... 153
AER 2161 Management of Automotive Service Function (O) ..... 154
AER 2136 Automatic Transmissions (O) ..... 153
AER 2138 Automotive Power Trains (O) ..... 153
AER 2113 Automotive Engine Overhaul (O) ..... 153
AER 2101 Advanced Automotive Electrical Systems (O) ..... 153
AER 2109 Computer Controls and Fuel Injection (O) ..... 153
AER 2175 Automotive Air Conditioning (O) ..... 154
AER 2931 Automotive Technology Special Topics (O) ..... 154
AER 2932 Automotive Technology Special Topics (O) ..... 154
AER 2933 Automotive Technology Special Topics (O). ..... 155
AER 2934 Automotive Technology Special Topics (O) ..... 155
AER 1125 Preventive Maintenance Systems ..... 152
AER 1263 Auto Body I ..... 152
AER 1264 Auto Body II ..... 152
DIM 1520 Air Brakes ..... 152
AER 1771 Intro to Diesel Engines ..... 153
AER 1772 Diesel Engines Troubleshooting and Repair ..... 153
DIM 1121 Intro to Diesel Fuel Systems ..... 153
DIM 1131 Diesel Distributor and In-line Fuel Systems ..... 153
DIM 1133 Cummins and Detroit Diesel Fuel Systems ..... 153
AER 2531 General Motors Computer Controlled Systems ..... 154
AER 2532 Ford Computer Controlled Systems ..... 154
AER 2533 Chrysler Computer Controlled Systems ..... 154
AER 2534 Bosch Computer Controlled Systems ..... 154
AER 2881 Auto/Diesel Supervised Work Experience I ..... 154
AER 2882 Auto/Diesel Supervised Work Experience II. ..... 154
AER 2883 Auto/Diesel Supervised Work Experience III. ..... 154
AER 2884 Auto/Diesel Supervised Work Experience IV ..... 154
BIOLOGY
APB 2203C Anatomy and Physiology I (P) ..... 155
APB 2204C Anatomy and Physiology II (P) ..... 155
BOT 1800 Plants and Man (P) ..... 155
BOT 2010C General Botany I (P) ..... 155
APB 1153C Biology with Lab (P) ..... 155
BOT 2011C General Botany II (P) ..... 155
APB 1150 Fundamentals of Biology I (P) ..... 155
APB 1151 Fundamentals of Biology II (P) ..... 155
BSC 1010C General Biology I (P) ..... 156
BSC 1011C General Biology II (P) ..... 156
APB 1120 Introduction to Ecology (P) ..... 156
MCB 2010C Microbiology (P) ..... 156
BSC 2910 Natural Science Directed Research Studies (P) ..... 156
ZOO 2203C Invertebrate Zoology (P) ..... 156
ZOO 2303C Vertebrate Zoology (P) ..... 156
ISC 2601 Science and the Scientific Method $(P)$ ..... 156
APB 1161 Human Genetics (P) ..... 156
BLACK CULTURE STUDIES
AFA 2000 Afro-American Studies (P) ..... 157
BROADCAST COMMUNICATIONS
RTV 1000 Introduction to Broadcasting (D) ..... 157
RTV 1941 Broadcast Practicum I (D) ..... 157
RTV 1942 Broadcast Practicum II (D) ..... 157
RTV 2003 Introduction to Radio News (D) ..... 157
BUILDING CONSTRUCTION TECHNOLOGY
BCT 1421 Brick and Block Construction I (O) ..... 159
BCT 1422 Brick and Block Construction II (O) ..... 159
BCT 1423 Brick and Block Construction III (O) ..... 159
BCT 1424 Brick and Block Construction IV (O) ..... 159
ETM 1111 Energy and Building Design (O) ..... 159
BCN 1272 Plans Interpretation I (O) ..... 157
BCN 1701 Construction Office Practices (O) ..... 157
BCN 1721 Construction Accounting and Cost Control (O) ..... 157
BCN 1210 Materials of Construction (O) ..... 158
BCN 1610 Contact Cost Estimating (O) ..... 158
BCN 1765 Construction Codes and Specifications(O) ..... 158
BCN 2616 Construction Estimating (O) ..... 158
BCN 1760 Building Codes Ordinances and Specifications (O) ..... 158
BCN 2213 Concrete Constructon Material and Methods (O) ..... 158
BCN 2211 Commercial Construction Materials (O) ..... 158
BCN 2275 Plans Interpretation II (O) ..... 159
BCN 2561 Mechanical and Electrical Systems (O) ..... 159
BCN 2614 Estimating and Bidding (O) ..... 159
BCN 2703 Field Management (O) ..... 159
BCN 2705 Office Management (O) ..... 159
BCN 2742 Preliminary Comprehensive Exam (O) ..... 159
BUSINESS ADMINISTRATION AND MANAGEMENT
GEB 1011 Introduction to Business (D) ..... 160
QMB 1001 Mathematics of Business (O) ..... 162
REE 1040 Real Estate Principles and Practices I (O) ..... 162
REE 2541 Condominium and Property Management I (O) ..... 163
MKA 1303 Mid-Management Seminar and Supervised WorkExperience I (O)161
MKA 1313 Mid-Management Seminar and Supervised Work Experience II (O) ..... 161
MKA 2323 Mid-Management Seminar and Supervised Work Experience III (O) ..... 161
MKA 2333 Mid-Management Seminar and Supervised Work Experience IV (O) ..... 161
SLS 1215 Self Awareness in the Workplace (O) ..... 163
SLS 1220 Assertiveness in the Workplace (O) ..... 163
SLS 1227 Managing Anger in the Workplace (O) ..... 163
MKA 1351 Mid-Management Seminar and Supervised Work Experience I (Summer Session Only) (O) ..... 161
MKA 1352 Mid-Management Seminar and Supervised Work Experience II (Summer Session Only) (O) ..... 161
MNA 2345 Supervision I (O) ..... 162
BUL 2111 Business Law I (D) ..... 160
BUL 2112 Business Law II (D) ..... 160
MAR 2011 Principles of Marketing (D) ..... 160
MKA $2041 \quad$ Principles of Retailing (D). ..... 161
ADV 2201 Advertising and Sales Promotion (D) ..... 159
MKA 2021 Salesmanship (O) ..... 161
REE 2041 Real Estate Principles \& Practices II (O) ..... 163
MAN 2300 Personnel Management (D) ..... 160
MNA 2772 Human Relations in Business (D) ..... 162
MAN 2021 Principles of Management (D) ..... 160
MNA 2781 Communications in the Workplace ..... 162
MNA 1801 Entrepreneurship (O). ..... 161
MNA 2932 Executive Development (O) ..... 162
SLS 1365 Developing Leadership Skills (O). ..... 163
SLS 1223 Managing Stress in the Workplace (O) ..... 163
CHEMISTRY
CHM 1015 Introduction to Chemistry (P) ..... 164
CHM 1045C General Chemistry I (P) ..... 164
CHM 1046C General Chemistry II (P) ..... 164
CHM 2210C Organic Chemistry I (P) ..... 164
CHM 2211C Organic Chemistry II (P) ..... 164
CHM 1033 Biochemistry for Health Professionals (O) ..... 164
COLLEGE ORIENTATION
SLS 1101 Principles of Academic/Personal Development (P) ..... 164
COMPUTER SCIENCE PROGRAMMING AND ANALYSIS
CET 1151 PC Maintenance and Repair (O) ..... 165
CGS 1412 LOGO Usage Workshop (O) ..... 166
CGS 1561 Disk Operating System II (O) ..... 166
CGS 1460 Basic Usage Workshop (O) ..... 166
CGS 1570 High Tech Usage Workshop (O) ..... 166
COP 2000 Introduction to Computer Programming (D) ..... 166
COP 2701 Data Base Programming (O) ..... 166
CEN 2500 Data Communications (O) ..... 164
CGS 1000 Introduction to Computer Usage (O) ..... 165
CGS 2100 Computer Applications (O) ..... 165
CIS 1000 Introduction to Data Processing (D) ..... 165
COP 1170 BASIC Programming I (D) ..... 165
COP 1171 Business Programming in BASIC (D) ..... 165
COP 2120 COBOL Programming I (D) ..... 165
COP 2121 COBOL Programming II (D) ..... 165
COP 2200 FORTRAN (D) ..... 165
COP 2210 PASCAL I (D) ..... 165
CIS 2321 Computer Systems Design (D) ..... 165
COP 2400 ASSEMBLER Programming I (D) ..... 166
CGS 1510 Electronic Spreadsheet (O) ..... 166
COP 1700 Introduction to Data Base Management (O) ..... 166
CGS 1500 Micro-World Processing (O) ..... 166
CGS 1530 Lotus-Integrated Software (O) ..... 167
CGS 1050 Electronic Access to Information (O) ..... 167
CGS 1370 Choosing Your Microcomputer (O) ..... 167
CGS 1560 Disk Operating System I (O) ..... 166
CGS 1101 Personal Computer Finance (O) ..... 167
CGS 1060 College Computing (P) ..... 167
CGS 2570 Appleworks (O) ..... 167
CGS 2420 Computer Programming for Engineers (D) ..... 167
CGS 1370 Choosing Your Microcomputer (O) ..... 167
CGS 1110 Computer Literacy for Educators (O) ..... 168
CGS 1411 Educational Programming (O) ..... 168
CGS 1511 Advanced Lotus (O) ..... 168
CRIMINAL JUSTICE TECHNOLOGY
CCJ 2020 Introduction to Criminal Justice (D) ..... 168
CJT 2100 Criminal Investigation (D) ..... 168
CJT 2110 Introduction to Criminalistics (D) ..... 168
CCJ 2220 Criminal Law (D) ..... 168
CCJ 2231 Criminal Procedure (D) ..... 168
CCJ 2330 Probation, Pardons and Parole (O) ..... 169
CCJ 2300 Introduction to Corrections (D) ..... 169
CCJ 2440 Correctional Institution Administration and Organization (O) ..... 169
CCJ 2250 Constitutional Law (D) ..... 169
CCJ 2230 Rules of Evidence (D) ..... 169
CCJ 2500 The Juvenile and the Law (O) ..... 169
CCJ 2281 Constitutional Rights of the Incarcerated (D) ..... 169
CCJ 2200 Introduction to the Courts (O) ..... 169
CCJ 2400 Police Organization and Administration (O) ..... 169
CJD 1480 Basic Corrections Probation and Parole Program (O) ..... 170
CJD V000 Basic Law Enforcement Training (O) ..... 170
CJD V450 Basic Corrections Training (O) ..... 170
CJT 2210 Fingerprint Science (O) ..... 170
CJD 2660 Crime Scene Photography (O) ..... 170
CJT 2230 Chemical Test for Intoxication/ Breathalyzer Technician (O) ..... 170
CCJ 1611 Child Abuse and Exploitation (O) ..... 170
CJD 1255 Basic Instructor-Self Defense/Use of Force (O) ..... 170
CJD 1443 Basic Environmental Health Training (O) ..... 170
*CJD 1607 Background Investigations (O) ..... 171
CJD 1608 Advanced Traffic Accident Investigation(O) ..... 171
CJD 1312 Investment in Excellence (O) ..... 171
CJD 1672 School Resource Officer (O) ..... 171
CJD 1630 Basic Firearms Instructor Training (O) ..... 171
CJT 1311 Advanced Firearms Training (O) ..... 171
CJD 1614 Standardized Field Sobriety Testing (O) ..... 175
CJD 1673 Crime Prevention (O) ..... 171
CJD 1693 Crisis Intervention (O) ..... 171
CJD 1471 Discipline and Special Confinement Techniques (O) ..... 172
CJD 2602 Narcotics Identification and Investigation (O) ..... 172
CJD 2250 Investigative Interviews (O) ..... 172
CJD 1253 Self Defense and Use of Force (O) ..... 172
CJD 1468 Youthful Offenders (O) ..... 172
CJD 1501 Criminal Justice Instructor Techniques (O) ..... 172
CJD 1632 Field Training Officer Techniques (O) ..... 172
CJD 168 Case Preparation and Court Presentation (O) ..... 172
CJT 2120 Crime Scene Procedures (O). ..... 173
CJD 1310 Line Supervision (O) ..... 173
CJD 2320 Middle Management (O) ..... 173
CJD 1330 Developing and Maintaining a Sound Organization (O) ..... 173
CJD 2331 Planning the Effective Use of Financial Resources (O) ..... 173
CJD 1332 Building and Maintaining Sound Behavioral Climate (O) ..... 173
CJD 2476 Firefighting for Correctional Officers (O) ..... 173
CJD 2603 Sex Crimes Investigation (O) ..... 173
CJD 2604 Injury and Death Investigation (O) ..... 174
CJD 2605 Traffic Homicide Investigation (O). ..... 174
CJD 2609 Traffic Accident Reconstruction (O) ..... 174
CJT 2121 Arson Investigation (D) ..... 174
CJD 2661 Special Tactical Problems (O) ..... 174
CJD 2663 Report Writing Development (O) ..... 174
CJD 2664 Underwater Police Science and Technology (O) ..... 174
CJD 1665 Computer Applications for Law Enforcement (O) ..... 174
CJD 1677 Drug Abuse Awareness and Education (O) ..... 174
CJD 1615 Radar Operators (O) ..... 174
CJD 1254 First Responder to Medical Emergencies (O) ..... 175
CJD 1662 Tactical Police Driving (O) ..... 175
CJD 1601 Traffic Accident Investigation (O) ..... 175
CJD 1691 Stress Awareness and Resolution (O) ..... 175
CJD 1696 Community and Human Relations (O) ..... 175
CJD V002 Law Enforcement-Cross Training (O) ..... 175
CJD V007 Law Enforcement Supplemental Training (O) ..... 175
CJD V008 Law Enforcement Supplemental Training (O) ..... 175
CDT V001 Law Enforcement Auxilary (O) ..... 175
CJD 1256 Handgun Retention Instructor (O) ..... 175
CJD 1650 Selective Patrol Drug Enforcement (O) ..... 176
CJD 1667 Driving Instructor Training (O) ..... 176
CJD V006 Corrections Supplemental Training (O) ..... 176
DENTAL SCIENCE
DEA 1000 Introduction to Dentistry (O) ..... 176
DEA 1200 Dental Office Management (O) ..... 176
DEA 1820C Intraoral Auxiliary Procedures I (O) ..... 176
DEA 1821C Intraoral Auxiliary Procedures II (O) ..... 176
DEA 1800C Clinical Practice I (O) ..... 176
DEA 1801C Clinical Practice II (O) ..... 176
DEA 1850C Clinical Practice III (O) ..... 176
DES 1000C Head, Neck, and Dental Anatomy (O) ..... 176
DES 1200 Dental Radiology (O). ..... 176
DES 1200L Dental Radiology Lab (O) ..... 176
DEA 1120 Related Dental Theory I (O) ..... 177
DEA 1121 Related Dental Theory II (O) ..... 177
DES 1100C Elements of Dental Materials (O) ..... 177
DEH 1820 Health Office Emergencies (O) ..... 179
DENTAL HYGIENE
DEH 1090 Introduction to Clinical Dental Hygiene (O) ..... 179
DES 1030 Oral Embryology and Histology (O) ..... 179
DEH 1800C Clinical Dental Hygiene I (O) ..... 179
DEH 1802C Clinical Dental Hygiene II (O) ..... 179
DEH 1804C Clinical Dental Hygiene III (O) ..... 180
DEH 2806C Clinical Dental Hygiene IV (O) ..... 180
DEH 2808C Clinical and Dental Hygiene V (O) ..... 180
DES 2044 General and Oral Pathology (O) ..... 180
DES 1050 Pharmacology (O) ..... 180
DES 2051 Pain Control and Anesthesia (O) ..... 180
DEH 2602 Peridontology (O) ..... 181
DEH 2702C Community Dental Health (O) ..... 181
DEH 2530L Expanded Functions for Dental Hygienists (O) ..... 180
CHM 1033 Biochemistry for Health Professionals (O) ..... 181
DENTAL LABORATORY TECHNOLOGY
DTE 1000 Orientation and Terminology (O) ..... 177
DTE 1010 Oral Anatomy (O) ..... 177
DTE 1020 Tooth Physiology and Anatomy Theory (O) ..... 177
DTE 1020L Tooth Physiology and Anatomy Lab (O) ..... 177
DTE 1103 Complete Denture Theory (O) ..... 177
DTE 1103L Complete Denture Theory Lab (O) ..... 177
DTE 2107 Partial Denture Theory (O) ..... 177
DTE 2107L Partial Denture Theory Lab (O) ..... 178
DTE 2030 Occlusal Topography (O) ..... 178
DTE 2030L Occlusal Topography Lab !(O) ..... 178
DES 1140C Dental Materials I (O) ..... 178
DTE 1132 Orthodontics and Pedodontic Theory (O) ..... 178
DTE 1132L Orthodontic and Pedodontic Lab (O) ..... 178
DTE 2141 Ceramic Theory (O) ..... 178
DTE 2141L Ceramic Lab (O) ..... 178
DTE 2150 Crown and Bridge Theory (O) ..... 178
DTE 2150L Crown and Bridge Lab (O) ..... 178
DTE 2151 Advanced Fixed Prosthodontics Theory (O) ..... 178
DTE 2151L Advanced Fixed Prosthodontics Lab (O) ..... 178
DES 2141C Dental Materials II (O) ..... 178
DTE 2180 Dental Laboratory Operations (O) ..... 179
DTE 2191 Assimilation of Dental Technology (O) ..... 179
DTE 2200 Ethics and Jurisprudence (O) ..... 179
DRAFTING AND DESIGN TECHNOLOGY
EGS 1110C Engineering Graphics (D) ..... 181
EGS 1130C Descriptive Geometry (D) ..... 181
ETD 1310 CAD Familiarization ..... 181
ETD 1544 Civil Drafting I (O) ..... 181
ETD 2320C Computer Aided Drafting (O) ..... 182
ETD $1830 \quad$ Charts and Graphs (O) ..... 181
ETD 1230 Intersections and Developments (O) ..... 181
ETD 2540 Civil Drafting II (O) ..... 182
ETD 2125C Topographical Drafting (O) ..... 181
ETD 2240 Numerical Drafting (O) ..... 182
ETI 2411 Methods of Fabrication (O) ..... 182
ETD 2707 Machine Drafting I (O) ..... 182
ETD 2712 Machine Drafting II (O) ..... 182
ETD 2801C Illustrations (O) ..... 182
ETD 2840 Pictorial Drafting (O) ..... 183
ETD 2820C Perspective Drafting (O) ..... 183
ETD 2841 Airbrush Rendering (O) ..... 183
BCN 1210 Materials of Construction (D) ..... 158
BCN 1250C Architectural Drafting Principles (D) ..... 182
BCN 1610 Contract Cost Estimating (O) ..... 158
BCN 2251C Architectural Drafting-Residential (O) ..... 182
BCN 2253C Architectural Drafting - Commercial (O) ..... 182
ETD 2528 CAD—Mechanical (O) ..... 182
ETD 2538 CAD—Architectural (O) ..... 182
ETD 2548 CAD—Civil ..... 182
DRAMA
THE 1000 Introduction to Drama (P) ..... 183
ORI 1001 Oral Interpretation (P) ..... 183
TPP 1800 Theatre, Voice, \& Speech (P) ..... 183
TPP 1110 Acting I (P) ..... 183
THE 1950L Theatre Workshop I (P) ..... 183
THE 1951L Theatre Workshop II (P) ..... 183
TPP 1111 Acting II (P) ..... 183
TPP 2652 Play Analysis (P) ..... 184
TPP 1190 Rehearsal and Performance Lab I (D) ..... 184
TPP 1191 Rehearsal and Performance Lab II (D) ..... 184
TPP 1192 Rehearsal and Performance Lab III (D) ..... 184
TPP 1193 Rehearsal and Performance Lab IV (D) ..... 184
TPP $2300 \quad$ Play Direction (P) ..... 184
TPA 1200C Beginning Stagecraft (D) ..... 184
ECONOMICS
ECO 2000 Introduction to Economics (P) ..... 184
ECO 2013 Principles of Economics I (P) (Macroeconomics) ..... 184
ECO 2023 Principles of Economics II (P) (Microeconomics) ..... 184
EDUCATION
EDF 2005 Introduction to Education (P) ..... 184
EDF 2070 Social Foundations of Education (P) ..... 185
EDF 2020 Human Development (P) ..... 185
EDG 2930 Introduction to Classroom Management (O) ..... 185
EDG 2001 Teacher Capability Development (P) ..... 185
ELECTRONIC ENGINEERING TECHNOLOGY
EET 1015C DC Circuits (O) ..... 185
EET 1025C AC Circuits (O) ..... 185
EET 2106C Electronic Devices I (O) ..... 185
EET 2107C Electronic Devices II (O) ..... 185
EET 2325C Communication Circuits I (O) ..... 186
EET 2335C Communication Circuits II (O) ..... 186
CET 2114C Digital Circuits (O) ..... 186
EET 2215C Electronic Instruments (O) ..... 186
ETD 2614 Electronic Drafting (O) ..... 186
CET 2123C Microprocessors I (O) ..... 186
CET 2131C Microprocessors II (O) ..... 186
MTB 1321 Technical Mathematics I (D) ..... 186
MTB 1322 Technical Mathematics II (D) ..... 186
PHY 1001 Physics for Electronics Engineering Technology (O) ..... 186
ENGLISH
ENC 0080 Basic English Review* (P) ..... 187
ENC 1001 Fundamentals of Writing* (P). ..... 187
ESL 1181 English as a Foreign Language (P) ..... 187
ENC 1101 Communications I (P) ..... 187
EDG 2010 Techniques of Writing (O) ..... 187
ENC 1102 Communications II (P) ..... 187
ENC 2090 Essential Skills in English (P) ..... 187
ENC 2210 Technical Communications (O) ..... 187
ENC 1083 Beginning Creative Writing (P) ..... 188
ENC 1084 Intermediate Creative Writing (P) ..... 188
ENC 1085 Introduction Creative Writing (P) ..... 188
LIT 2110 World Literature I (P) ..... 187
LIT 2120 World Literature II (P) ..... 188
ENL 2010 English Literature I (P) ..... 188
ENL 2020 English Literature II (P) ..... 188
LIT 2300 Special Themes in Literature (P) ..... 188
CRW 2001 Creative Writing I (P) ..... 188
CRW 2002 Creative Writing II (P) ..... 188
AML 2010 American Literature to 1865 (P) ..... 188
AML 2022 American Literature after 1865 (P) ..... 188
LIT $2330 \quad$ Children's Literature (P) ..... 188
EMERGENCY MEDICAL SERVICES TECHNOLOGY
EMS 1059C First Provider Concepts of Emergency Care (O) ..... 189
EMS 1119C Fundamentals of Emergency Care (O) ..... 189
EMS P381 Emergency Medical Care Refresher (O) ..... 189
EMS 2234C Paramedic I (O) ..... 189
EMS 2435 Paramedic Hospital/Field Experience I (O) ..... 189
EMS 2235C Paramedic II (O) ..... 189
EMS 2436 Paramedic Hospital/Field Experience II (O) ..... 189
EMS 2450 Paramedic Field Internship(O) ..... 189
EMS 1335 Ambulance Emergency Vehicle Operators Course ..... 189
EMT 1321 Advanced Life Support for EMT's (O) ..... 190
EMS 2375 Paramedic State Exam Review (O) ..... 190
EMS 2938 Advanced Arrhythmia Interpretation (O) ..... 189
EMS 293512 Lead EKG (O) ..... 190
EMS 2934 Basic Cardiac Rhythm Interpretation (O) ..... 190
EMS 1936 EMT Review (O) ..... 190
EMS 2930 Intro to Advanced Life Support (O) ..... 190
ENVIRONMENTAL CONTROL
OCB 1652 Pollution of Coastal Waters (O) ..... 190
EVS 2600 Introduction to Environmental Services (O) ..... 190
FINANCIAL SERVICE
BAN 1401 Wills, Trusts and Estates (O) ..... 190
BAN 1605 Communication for Bankers (O) ..... 191
BAN 1800 Law and Banking: Principles (O) ..... 191
BAN 1801 Law and Banking: Applications (O) ..... 191
BAN 2004 Principles of Banking (O) ..... 191
BAN 2142 Professional Teller Training (O) ..... 191
BAN 2210 Analyzing Financial Statements (O) ..... 191
BAN 2231 Introduction to Commercial Lending (O) ..... 191
BAN 2240 Consumer Lending (O) ..... 191
BAN 2400 The Trust Business (O) ..... 191
BAN 2500 Economics for Bankers (O) ..... 191
BAN 2501 Money and Banking (O) ..... 191
BAN 2511 Marketing for Bankers (O) ..... 191
BAN 2742 Bank Management (O) ..... 191
BAN 2935 Service and Sales in Banking (O) ..... 192
FIN 1101 Personal Financial Planning (O) ..... 192
FIN 1105 Personal Investing (O) ..... 192
SVL 2001 Intro to the Savings Assoc. Business (O) ..... 192
SVL 2011 Money and Banking (O) ..... 192
SVL 2015 Commercial Banking (O) ..... 192
SVL 2101 Savings Institution Operations (O) ..... 192
SVL 2111 Teller Operations (O) ..... 192
SVL 2113 Deposit Accounts and Services (O) ..... 192
SVL 2121 Managing Deposit Accounts \& Services (O) ..... 192
SVL 2122 Accounting Principles for Savings Institutions (O) ..... 192
SVL 2123 Accounting Practices for Savings Institutions (O) ..... 193
SVL 2125 Intro to Electronic Data Processing (O). ..... 193
SVL 2201 Financial Statement Analysis (O) ..... 193
SVL 2211 Consumer Lending (O) ..... 193
SVL 2221 Residential Mortgage Lending (O) ..... 193
SVL 2223 Residential Appraising (O) ..... 193
SVL 2231 Commercial Lending for Savings Assoc. (O) ..... 193
SVL 2241 Mortgage Loan Servicing (O) ..... 193
SVL 2251 Real Estate Principles I (O) ..... 193
SVL 2403 IRA/KEOGH Accounts (O) ..... 193
SVL 2411 Techniques for Customer Counseling (O) ..... 193
SVL 2501 Economics I (O) ..... 193
SVL 2511 Marketing for Financial Institutions (O) ..... 193
SVL 2521 Human Relations in Business (O) ..... 193
SVL 2532 Supervisory Personnel Management I (O). ..... 193
SVL 2533 Supervisory Personnel Management II (O) ..... 194
SVL 2601 Effective Business Writing (O). ..... 194
SVL 2761 Branch Management (O) ..... 194
SVL 2801 Commercial Law I (O) ..... 194
FIRE SCIENCE TECHNOLOGY
FFP $1000 \quad$ Introduction to Fire Services (O). ..... 194
FFP 1130 Fire Supervision (O) ..... 194
FFP 1410 Multiple Alarm Operations (O). ..... 196
FFP 1420 Engine and Truck Company Fireground Operations (O) ..... 196
FFP 1200 Fire Inspection Practices (O). ..... 194
FFP V005 Basic Fire Recuit Training (O) ..... 194
FFP 1040 Introduction to Marine Fire Protection (O) ..... 194
FFP V081 Basic Volunteer Firefighter Training (O) ..... 194
FFP 1326 Plans Examination and Blueprint Reading (O) ..... 194
FFP 1620 Fire Protection and Detection Systems (O) ..... 195
FFP $1530 \quad$ Private Fire Brigade (O) ..... 195
FFP 1930 Fire Service Special Topics ..... 195
FFP P085 Advanced Volunteer Firefighting (O) ..... 195
FFP 2130 Company Officer Leadership (O) ..... 195
FFP $2150 \quad$ Methods and Techniques of Instruction (O) ..... 195
FFP 2500 Hazardous Materials I (O) ..... 195
FFP 2501 Hazardous Materials II (O) ..... 195
FFP 2410 Firefighting Tactics \& Strategy I (O) ..... 195
FFP 2300 Building and Fire Codes I (O) ..... 195
FFP 2527 Electrical Hazards for Firefighters (O) ..... 195
FFP 1410 Multiple Alarm Response (O) ..... 195
FFP $2640 \quad$ Fire Hydraulics for Pump Operators (O) ..... 196
FFP 2240 Fire Investigation and Arson Detection (O) ..... 196
FFP 2100 Municipal Fire Administration (O) ..... 196
FFP 2949 Work Experience Internship (O) ..... 196
FFP 2301 Building and Fire Codes II (O) ..... 196
FFP 1520 Chemistry for Fire Science (O) ..... 196
FFP 1921 Inservice Instruction and Training (O) ..... 196
FFP 1320 Building Construction for Fire Science ..... 196
FOOD SERVICE
HUN 1201 Nutrition (O) ..... 196
FSS 2221C Food Preparation I (O) ..... 197
FSS 2222C Food Preparation II (O) ..... 197
FOS 2201 Sanitation and Safety (O) ..... 197
FSS 2401 Use and Care of Kitchen Equipment (O) ..... 197
FSS 2246C Quantity Baking (O) ..... 197
FSS 2263 Food Merchandising and Service (O) ..... 197
FSS 2284C Food Services Special (O) ..... 198
FSS 2300 Food Service Supervision and Management (O) ..... 198
DIE 2201 Nutrition and Diet Therapy (O) ..... 198
FSS 2303 Food Service Seminar and Supervised Work Experience I (O) ..... 198
FSS 2304 Food Service Seminar and Supervised Work Experience II (O) ..... 198
FSS 2305 Food Service Seminar and Supervised Work Experience III (O) ..... 198
FSS 2306 Food Service Seminar and Supervised Work Experience IV (O) ..... 198
FRENCH
FRE 1000 French for Daily Use I (P) ..... 198
FRE 1001 French for Daily Use II (P) ..... 198
FRE 1010 Applied Conversational French I (P) ..... 198
FRE 1011 Applied Conversational French II (P) ..... 198
FRE 1012 Applied Conversational French III (P) ..... 198
FRE 1120 Elementary French I (P) ..... 198
FRE 1121 Elementary French II (P) ..... 198
FRE 2200 Intermediate French I (P) ..... 198
FRE 2201 Intermediate French II (P) ..... 198
GEOGRAPHY
GEA 2000 World Geography (P) ..... 199
GEOLOGY
GLY 1010 Introduction to Physical Geology (P) ..... 199
GLY 1100 Historical Geology (P) ..... 199
GERMANFirst-year language courses are intended for students who have no previousformal instruction in the language. Students with two years of high schoolGerman normally enter the second year courses.
GER 1000 German for Daily Use I (P) ..... 199
GER 1001 German for Daily Use II (P) ..... 199
GER 1010 Applied Conversational German I (P) ..... 199
GER 1011 Applied Conversational German II (P) ..... 199
GER 1012 Applied Conversational German III (P) ..... 199
GER 1100 Elementary German I (P). ..... 200
GER 1101 Elementary German II (P). ..... 200
GER 2200 Intermediate German I (P) ..... 200
GER 2201 Intermediate German II (P) ..... 200
HEALTH CARE MANAGEMENT
HSA 1220 General Adminstration and Management (O) ..... 200
HSA 1230 Long-term Care Management I (O) ..... 200
HSA 1231 Long-term Care Management II (O) ..... 200
HSC 1590 Long-term Patient Care I (O) ..... 200
HSC 1591 Long-term Patient Care II (O) ..... 201
HSA $2850 \quad$ Nursing Home Experience (O) ..... 201
HSA 2234 Health Care Planning and Delivery Systems (O) ..... 201
HSA 2422 Legal Aspects of Long-term Care (O) ..... 201
HEALTH AND SAFETY
HSC 1130 Holistic Health Care I (O) ..... 201
HSC 2100 Personal and Community Health (D) ..... 201
HSC 2400 First Aid and Safety (D). ..... 201
HSC 2930 : Allied Health Special (O) ..... 201
HSC 1160 Ethical Issues in Medicine (P) ..... 201
WST 1321 Women's Wellness (D) ..... 201
HISTORY
ASH 1040 Japan and the Japanese: A Perspective (P) ..... 202
EUH 1000 History of Western Civilization I (P) ..... 202
EUH 1001 History of Western Civilization II (P) ..... 202
AMH 2010 American History to 1877 (P) ..... 202
AMH 2020 American History Since 1877 (P). ..... 202
WOH 2040 The World in the Twentieth Century (P) ..... 202
HOME SERVICE MANAGEMENT
CTE 1300 Clothing Selection and Construction (D) ..... 202
HUN 1001 Principles of Nutrition (D) ..... 202
HUN 1410 Basic Childhood Nutrition (O) ..... 203
CTE 1401 Introduction to Textiles (D) ..... 203
CHD 1220 Introduction to Child Development (D) ..... 203
EEC 1001 Principles of Early Childhood Curriculum (D) ..... 203
CHD 1332 Creative Experiences for the Young Child (O) ..... 203
EEC 1260 Program Designs for Young Children (O) ..... 203
EDF 1031 Social Elements in Early Childhood Education (D) ..... 203
HUN 1002 Understanding Eating Disorders (O) ..... 203
LEA 1932 Consumer Legal Issues (P) ..... 204
EEC 1946 Seminar in Early Childhood Education I (D) ..... 203
EEC 1947 Seminar in Early Childhood Education II (D) ..... 203
EEX 1001C Seminar in Exceptional Child Education II (D) ..... 203
COA 1100 Consumer Finance (O) ..... 203
EEC 2948 Seminar in Early Childhood Education III (D) ..... 204
EEC 2949 Seminar in Early Childhood Education IV (D) ..... 204
CTE 2340 Personal \& Career Development (O) ..... 204
FSS 2202C Food for the Family (D) ..... 204
HHD 2001 Creative Art and Design Techniques (O) ..... 204
HEV 1115 Statewide Child Care Training (O) ..... 203
HUMANITIES
HUM 1541 Humanities Literature (P) ..... 204
HUM 1533 Humanities Philosophy (O) ..... 204
HUM 2511 Humanities II: Art/Music (P) ..... 205
HUMAN SERVICES TECHNOLOGY
CLP 2140 Abnormal Psychology (P) ..... 205
DEP 1001 Child and Adolescent Psychology (P) ..... 205
GEY 1000 Introduction to Gerontology (D) ..... 205
HUS 1001 Introduction to Human Services (D) ..... 205
HUS 1200 Group Dynamics (D) ..... 205
HUS 1820 Human Services Practicum I (O) ..... 205
HUS 1821 Human Services Practicum II (O) ..... 205
HUS 1822 Human Services Practicum III (O) ..... 206
HUS 2110 Counseling Techniques (D) ..... 206
HUS 2531 Substance Abuse and Treatment (D) ..... 206
HUS 2500 Introduction to Ethics in Human Services (P). ..... 206
HUS 2102 Introduction to Techniques of Interviewing and Intervention (D) ..... 206
PPE 2000 Person and Personality Development (P) ..... 206
HUS 1506 Introduction to Drugs of Abuse (D) ..... 206
HUS 2025 Introduction to Interpersonal Behavior (P) ..... 206
INDIVIDUAL PROBLEMS
IDS 2905 Individual Problems (P). ..... 206
(Specify Subject Area by Title)
INDUSTRIAL
ETI 1948 Industrial Seminar and Supervised Work Experience (O) ..... 207
ETI 1931 Industrial Seminar and Supervised Work Experience (O) ..... 207
INSURANCE
RMI 2500 Individual Life and Health Insurance (O) ..... 207
RMI 2505 Life Insurance Law and Company Operations (O) ..... 207
RMI 2506 Group Insurance and Social Insurance (O) ..... 207
RMI 2507 Pension Planning (O) ..... 207
RIN 2110 Investments and Family Financial Management (O). ..... 207
RMI 2552 Business Insurance (O) ..... 207
RMI 2509 Estate Planning and Taxation (O).... ..... 207
RMI 2600 Property and Casualty Insurance (O) ..... 208
INTERIOR DESIGN
HHD 1234 Design of Interior Space (O) ..... 208
HHD 1321 Introduction to Interior Design (O) ..... 208
HHD 1614 Survey of Architectural Design and Furniture Styles. ..... 208
HHD 1930 Seminar in Interior Design I (O) ..... 208
HHD 1931 Seminar in Interior Design II (O) ..... 208
IND 2420 Materials and Sources (O) ..... 208
JOURNALISM
JOU 1100 News Reporting and Writing (D) ..... 208
JOU 1420 Journalism Lab (D) ..... 208
JOU 1421 Journalism Laboratory II (D). ..... 208
JOU 1422 Journalism Laboratory III (D) ..... 209
JOU 2200 Editing (D) ..... 209
MMC 1000 Survey of Mass Communication (D) ..... 209
PUR 2000 Introduction to Public Relations (D) ..... 209
LEGAL ASSISTANT
PLA 1200 Civil Litigation (O) ..... 209
PLA 1504 Real Estate Law and Property (O) ..... 211
PLA 1763 Law Office Management Practice (O) ..... 210
PLA 2003 Intro to Legal Assistant Technology (O) ..... 209
PLA 2059 Survey of Law (O) ..... 210
PLA 2105 Legal Research (O) ..... 210
PLA 2155 Legal Writing (O) ..... 210
PLA 2208 Legal Systems and Litigation Procedures (O) ..... 210
PLA 2302 Criminal Law and Procedures (O) ..... 209
PLA 2433 Corporation and Business Organization Law (O) ..... 210
PLA 2465 Bankruptcy Law (O) ..... 210
PLA 2483 Administrative Law (O) ..... 211
PLA 2641 Estate Planning and Probate Administration (O) ..... 209
PLA 2663 Federal and State Tax Law (O) ..... 210
PLA 2803 Family Law (O) ..... 210
PLA 2873 Intro to Court Administration Procedure (O) ..... 209
PLA 2930 Professional Responsibilities (O) ..... 210
MARINE SCIENCE
ISC 2601 Science and the Scientific Method (P) ..... 211
OCE 2001 Introduction to Oceanography (P) ..... 211
OCB 2010C Introduction to Marine Biology (P) ..... 211
OCG 1001 Marine Geology ( P ) ..... 211
OCB 2721C Fundamentals of Mariculture (P) ..... 211
GRA 2930 Technical Photography (P) ..... 211
OCB 1019 Life on the Seashore (P) ..... 211
OCE 1921C Marine Science Workshop (P) ..... 211
MATHEMATICS
*MAT 0002 Basic Mathematics Review (P) ..... 212
*MAT 1024 Introductory Algebra (P) ..... 212
MTB 1321 Technical Mathematics I (D) ..... 212
MTB 1322 Technical Mathematics II (D) ..... 212
MGF 1113 Foundations of Mathematics (P) ..... 212
MGF 2118 Essential Skills in Mathematics (P) ..... 212
**MAC 1102 Basic College Algebra (P) ..... 212
**MAC 1104 College Algebra (P) ..... 212
MAC 1114 Plane Trigonometry (P) ..... 212
**MAC 1135 Pre-Calculus (P) ..... 212
**MAC 2233 Business Calculus I (P) ..... 213
**MAC 2234 Business Calculus II (P) ..... 213
MAC 1253 Technical Calculus (D) ..... 213
**STA 2014 Elementary Statistics ..... 213
**MAC 2311 Calculus I (P) ..... 213
**MAC 2312 Calculus II (P) ..... 213
**MAS 2103 Linear Algebra (P) ..... 213
**MGF 2202 Finite Mathematics (P) ..... 214
MAC 2313 Calculus III (P) ..... 214
**MAP 2302 Differential Equations (P) ..... 214
MGF 1114 Foundations of Math II (P) ..... 214
STA 2100 Statistical Simulation and Computation (P) ..... 213
*College Prep. Credit not applied toward degree. Placement testing required for admission.
**For Gordon Rule fulfillment, a " C " must be earned in this course. Placement testing required for admission.
MEDICAL LABORATORY TECHNOLOGY
MLT 1000C Introduction to MLT (O) ..... 214
MLT 2800C Clinical Laboratory Practicum I (O) ..... 215
MLT 2931 Medical Technology Review for the State Exam (O).. ..... 215
MLT 2933 Serology Update (O) ..... 216
MLT 2938 Advanced Hematology (O) ..... 216
MLT 2937 Advanced Clinical Microbiology (O) ..... 216
MLT 1937 Clinical Microbiology Update (O) ..... 215
MLT 2934 Immunohematology Update (O) ..... 215
MLT . 2935 Hematology and Coagulation Update (O) ..... 215
MLT 2932 Clinical Chemistry Update (O) ..... 215
MLT 1300C Hematology (O) ..... 214
MLT 1335C Coagulation and Blood Banking (O) ..... 214
MLT 1542C Serology and Urinalysis (O) ..... 214
MLT 2620C Clinical Chemistry (O) ..... 215
MLT 2400C Clinical Microbiology (O) ..... 215
MLT 2033 Medical Laboratory Career Orientation (O) ..... 216
MLT 2801C Clinical Practicum II (O) ..... 215
MLT 2040 Basic Concepts of Phlebotomy (O) ..... 214
MCB 1000 Introduction to Microbiology (P) ..... 216
METALLURGY
ETM 1800 Elementary Metallurgy (O) ..... 216
ETM 1820 Engineering Materials (O) ..... 216
MOTORCYCLE REPAIR
SER 1600 Introduction to Motorcycle Repair (O) ..... 216
SER 1610 Intermediate Motorcycle Repair (O) ..... 216
MUSIC
MUL 1010 Music Appreciation (P) ..... 217
MUH 1011 Introduction to Classical Music Appreciation (P) ..... 217
MUH 1951 Origins of Classical Music (P) ..... 217
MUN 1270 Orchestra ..... 217
MUT 1001 Fundamentals of Theory (P) ..... 217
MUT 1111 Theory of Music I (P) ..... 217
MUT 1112 Theory of Music II (P) ..... 217
MUT 2116 Theory of Music III (P) ..... 217
MUT 2117 Theory of Music IV (P) ..... 217
MUH 2111 Survey of Music History I (Greek Heritage through the Early Classical Style) (P) ..... 217
MUH 2112 Survey of Music History II (Late 18th Century through the 20th Century) (P) ..... 217
MUT 1241 Sight Singing and Ear Training I (P) ..... 218
MUT 1242 Sight Singing and Ear Training II (P) ..... 218
MUO 1020 Music Theatre I (P) ..... 218
MUO 1021 Music Theatre II (P) ..... 218
MUO 2022 Music Theatre III (P) ..... 218
MUO 2023 Music Theatre IV (P) ..... 218
MUE 1450 Woodwind Techniques (P) ..... 218
MUT 1460 Brass Techniques (P) ..... 218
MUE 1470 Percussion Techniques (P) ..... 218
MUT 1238 Jazz Keyboard Fundamentals I (P) ..... 222
MUT 1239 Jazz Keyboard Fundamentals II (P) ..... 222
MUT 1361 Jazz Harmony \& Theory I (P). ..... 222
MUT 1640 Intro to Jazz Improvisation (P) ..... 222
MUT 1641 Jazz Improvisation I (P) ..... 223
MUT 1642 Jazz Improvisation II (P) ..... 223
MUN 1711 Jazz Combo I (P) ..... 223
MUM 1623 Intro to Electronic Music (P) ..... 223
MUG 1101 Basic Conducting (P) ..... 218
MVK 1111 Class Piano I (P) ..... 218
MVK 1111 Class Piano II (P) ..... 218
MVK 2121 Class Piano III (P). ..... 218
MVK 2121 Class Piano IV (P) ..... 218
MVS 1116 Class Guitar I (P) ..... 218
MVS 1116 Class Guitar II (P) ..... 218
MVV 1111 Class Voice (P) ..... 219
MUN 1310 College Chorale I (P) ..... 219
MUN 1310 College Chorale II (P) ..... 219
MUN $2310 \quad$ College Chorale III (P) ..... 219
MUN 2310 College Chorale IV (P) ..... 219
MUN 1130 Symphonic Band I (P) ..... 219
MUN 1130 Symphonic Band II (P) ..... 219
MUN 2130 Symphonic Band III (P) ..... 219
MUN 2130 Symphonic Band IV (P) ..... 219
MUN 1710 Stage/Jazz Band I (P) ..... 219
MUN $1710 \quad$ Stage/Jazz Band II (P) ..... 219
MUN 2710 Stage/Jazz Band III (P) ..... 219
MUN 2710 Stage/Jazz Band IV (P) ..... 219
MUN 1720 Jazz/Rock Vocal Ensemble "Company" I (P)..... ..... 220
MUN 1720 Jazz/Rock Vocal Ensemble "Company" II (P) ..... 220
MUN 2720 Jazz/Rock Vocal Ensemble "Company" III (P) ..... 220
MUN 2720 Jazz/Rock Vocal Ensemble "Company" IV (P) ..... 220
MUN 1700 Jazz/Rock Instrumental Ensemble "Company" I (P) ..... 220
MUN 1700 Jazz/Rock Instrumental Ensemble "Company" II (P) ..... 220
MUN 2700 Jazz/Rock Instrumental Ensemble "Company" III (P) ..... 220
MUN 2700 Jazz/Rock Instrumental Ensemble "Company" IV (P) ..... 220
MUSIC (APPLIED)
Applied Music Principal Instruments - Semesters I and II (P). ..... 220
MVB 1311 Principal Applied Music - Trumpet I and II (P) ..... 220
MVB 1312 Principal Applied Music - French Horn I and II (P) . ..... 220
MVB 1313 Principal Applied Music - Trombone I and II (P) ..... 220
MVB 1314 Principal Applied Music - Baritone Horn I and II (P) ..... 220
MVB 1315 Principal Applied Music - Tuba I and II (P) ..... 220
MVK 1311 Principal Applied Music - Piano I and II (P) ..... 220
MVS 1313 Principal Applied Music - Organ I and II (P) ..... 220
MVP 1311 Principal Applied Music - Percussion I and II (P) ..... 220
MVS 1311 Principal Applied Music - Violin I and II (P) ..... 220
MVS 1312 Principal Applied Music - Viola I and II (P). ..... 220
MVS 1313 Principal Applied Music - Cello I and II (P) ..... 220
MVS 1314 Principal Applied Music - String Bass I and II (P) ..... 220
MVS 1316 Principal Applied Music - Guitar I and II (P) ..... 220
MVV $1311 \quad$ Principal Applied Music - Voice I and II (P) ..... 220
MVW 1311 Principal Applied Music - Flute I and II (P) ..... 220
MVW 1312 Principal Applied Music - Oboe I and II (P) ..... 221
MVW 1313 Principal Applied Music - Clarinet I and II (P) ..... 221
MVW 1314 Principal Applied Music - Bassoon I and II (P) ..... 221
MVW 1315 Principal Applied Music - Saxophone I and II (P) ..... 221
MVB 2321 Principal Applied Music - Trumpet III and IV (P) ..... 221
MVB 2322 Principal Applied Music - French Horn III and IV (P) ..... 221
MVB 2323 Principal Applied Music - Trombone III and IV (P) ..... 221
MVB 2324 Principal Applied Music - Baritone Horn III and IV (P) ..... 221
MVB 2325 Principal Applied Music - Tuba III and IV (P) ..... 221
MVK 2321 Principal Applied Music - Piano III and IV (P) ..... 221
MVK 2323 Principal Applied Music - Organ III and IV (P) ..... 221
MVP 2321 Principal Applied Music - Percussion III and IV ..... 221
MVS 2321 Principal Applied Music - Violin III and IV ..... 221
MVS 2322 Principal Applied Music - Viola III and IV (P) ..... 221
MVS 2323 Principal Applied Music - Cello III and IV (P) ..... 221
MVS 2324
Bass III and IV (P) ..... 221
MVS 2326 Principal Applied Music - Guitar III and IV (P) ..... 221
MVV 2321 Principal Applied Music - Voice III and IV (P) ..... 221
MVW 2321 Principal Applied Music - Flute III and IV (P) ..... 221
MVW 2322 Principal Applied Music - Oboe III and IV (P) ..... 221
MVW 2323 Principal Applied Music - Clarinet III and IV (P) ..... 221
MVW 2324 Principal Applied Music -Bassoon III and IV (P) ............................................. 221
MVW 2325 Principal Applied Music - Saxophone III and IV (P) ..... 221
MVB 1211 Secondary Applied Music - Trumpet I and II (P) ..... 221
MVB 1212 Secondary Applied Music - French Horn I and II (P) ..... 221
MVB 1213 Secondary Applied Music Trombone I and II (P) ..... 221
MVB 1214 Secondary Applied Music - Baritone Horn I and II (P) ..... 221
MVB 1215 Secondary Applied Music - Tuba I and II (P) ..... 221
MVK 1211 Secondary Applied Music - Piano I and II (P) ..... 221
MVK 1213 Secondary Applied Music - Organ I and II (P) ..... 221
MVP 1211 Secondary Applied Music Percussion I and II (P) ..... 221
MVS 1211 Secondary Applied Music - Violin I and II (P) ..... 221
MVS 1212 Secondary Applied Music - Viola I and II (P) ..... 221
MVS 1213 Secondary Applied Music - Cello I and II (P) ..... 221
MVS 1214 Secondary Applied Music - String Bass I and II (P) ..... 221
MVS 1216 Secondary Applied Music - Guitar I and II (P) ..... 221
MVV 1211 Secondary Applied Music - Voice I and II (P) ..... 221
MVW 1211 Secondary Applied Music - Flute I and II (P) ..... 221
MVW 1212 Secondary Applied Music - Oboe I and II ..... 221
MVW 1213 Secondary Applied Music - Clarinet I and II (P) ..... 222
MVW 1214 Secondary Applied Music - Bassoon I and II (P) ..... 222
MVW 1215 Secondary Applied Music Saxophone I and II (P) ..... 222
MVB 2221 Secondary Applied Music - Trumpet III and IV (P) ..... 222
MVB 2222 Secondary Applied Music - French Horn III and IV (P) ..... 222
MVB 2223 Secondary Applied Music - Trombone III and IV (P) ..... 222
MVB 2224 Secondary Applied Music - BaritoneHorn III and IV (P)222
MVB 2225 Secondary Applied Music - Tuba III and IV (P) ..... 222
MVK 2221 Secondary Applied Music - Piano III and IV (P) ..... 222
MVK 2223 Secondary Applied Music - Organ III and IV (P) ..... 222
MVP 2221 Secondary Applied Music -
Percussion III and IV (P) ..... 222
MVS 2221 Secondary Applied Music - Violin III and IV (P) ..... 222
MVS 2222 Secondary Applied Music - Viola III and IV (P) ..... 222
MVS 2223 Secondary Applied Music - Cello III and IV (P) ..... 222
MVS 2224 Secondary Applied Music - StringBass III and IV (P)222
MVS 2226 Secondary Applied Music - Guitar III and IV (P) ..... 222
MVV 2221 Secondary Applied Music - Voice III and IV (P) ..... 222
MVW 2221 Secondary Applied Music - Flute III and IV (P) ..... 222
MVW 2222 Secondary Applied Music - Oboe III and IV (P) ..... 222
MVW 2223 Secondary Applied Music - Clarinet III and IV (P) ..... 222
MVW 2224 Secondary Applied Music -Bassoon III and IV (P).222
MVW 2225 Secondary Applied Music - Saxophone III and IV (P) ..... 222
NURSING SCIENCE
NUR 1020C Nursing Fundamentals (O) ..... 223
NUR 1210C Medical and Surgical Nursing I (O) ..... 223
NUR 1211C Medical and Surgical Nursing II (O) ..... 223
NUR 2213C Medical and Surgical Nursing III (O) ..... 224
NUR 2520C Psychiatric - Mental Health Nursing (O) ..... 224
NUR 2423C Maternity Nursing (O) ..... 224
NUR 2310C Pediatric Nursing (O) ..... 225
NSP 2132 Nursing Management (O) ..... 225
NUR 2810C Practicum (O) ..... 225
OFFICE SYSTEMS TECHNOLOGY
OST 1100 Elementary Typewriting (D) ..... 225
OST 1110 Intermediate Typewriting (D) ..... 225
OST 1120 Advanced Typewriting (D) ..... 225
OST 1141 Keyboarding for Information Processing (O) ..... 225
OST 1145 Data Entry Applications (O) ..... 226
OST 1211 Introductory Shorthand (D) ..... 226
OST 1212 Intermediate Shorthand (D) ..... 226
OST 2213 Advanced Shorthand (D) ..... 226
OST 1201 ABC Shorthand I (Speedwriting) (O) ..... 226
OST 1202 ABC Shorthand II (Speedwriting) (O) ..... 226
OST 1221 Machine Shorthand I (O) ..... 226
OST 2222 Machine Shorthand II (O) ..... 226
OST 2401 Office Practice (O) ..... 226
OST 2323 Reprographics (O) ..... 226
OST 2320 Business Machines (O) ..... 226
OST 2601 Machine Transcription I (O) ..... 227
OST 2602 Machine Transcription II (O) ..... 227
OST 1711 Word Processing I (O) ..... 227
OST 1712 Word Processing II (O) ..... 227
OST 2604 Central Information Management Systems (O) ..... 227
OST 2389 CPS Review and Supervised Work Experience Seminar (O) ..... 227
OST 2491 Office Seminar and Supervised Work Experience (O) ..... 227
COM 1130 Secretarial Communications (O) ..... 227
ENC 2200 Business Communications (D) ..... 228
OST 2421 Legal Office Practice I (O) ..... 228
OST 2422 Legal Office Practice II (O) ..... 228
OST 2431 Legal Secretarial Practices and Procedures I (O) ..... 228
OST 2432 Legal Secretarial Practices and Procedures II (O) ..... 228
OST 2621 Legal Terminology and Transcription I (O) ..... 228
OST 2622 Legal Terminology and Transcription II (O) ..... 228
OST 2611 Medical Transcription I (O) ..... 228
OST 2612 Medical Transcription II (O) ..... 228
OST 2613 Medical Transcription III (O) ..... 229
MRE 1003 Medical Records I (O) ..... 229
MRE 1005 Medical Records II (O) ..... 229
MRE 1031 Medical Word Processing I (O) ..... 229
MRE 1032 Medical Word Processing II (O) ..... 229
APB 2190 Fundamentals of Medical Science (O) ..... 229
OST 2461 Medical Office Practice I (O) ..... 229
OST 2462 Medical Office Practice II (O) ..... 229
HSC 2531 Medical Terminology I (O) ..... 229
HSC 2532 Medical Terminology II (O) ..... 229
WCL 1940C Ward Clerk Practicum (O) ..... 229
MRE 2825 Medical Office Internship (O) ..... 230
MRE 2826 Medical Office Externship (O) ..... 230
OST V061 Office Skills Training ..... 228
PHILOSOPHY
PHI 1010 Introduction to Philosophy (P) ..... 230
PHI 1103 Critical and Creative Thinking (P) ..... 230
PHI 2100 Introduction to Logic (P) ..... 230
PHI $1450 \quad$ Philosophy of Psychology (P) ..... 230
PHI 2101 Applied Logic (P) ..... 230
PHI 2130 Symbolic Logic (P) ..... 230
PHI 2660 Introduction to Ethics (P) ..... 231
HSC 1160 Ethical Issues in Medicine (P) ..... 231
PHOTOGRAPHY
PGY 1101C Beginning Photography (O) ..... 231
PGY 1110C Intermediate Photography (O). ..... 231
PGY 1102C Advanced Photography (O) ..... 231
PGY 1120C Beginning Dark Room Photography (O) ..... 231
PGY 1121C Intermediate Dark Room Photography (O) ..... 231
PGY 1122C Advanced Dark Room Photography (O) ..... 231

## PHYSICAL EDUCATION

HLP 1081 Personal Wellness (O) ..... 234
PEM 1101 Fitness through Physical Activity (P) ..... 231
PEN 1121 Swimming I (P) ..... 232
PEL 1341 Tennis (P) ..... 232
PEL 1342 Tennis II (P) ..... 232
PEL 1111 Bowling (P) ..... 232
PEM 1140 Aerobic Conditioning (P) ..... 231
DAA 1010 Stage Movement and Theatre Dance ..... 232
PEN 2114 Advanced Lifesaving (Guard Training) (P) ..... 232
PEN 1122 Swimming II (P) ..... 232
PEL 1441 Racquetball (P) ..... 232
PEL 1442 Racquetball II (P) ..... 232
PEL 1121 Golf (P) ..... 232
PEL 1511 Soccer (P) ..... 232
PEN 1136 SCUBA - Basic (P) ..... 233
PEQ 1137 Dive Master Specialty (O) ..... 233
PEQ 1131 Equipment Specialty Instructor (O) ..... 233
PEQ 1139 Underwater Collecting Specialty (O) ..... 233
PEQ 1134 Drift Diver Specialty (O) ..... 233
PEQ 1135 Night Diver Specialty (O) ..... 233
PGY 1244 Underwater Photography ..... 233
PEQ 1132 Instructor Development Prep Course (O) ..... 233
PEQ 1133 Instructor Development Course (O) ..... 233
PEQ 1138 Instructor Evaluation Prep. Course (O) ..... 233
PEM 1405 Self Defense (P) ..... 232
PEN 1138 SCUBA - Advanced/Rescue (P) ..... 234
PEO 2013 Sports Officiating (D) ..... 234
PEL 2620 Team Sports for Women and Men II (P) ..... 234
LEI 2433 Community Recreation (D) ..... 234
PEM 1930 Physical Education: Special Topics. ..... 234
PEM 1931 Physical Education: Special Topics ..... 234
PEM 1932 Physical Education: Special Topics ..... 234
PEM 1933 Physical Education: Special Topics ..... 234
PHYSICAL EDUCATION - RECREATION
PEM 1953 Cheerleading (P) ..... 234
PEL 2219 Baseball (P) ..... 234
PEL 2624 Basketball (P) ..... 234
PEN 2124 Swimming (P) ..... 234
PEN 1113 Life Saving (P) ..... 232
PEL 2344 Tennis for Men and Women (Varsity) (P). ..... 234
PEL 2324 Volleyball (P) ..... 234
PEN 2151 Springboard Diving (P) ..... 234
PEL 2124 Golf (P) ..... 234
PHYSICAL SCIENCES
AST 1002 Astronomy (P) ..... 235
PSC 1311 Physical Science I (P) ..... 235
PSC 1341 Physical Science II (P) ..... 235
PSC 1342C Physical Science with Lab (P) ..... 235
PHYSICS
PHY 1020 Physics for Non-Science Majors (P) ..... 235
PHY 2053C General Physics I (P) ..... 235
PHY 2054C General Physics II (P) ..... 235
PHY 2048C Physics for Engineers I (P) ..... 235
PHY 2049C Physics for Engineers II (P) ..... 235
POLITICAL SCIENCE
POS 1041 American Government (P) ..... 235
INR 2002 Introduction to International Politics (P) ..... 236
CPO 2002 Comparative Political Systems (P) ..... 236
POS 2112 State and Local Government (P) ..... 236
INR 1332 U.S. Foreign Policy and Intelligence (P) ..... 236
PSYCHOLOGY
DEP 1930 Aspects of Aging (P) ..... 236
PSY 2012 Introduction to Psychology (P) ..... 236
EDP 2002 Educational Psychology (P) ..... 236
SLS 1211 Self Awareness (O) ..... 236
SLS 1212 Self Development (O) ..... 236
SLS 1213 Constructive Anger (O) ..... 237
SLS 1224 Coping with Loneliness and Grief (O) ..... 236
RADIOLOGIC TECHNOLOGY
RTE 1004 Introduction to Radiologic Technology ..... 238
RTE 1001 Radiologic Terminology (O) ..... 237
RTE 1308 Radiation Protection (O) ..... 237
RTE 1504C Radiologic Positioning I (O) ..... 237
RTE 1002 Radiologic Techniques I (O) ..... 237
RTE 1514C Radiologic Positioning II (O) ..... 237
RTE 1411 Radiologic Techniques II (O) ..... 237
RTE 1523C Radiologic Positioning III (O) ..... 237
RTE 2532 Radiologic Positioning IV (O) ..... 237
RTE 2613 Radiologic Techniques III (O) ..... 237
RTE 2563 Special Radiographic Procedures (O) ..... 238
RTE 2780 Radiologic Diseases (O) ..... 238
RTE 1814L Radiologic Clinical Education I (O) ..... 238
RTE 1822L Radiologic Clinical Education II (O) ..... 238
RTE 1823L Radiologic Clinical Education III (O) ..... 238
RTE 2838L Radiologic Clinical Education IV (O) ..... 238
RTE 2848L Radiologic Clinical Education V (O) ..... 238
RTE 2852L Radiologic Clinical Education VI (O) ..... 238
RTE 2866L Radiologic Clinical Educaton VII (O) ..... 238
RTE 2933 Radiologic Comprehensive Seminar (O) ..... 238
RTE 1473 Introduction to Quality Assurance ..... 238
CGS 1040 Introduction to Computer Literacy for Radiology ..... 238
READING
REA 0001 *College Prep Reading I ..... 239
REA 0002 *College Prep Reading II ..... 239
REA 1205 Advanced College Reading I (P) ..... 239
REA 1125 Reading/CLAST ..... 239
REA 1208 Advanced College Reading II (P) ..... 239
*College Preparatory. Courses do not count toward degree.
SOCIOLOGY
SYG 2000 Introduction to Sociology (P) ..... 239
SYG 2010 Social Problems (P) ..... 240
SYG 1410 Family Relations (P) ..... 240
SYG $2420 \quad$ The Family (P) ..... 240
SYG 2320 Deviant Behavior (D) ..... 240
SYG 2323 Criminal and Delinquent Behavior (D) ..... 240
SYG 1362 Adjustment for Retirement (D) ..... 240
SYG 1412 Marriage Encounter (D) ..... 240
SYG 1313 Social Roles of Single People (D) ..... 240
SPANISH
SPN 1000 Spanish for Daily Use I (P) ..... 240
SPN 1001 Spanish for Daily Use II (P) ..... 240
SPN 1010 Applied Conversational Spanish I (P) ..... 241
SPN 1011 Applied Conversational Spanish II (P) ..... 241
SPN 1012 Applied Conversational Spanish III (P) ..... 241
SPN 1120 Elementary Spanish I (P) ..... 241
SPN 1121 Elementary Spanish II (P) ..... 241
SPN 2200 Intermediate Spanish I (P) ..... 241
SPN 2201 Intermediate Spanish II (P) ..... 241
SPEECH
SPC 1050 Speech Improvement (P) ..... 241
SPC 1300 Interpersonal Communications (P) ..... 241
SPC 1010 Introduction to Speech Communications (P) ..... 241
SPA 1332 Sign Language I (P) ..... 242
SPA 1334 Sign Language II (P) ..... 242
SURVEYING
SUR 1321 Survey Drafting (O) ..... 242
SUR 1100 Elementary Surveying with Math (O) ..... 242
SUR 2101C Surveying I ..... 242
WATER/WASTEWATER TREATMENT
EVS V333 Wastewater "C" Certification ..... 242
EVS P343 Wastewater "B" Certification ..... 242
EVS P221 Wastewater "A" Certification ..... 242
EVS V133 Water "C" Certification ..... 243
EVS P247 Water "B" Certification ..... 243
EVS P241 Water "A" Certification ..... 243
WELDING
PMT 1123 Combination Welding I (O) ..... 243
PMT 1121 Electric Welding I (O) ..... 243
PMT 2930 Welding - Special (O) ..... 243
PMT 2931 Welding - Special (O) ..... 243
PMT 2932 Welding - Special (O) ..... 243
PMT 2933 Welding - Special (O) ..... 243
WOODWORKING
BCT 1111 Basic Woodworking (O) ..... 244
BCT 1121 Woodworking Workshop (O) ..... 244

## INDEX

Academic Advising ..... 20
Academic Awards ..... 35
Access to Educational Records ..... 48
Accreditation ..... 17
Activities ..... 44
Add and Drop Procedures ..... 34
Administration ..... 246
Admissions ..... 20
Adult Basic Education ..... 56
Advanced Placement ..... 54
Advisory Committees ..... 259
Associate in Arts Degree
General Education Requirements ..... 60
Agriculture ..... 63
Anthropology ..... 64
Art. ..... 64
Art Education ..... 64
Business Administration ..... 65
Biology ..... 66
Biology Education ..... 66
Chemistry ..... 67
Computer Science ..... 67
Criminal Justice/Corrections ..... 68
Drama ..... 68
Education ..... 69
Engineering ..... 69
English ..... 70
Forestry ..... 70
French ..... 71
Geology ..... 71
German. ..... 71
Health Education ..... 72
History ..... 72
Human Services ..... 72
Journalism ..... 73
Journalism/Public Relations ..... 73
Liberal Arts ..... 74
Marine Science ..... 74
Math ..... 75
Math Education ..... 75
Medical Technology ..... 76
Medicine/Dentistry ..... 76
Music ..... 76
Ocean Engineering ..... 77
Pharmacy ..... 78
Philosophy ..... 78
Physical Education/ Recreation ..... 78
Physical Therapy ..... 79
Physics Education ..... 80
Political Science ..... 80
Psychology ..... 80
Social Studies Education ..... 81
Social Welfare ..... 81
Sociology ..... 82
Spanish ..... 82
Speech ..... 82
Associate in Science- Degree ..... 86
General Education Requirements ..... 88
Accounting Technology
Degree Option: High-Tech Computer Accounting ..... 89
Agricultural - Business Technology Degree Options -
Animal Science ..... 91
Citrus ..... 91
Landscape ..... 91
Air Conditioning, Refrigeration
\& Heating Systems Technology ..... 92
Architectural Design \& Construction Technology ..... 93
Automotive Service Technology ..... 94
Award of Achievement
Child Care Center Management ..... 137
Restaurant Management ..... 137
Home Service Management ..... 138
Fashion Marketing Management ..... 138
Fashion Production
Management ..... 139
Scuba Industry Management ..... 139
Business Administration andManagementDegree Option -
Scuba Industry
Administration and
Supervision ..... 96
Building Construction Technology ..... 95
Child Development and Education Degree Option - Teacher Aide ..... 97
Computer Programming and Analysis ..... 98
Criminal Justice TechnologyDegree Option -
Corrections ..... 99
Dental Hygiene ..... 101
Dental Laboratory Technology and Management ..... 102
Drafting and DesignTechnology
Degree Options -Civil Drafting103
Mechanical Drafting ..... 104
Commercial Art ..... 104
Electronics EngineeringTechnologyDegree Option -Computer Electronics .... 105
Emergency Medical ServicesTechnology106
Fashion Marketing Management ..... 107
Financial Services
Degree Options -
Banking ..... 108
Savings \& Loan ..... 109
Fire Science Technology ..... 109
Health Care Management ..... 111
Human Services Technology ..... 112
Interior Design Technology.. ..... 112
Legal Assistant ..... 113
Marketing Management ..... 114
Medical LaboratoryTechnology115
Nursing - R.N. ..... 115
Office Systems TechnologyDegree Options mMedical Records118
Legal Secretarial ..... 118
Medical Secretarial ..... 119
Word Processing ..... 120
Office Management ..... 119
Radiologic Technology ..... 120
Restaurant Management Degree Option - Food Service ..... 121
Athletics ..... 46
Attendance ..... 22
Board of Trustees ..... 4
Bookstore ..... 42
Calendar ..... 8
Career Training Programs ..... 129
Center for Personalized
Instruction (CPI) ..... 57
Certificates ..... 123
Accounting Applications ..... 124
Business Data Processing ..... 124
Emergency Medical Technology ..... 125
Office Systems Specialist ..... 125
Paramedic ..... 127
Small Business Management ..... 127
Challenge Examination ..... 55
Change of Address ..... 50
Child Care Center ..... 44
Classification of Students ..... 22
CLAST ..... 36
CLEP ..... 54
Clubs and Organizations ..... 44
College Preparatory Classes ..... 52
Common Course Numbering System ..... 53
Communications and Computation Requirements ..... 40
Continuing Education ..... 56
Cosmetology ..... 130
Course Descriptions ..... 142
Course Directory ..... 263
Dean's List ..... 35
Deferred Credit Enrollment. ..... 54
Directed Independent Study ..... 55
Dual Enrollment ..... 22
Early Admissions ..... 22
Educational Services ..... 20
Emergency MedicalTechnology (EMT)189
Essential Skills ..... 39
34
34
New Student Orientation
New Student Orientation ..... 46
Performing Arts Series
21
Placement Testing133
Extended Course Load .56 Publications ..... 43
.17 Refund Policy Facilities ..... 31
Faculty .250 Registration ..... 24
Fees .24 Scholarships ..... 32
Financial Aid 32 Sexual Harassment ..... 50
Foreign Students 23 Student Identification ..... 42
Gordon Rule .40 Student Responsibility ..... 47
Grading System 35 Transcripts ..... 48
Graduation 47 Transfer Students ..... 24
Handicapped Student Services 34 Transient Students ..... 23
Health Services 42 Transportation and Parking. ..... 43
History of IRCC 17 Veterans Affairs Office ..... 32
Housing 42 Vocational Transition ..... 58
Job Placement 33 Withdrawal Procedures ..... 34
Maps (Area) 294 Women's Program ..... 57

## INDIAN RIVER COMMUNITY COLLEGE LOCATION MAP

## MAIN CAMPUS, FORT PIERCE <br> 3209 Virginia Ave.

Fort Pierce, FL 34954-9003
(407) 468-4700


## INDIAN RIVER COMMUNITY COLLEGE LOCATION MAP CHASTAIN CENTER, STUART 2400 S.E. Salerno Rd. <br> Stuart, FL 34997 <br> (407) 283-6550



## INDIAN RIVER COMMUNITY COLLEGE LOCATION MAP

## DIXON HENDRY CENTER, OKEECHOBEE

2229 N.W. 9th Ave.
Okeechobee, FL 34972
(813) 763-8017


## INDIAN RIVER COMMUNITY COLLEGE LOCATION MAP

INDIAN RIVER ACADEMY<br>5400 Tedder Road

Fort Pierce, FL 34954


## INDIAN RIVER COMMUNITY COLLEGE LOCATION MAP

MUELLER CENTER, VERO BEACH<br>5880 Lundberg Rd.<br>Vero Beach, FL 32966<br>(407) 569-0333



## INDIAN RIVER COMMUNITY COLLEGE LOCATION MAP

## PORT ST. LUCIE COMMUNITY CENTER 200 S.W. Prima Vista Blvd. Port St. Lucie, FL 34952 <br> (407) 879-4199





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In compliance with various state and federal regulations, the District Board of Trustees for Indian River Community College has approved nondiscriminatory practices and policies concerning enrollment, admissions, and equal opportunity employment. This includes an Affirmative Action Program. The following statements are made to officially publicize such actions:
Title VII, Civil Rights Act of 1964: Prohibits discrimination in employment on the basis of race, color, religion, national origin, or sex. This covers all terms and conditions of employment, including recruitment, selection, discharge, promotion opportunities, training, wages, leave, retirement and fringe benefits. Section 504, Rehabilitation Act of 1973: Prohibits discrimination against handicapped persons on the basis of handicap. The provisions of this law are equally applicable to employees, employment applicants, students and student admissions.
Title VI-Civil Rights Act of 1964 as Amended: No persons shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving Federal financial assistance from the H.E.W. department.
Title IX-Educational Amendments of 1972, Prohibits Sex Discrimination in Education: Indian River Community College does not illegally discriminate on the basis of sex in its employment practices for both academic and non-academic personnel, or in its admission of students, or in its educational programs or activities. Any inquiries concerning the application of Title IX should be made to the College Personnel Director, or to the Director, Office of Civil Rights, HEW, Washington, D.C. 20201.
Other laws and regulations with which we are in compliance are The Equal Pay Act of 1963; Executive Order \# 1246: Title VIII, Public Health Service Act; Age Discrimination in Employment Act of 1967, and the Florida Human Rights Act.
Although the college catalog is not a contract, it does bind the student to meet the requirements contained within. The college reserves the right to change any requirements for the benefit of the student and the college.
Indian River Community College ensures equal opportunity and affirmative action in its educational and employment policies and procedures.

Main Campus
3209 Virginia Avenue
Non-Profit Orgn.
U.S. Postage

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Chastain Center 2400 S.E. Salerno Rd. Stuart, FL 34997
407-283-6550
Mueller Center 5880 Lundberg Rd. Vero Beach, FL 32966 407-569-0333
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## Port St. Lucie Site

``` 200 S.W. Prima Vista Blvd. Port St. Lucie, FL 34952 407-879-4199
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Dixon Hendry Center 2229 N.W. 9th Ave. Okeechobee, FL 34972 813-763-8017

IRCC ensures equal opportunity and affirmative action in its educational and employment policies and procedures.


[^0]:    *Official Holiday - All offices closed. No classes.

[^1]:    *These courses will satisfy the curriculum required by the Bureau of Fire Standards and Training for the Fire Officer 1 Certificate Examination: FFP-2130, FFP-1620, FFP-2150, FFP-2400, FFP-1200, FFP2500 and FFP-2501

[^2]:    + These courses will satisfy the curriculum required by the Bureau of Fire Standards and Training for Fire Inspector Certification Examination: FFP-1200, FFP-1326, FFP-1623, FFP-2300 and FFP 1320

[^3]:    *Students who have satisfactorily completed one year of high school typewriting should enroll in OST 1110 . Students who have satisfactorily completed two years of high school typewriting should enroll in OST 1120.
    **Students who have satisfactorily completed one year of high school shorthand should enroll in OST 1212.

[^4]:    *Students who have satisfactorily completed one year of high school typewriting should enroll in OST 1110. Students who have satisfactorily completed two years of high school typewriting should enroll in OST 1120.
    **Students who have satisfactorily completed one year of high school shorthand should enroll in OST 1212.

[^5]:    *Students who have satisfactorily completed one year of high school typewriting should enroll in OST 1110. Students who have satisfactorily completed two years of high school typewriting should enroll in OST 1120.

[^6]:    ART 1301C Drawing (P)
    5 hours- 3 credits
    A continuation of ART 1300C with more emphasis on personal creativity. Includes an introduction to figure drawing using live models. Prerequisite: ART 1300C.

[^7]:    *Credit not awarded if student has already completed APB 1150.
    **Permission of Instructor is required.

[^8]:    *Prerequisite: Florida State Certified Law Enforcement, Corrections, and Probation Officers only or Permission of Criminal Justice Department.

[^9]:    *Prerequisite: Florida State Certified Law Enforcement, Corrections, and Probation Officers only or Permission of Criminal Justice Department.

[^10]:    *Prerequisite: Florida State Certified Law Enforcement, Corrections, and Probation Officers only or Permission of Criminal Justice Department.

[^11]:    *College preparatory. Credit not applied toward degree. In addition to classroom time, this course requires two (2) hours per week in the Center for Personalized Instruction.

[^12]:    *One of five courses for Fire Inspector.
    **One of seven courses for Fire Officer I.

[^13]:    *FRE 2201 Intermediate French II (P) 4 credits
    Continuation of FRE 2200. Prerequisite: FRE 2200 or equivalent.

[^14]:    *These courses meet Foreign Language requirement for university admission.

[^15]:    *These are Gordon Rule courses. A minimum grade of " C " and 2,000 written words are required in each course.

[^16]:    **MGF 2202 Finite Mathematics (P)
    3 credits
    Major topics are logic, geometry, probability and counting, descriptive statistics, sets and venn diagrams, and fundamental concepts of modern mathematics such as equations and inequalities, exponents and functions. Prerequisite: MAC 1102 or MAC 1104.
    **MAC 2313 Calculus III (P)
    5 credits
    Calculus of several variables including limits, partial derivatives, multiple integrals, vector functions, line integrals, cylindrical and spherical coordinates. Prerequisite: MAC 2312 and MAS 2103.
    **MAP 2302 Differential Equations ( $\mathbf{P}$ ) 3 credits Solutions of first order differential equations and applications, solutions of second order linear differential equations and applications, series solutions and numerical methods, the laplace transform. Prerequisite: MAC 2312.
    MGF $1114 \quad$ Foundations of Math II (P) $\mathbf{3}$ credits Algorithms, properties of fundamental operations, error analysis, introductory number theory, geometry.

[^17]:    **For Gordon Rule fulfillment, a " $\mathrm{C}^{\prime \prime}$ must be earned in this course. Placement testing required for admission.

[^18]:    *Audition Required.

[^19]:    *The code letter " P " designates "academic" courses; the code letter " O " designates "occupational" courses; the code letter "D" designates "dual" courses.

