VALENCIA
COMMUNITY COLLEGE

A Community College Publicly Supported
by the State of Florida.

WEST CAMPUS
1800 SOUTH KIRKMAN ROAD
ORLANDO, FLORIDA 32811

EAST CAMPUS
701 NORTH ECONLOCKHATCHEE TRAIL
ORLANDO, FLORIDA 32807

TELEPHONE (305) 299-5000

DOWNTOWN CENTER
1 WEST CHURCH STREET
ORLANDO, FLORIDA 32801
Valencia Community College subscribes to and endorses the non-discrimination clause in Section 202, Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein. This statement includes compliance with 41 CFR Chapter 60, Part I (Job and Recruitment Policies Related to Sex).
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### Registration Dates

<table>
<thead>
<tr>
<th>SESSION</th>
<th>REGISTRATION DATES</th>
<th>CLASSES BEGIN</th>
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<tr>
<td>I</td>
<td>July 19-August 6</td>
<td>September 7</td>
<td>December 21</td>
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<tr>
<td>II</td>
<td>November 15-19</td>
<td>January 6</td>
<td>April 19</td>
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<tr>
<td>IIIA</td>
<td>November 29 - December 10</td>
<td>April 25 (eve.)</td>
<td>June 16</td>
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<tr>
<td>IIIB</td>
<td>March 21-31</td>
<td>April 26 (day)</td>
<td>August 11</td>
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<td>June 20 (eve.)</td>
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<td>June 21 (day)</td>
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### Session Dates

**1977**
VALENCIA COMMUNITY COLLEGE
Orlando, Florida
Calendar for Session I
1976-1977
(Subject to Change)

July 19 (Monday) through August 6 (Friday)
Advanced registration for Session I, 1976-77, for currently enrolled students, and returning or new students on a space available basis. Academic counseling should be arranged prior to the appointment.

July 30 (Friday)
Last day to make application for financial aid for the 1976-77 academic year.

August 24 (Tuesday)
By this date admission requirements should have been met and final registration appointments made for Session I, 1976-77. Students applying after this date will be considered on an individual basis.

August 31 (Tuesday)
All faculty report for duty at 8:00 a.m.

September 1 (Wednesday) and September 2 (Thursday)
Late registration for Session I, 1976-77, by appointment, on a space available basis.

September 6 (Monday)
Labor Day Holiday. Administrative offices will be closed.

September 7 (Tuesday)
Classes begin for Session I, 1976-77.

September 7 (Tuesday) through September 10 (Friday) and September 13 (Monday)
DROP-ADD PERIOD. Schedule changes and adjustments on these dates only (9:00 a.m. to 3:00 p.m. and 5:00 p.m. to 7:00 p.m.)

September 13 (Monday)
Deadline for refund requests for Session I, 1976-77.

October 26 (Tuesday)
Career Education Program. Supper hour and evening classes will not meet. Day classes will meet as usual.

November 15 (Monday) through November 19 (Friday) and November 29 (Monday) through December 10 (Friday)
Advanced registration for Session II, 1976-77, by appointment for currently enrolled students and returning or new students on a space available basis. Academic counseling should be arranged prior to the appointment.

November 24 (Wednesday)
Supper hour and evening classes will not meet. Day classes will meet as usual.

November 25 (Thursday) and November 26 (Friday)
Thanksgiving Holiday for faculty, staff and students.

November 27 (Saturday)
Classes will not meet.

December 1 (Wednesday)
Last day to make application for graduation at the end of Session I, 1976-77.

December 13 (Monday)
By this date admission requirements should have been met for Session II, 1976-77. Students applying after this date will be considered on an individual basis.

December 15 (Wednesday) through December 21 (Tuesday)
Final examination period for Session I classes. (A final examination schedule will be published.)
December 21 (Tuesday)  End of Session I, 1976-77.
December 22 (Wednesday) Final grades may be turned in as late as 12:00 noon.
December 23 (Thursday) through January 2 (Sunday) Christmas and New Year Holiday. Administrative offices will be closed.

Calendar for Session II
1976-1977
(Subject to Change)

November 15 (Monday) through November 19 (Friday) and November 29 (Monday) through December 10 (Friday) Advanced registration for Session II, 1976-77, by appointment for currently enrolled students and returning or new students on a space available basis. Academic counseling should be arranged prior to the appointment.

December 13 (Monday) By this date admission requirements should have been met for Session II, 1976-77. Students applying after this date will be considered on an individual basis.

January 3 (Monday) All faculty report for duty at 8:00 a.m.
January 3 (Monday) Late registration for Session II, 1976-77, by appointment on a space available basis.
January 6 (Thursday) Day and evening classes begin for Session II, 1976-77.
January 6 (Thursday) through January 12 (Wednesday) DROP-ADD PERIOD. Schedule changes and adjustments on these dates only (9:00 a.m. to 3:00 p.m. and 5:00 p.m. to 7:00 p.m.)

February 28 (Monday) Spring Holiday. Administrative offices will be closed.
March 1 (Tuesday) Last day to make application for graduation at the end of Session II, 1976-77.
March 21 (Monday) through March 31 (Thursday) Advanced registration for Session IIIA and IIIB, 1976-77, by appointment, for currently enrolled students and returning or new students on a space available basis. Academic counseling should be arranged prior to the appointment.

March 23 (Wednesday) Matador Field Day. Day classes dismissed between 11:00 a.m. and 5:00 p.m. Supper hour and evening classes will meet as usual.
April 7 (Thursday) Supper hour and evening classes will not meet. Day classes will meet as usual.
April 8 (Friday) through April 10 (Sunday) Easter Holiday for faculty, staff and students.
April 9 (Saturday) Classes will not meet.
December 1 (Wednesday) Last day to make application for graduation at the end of Session II, 1976-77.

April 13 (Wednesday) through April 19 (Tuesday) Final examination period for Session II classes. (A final examination schedule will be published.)
April 18 (Monday) By this date admission requirements should have been met and final registration appointments made for Session
Calendar for Session IIIA  
1976-1977  
(Subject to Change)

<table>
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<th>Date</th>
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<tbody>
<tr>
<td>April 19 (Tuesday)</td>
<td>End of Session IIIA, 1976-77. Students applying for admission after this date will be considered on an individual basis.</td>
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<tr>
<td>April 20 (Wednesday)</td>
<td>Final grades may be turned in as late as 9:00 a.m.</td>
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<tr>
<td>April 21 (Thursday)</td>
<td>GRADUATION 8:00 p.m.</td>
</tr>
<tr>
<td>April 22 (Friday)</td>
<td>Semester break. Administrative offices will be closed.</td>
</tr>
<tr>
<td>March 21 (Monday)</td>
<td>Advanced registration for Session IIIA and IIIB, by appointment, for currently enrolled students and returning or new students on a space available basis. Academic counseling should be arranged prior to the appointment.</td>
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<tr>
<td>through March 31 (Thursday)</td>
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<tr>
<td>April 18 (Monday)</td>
<td>By this date admission requirements should have been met for Session IIIA, 1976-77. Students applying for admission after this date will be considered on an individual basis.</td>
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<tr>
<td>April 22 (Friday)</td>
<td>Non-duty day for faculty and staff. Administrative offices will be closed.</td>
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<tr>
<td>April 25 (Monday)</td>
<td>All faculty report for duty at 8:00 a.m.</td>
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<tr>
<td>April 25 (Monday)</td>
<td>Evening classes begin for Session IIIA, 1976-77.</td>
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<tr>
<td>April 25 (Monday)</td>
<td>Late registration for Session IIIA, 1976-77, by appointment on a space available basis.</td>
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<tr>
<td>April 26 (Tuesday)</td>
<td>Day classes begin for Session IIIA, 1976-77.</td>
</tr>
<tr>
<td>April 25 (Monday)</td>
<td>DROP-ADD PERIOD. Schedule changes and adjustments on these dates only (9:00 a.m. to 3:00 p.m. and 5:00 p.m. to 7:00 p.m.).</td>
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<tr>
<td>and April 26 (Tuesday)</td>
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<tr>
<td>April 26 (Tuesday)</td>
<td>Deadline for refund requests for Session IIIA, 1976-77.</td>
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<tr>
<td>May 30 (Monday)</td>
<td>Memorial Day Holiday for faculty, staff and students.</td>
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<tr>
<td>June 1 (Wednesday)</td>
<td>Advanced registration for Session IIIB, 1976-77, by appointment, for currently enrolled students and returning or new students on a space available basis. Academic counseling should be arranged prior to the appointment.</td>
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<td>through June 10 (Friday)</td>
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<td>June 3 (Friday)</td>
<td>Last day to make application for graduation at the end of IIIA, 1976-77.</td>
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<tr>
<td>June 13 (Monday)</td>
<td>By this date admission requirements should have been met for Session IIIB, 1976-77. Students applying after this date will be considered on an individual basis.</td>
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<tr>
<td>June 15 (Wednesday)</td>
<td>Final examination period for Session IIIA classes. (A final examination schedule will be published.)</td>
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<td>and June 16 (Thursday)</td>
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<td>June 16 (Thursday)</td>
<td>End of Session IIIA, 1976-77.</td>
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<tr>
<td>June 17 (Friday)</td>
<td>Final grades may be turned in as late as 12:00 noon.</td>
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## Calendar for Session IIIB
### 1976-1977
**(Subject to Change)**

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<td>Advanced registration for Session IIIB, 1976-77, by appointment, for currently enrolled students and returning or new students on a space available basis. Academic counseling should be arranged prior to the appointment.</td>
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<tr>
<td>June 13 (Monday)</td>
<td>By this date admission requirements should be met for Session IIIB, 1976-77. Students applying after this date will be considered on an individual basis.</td>
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<tr>
<td>June 20 (Monday)</td>
<td>All faculty report for duty at 8:00 a.m.</td>
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<tr>
<td>June 20 (Monday)</td>
<td>Evening classes begin for Session IIIB, 1976-77.</td>
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<tr>
<td>June 20 (Monday)</td>
<td>Late registration for Session IIIB, 1976-77, by appointment, on a space available basis.</td>
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<tr>
<td>June 21 (Tuesday)</td>
<td>Day classes begin for Session IIIB, 1976-77.</td>
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<td>June 20 (Monday) and June 21 (Tuesday)</td>
<td>DROP-ADD PERIOD. Schedule changes and adjustments on these dates only (9:00 a.m. to 3:00 p.m. and 5:00 p.m. to 7:00 p.m.)</td>
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<td>June 21 (Tuesday)</td>
<td>Deadline for refund requests for Session IIIB, 1976-77.</td>
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<tr>
<td>July 4 (Monday)</td>
<td>Independence Day Holiday for faculty, staff and students.</td>
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<tr>
<td>July 18 (Monday) through August 5 (Friday)</td>
<td>Advanced registration for Session I, 1977-78, by appointment, for currently enrolled students and returning or new students on a space available basis. Academic counseling should be arranged prior to the appointment.</td>
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<tr>
<td>July 29 (Friday)</td>
<td>Last day to make application for financial aid for the 1977-78 academic year.</td>
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<tr>
<td>August 1 (Monday)</td>
<td>Last day to make application for graduation at the end of Session IIIB, 1976-77.</td>
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<tr>
<td>August 10 (Wednesday) and August 11 (Thursday)</td>
<td>Final examination period for Session IIIB classes. (A final examination schedule will be published.)</td>
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<td>August 11 (Thursday)</td>
<td>End of Session IIIB, 1976-77.</td>
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<tr>
<td>August 12 (Friday)</td>
<td>Grades may be turned in as late as 12:00 noon.</td>
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DISTRICT BOARD OF TRUSTEES

Mrs. Dan L. McKinnon  
*Chairman*

Andrew N. Serros  
*Vice Chairman*

Albert H. Chubb  
Dr. James R. Smith  
Mrs. Barbara G. Lupfer

Raymer F. Maguire, Jr.  
Murray W. Overstreet, Jr.  
Joseph B. Shirah
COLLEGE ADMINISTRATION

JAMES F. GOLLATTSCHECK
President

COLLEGE ADMINISTRATION

James F. Gollattscheck ........................................ President
Richard J. O'Sullivan ........................................... Vice President for Administration
Robert W. Gilbert ............................................. Vice President for Development and Facilities Planning
Lee P. Young ..................................................... Vice President for Business Affairs
Gloria W. Raines ................................................ Assistant to the President for College-Wide Instructional Services
Claudia E. Pennington .......................................... Dean for Learning Resources
W. Dean Holland ................................................ Director of Accounting and Controller
Louise McMullan ................................................. Director of Personnel Services
James P. Mulcahy ................................................ Director of Community Relations
Ronald W. Reinighaus ........................................ Director of Resource Development

OPEN CAMPUS ADMINISTRATION

Charles W. Sample ............................................... Provost
Olin R. Fischer, Jr. .............................................. Director of Community Instructional Resources
W. Michael Hooks ............................................. Director of Community Instructional Programs

WEST CAMPUS ADMINISTRATION

James S. Kellerman ............................................... Provost
James R. Richburg ............................................... Dean of Academic Affairs
Jerry W. Odom ................................................... Dean of Student Affairs
A. Qurentia Thom ................................................ Chairman of Fine Arts Department
Thelma J. Dudley ................................................ Chairman of Basic Studies Department
Fred E. Hild ....................................................... Chairman of Business Related Programs
Donald J. Tighe ................................................... Chairman of Communications Department
H. Eugene Simmons ............................................... Chairman of Counseling Department
Rosario Martinez ................................................ Chairman of Foreign Language Department
Luis E. Folgueras ................................................. Chairman of Health Related Programs
J. Louis Schlegel ................................................ Chairman of Humanities Department
Louis M. Edwards ............................................... Chairman of Mathematics Department
Larry N. Graham ................................................ Acting Chairman of Music Department
Boyd L. Johnson ................................................ Chairman of Physical Education Department
Robert L. Milke ......................... Chairman of Public Safety Related Programs
Ben H. Lynd .............................. Chairman of Science Department
William C. Prentiss ...................... Chairman of Social Science Department
Robert L. Carmody .................... Chairman of Technical and Engineering Related Programs

EAST CAMPUS ADMINISTRATION

David L. Evans .............................. Provost
Ruby M. Beal ................................. Dean
Thomas J. Ribley .......................... Director of Instructional Development
Paulette S. Poyner ...................... Coordinator of Learning Resources
FACULTY AND STAFF

GOLLATTSCHECK, JAMES F. .................................................. President
B.A., University of Florida; M.Ed., University of Florida; Ph.D., Florida State University

ADAMS, MARY W. ............................................................... Speech
B.S., Indiana State College; M.A., Western Michigan University

ANDERSON, GLYNTA B. ..................................................... Education
B.S., Texas College of A&I; M.Ed., The University of Texas

APPLEBAUM, IVAN R. ...................................................... Area Coordinator in Psychology
B.S., Rollins College; M.S., Rollins College

ARCHAMBEAULT, WILLIAM G. (On Leave '75-'76) .... Preventions & Corrections
B.S., Indiana State University; M.A., Indiana State University

ARNOLD, KENNETH ......................................................... Supervisor, Air Conditioning and Refrigeration

BAKER, MARION H. ........................................................... Chemistry
B.A., Swarthmore College; M.S., University of Michigan

BALL, JASIEL N. ............................................................... Supervisor of Custodial Maintenance

BARFIELD, ONA M. (On Leave '75-'76) ......................... English
A.B., Stetson University; M.A., Stetson University

BEAL, RUBYE ................................................................. Dean, East Campus
B.A.E., University of Florida; M.Ed., University of Florida; Ed.D., University of Florida

BENEFIELD, JACK W. ..................................................... Area Coordinator for Materials Production
B.S. Ed., University of Georgia; M.Ed., University of Georgia

BENNETT, LULA B. ............................................................. Political Science
A.B., Valdosta State College; M.A. T., Rollins College

BLACKNEY, W. RICHARD ................................................... Art
B.S., Western Michigan University, M.A., Western Michigan University

BOARDMAN, WILLIAM M. ................................................... Superintendent of Physical Plant
B.S., University of Alabama

BRADBURY, JACK E. .......................................................... Psychology and Sociology
B.S., Indiana State University; M.S., Indiana State University; Ed.D., Indiana State University

BROWN, LARNA ................................................................. Coordinator, Institute for Lifetime Learning
B.A., Florida Technological University; M.S., Florida Technological University

BUCKHANON, ANNIE R. .................................................... Counselor
B.S., Florida A&M; M.Ed., Florida Technological University

BURROWS, LILLIAN L .......................................................... Nursing
R.N., Mound Park Hospital; B.S.N., George Peabody College for Teachers; M.P.H., University of North Carolina

BUTLER, FANNIE B. ............................................................ History
B.S., Bluefield State College; M.A., West Virginia University

BYRNE, THOMAS J. .................. Political Science
B.A., Marquette University; M.A., University of Florida

CAPRAUN, LYNN W. ....................................................... Respiratory Therapy
B.S., Florida Technological University

CARRIGNAN, ANN MARIE .................................................. Nursing
B.S. N., St. Anselm College; M.S., Boston University

CARMODY, ROBERT L. .................. Chairman, Technical & Engineering Related Programs, West Campus
B.A., Michigan State University; M.A., Rollins College
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ADVISORY COMMITTEES FOR CAREER & COMMUNITY PROGRAMS

Valencia Community College recognizes the need for utilizing the resources of individuals within the community to help develop realistic and practical career and community programs. It is essential that career programs be cooperatively planned and that a close working relationship exist among career educators, industry, business and labor in order to create a marketable product (the student). To this end Advisory Committees are established to assist in the development and evaluation of new curricula and for constant reevaluation and updating of those curricula presently offered. In general, the duties of the Advisory Committees are to advise the professional staff of Valencia on such matters as current and projected employment needs, curricula content, equipment and facilities.

The Advisory Committees serving Valencia Community College have contributed tremendous aid and assistance in the development of career programs which is reflected in the strength and effectiveness of the curricula offered.

There are three types of advisory committees:

1. The General Advisory Committee is composed of one representative (usually the chairman) from each specific Program Advisory Committee. Its purpose is to relate the total occupational education effort to the community and to provide an atmosphere for liaison among the several Program Advisory Committees.

2. The Program Advisory Committee is composed of representatives from the specific occupational area concerned.

3. The Community Advisory Committee is composed of representatives from the community and Valencia Community College.
PROGRAM ADVISORY COMMITTEE

Air Conditioning and Refrigeration Technology

Mr. J. Wesley Floret, Chairperson
Floret Sales Corporation

Mr. Robert L. Carmody, Acting Secretary
Valencia Community College

Mr. Wiley Cauthen, Manager
Industrial Sales
Florida Gas Transmission Company

Mr. William C. Denson
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Mr. John Hays
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Mr. Sidney Leopold
Mid-Florida Technical Institute

Mr. Dave McDuffie, President
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Mr. Donald F. Meyers
Marketing Specialist
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Mr. George S. Munson, President
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Mr. David A. Ritchie, Chief Engineer
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Mr. John Simonds
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Mr. Roberto A. Guedes
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Mr. Paul C. Palmer, Jr.
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GENERAL INFORMATION

HISTORY

Valencia Junior College was organized in February, 1967, by the Orange County Board of Public Instruction and the State Board of Education under authority granted by the 1961 session of the Florida Legislature.

In the fall of 1967, the Charter Class, limited to freshman students, began classes in temporary facilities at 2908 West Oak Ridge Road.

In accordance with state law, the College Advisory Committee became the Valencia Junior College District Board of Trustees and replaced the Orange County Board of Public Instruction as the governing body of the college on July 1, 1969.

The Southern Association of Colleges and Schools granted full accreditation to the college in the fall of 1969.

In line with the expanding role of the college in community education, the name of the college was changed to Valencia Community College on July 1, 1971.

In September, 1971, the college moved to its first permanent campus of 185 acres, the West Campus, at 1800 South Kirkman Road, Orlando. The enrollment for the college reached 6,721 credit students for the Winter session, 1975-76.

In July, 1974, the Open Campus was created. With its administrative offices located in the college's Downtown Center, at One West Church Street, the concept of the Open Campus is to bring needed courses to residents of the college district by offering a variety of courses and/or programs near their homes or places of employment. An additional 7,500 Central Florida residents were enrolled in non-credit continuing education courses during the 1975-76 college year through the Open Campus.

Valencia's East Campus opened in the fall of 1975. It is located on an 80 acre site at 701 North Econolockhatchee Trail.

The Valencia Community College District Board of Trustees on February 20, 1974 and the State Board of Education in May of 1974 approved the addition of Osceola to the college district.

PURPOSE

GUIDING PRINCIPLES, OBJECTIVES, AND FUNCTIONS OF VALENCIA COMMUNITY COLLEGE

Guiding Principles — In accordance with the principles specified by the Florida State Legislature and outlined by the Community College Council,
the following guiding principles have been adopted for Valencia Community College:

A. Every effort shall be made to remove the geographic, economic, and cultural barriers to higher education. All citizens should be encouraged to continue their education to the limits of their abilities and interests.

B. The college shall provide a diversity of programs to meet the needs of the community.

C. The college shall attempt to instill in all its students an understanding of the value and necessity of work. An appreciation of all workers and a respect for all types of work shall be cultivated.

D. The college shall attempt to emphasize the fact that the rights of citizens in a democracy are inseparably associated with their responsibilities.

E. The college shall attempt to instill in each student a desire for continued learning which will help him understand and adapt to the many rapid changes in contemporary American society.

Objectives – In conformity with the principles described in the previous paragraphs, Valencia Community College has developed the following specific objectives:

A. To provide a two year college parallel program which will prepare students to transfer to senior colleges and universities upon completion of an Associate in Arts Degree.

B. To provide career programs that will prepare the student for gainful employment in the community upon completion of the Associate in Science Degree.

C. To provide continuing education courses, programs and activities to meet the needs of the community in the areas of vocational training, cultural and recreational activities, and to upgrade professional skills as requested by the citizens of the college district.

D. To provide guidance and counseling services for all students. These services shall be available to day and evening students and shall be organized to assist the students in a self-evaluation and in making appropriate decisions dealing with academic and career planning.

E. To provide basic and developmental programs to give students needing academic assistance a greater chance for success.

F. To provide, as a community service, cultural, recreational, and personal improvement programs designed to meet individual needs and interests.

G. To provide educational leadership, especially in the improvement of instruction, in research, and in curriculum.

H. To provide an additional cultural center for the community.
Functions — The functions of Valencia Community College are as varied as the students who seek admission. In fact, the effective role of any college can best be described by the services offered to its clientele. Thus, for Valencia Community College, the six major roles and functions include:

A. The Transfer Function — Valencia Community College provides the first two years of study leading to a baccalaureate degree. In addition to general education courses that are required, students may select courses needed as preparation for later specialization.

B. The Career Education Function — The college has a responsibility for meeting the post high school needs of the area in vocational and technical education. For many students, this means providing training for a satisfying career. For others, it means encouraging improvement in work habits and developing techniques to solve technical problems.

C. The Community Service Function — Valencia Community College has a responsibility to provide a variety and scope of educational services needed and/or desired by all segments of its community. This may include such activities as continuing education, courses of an enrichment or occupational nature, counseling services, short courses, cultural activities, workshops, conferences, seminars and refresher courses.

To determine the various needs of the community, the college uses advisory committees consisting of citizens from all areas of the community to recommend courses and programs, and welcomes suggestions from interested individuals.

Strongly believing in the philosophy that the community is the college, the college is committed to take these courses and programs to all areas of the college district thereby making them readily available to all of its citizens.

D. The General Education Function — This function provides a basic, liberal education through courses designed to prepare students for their responsibilities as citizens in a free society, for wholesome and creative participation in a wide range of life activities, for intelligent choices toward their goals, and for greater insight into and an improvement of their relationship with their environment.

E. The Counseling Function — This function is designed to assist every student in assessing and fulfilling his potential through academic, career, and personal counseling.

F. The Developmental Function — This function is designed to assist those students who need special help to develop self-confidence and to achieve academic success.

ACCREDITATION

As part of the state-wide system of higher education, Valencia Community College is accredited by the Florida State Department of Educa-
tion. It is a fully accredited member of the Southern Association of Colleges and Schools, and is thereby accredited for the Southern region and, reciprocally, for the country.

LEARNING RESOURCES CENTER

The Valencia Community College Campus Learning Resources Centers are the center of the academic programs. They are learning centers providing a wide variety of books, periodicals and audio-visual materials and equipment to support the instruction program and the learning and leisure-time activities of the students, faculty and community. With emphasis upon independent work, the campus learning resources center is the primary instrument in the educational process. Students are urged to become familiar with and take advantage of these resources for research, enrichment and recreational reading.

Each campus learning resources center is under the direction of a professionally trained staff whose primary aim is to serve the faculty and student body.
ADMISSIONS AND REGISTRATION

GENERAL INFORMATION

All students enrolling for credit classes at Valencia Community College will be requested to declare a home campus on the application for admission. The campus which the student designates (East, West or Open) will be the official “home” of records while the student is enrolled at Valencia. The student record with correspondence, transcripts, etc., will be housed, maintained and administered on that campus to better serve the student. He may take classes on any or all of the campuses but the official hard copy of his record will be maintained on the “home campus.” To facilitate service the student should transact all “administrative business” on his “home campus” i.e. counseling, student activities, etc. Should the student wish to transfer his “home campus” he should request the transfer in the Office of Admissions and Registration on any Valencia campus.

Records for students who are not currently enrolled (inactive) will be housed and maintained on the West Campus. Requests for transcripts, etc., for former students will be forwarded to the West Campus for processing.

Students Entering College For The First Time

Students who are taking college work for the first time are considered for acceptance under the following classifications:

A. Graduates of high schools accredited by Florida State Department of Education are automatically eligible for admission.

B. Graduates of regionally accredited out-of-state high schools are automatically eligible for admission.

C. Graduates of out-of-state high schools which are not accredited by their regional accrediting agency are eligible for admission on academic probation.

D. Students who have completed the General Education Development Tests through a State Department of Education and as a result have been issued a high school equivalency certificate (or diploma) are eligible for admission.

E. An applicant eighteen (18) years of age or older who has not completed high school may be admitted as a special student and will remain in this category until such time as he provides a high school diploma, an equivalency diploma or completes twelve (12) or more credit hours and is in good academic standing.

Validated relevant military service training including military service schools, USAFI courses and acceptable GED test scores are recognized and
credit can be granted. The recommendation of the American Council on Education, *A Guide To The Evaluation of Educational Experiences In The Armed Services* will be used in evaluating military service training. (See Section on Servicemen’s Opportunity College in this catalog)

Graduation from an accredited high school or its equivalent, as described in the preceding paragraphs, is the basic qualification for admission to Valencia Community College. When limited facilities or programs restrict the size of enrollments, admission to the college will be granted in the order in which applications are received by the Office of Admissions and Registration.

This policy does not preclude the Admissions Committee from denying admission to an applicant when examination of the applicant’s secondary school record provides evidence that he would be unlikely to make satisfactory progress in the educational program or programs provided by the college. The committee may further determine that an applicant should be admitted on a provisional status. In such a case, a letter will inform the applicant of the conditions of his admission and the means by which he may be removed from provisional status.

**Regular Students**

A regular student is one who has provided the Office of Admissions and Registration with all of the required admission credentials and is officially working toward a degree. He is eligible to register as a full-time or part-time student in any session.

**Special Students**

A special student is one who does not have on file in the Office of Admissions and Registration all necessary requirements for admission as a regular student, or one who does not wish to qualify as a regular student at the time he presents himself for registration. He may desire to be enrolled in course work for personal enrichment, job improvement, etc., and not wish to seek a degree from the college. The special student is classified as neither a freshman nor a sophomore, but is registered in at least one course for credit. Transcripts from Valencia Community College will indicate this status.

A. If an applicant is a high school graduate, he must sign a statement attesting to high school graduation in order to register.

B. If an applicant is not a high school graduate, he will not be admitted prior to his eighteenth birthday.

C. If an applicant has attended another college or university, he must sign a statement certifying that he is eligible to return to the last college attended and that he is not now under any suspension for any reason.

D. If a student is categorized as a special student, it will not be necessary to furnish transcripts and scores on the Florida Twelfth Grade Placement Test in order to enroll for credit.

E. A special student may change his status to that of a regular stu-
dent upon request when all the admission requirements for regular students have been met.

F. Credits earned by a special student may be applied toward a degree only after the student has met all admission requirements.

G. A student who seeks admission to Valencia Community College and who intends to apply for a visa and/or admission to the United States under the Immigration and Nationality Act must satisfy all requirements for admission as a regular student.

Transfer Students

A student is classified as a transfer student if he has registered previously at any college or university, regardless of the amount of time spent in attendance or the amount of credit earned. Transfer students must be eligible to return to the last college attended. A transfer student who expects to graduate from Valencia Community College is required to furnish complete information regarding all former enrollments. It is the student's responsibility to request that each college or university he has previously attended send a transcript of his record to the Office of Admissions and Registration on or before the first day of registration. It is also the student's responsibility to answer all items on the appropriate application forms completely and accurately. Failure to do so may result in cancellation of registration and loss of all credits earned at this college.

A. Credits earned at fully accredited colleges or universities will be accepted, provided the work was in an area and on a level normally included within the first two years of college, and a grade of "D" or better was earned.

B. Credits earned from non-regionally accredited colleges may be accepted provisionally and validated by the student's earning a "C" average during the first twelve (12) semester hours of work at Valencia Community College.

C. Transfer students whose cumulative grade point average for all course work previously attempted is less than 1.50, will be accepted on academic probation only.

D. Students on current academic suspension from another institution are eligible for enrollment for credit courses only after a lapse of one session or upon written recommendation of the transfer institution.

E. A student who has been suspended for disciplinary reasons from another institution is not eligible for admission, except by approval of the Committee on Student Appeals.

F. Transfer quality point deficiencies will be included in the computation of grade point requirements for graduation.
Final determination of the number of transfer credits to be granted rests with the Dean for Admissions and Registration.

**Audit Students**

A student registered for a college credit course for which he does not wish college credit is considered an audit student. He does not need special permission but must register during the regularly scheduled registration period.

A. If an applicant is a high school graduate, he must sign a statement attesting to high school graduation in order to register as an audit student.

B. If an applicant is not a high school graduate, he will not be admitted prior to the date he would normally have graduated had he remained with his high school class.

C. The fee for auditing is the same as the registration fee for credit.

D. Audit students must be regular in attendance and must make regular class preparation. They will not be required to take examinations but may participate in all classroom activities. No grades will be given nor will college credit be earned.

E. Audit students may not change to credit status once the registration period has expired. A credit student may change to audit status anytime prior to the final examination.

**Foreign Students**

The credentials for admission of an applicant from a foreign country are evaluated in accordance with the general regulations governing admission. Application for admission should be submitted three (3) months prior to the term or session for which the applicant seeks admission.

A. Foreign students must satisfy all requirements for admission as a regular student.

B. The foreign applicant must have the equivalent of a high school education in the United States.

C. Valencia Community College does not provide facilities to teach the English language to foreign students; therefore, each foreign student must have sufficient knowledge of the English language to enable him to pursue a full course of study for credit. As proof of sufficient knowledge of the English language, the college will accept a minimum of 485 on the Test of English as a Foreign Language (TOEFL), or successful completion of an approved English language institute in the United States.

D. All foreign student applicants must submit a certified declaration of finances proving they have the financial resources to attend Valencia Community College.

E. Due to the high cost of medical services, foreign students admit-
Eld to Valencia must possess health insurance before registering for classes.

EARLY ADMISSION – DUAL ENROLLMENT

Valencia Community College offers various opportunities for selected high school students to earn college credit while still enrolled in high school.

Students should request enrollment permission through their high school counselor with approval of their high school principal. Eligibility for enrollment is determined by the early admission or dual enrollment requirements of the County Board of Public Instruction.

Qualified high school students may enroll for courses at Valencia Community College while concurrently enrolled in high school. There is no limit on the number of courses these students may take, however, the courses must be recommended and approved by student’s parents, high school guidance counselor, the principal and the college.

Early Admissions and Dual Enrollment General Conditions:

The early admission or dual enrollment student enrolls for college credit and no high school credit is granted by the college. College credit gained through early admission or dual enrollment is held in escrow and granted after the student has graduated from high school.

Eligibility to enroll for college level course work is to be determined by the high school counselor. This determination should be based on criteria such as test scores, grades, maturity level, motivational level, attendance record, etc.

Advanced Placement Credit

Under a statewide Advanced Placement Program agreement, it is possible for a student to earn college credits prior to enrollment at Valencia Community College. To be eligible for credit, a student must present a score of 5, 4 or 3 on the examination administered by the College Entrance Examination Board. Credit thus granted by Valencia Community College is transferable among Florida institutions of higher education participating in a statewide advanced placement agreement.

Program Counseling Appointment

Program counseling is required of all new day students before appointments can be made for registration. Appointments may be made in the counseling office. Returning students knowing the specific requirements for their major programs are not required to have a program counseling appointment. However, it is suggested that returning students desiring professional assistance contact the counseling office before registration. An appointment with a counselor is not required for those students taking only evening courses; however, evening students are encouraged to contact the counselors to discuss their academic goals and objectives.
<table>
<thead>
<tr>
<th><strong>IF YOU WANT TO ENROLL AT VCC AND WORK TOWARD A DEGREE</strong></th>
<th><strong>(REGULAR STUDENT)</strong>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>... you have never attended college ...</td>
<td>... you have attended another college or university ...</td>
</tr>
</tbody>
</table>

You should submit the following materials before you register: A completed application for admission form • Residency affidavit • Social security number • A $5.00 non-refundable application service FEE MUST ACCOMPANY THE FIRST APPLICATION FOR ADMISSION. A completed high school transcript indicating the date of graduation (ask your high school to forward the transcript directly to the Office of Admissions and Registration) • Florida Twelfth Grade Placement Test Scores or other nationally recognized entrance examinations.

NOTE: Persons who have completed the General Education Development Tests through a State Department of Education and as a result have been issued a high school equivalency certificate (or diploma) are eligible for admission.

An applicant eighteen (18) years of age or older who has not completed high school may be admitted as a special student and will remain in this category until such time as he provides a high school diploma, an equivalency diploma, or completes twelve (12) or more credit hours and is in good academic standing.

| ... you are still enrolled in high school ...              |                        |

You should submit the following materials before you register: A completed application for admission form • Residency affidavit • Social security number • A $5.00 non-refundable application service FEE MUST ACCOMPANY THE FIRST APPLICATION FOR ADMISSION • An Early Admission-Dual Enrollment form (a permission form signed by your parents and your high school principal outlining the specific course or courses recommended by the high school counselors.)

NOTE: You will be registered at the college while still enrolled in high school. You must be a senior in high school.
<table>
<thead>
<tr>
<th>IF YOU WANT TO ENROLL AT VCC AS A NON-DEGREE SEEKING STUDENT AND . . . . (SPECIAL STUDENT)</th>
<th>. . . you are from a foreign country . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>. . . you desire courses for personal enrichment, job improvement, etc. . . .</td>
<td>You should submit the following credentials: A completed application for admission form. • A $5.00 non-refundable application service fee MUST ACCOMPANY THE APPLICATION FOR ADMISSION • Official records of all previous schooling (English translations should accompany the record). A completed Declaration of Finances • A minimum score of 485 on the Test of English as a Foreign Language (TOEFL) if English is not your native tongue. NOTE: Application materials should be submitted three (3) months prior to admission.</td>
</tr>
<tr>
<td>. . . you do not wish to earn college credit . . .</td>
<td>You should submit the following materials before you register: A completed application for admission form. • Residency affidavit • Social security number • A $5.00 non-refundable application service fee MUST ACCOMPANY THE FIRST APPLICATION FOR ADMISSION. NOTE: If you are not a high school graduate you will not be admitted prior to the date of your eighteenth (18th) birthday. You may change your status to that of a regular student and have earned credits apply toward a degree when all regular student admission requirements have been met.</td>
</tr>
<tr>
<td>. . . you are currently enrolled at another college or university . . .</td>
<td>You should submit the following materials before you register as an audit student: A completed application for admission form • Residency affidavit • Social security number • A $5.00 non-refundable application service fee MUST ACCOMPANY THE FIRST APPLICATION FOR ADMISSION. NOTE: If you are not a high school graduate you will not be admitted prior to the date of your eighteenth (18th) birthday.</td>
</tr>
<tr>
<td>You should submit the following materials before you register: A completed application for admission form • Residency affidavit • Social security number • A $5.00 non-refundable application service fee MUST ACCOMPANY THE FIRST APPLICATION FOR ADMISSION. A transient form (permission from appropriate administrator of your institution indicating a course or courses you may take at Valencia Community College). NOTE: This transient form is required each time you enroll at Valencia Community College.</td>
<td></td>
</tr>
</tbody>
</table>
FINANCIAL INFORMATION
1976-1977
Fees and Tuition

APPLICATION FEE
Students planning to enter Valencia Community College for the first time are required to pay a $5.00 application fee. This fee is neither refundable nor transferable. It is a one-time fee and covers all subsequent enrollments even though a student may have his college career at Valencia Community College interrupted and return later. This applies to all credit and/or audit students, whether full-time, part-time, day or evening. All credit and/or audit students registered at the college prior to the first session of the 1976-77 college year will not be required to pay the $5.00 application fee.

PAYMENT OF FEES

FEE AND TUITION SCHEDULE
Required fees and tuition are established by the Valencia Community College Board of Trustees and the Florida State Legislature. They are subject to change without notice.

The following schedule of tuition and fees applies to all Valencia Community College students (day or evening – credit or audit) for all sessions:

<table>
<thead>
<tr>
<th>Residency Status</th>
<th>Per Semester Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLORIDA STUDENTS</td>
<td></td>
</tr>
<tr>
<td>Registration Fee</td>
<td>$12.00</td>
</tr>
<tr>
<td>Scholarship Fee*</td>
<td></td>
</tr>
<tr>
<td>OUT-OF-STATE STUDENTS</td>
<td></td>
</tr>
<tr>
<td>Registration Fee</td>
<td>$12.00</td>
</tr>
<tr>
<td>Scholarship Fee*</td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$15.00</td>
</tr>
<tr>
<td>Total</td>
<td>$27.00</td>
</tr>
</tbody>
</table>

* Recent legislation and subsequent amendments to the Regulations of the State Board of Education require that four dollars and fifty cents ($4.50) per semester shall be collected from each full-time student and shall be remitted to the Department of Education student financial aid trust fund pursuant to section 239.70, Florida Statutes. A full-time student, for purposes of determining collection and remittance for the student financial aid trust fund, shall be defined as a student who takes twelve (12) credit hours or more of course work per session.

LABORATORY FEE
In addition to the regular registration fee per credit hour a $5 laboratory fee is assessed for certain courses. This fee is included in the course description and applies to courses in the following areas: Air Conditioning Technology, Architectural & Building Construction Technology, Automotive
Forget about College... and no one will be the wiser! Especially you!

VALENCIA COMMUNITY COLLEGE
TURNE LEFT 500 YARDS
Service Technology, Art, Biology, Civil Technology, Chemistry, Drafting & Design Technology, Electronics Technology, Electro-mechanical Technology, Graphic Arts Technology, Ornamental Horticulture Technology, Medical Laboratory Technology, Music, Nursing, Physics, Respiratory Therapy and Surveying Technology.

MUSIC FEES

In addition to the regular Registration Fee per credit hour, the following fees are assessed for the certain music courses at the time of registration:

- MC 167 – Applied Music ........................................... $60.00
- MC 171-172 – Secondary Instruments ......................... $30.00
- MC 273-274 – Performance III&IV ............................ $60.00
- MC 173-174 – Performance I&II ............................... $60.00
- MC 271-272 – Secondary Instruments ......................... $30.00

NURSING STUDENTS

Students enrolled in the Nursing Program will accrue the following additional costs during their course of study:

- Uniforms, caps and shoes ........................................ $80.00
- Achievement tests ............................................... (2 Year Period) $15.00
- Name pins and uniform patches ............................... $3.00
- Liability insurance ............................................... (Annually) $6.00
- Graduate pins ........................................................ $30.00
- Pin guards .......................................................... $8.00
- Miscellaneous supplies and materials ....................... (Annually) $10.00

The above additional fees are subject to change without notice because of cost fluctuation.

The students will be responsible for furnishing his/her transportation to the community and/or hospital facilities used by the college for clinical practice.

CONTINUING EDUCATION

Fees for non-credit continuing education courses vary with the length and nature of the individual course and are not refundable after the starting date of the course. Full refund will be made should the class be cancelled or the student upon written request withdraws prior to the starting date of the class. See the course description section of the catalog for specific fees and additional information.

SPECIAL SERVICE FEES

Credit by Examination
- CLEP General Examinations (one only) ..................... $20.00
- (two only) ......................................................... 30.00
- (three-five) ....................................................... 40.00
- CLEP Subject Examinations (per exam) .................... 20.00
Other tests as approved by the Board of Trustees.

Fees are not refunded after examination application has been accepted.

Duplicate Student Identification Fee ........................................ 1.00
Graduation Fee (non-refundable)
    includes cap and gown when required ............................... 10.00
Rental of band and orchestral instruments (per session) ............ 10.00
Child Development Program food fee per child (per session) ...... 10.00

REFUND POLICY

If a student finds it necessary to withdraw from the college, the Office of Registration and Admissions must be notified immediately. Provided withdrawal is within the add-drop period of a session, all fees paid except the application fee will be refunded. There will be no refunds after the add-drop deadline.

RESIDENCY INFORMATION

All applicants who are bona fide residents of Florida are required to execute a notarized residency affidavit and to submit it with their application to Valencia Community College. Applicants who are not Florida residents may attend Valencia Community College. They are not required to submit a residency affidavit. College fees and tuition assessments are based on the applicant’s legal residence or the legal residence of his parents or legal guardian if the applicant is less than eighteen (18) years of age.

A bonafide Florida resident, for purposes of admission and payment of fees to Valencia Community College, is defined as a person who is a citizen of the United States or a resident alien and who has resided and has his habitation, domicile, home, and permanent abode in the State of Florida for at least twelve (12) months immediately preceding his current registration.

The following categories shall also be treated as Florida residents for tuition purposes:

1. Military personnel of the United States of America on active duty and stationed in Florida, including dependent members of their immediate families.

2. Veterans of the United States of America retired with twenty (20) years or more of active military service, including dependent members of their immediate families, who are in Florida at the time of retirement or move to Florida within one (1) year following retirement and intend to make Florida their permanent home.

3. Elementary, secondary, and junior college faculty members under current teaching contracts in the State of Florida.

4. Full-time faculty and career employees of the junior college system of Florida and members of their immediate families. (This is construed to exclude the spouse of students.)
Valencia Community College may deny college credits for work done by the student at the institution if it finds that the applicant has made false or fraudulent statements concerning his legal residence or his intention as to legal residence in connection with, or supplemental to, his application for admission.

Applicants who do not qualify as Florida residents under these provisions will pay the non-Florida tuition and other charges required of non-Florida residents.

In establishing Florida residency for purposes of assessing this fee, the burden of proof rests with the applicant. Under the law, an applicant can change his place of residence from another state to the State of Florida only by actually and physically coming into the state and establishing his residence with the intention of permanently residing within the state. The domicile or legal residence of the wife is that of the husband or the domicile or legal residence of the husband is that of the wife as determined by the couple and duly expressed in writing and the legal residence of a minor is that of the parents, parent, or legal guardian of his person.

A non-Florida resident may apply in writing for reclassification prior to any subsequent registration under the provisions set forth below. To qualify for reclassification as a Florida resident, a person (or if a minor, his parents or legal guardian) shall have resided in Florida for twelve (12) months, shall have filed a declaration of intent to become a resident of the state, and shall be registered to vote in the state. An alien shall have resided in Florida for twelve (12) months and must present United States immigration and naturalization certification that he is a resident alien. If the application is supported by evidence satisfactory to the community college that the student then qualifies as a Florida resident, his classification will be changed for future registrations.

**STUDENT FINANCIAL AID**

**Purpose**

Valencia Community College subscribes to the principle that the primary purpose of a financial assistance program is to provide aid to students who show financial need or academic or special talent. The Office of Financial Aids administers monies available from federal, state and local sources in the form of loans, grants or scholarships, and part-time employment. Assistance may be provided through individual programs or as a package combining a loan, grant, scholarship or work opportunity to those who qualify. Students desiring financial aids information should contact the Financial Aids Office on the campus which they anticipate attending.

**Basis on Which Aid Is Granted**

All financial aid is dependent upon the availability of Valencia Community College resources. To be awarded financial aid applicants must:
(1) be accepted for admission to the college;
(2) prove financial need except for direct academic scholarship grants;
(3) show academic achievement;
(4) be of good character and citizenship.
A personal interview with the financial aids officer is desirable.

How To Apply

Applications for financial aid at Valencia Community College should be filed before the first of July for the following academic year. One application serves for all of the sources of financial aid.

The following steps are necessary for application:

(1) *File the Valencia Community College application for financial aid with the Office of Financial Aids.* The application for admission and the application for financial aid are not the same.

(2) *File the appropriate confidential statement, either the Parents’ Confidential Statement (PCS) or the Student Financial Statement (SFS), available from a high school counselor or the Office of Financial Aids.* The PCS or SFS should be mailed with the appropriate fee to:

**PCS — College Scholarship Service**
P.O. Box 176
Princeton, New Jersey 08540

**SFS — College Scholarship Services**
P.O. Box 300
Berkeley, California 94701

A student who lives away from home and/or who is married may be required to file a Parents’ Confidential Statement.

Aid may be renewed only within the limits of available resources. It is necessary for recipients to reapply annually before July 1 in order to be considered for continued assistance.

Types of Aid

GRANTS

**Basic Educational Opportunity Grant (BEOG)** — The BEOG program makes funds available to eligible students who are in attendance at approved colleges. Valencia Community College is an approved college, authorized to administer funds under the BEOG guidelines. The funds administered to students are meant to be the base for the entire financial aid package awarded to students. Application forms are available in the Financial Aids Office.

**Florida Student Assistance Grant** — Grants are awarded to qualified
students who have exceptional need. To be eligible a student applicant must be a U.S. citizen, be a resident of Florida for two (2) years, be enrolled as a full-time student, demonstrate financial need, and have the recommendation of a college official. Application deadline is March 1.

**Law Enforcement Education Program Grant** — The Law Enforcement Education Program Grant is designed to assist the full-time law enforcement officer continue his education in law enforcement or a directly related field. Grants currently cover the cost of tuition and fees only.

**Nursing Scholarship Award** — Grants are awarded to qualified students enrolled as full- or half-time students in the Valencia Community College nursing program. To receive a grant a student must be accepted or in good standing, be a U.S. citizen, have exceptional financial need, and require such assistance to pursue the specified course of study at Valencia in the particular year. Application can be made at any time during the year in the Office of Financial Aids.

**Supplemental Educational Opportunity Grant** — These grants are available to a limited number of undergraduate students with exceptional financial need who require grants to attend college. *To be eligible the student must also show academic or creative promise.*

Eligible students who are accepted for enrollment or who are currently enrolled in good standing may receive Supplemental Educational Opportunity Grants for each year of their higher education, although the maximum duration of a grant is four (4) years or eight (8) semesters.

Grants will range from $200 to $1000 a year and can be no more than one-half of the total assistance given the student.

**LOANS**

**College Short-Term Loans** — These loans are available up the maximum amount of $100 and are applicable only to tuition, fees and books. Residents of Orange and Osceola Counties will be given first consideration. Requirements are as follows:

1. grade point average of 2.0 or better for the previous session;
2. repayment within three (3) months from the date of the loan during Sessions I and II, and within forty-five (45) days from the date of the loan during Sessions IIIA and IIIB;
3. a co-signer is required if the loan is for more than $50.

Application may be made at the Office of Financial Aids at any time during the school year. One (1) week is usually required to process college loans.

**Federally Insured Loan Program** — A program to provide a federal guarantee of a loan personally arranged by a student with a bank, credit union, or other lending agency for up to $1500 per academic year.
Florida Insured Student Loan Program — A program to provide a federal guarantee of a loan arranged with the state of Florida for up to $1500 per academic year.

PART-TIME EMPLOYMENT

Federal College Work-Study Program — Qualifying students who need a job to help pay for college expenses are eligible for employment by the college under federally supported Work-Study Programs.

The basic pay rate will be $2.20 per hour, paid in accordance with the Board approved pay scale.

On-campus jobs can include work in offices, laboratories, libraries and maintenance. Off-campus jobs in a variety of governmental and non-profit agencies are also available.

To be eligible for this program a student must:

1. be enrolled or accepted for enrollment as at least a half-time student;

2. show evidence of financial need; and

3. be capable of maintaining good academic standing while employed under the program.

Application may be made at any time during the school year in the Office of Financial Aids.

Institutional Work-Study — Each year a number of students are employed on campus in administrative and departmental offices, libraries and laboratories. Applicants may qualify on the basis of need, satisfactory academic standing, and the possession of a particular skill needed for the job assignment.

SCHOLARSHIPS

Scholarships are made available to qualified students from funds received from many area organizations, firms and individuals. The college selects recipients for scholarships and has complete administrative responsibility. In some instances scholarships are made available to specific students by donors. In these instances the Office of Financial Aids acts as the administering agency.

A tuition waiver is a special type of scholarship for Valencia Community College students who have financial need or have demonstrated ability in a particular area.

To be considered for an academic tuition waiver a student must have displayed academic achievement in high school and scored well on the Florida Twelfth Grade Placement Test. Enrolled applicants must have a minimum 3.0 overall grade-point average and a 3.0 from the previous semester.

Athletic, forensic, music, readers' theatre, publication editors, opera-
tion student concern, and student government tuition waivers are awarded to qualified students who have been recommended by the appropriate faculty member and approved by the Financial Aids Committee.

Need tuition waivers are awarded to qualified students whose need has been approved by the Financial Aids Committee.

Valencia Community College Scholarships

Air Force Aid Society
American Business Women's Association
American Legion Auxiliary
American Legion Post 80
John H. Burrows Scholarship
Central Florida Chapter English Society
Central Newspaper Foundation
Citrus Golf Tournament Fund
CNA Foundation
Colonial Plaza Merchants Association
Delta Sigma Theta Society
Eccleston Callahan Memorial Scholarship
Florida Hotel and Motel Association
Florida Restaurant Education Foundation
Florida State Racing Pigeon Association
Kiwanis Club of West Orange County
Arno Kollmer Scholarship
Mount Dora High School
Navy Relief Society
Miriam Neubeck Memorial
Orange County Association of Legal Secretaries
Orange County East Rotary Club
W.H. Payne Scholarship
Dr. Phillips Foundation Scholarship
Roper Brothers
Royal Grand Chapter Order of Eastern Star
Sigma Alpha Iota
Winn Dixie Stores, Inc.
Winter Park Fireman's Club
Winter Park Hospital
Woman's Club of Ocoee
Woman's Club of Winter Park

Valencia Community College
Short-Term Loan Funds

Alpha Delta Kappa Honorary Educational Sorority, Kappa Chapter, Orlando
Apopka Woman's Club
ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Central Florida Chapter)
Black Student Union, Valencia Community College
Dr. Jack Bradbury — Emergency Fund
Catholic Social Services
The Linda Crisler Memorial Loan Fund
Delta Beta Pi Fraternity, Delta Chapter
East Orange County Rotary Club
Hotel Sales Managers Association
James Kellerman — Emergency Fund
Roy Kinnick Fund, Valencia Community College
Kiwanis Club of West Orange
Dr. P. Phillips Foundation, Orlando
S Club, Valencia Community College
Tupperware Home Parties
United Student Aid Fund, Valencia Community College
University Club of Orlando
Valencia Faculty Wives
Theodore H. Van de Venter, Sr., Fund of the Grace Covenant Presbyterian Church of Orlando

West Orlando Rotary Club
STUDENT SERVICES

BOOKSTORE

The Bookstore has general school supplies and textbooks available for sale to Valencia students. New hardback and paperback textbooks are sold at publisher’s list price. Secondhand books, when available, are offered at substantial savings.

COOPERATIVE EDUCATION

Cooperative Education is a planned and supervised educational program designed to integrate the student’s classroom study with practical experience directly related to his major field. This is usually accomplished by alternating terms of full-time study with terms of full-time work (Alternating Plan) or by enrolling in both classroom instruction and a work assignment simultaneously (Parallel Plan). However, other variations are available depending on the particular needs of the student or employer.

Two, three, or four credits, based on the number of hours worked each week and the employment responsibilities involved, are granted for the satisfactory completion of each cooperative training assignment. The Cooperative Education Department grades each assignment using reports submitted by the student, evaluations from the employer, and conferences with both the student and employer.

All full-time students who have completed one semester (12 credit hours) and are in good academic standing are eligible for the program.

For further information, write or call the Cooperative Education Office, Valencia Community College, P.O. Box 3028, Orlando, Florida 32802, 305/299-5000.

COUNSELING

Counseling is an interpersonal relationship between two or more people, one of whom is professionally trained in counseling techniques. Full-time professional counselors are available to assist students to achieve productive and rewarding experiences at the college. Counseling services are provided for all students — full-time, part-time, day and evening.

Counseling may involve exploring alternative courses of action, assessing skills and abilities, clarifying values, experiencing the decision-making process, or choosing realistic career goals. Educational advisors, the paraprofessional members of the counseling staff, discuss academic and career programs, explain requirements for college majors, assist students in the selection of appropriate courses, and administer tests.
The counseling services include the opportunities for students to pursue career exploration and decision-making through the use of occupational inventories, career information files, and career cassettes.

Upon admission to the college, each student is encouraged to have an appointment with a counseling staff member to review previous educational background, interests, and appropriate programs of study offered by the college. Thereafter, each student is invited to seek counseling assistance in reviewing academic progress and personal planning. Students are not assigned to a specific counselor, but are asked to make their personal selection from the staff available.

FOOD SERVICE

A food service facility is operated for the benefit of students and college personnel. The system will provide quick, efficient service to a large number of people. Food service is available during class hours.

HEALTH SERVICES

Valencia Community College provides limited health services for faculty, staff and students. In case of a serious emergency, a student's local guardian will be contacted. If the guardian is not available, the student will be taken to a local emergency room at the student's expense. The college is in no way responsible or legally obligated for the medical expenses of any student.

HOUSING

Valencia is a commuting institution and has no dormitory facilities. The college assumes no responsibility for the supervision of housing for students.

INDEPENDENT STUDY COURSES

Valencia Community College offers Independent Study (IS) in various courses to provide capable students an opportunity to complete courses at their own rate. Independent Study is designed to meet course requirements through individual student-faculty interaction in a non-classroom situation.

This is an attempt to provide an alternative to the regular fixed schedule by recognizing special abilities of each student. Courses offered through Independent Study are designated (IS) in the course description section of the catalog. Students should recognize that Independent Study arrangements are dependent on the availability of an instructor. Regardless of the date of enrollment in an Independent Study course the student must complete the course prior to the end of the following session or receive a grade of "W".

Students interested in Independent Study should make preliminary arrangements with instructors and/or department chairmen. Formal applications are available from the registrar and department chairmen. A non-
refundable fee of $25.00 (twenty-five dollars) is charged in addition to the regular registration fee for each Independent Study course in which the student enrolls.

LOST AND FOUND

A lost and found depository is maintained in the Student Services Office. All articles should be turned in to this office and students should check this office frequently when seeking a lost article.

MAIL TO STUDENTS

Students should provide correspondents with correct mailing addresses. Mail addressed to students in care of Valencia Community College will be returned to the sender.

The college does not assume responsibility for delivery of student mail. Students should use their residence for all correspondence.

PLACEMENT OFFICE

The Valencia Community College Placement Office offers placement services to currently enrolled students, graduates, and interested persons in the community.

Applications for off-campus part- or full-time employment are available in the Placement Office, in addition to specific information on job requirements and opportunities.

Current part- and full-time job opportunities are posted on the job placement bulletin boards located on the East and West Campuses.

READING LABORATORY

Students who want to improve skills in any area of reading are encouraged to visit the reading laboratory. A student may use the reading laboratory facilities without additional charge on a voluntary basis during the hours posted each session outside the reading lab and in the Counseling Office. Modern reading devices and materials are available under the supervision of a reading specialist. Students utilize the reading laboratory to improve reading speed, vocabulary, comprehension, study-reading techniques, and pronunciation. Students may also enroll in several different reading courses for credit.

SPECIAL SERVICES

Valencia Community College has a Special Services Program which is designed to provide supportive and counseling services to students who qualify. These services include academic and career counseling, tutorial assistance, and job referrals. In order to be eligible for this program, a student must meet all federal guidelines pertaining to participation.
STUDENT ACTIVITIES

The community college offers an excellent opportunity for an activity program contributing to the educational experience of the student. The opportunity to participate in activities which enhance the physical, social, political, moral and intellectual life of students is provided through organizations, forensics, student publications, athletics, cultural events and social affairs. Students are encouraged to participate in college-sponsored extra-curricular activities.

STUDENT INSURANCE

A group accident and sickness insurance policy is available to students through the Student Services Office.

TESTING

As an open-door institution, Valencia does not utilize test scores for purposes of admission. Counselors, however, make use of this information along with other indicators for placement purposes.

Students who have attained sophomore status are not required to submit test scores.

Valencia also offers a variety of tests for students interested in credit-by-exam, interest clarification, personality assessment or career exploration.

Credit By Examination

ADVANCED PLACEMENT EXAMINATIONS (CEEB)

It is the policy of Valencia Community College to grant college credit to a student who presents a score of 5, 4, or 3 on one or more of the Advanced Placement Program examinations of the College Entrance Examination Board. To be eligible for credit, the examination must be taken prior to enrolling in college. Credit thus granted by Valencia Community College is transferable among Florida institutions of higher education participating in a statewide advanced placement agreement.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Students enrolling at Valencia Community College may gain credit in certain specified courses through examinations of the College Level Examination Program (CLEP), administered by the Educational Testing Services (ETS) for the College Entrance Examination Board (CEEB). CLEP General Examination and CLEP Subject Examinations may be taken at Valencia upon application to the Counseling Office, or at any of the CLEP Test Centers. Valencia Community College offers the CLEP examinations periodically throughout the year.
Information concerning test dates and specific credit awarded through the College Level Examination Program can be obtained by contacting the Counseling Department.

Valencia Community College will accept a maximum of forty-five (45) semester hours of credit through CLEP, both General and Subject examinations combined.

The fee schedule is as follows:

- One Exam: $20.00
- Two Exams: 30.00
- Three to Five: 40.00

**LOCAL CREDIT BY EXAMINATION**

Credit by Examination in courses which are designated as career courses may be given to students who have had a substantial background, including experience and training, in a specified field. The examination normally includes a combination of written and oral materials as well as demonstration of specific skills as determined by the department concerned.

Students are reminded that this type of credit may not be acceptable for transfer to other institutions.

Applications and information regarding the specific career courses available through the local credit-by-examination program should be obtained from the department offering the course. The fee for a local credit-by-exam is $15.00.

**Foreign Language Credit By Examination** — Credit for foreign languages is available to Valencia Community College students through the credit by examination program. Transferability of this credit is dependent upon the policies of the receiving institution. Information and applications may be obtained in the Counseling Office.

**OTHER EXAMINATIONS**

Students desiring to take credit by examination in a subject area not included above should consult the department concerned to explore other test possibilities.

**CREDIT**

Credit will be recorded for individuals who earn acceptable scores on the College Level Examination Program tests or the career CE courses. No letter grades or quality points will be assigned. CLEP credit may be used under the repeat course policy for D or F grades only. Credit will not be awarded for courses in which a C or better has been earned.

**TRANSCRIPTS**

Students wishing to have transcripts of their academic records sent to other institutions may do so by completing a transcript form in the Office of Admissions and Registration on any Valencia campus.
Currently enrolled students will be requested to indicate their “home” campus on the request form to facilitate the administrative services.

TUTORIAL ASSISTANCE

The Veterans Affairs Office and the Special Services Program provide tutorial assistance for students meeting the eligibility requirements of these programs.

The West Campus Tutorial Service maintains a list of students who are capable of tutoring in many subject areas. There is a nominal fee for tutoring. If you are interested in tutoring or in need of tutorial assistance, please contact the West Campus Tutorial Office.

VETERANS

The college is approved for education and training under the various Veterans Administration programs.

Veterans, dependents of veterans having a 100 percent (100%) service-connected disability, and dependents of deceased veterans who plan to attend under any of these programs should contact the Office of Veterans Affairs for certification after the admission and registration procedures have been completed. Students planning to receive veterans benefits are required to contact the college Office of Veterans Affairs at the beginning of each session of enrollment. Educational allowances are paid by the Veterans Administration directly to the student.

Payment of benefits will be based on satisfactory progress. If a student who has been certified to the Veterans Administration as being in attendance at Valencia Community College ceases to attend classes, drops from classes, or is officially withdrawn from classes, the Veterans Administration will be notified of the last date of attendance.

Deferment of Fees

Veterans may be eligible for a 60-day deferment of tuition fees if they are attending Valencia Community College under Chapter 34 or 35, Title 38, United States Code. Should a veteran fail to pay his deferment by the due date, he will be withdrawn from classes and his veterans benefits will be terminated. A veteran may not register for the following term until his overdue deferment from the previous term has been paid.
COLLEGE REGULATIONS

ACADEMIC AVERAGE AND REPEATED COURSES

A student's academic average will include grades on all work attempted with the exception of a repeated course; only the last attempt of a repeated course will be used in computing the student's average. When a course is repeated, or when two courses are taken in which credit cannot be received in both; for example, Mathematics 171 and 173, credit will be allowed only in the most recent course taken, even if the latest grade is lower than a previous grade. In no case will multiple credit be granted for the same course.

No student may repeat a course in which he has previously earned a grade of "B" or "A" except on an audit basis.

ACADEMIC HONORS

DEANS HONOR LIST — In recognition of scholastic achievement, students who complete a minimum of twelve (12) hours of course work at the 100 or 200 level and who earn a 3.0 grade-point average or above on all courses attempted at Valencia during any session are named to the Dean's Honor List. Part-time students who earn a 3.0 grade-point average or above on all courses attempted at Valencia and who complete increments of a minimum of twelve (12) hours of course work at the 100 or 200 level will also be named to the Dean's Honor List. Once the part-time student completes a session in which a minimum of twelve (12) hours of course work at the 100 or 200 level has been accumulated, a new increment of accumulating semester hours begins with course work taken during the next session.

PRESIDENT'S HONOR LIST — In recognition of scholastic achievement, students who complete a minimum of twelve (12) hours of course work at the 100 or 200 level and who earn a 3.5 grade-point average or above on all courses attempted at Valencia during any session are named to the President's Honor List. Part-time students who earn a 3.5 grade-point average or above on all courses attempted at Valencia and who complete increments of a minimum of twelve (12) hours of course work at the 100 or 200 level will also be named to the President's Honor List. Once the part-time student completes a session in which a minimum of twelve (12) hours of course work at the 100 or 200 level has been accumulated, a new increment of accumulating semester hours begins with course work taken during the next session.

ACADEMIC PROBATION AND SUSPENSION

I. Probation:

A student who fails to maintain a 1.0 (D) grade-point average during any session will be placed on academic probation begin-
ning with his next session in attendance. The student is then required to meet the following conditions in order to satisfy the probation requirement:

A. The period of probation shall extend until grades have been received in a total of at least twelve (12) semester hours of academic work.

B. A student must have a cumulative Valencia Community College average of 1.5 at the end of the probation period.

Students admitted to the college on academic probation must also satisfy the conditions stated above in order to be removed from probation.

II. Suspension:

A student on academic probation will not be subject to suspension until he has attempted a minimum of twelve (12) academic hours at Valencia Community College after being placed on probation.

When a student has been placed on academic probation and then fails to attain a cumulative Valencia Community College 1.5 average at the end of the probation period, he will be placed on academic suspension for one session. If the student re-enters at a later date, he will be placed on probation automatically.

If a student is placed on academic suspension from Valencia Community College, he may avail himself of one of the following alternatives:

A. He may appeal to the Committee on Student Appeals for possible reinstatement.

B. He may contact the Registrar's Office and be admitted on an audit basis only.

C. He may re-enter Valencia Community College after one session.

If a student chooses the first alternative, he should write a letter of appeal to the chairman of the Committee on Student Appeals, stating his petition and citing any extenuating circumstances which he feels may be significant in the committee's consideration of his case.

CLASS ATTENDANCE

Students are expected to attend all classes for which they are registered, except in cases of illness or other emergencies, since regular attendance and regular application constitute the two most significant factors which promote
success in college work. If a student accumulates so many absences that further enrollment in the class appears to be of little value, it shall be the duty of the instructor to warn the student in writing that additional absences may cause him to be withdrawn from the course. This warning, when possible, will be delivered personally; otherwise, it will be mailed to the student. If the matter is not cleared satisfactorily, the student may be withdrawn from the course.

CLASSIFICATION OF STUDENTS

Regular — A student enrolled in college credit courses who has provided the Office of Admissions and Registration with all the required admission credentials and is officially working toward a degree. This student is classified as follows:

Freshman — A student regularly enrolled in college credit courses who has completed less than twenty-four (24) semester hours of college work at the time of registration.

Sophomore — A student regularly enrolled in college credit courses who has completed twenty-four (24) semester hours but not more than sixty-two (62) semester hours of college work at the time of registration.

Special — A student enrolled in college credit courses who does not have on file in the Office of Admissions and Registration all the necessary requirements for admission as a regular student, or one who does not wish to qualify as a regular student. This student is not classified as either freshman or sophomore.

Audit — A student enrolled for a college credit course but not seeking college credit.

Full-time — A student enrolled for twelve (12) or more semester hours in Session I or II and six (6) or more semester hours in Session IIIA or IIIB.

Part-time — A student enrolled for less than twelve (12) semester hours in Session I or II and less than six (6) semester hours in Session IIIA or IIIB.

CORRESPONDENCE AND EXTENSION COURSE CREDIT

No more than fifteen (15) semester hours of credit earned through extension and/or correspondence courses are creditable toward a degree. A student must have permission of the Registrar prior to registering for such
courses. Extension and/or correspondence courses shall be included in a student's load, provided:

A. The course is offered by a regionally accredited institution.

B. The minimum grade earned is at least the equivalent of a Valencia Community College "D".

C. The credit is acceptable toward one of its own degrees by the institution conducting the correspondence and/or extension course.

D. None of the final fifteen (15) semester hours before graduation may be earned through correspondence and/or extension courses.

Students expecting to transfer correspondence and/or extension credit to another institution should become familiar with the institution's policy on the acceptance of such courses.

CROSS-ENROLLMENT AGREEMENT
(Air Force and Army R.O.T.C.)

Valencia Community College has a cross-enrollment agreement with Florida Technological University and Stetson University that male and female students enrolled at Valencia will be eligible to apply for the United States Air Force R.O.T.C. program at Florida Technological University or the United States Army R.O.T.C. program at Stetson University. A maximum of four (4) semester hours (six (6) quarter hours) of R.O.T.C. credits earned at Florida Technological University or Stetson University through this agreement are transferable to Valencia and may be used as elective credit toward an associate in art or associate in science degree.

Further information regarding this program may be obtained from the Valencia Community College Office of Admissions and Registration.

MID-FLORIDA TECHNICAL INSTITUTE

In a continuing effort to promote career education programs, Valencia Community College accepts transfer credits from Mid-Florida Technical Institute in drafting and architectural design technology and in hotel-motel-restaurant management. Further information can be obtained from the Department of Technical and Engineering Related Programs and the Department of Business Related Programs, West Campus.

FINAL EXAMINATIONS

All students, except those enrolled for audit, must take the final examination. An absence from a final examination must be approved by the appropriate dean and the instructor. It is the responsibility of the student to know when the examination is scheduled and be present and on time.
GRADE-POINT AVERAGE

The grade-point average is determined by dividing total quality points earned by total academic hours attempted. Only the last attempt of a repeated course will be used in computing the grade-point average. The following example illustrates a grade-point average of 2.0, obtained by dividing thirty (30) quality points by fifteen (15) academic hours attempted:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem.</th>
<th>Grade</th>
<th>Academic Hrs. Attempted</th>
<th>Hours Passed</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>3</td>
<td>C</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>PL 152</td>
<td>3</td>
<td>D</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>AT 175</td>
<td>3</td>
<td>A</td>
<td>3</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>HY 181</td>
<td>3</td>
<td>F</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BY 151</td>
<td>3</td>
<td>B</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>BA 171</td>
<td>3</td>
<td>W</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

GRADING SYSTEM

Letters are used to indicate the quality of work achieved by the student at Valencia Community College.

A  Excellent ......................................... Earns 4 quality points
B  Good ................................................. Earns 3 quality points
C  Average ............................................. Earns 2 quality points
D  Below Average ................................. Earns 1 quality point
F  Failure ............................................. Earns 0 quality points
I  Incomplete ........................................ Earns 0 quality points
   (Automatically changed to “W” if not made up in the ensuing session.)
S  Satisfactory ...................................... Earns 0 quality points
   (“S” grade used only in the following courses:
   RT 134, RT 232, RT 235, RT 237, RT 238)
U  Unsatisfactory ................................. Earns 0 quality points
   (“U” grade used only in the following courses:
   RT 134, RT 232, RT 235, RT 237, RT 238)
W  Withdrawn or dropped course .................. Earns 0 quality points
X  Audit ................................................. Earns 0 quality points
N  No grade or non-credit course ................ Earns 0 quality points

SERVICEMEN'S OPPORTUNITY COLLEGE (SOC)

Valencia Community College has been designated a “Servicemen’s Opportunity College” by the American Association of Community and Junior Colleges. This designation results from the special efforts of the college to aid the serviceman in his quest for a post-secondary education. The college is committed to providing programs and special services to meet the unique educational needs of active-duty servicemen.
In order to serve as a Servicemen’s Opportunity College, Valencia Community College has set forth the following policies, procedures and services:

1. Valencia Community College has liberal admission requirements. Admission to college credit studies is open to all high school graduates, transfer students, persons with state-issued high school equivalency certificates or diplomas, persons eighteen (18) years of age or older and other special categories (see requirements for admission section of catalog).

2. Servicemen may obtain up to forty-five (45) credits toward the sixty-two (62) credits required for most associate degrees through a variety of special means or optional non-traditional modes, i.e.:
   a. Satisfactory completion of Advanced Placement Examinations.
   b. A maximum of fifteen (15) semester hours of credit earned through extension and/or correspondence courses.
   c. Properly validated relevant military service training including military service schools, USAFI courses and acceptable GED test scores. The recommendation of the American Council on Education, *A Guide To The Evaluation Of Educational Experiences In The Armed Services* will be used in evaluating military service training.
   d. College Level Examination Program (CLEP) — maximum credit allowable without overlap is forty-five (45) semester hours of General and Subject examinations combined.
   e. College departmental examinations.

3. Full transfer of credits awarded by other accredited colleges and universities.

4. Professional college counseling and advisement services are available to service personnel. (Contact the Counseling Office on any campus for dates and times.)

5. In addition, servicemen and their dependents may satisfy the college’s residency requirements by completing fifteen (15) semester hours of credit at Valencia Community College.

All servicemen and their dependents who are stationed in Florida are eligible to attend Valencia Community College and pay tuition and fees at the rate established for Florida residents.

**PROJECT AHEAD**

Valencia Community College cooperates with the U.S. Army in a program called “Project Ahead” (Army Help for Education and Development).
The college accepts for admission Army personnel, provides counseling and advisement and acts as a repository for credits earned during the service years. Since armed services personnel are frequently transferred, the program will allow Army personnel to organize a continuous education program even though courses may be taken at several institutions.

In order to participate in the Army Cooperative Education Program, “Project Ahead,” Valencia Community College follows the same policies, procedures, and services listed above in “Servicemen’s Opportunity College (SOC).”

STUDENT CONDUCT

Attendance at Valencia Community College is a privilege; therefore, the conduct of students is expected to be honorable and dignified at all times. By registering, the student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct as stated in the Valencia Community College Student Handbook.

DISCIPLINE

After notice to the student and a hearing on the charges, the president of Valencia or his authorized representative shall have the authority to suspend or expel a student who is found to have violated any of the rules of conduct as stated in the Valencia Community College Student Handbook. Hearings shall be conducted by the president or an officer or committee appointed by him or his designate. At such hearing the student charged shall have the right to counsel or representation of his choice. The determination of the student’s guilt or innocence in the commission of the act may be made by the president of the college after such a hearing. The conviction of a student for a criminal offense involving personal misconduct of a kind which, if condoned by the college, would reflect dishonor or discredit on the college, shall be sufficient ground for suspension or expulsion of such student.

The president is granted discretionary power, in any case, to summarily suspend a student pending a hearing. Hearings shall be scheduled as promptly as possible without prejudicing the rights of the accused. All college-administered financial support of a student so suspended or so expelled shall be terminated as of the date of the suspension or expulsion.

Violations of college regulations or other forms of student misconduct will be investigated by the appropriate campus dean. The dean shall have original jurisdiction in such matters and may take the following degrees of disciplinary action: warning, censure, disciplinary probation, or restitution.

Nothing in this policy shall be construed as preventing the president or his authorized representative from taking any immediate action which may be deemed necessary.

STUDENT LOAD

Fifteen (15) or sixteen (16) semester hours is the normal full-time load
during Sessions I and II, and six (6) hours in Sessions IIIA and IIIB. Nineteen (19) semester hours is the maximum full-time load during Sessions I and II, and seven (7) hours in Sessions IIIA and IIIB. In very unusual cases, a student may register for additional course hours with the permission of the Dean of Student Affairs. The college reserves the right to limit the number of semester hours for a student whose academic record indicates need for further preparation for college-level work.

**STUDENT RIGHTS OF APPEAL OF ADMINISTRATIVE DECISIONS**

Students have the right, individually, to appeal any administrative decision under existing policies which adversely affect them. Such appeals should be directed to the Committee on Student Appeals.

The Committee on Student Appeals may consider appeals for many types of administrative actions, some of which are:

- Reinstatement from academic suspension.
- Waiver of certain admission requirements.
- Reinstatement of credit status.

**STUDENT RIGHT OF APPEAL OF DISCIPLINARY ACTION**

Within ten (10) working days of any administrative disciplinary action, a student may appeal such administrative disciplinary action to the Committee of Student Review.

**Jurisdiction of the Committee of Student Review** -- The Committee of Student Review shall make a recommendation to the president of the college on the case by a majority vote of the committee on any of the following areas:

- Warning
- Censure
- Disciplinary probation
- Restitution
- Suspension
- Expulsion
- Removal of charges

The recommendation of the committee shall be carefully evaluated by the president of the college or his authorized representative. Final determination of the matter rests with the president or his authorized representative and must be made by him within ten (10) working days of the recommendation by the committee. A copy of the committee's recommendation shall be sent to the president, to the campus provost, to the appropriate campus dean, and to the student requesting the committee hearing. Any further appeal from the decision of the president shall be formally lodged with the Board of Trustees of the college.
TRANSIENT STUDENTS

A student may wish to take a course away from his “home” college and still be able to apply the credit toward a degree. Students qualifying to do this will be considered transient students.

A. Transient students from Valencia Community College:

Permission to attend another institution on a transient basis may be granted only to students who have a cumulative 2.0 (C) average on all work attempted prior to the session in which the student intends to be transient. Eligibility for transient status is determined by the Associate Dean for Admissions and Registration. The regulations pertaining to acceptance of transfer credit from other institutions apply to transient students.

B. Transient students from another college:

A transient student is one who attends Valencia Community College to take particular courses with permission of his “home” college. This procedure does not constitute a transfer and transcripts of previous college attendance are not required. Students who intend to register at Valencia Community College on a transient basis from their “home” college must fill out the Valencia Community College application for admission plus a transient form. The VCC transient form must be submitted to the proper authority from the student’s “home” college for approval. Transient forms are available in the Office of Admissions and Registration.

WITHDRAWAL POLICIES

WITHDRAWAL FROM A COURSE — A student may withdraw from a course prior to the scheduled final examination. If a special exam is approved for a course, withdrawal must be prior to the administration of the special examination. Students wishing to withdraw from a course must complete the proper forms in the Office of Admissions and Registration. Students withdrawing properly from a course prior to the deadline will receive a grade of “W.”

WITHDRAWAL FROM COLLEGE — If a student wishes to terminate all of his studies at the college and officially withdraw prior to scheduled final examinations, he will receive a grade of “W” in all courses. The official withdrawal procedure is as follows:

A. Complete the “withdrawal from college” forms in the Office of Admissions and Registration.

B. Obtain signatures from the Counseling Office, the Library, Financial Aids, and the Business Office.

C. Turn in I.D. card to the Office of Admissions and Registration.
A student who does not withdraw officially as indicated in the above procedures and does not complete the course work for which he is registered will automatically receive a grade of "W" in all courses unless assigned a grade of "I" by the instructor.
UNIVERSITY PARALLEL PROGRAMS

ASSOCIATE IN ARTS DEGREE

Courses of Study Leading to Advanced Degrees

In keeping with one of its stated purposes, Valencia Community College offers courses of study which are equivalent to those provided freshmen and sophomores in the lower divisions of Florida state universities. The student who receives the Associate in Arts Degree from Valencia Community College has met the lower division requirements and is admissible to the upper division of a state university.

Requirements for the Associate in Arts Degree are described in the Graduation Requirements section of this catalog. The student should note that these requirements consist of general education requirements and electives. It is in the area of electives and, to some extent, in those portions of the general education program where choice is allowed that the student must select courses which will prepare him best for transfer in a particular major field at a specific college or university.

SUGGESTED PROGRAMS OF STUDY LEADING TO BACHELOR'S DEGREES MAY BE OBTAINED FROM THE COUNSELING OFFICE. These suggested courses of study meet the requirements for the Associate in Arts Degree and include the electives generally recommended for the particular major at most of the state universities. Since listing all recommendations and requirements for all majors at all universities is impossible, it is imperative that a student who expects to transfer to a senior institution write to the registrar of that institution for information concerning work to be taken at Valencia Community College.

The programs found in the Counseling Office show courses recommended. It is not required that courses be taken in any order except where prerequisites are involved. In some cases, courses are not offered every semester and the student should plan ahead to enroll in courses when they are offered.

Counselors and educational advisors are available to assist students in planning courses of study. Final responsibility for choice of program and courses rests with the student.
STUDENT DEVELOPMENTAL LABORATORIES

In addition to the above courses, the college offers laboratories which the student may attend voluntarily. A Reading and Writing Laboratory, and a Mathematics Laboratory are open on a scheduled basis for individual and small group help. The Reading and Writing Laboratory offers assistance to the student with average or above skills as well as the student with a deficiency in reading ability.

BASIC STUDIES DEPARTMENT, WEST CAMPUS

Valencia Community College Basic Studies Program is designed primarily for entering freshmen who need a totally designed program to increase their future success in college experiences and to improve their chances for succeeding academically. This program may lead to a university-parallel program, a career program, to gainful employment in the world of work, or to other academic pursuits.

Centering around the concept of Life, Career and Basic skills development, students are given the opportunity to assess goals which reflect a total look at themselves in terms of abilities, personality, and future training. The program also incorporates a two-semester requirement, with credit being given at the end of the second session. Academic success means the students have achieved proficiency in whatever skills are employed in the field of their choice. The Basic Studies Program stresses skills in writing, speaking, spelling, reading, comprehension, grammatical structure and usage. Students are also encouraged to use the Career Development Center, the Reading, Writing, and Mathematics laboratories for further help in achieving skills success. Further attention is focused on cultural growth and enrichment opportunities.

Students are required to enroll in the Basic Studies Program when an evaluation of the scores on the Florida Twelfth Grade Tests, the high school transcript, and/or scores on tests administered at Valencia Community College reveal that these students have not met prerequisite requirements for basic freshman level courses. Such evaluation is done by the counselors and reviewed by the department chairman.

FIRST SEMESTER

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<th>Course</th>
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<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>SP 100</td>
<td>Speech Improvement</td>
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SECOND SEMESTER

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Total: 15

ARTICULATION AGREEMENT BETWEEN THE STATE UNIVERSITIES AND PUBLIC COMMUNITY JUNIOR COLLEGES OF FLORIDA

Valencia Community College subscribes to the Articulation Agreement adopted in April 1971 by the State Universities and Public Community Junior Colleges. Under the auspices of this agreement certain requirements must be met. A synopsis of this agreement follows:

1. The provisions of the general education agreement of 1959 are reaffirmed. This agreement provides that: Each public institution of higher education in Florida, i.e., each State University and each Community Junior College, is encouraged to foster and promulgate a program of general education. This basic program for students working toward a baccalaureate degree should involve not fewer than thirty-six (36) semester hours of academic credit.
2. The Associate in Arts degree shall be awarded upon:
   a. Completion of sixty-two (62) semester hours of academic work exclusive of occupational courses and courses whose numbers are less than 100.
   b. Completion of an approved general education program of not fewer than thirty-six (36) semester hours.
   c. Achievement of a grade point average of not less than 2.0 in all courses attempted, and in all courses taken at the junior college awarding the degree, provided that only the final grade received in courses repeated by the student shall be used in computing this average. The grade of “D” will be accepted for transfer (provided the overall grade average does not drop below the prescribed 2.0 level), and will count towards the baccalaureate in the same way as “D” grades obtained by students enrolled in the lower division of state universities, i.e., credits in courses transferred with “D” grades will count towards the credits required for the baccalaureate; however, it is at the discretion of the department or college of the university offering the major as to whether courses with “D” grades in the major may satisfy requirements in the major field.

3. The baccalaureate degree in all state universities shall be awarded in recognition of lower division (freshman-sophomore) combined with upper division (junior and senior) work. The general education requirement of the baccalaureate degree shall be the sole responsibility of the institution awarding the Associate in Arts degree in accordance with the general education agreement of 1959. If, for any reason, a student has not completed an approved general education program in a junior college prior to his transfer to a state university, the general education requirement shall become the responsibility of the university.

4. Lower division programs in all state institutions enrolling freshmen and sophomores may offer introductory courses which permit the student to explore the principal professional specializations that can be pursued at the baccalaureate level. These introductory courses shall be adequate in content to be fully counted toward the baccalaureate degree for students continuing in such a professional field of specialization. However, the determination of the major course requirements for a baccalaureate degree, including courses in the major taken in the lower division, shall be the responsibility of the state university awarding the degree.

5. Students receiving the Associate in Arts degree will be admitted to junior standing within the University System. The specific university that accepts the student will be determined by the
preference of the student, by the program of major concentration, and by space available within the specific institution. If, because of space or fiscal limitations, any state university must select from among qualified junior college graduates, its criteria for selection shall be reported to the articulation coordinating committee.

6. Other associate degrees and certificates may be awarded by a junior college for programs which have requirements different from the Associate in Arts, or a primary objective other than transfer. Acceptance of course credits for transfers from such degree or certificate programs will be evaluated by the senior level institution on the basis of applicability of the courses to the baccalaureate program in the major field of the student. Each state university is encouraged to develop admission policies that will consider all factors indicating the possibility of success in its upper division of transfer students who have not earned the Associate in Arts degree.

7. Each university department shall list and update the requirements for each program leading to the baccalaureate degree and shall publicize these requirements for use by all other institutions in the state.

8. Each state university shall include in its official catalog of undergraduate courses a section stating all lower division prerequisite requirements for each upper division specialization or major program.

9. A junior college-university coordinating committee has been established to review and evaluate current articulation policies and formulate additional policies as needed. The coordinating committee is composed of seven (7) members, three (3) of whom are appointed by the Director of the Division of Community Colleges, three (3) by the Chancellor of the State University System and one by the Commissioner of Education. The activities of this committee shall include:

a. Authorize professional committees or task forces consisting of representatives from both levels of higher education to facilitate articulation in subject areas.

b. Conduct a continuing review of the provisions of this agreement.

c. Review individual cases or appeals from students who have encountered difficulties in transferring from a community college to a university. Decisions reached by the coordinating committee will be advisory to the institutions concerned. Students wishing to make an appeal to the coordinating committee should contact the Director of Admissions at Valencia.
GRADUATION REQUIREMENTS FOR THE ASSOCIATE IN ARTS DEGREE

1. Complete sixty-two (62) semester hours of acceptable college credits of which two (2) semester hours credit may be from Physical Education activity courses.

NOTE: CAREER COURSES DESIGNATED BY A "*" IN THE COURSE DESCRIPTION SECTION OF THE CATALOG, OR COURSES WHOSE NUMBER IS LESS THAN 100 ARE NOT APPLICABLE TOWARD AN ASSOCIATE IN ARTS DEGREE AT VALENCIA COMMUNITY COLLEGE.

2. Complete the general education program.

3. Earn a grade point average of at least 2.0 on all courses attempted which apply toward the Associate in Arts Degree.
   Earn a grade point average of at least 2.0 on all courses attempted at Valencia Community College.
   Earn a grade point average of at least 2.0 on all courses attempted.

4. Complete the last fifteen (15) college credit hours in residence at Valencia Community College.

5. File application for graduation in the Admissions Office by the deadline date as listed in the college calendar and catalog.

6. Fulfill all financial obligations to the college.

Final responsibility for meeting the requirements for graduation for the Associate in Arts degree rests with the student.

GENERAL EDUCATION

The general education program at Valencia Community College, designed to contribute to the growth and development of the individual student by providing a basic liberal education, is an integral part of the Associate in Arts degree program. Completion of general education requirements will be indicated, upon the student’s request, on the student’s record when the prescribed general education program is satisfied. The general education program embraces a minimum of thirty-six (36) semester hours of academic credit and serves as the core of the curriculum. Of the thirty-six (36) semester hours required for general education, the student must satisfy minimum requirements in each of the following areas:

Area 1. Communications (a minimum of 6 semester hours)

Required Courses:

EH 151 Freshman Composition, EH 152 Freshman Composition, and/or EH 260 Advanced Composition.
**Elective Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 250</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>EH 251-252</td>
<td>English Literature</td>
<td>3 each</td>
</tr>
<tr>
<td>EH 253-254</td>
<td>American Literature</td>
<td>3 each</td>
</tr>
<tr>
<td>EH 268-269</td>
<td>World Literature</td>
<td>3 each</td>
</tr>
<tr>
<td>FH 151-152</td>
<td>Elementary French</td>
<td>3 each</td>
</tr>
<tr>
<td>FH 251-252</td>
<td>Intermediate French</td>
<td>3 each</td>
</tr>
<tr>
<td>GN 151-152</td>
<td>Elementary German</td>
<td>3 each</td>
</tr>
<tr>
<td>GN 251-252</td>
<td>Intermediate German</td>
<td>3 each</td>
</tr>
<tr>
<td>SH 151-152</td>
<td>Elementary Spanish</td>
<td>3 each</td>
</tr>
<tr>
<td>SH 251-252</td>
<td>Intermediate Spanish</td>
<td>3 each</td>
</tr>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
</tbody>
</table>

**Area 2. Humanities (a minimum of 9 semester hours)**

In meeting this requirement, the student may:

1. Complete all three (3) of the following Humanities Courses: HS 251-252-253 (3 semester hours each), or
2. Complete one (1) of the Humanities courses listed above and two courses representing any two (2) areas listed below for example, English and Music, Art and Music, Philosophy and Art, etc, or
3. Complete two (2) of the Humanities courses listed in (1) above, or HS 270 and select one (1) course from the following:

**Art**
- AT 175  The Visual Arts Today – 3 semester hours
- AT 271-272  Introduction to Art History I and II – 3 semester hours each

**Foreign Language**
- FH 251-252  Intermediate French – 3 semester hours each
- GN 251-252  Intermediate German – 3 semester hours each
- SH 251-252  Intermediate Spanish – 3 semester hours each
- SH 268-269  Introduction to Spanish Literature – 3 semester hours each
- SH 261  Introduction to Spanish Civilization – 3 semester hours

**Humanities**
- HS 151  Humanities in a Technological Society – 3 semester hours

**Literature**
- EH 250  Introduction to Literature – 3 semester hours
- EH 251-252  English Literature – 3 semester hours each
- EH 253-254  American Literature – 3 semester hours each
- EH 256  Contemporary Literature – 3 semester hours
- EH 268-269  World Literature – 3 semester hours each

**Music**
- MC 101  Musicianship I – 4 semester hours
- MC 191  Music Appreciation – 3 semester hours
- MC 192  Music Literature – 3 semester hours

**Philosophy**
- PI 251  Philosophy – 3 semester hours

**Religion**
- HS 261  Understanding Religious Man – 3 semester hours

**Area 3. Mathematics (a minimum of 3 semester hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 141</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MS 151</td>
<td>College Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MS 152</td>
<td>Advanced College Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>
MS 170  College Algebra – 3 semester hours  
MS 171  College Trigonometry – 3 semester hours  
MS 173  College Algebra and Trigonometry – 4 semester hours  
MS 251-252  Calculus with Analytic Geometry I & II – 5 semester hours each  
MS 253  Calculus III – 3 semester hours  
MS 255  Elementary Statistics – 3 semester hours  
MS 261  Introduction to Matrices – 3 semester hours  
MS 265  Introduction to Modern Algebra – 3 semester hours  
MS 281  Mathematics for Elementary Education Majors – 3 semester hours  
MS 290  Selected Topics in Mathematics – 1-3 semester hours each

Area 4. Natural and Physical Sciences (a minimum of 6 semester hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BY 151</td>
<td>Man and Environment I – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 152</td>
<td>Biological Sciences – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 172</td>
<td>Fundamentals of Biology – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 251</td>
<td>Introduction to Human Anatomy and Physiology – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 255-256</td>
<td>Human Anatomy and Physiology – 4 semester hours each</td>
<td></td>
</tr>
<tr>
<td>BY 261</td>
<td>Zoology I – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 262</td>
<td>Botany – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 263</td>
<td>Zoology II – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 265</td>
<td>Aquatic Biology – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 266</td>
<td>Marine Biology – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 280</td>
<td>Microbiology – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>BY 285</td>
<td>Seminar: Ecology – 1 semester hour</td>
<td></td>
</tr>
<tr>
<td>BY 286</td>
<td>Seminar: Development – 1 semester hour</td>
<td></td>
</tr>
<tr>
<td>BY 287</td>
<td>Seminar: Genetics – 1 semester hour</td>
<td></td>
</tr>
<tr>
<td>BY 288</td>
<td>Seminar: Evolution – 1 semester hour</td>
<td></td>
</tr>
<tr>
<td>BY 289</td>
<td>Seminar: Cellular Biology – 1 semester hour</td>
<td></td>
</tr>
<tr>
<td>BY 290</td>
<td>Selected Topics in Biology – 1-3 semester hours each</td>
<td></td>
</tr>
<tr>
<td>CY 155</td>
<td>Introductory Chemistry – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>CY 156</td>
<td>Chemical Calculations – 2 semester hours</td>
<td></td>
</tr>
<tr>
<td>CY 160</td>
<td>Introduction to Inorganic, Organic, and Biochemistry – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>CY 171-172</td>
<td>General Chemistry and Qualitative Analysis – 4 semester hours each</td>
<td></td>
</tr>
<tr>
<td>CY 265-266</td>
<td>Organic Chemistry – 4 semester hours each</td>
<td></td>
</tr>
<tr>
<td>CY 275</td>
<td>Quantitative Analysis – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>CY 290</td>
<td>Special Topics in Chemistry – 1-3 semester hours each</td>
<td></td>
</tr>
<tr>
<td>GL 201</td>
<td>Physical Geology – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>GL 202</td>
<td>Historical Geology – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>PH 121</td>
<td>Applied Physics – 4 semester hours</td>
<td></td>
</tr>
<tr>
<td>PH 151-152</td>
<td>Basic Physics – 4 semester hours each</td>
<td></td>
</tr>
<tr>
<td>PH 156</td>
<td>Physics Calculations – 2 semester hours</td>
<td></td>
</tr>
<tr>
<td>PH 161-162</td>
<td>Introductory Physics – 4 semester hours each</td>
<td></td>
</tr>
<tr>
<td>PH 261-262</td>
<td>General Physics with Calculus – 4 semester hours each</td>
<td></td>
</tr>
<tr>
<td>PH 270</td>
<td>Modern Physics – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>PH 290</td>
<td>Special Topics in Physics – 1-3 semester hours each</td>
<td></td>
</tr>
<tr>
<td>PS 191</td>
<td>The Ecology of Physical Science – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>PS 192</td>
<td>Earth Sciences – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>PS 194</td>
<td>Elementary Astronomy – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>PS 290</td>
<td>Selected Topics in Physical Science – 1-3 semester hour</td>
<td></td>
</tr>
</tbody>
</table>

Area 5. Social Sciences (a minimum of 6 semester hours)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL 151</td>
<td>American Government I – 3 semester hours</td>
<td></td>
</tr>
</tbody>
</table>

Plus One of the Following 8 Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 150</td>
<td>Orientation to Education – 3 semester hours</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>ES 151</td>
<td>Basic Economics</td>
<td>3 semester</td>
</tr>
<tr>
<td>HY 261</td>
<td>Afro-American History and Culture</td>
<td>3 semester</td>
</tr>
<tr>
<td>HY 270</td>
<td>Recent and Contemporary History</td>
<td>3 semester</td>
</tr>
<tr>
<td>PL 152</td>
<td>American Government II</td>
<td>3 semester</td>
</tr>
<tr>
<td>PL 252</td>
<td>State and Local Government</td>
<td>3 semester</td>
</tr>
<tr>
<td>PL 255</td>
<td>International Politics</td>
<td>3 semester</td>
</tr>
<tr>
<td>SY 261</td>
<td>Introductory Sociology</td>
<td>3 semester</td>
</tr>
</tbody>
</table>

**Elective Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AY 201</td>
<td>Introduction to Anthropology</td>
<td>3 semester</td>
</tr>
<tr>
<td>ES 130</td>
<td>Consumer Economics</td>
<td>3 semester</td>
</tr>
<tr>
<td>ES 261-262</td>
<td>Principles of Economics I &amp; II</td>
<td>3 semester</td>
</tr>
<tr>
<td>GY 151</td>
<td>World Geography</td>
<td>3 semester</td>
</tr>
<tr>
<td>HY 181-182</td>
<td>Western Civilization</td>
<td>3 semester</td>
</tr>
<tr>
<td>HY 251-252</td>
<td>United States History</td>
<td>3 semester</td>
</tr>
<tr>
<td>HY 255</td>
<td>History of Florida</td>
<td>3 semester</td>
</tr>
<tr>
<td>PL 199</td>
<td>Introduction to Political Science</td>
<td>3 semester</td>
</tr>
<tr>
<td>PL 207</td>
<td>Introduction to Comparative Politics</td>
<td>3 semester</td>
</tr>
<tr>
<td>PY 101</td>
<td>Psychology of Adjustments</td>
<td>3 semester</td>
</tr>
<tr>
<td>PY 130</td>
<td>Psychology of Adolescence</td>
<td>3 semester</td>
</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3 semester</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3 semester</td>
</tr>
<tr>
<td>PY 260</td>
<td>Psychology of Childhood and Youth</td>
<td>3 semester</td>
</tr>
<tr>
<td>SL 152</td>
<td>Man and Environment II</td>
<td>3 semester</td>
</tr>
<tr>
<td>SY 265</td>
<td>Contemporary American Problems</td>
<td>3 semester</td>
</tr>
<tr>
<td>SY 271</td>
<td>Marriage and the Family</td>
<td>3 semester</td>
</tr>
</tbody>
</table>

**Area 6. Electives** (a minimum of 6 hours from a combination of at least two separate areas listed on preceding pages or from the course offerings listed below):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 290</td>
<td>Seminar: Selected Topics in Art</td>
<td>1 semester</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3 semester</td>
</tr>
<tr>
<td>CD 101</td>
<td>Career Development</td>
<td>3 semester</td>
</tr>
<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
<td>3 semester</td>
</tr>
<tr>
<td>DP 105</td>
<td>Fortran Programming</td>
<td>3 semester</td>
</tr>
<tr>
<td>DP 250</td>
<td>Computers for Everyone</td>
<td>3 semester</td>
</tr>
<tr>
<td>EH 259</td>
<td>Introduction to Film</td>
<td>3 semester</td>
</tr>
<tr>
<td>EN 290</td>
<td>Field Experience in Education</td>
<td>1 semester</td>
</tr>
<tr>
<td>EN 291</td>
<td>Selected Topics in Education</td>
<td>1-3 semester</td>
</tr>
<tr>
<td>ES 290</td>
<td>Selected Topics in Economics</td>
<td>1-3 semester</td>
</tr>
<tr>
<td>GA 101</td>
<td>Introduction to Graphic Communication</td>
<td>3 semester</td>
</tr>
<tr>
<td>HH 150</td>
<td>Personal and Community Health</td>
<td>3 semester</td>
</tr>
<tr>
<td>HY 290</td>
<td>Selected Topics in History</td>
<td>1-3 semester</td>
</tr>
<tr>
<td>JM 290</td>
<td>Selected Topics in Journalism</td>
<td>1 semester</td>
</tr>
<tr>
<td>LC 151</td>
<td>Practical Logic</td>
<td>3 semester</td>
</tr>
<tr>
<td>LC 251</td>
<td>Formal Logic</td>
<td>3 semester</td>
</tr>
<tr>
<td>LE 101</td>
<td>Introduction to Criminal Justice</td>
<td>3 semester</td>
</tr>
<tr>
<td>MS 125</td>
<td>The Metric System</td>
<td>1 semester</td>
</tr>
<tr>
<td>MS 161</td>
<td>Modern Computational Methods</td>
<td>2 semester</td>
</tr>
<tr>
<td>PC 101</td>
<td>Introduction to Corrections</td>
<td>3 semester</td>
</tr>
<tr>
<td>PI 261</td>
<td>Ethics</td>
<td>3 semester</td>
</tr>
<tr>
<td>PL 290</td>
<td>Seminar: Selected Topics in Political Science</td>
<td>1-3 semester</td>
</tr>
<tr>
<td>PY 201</td>
<td>Educational Psychology</td>
<td>3 semester</td>
</tr>
<tr>
<td>PY 290</td>
<td>Seminar: Selected Topics in Psychology</td>
<td>1-3 semester</td>
</tr>
<tr>
<td>SL 290</td>
<td>Field Experience in Social Sciences</td>
<td>1 semester</td>
</tr>
</tbody>
</table>
SP 151-152  Introduction to the Theatre — 3 semester hours
SP 166    Public Speaking — 3 semester hours
SP 175    Informal Communication — 3 semester hours
SP 290    Seminar: Selected Topics in Speech — 1 semester hour
SY 290    Seminar: Selected Topics in Sociology — 1-3 semester hour
CAREER PROGRAMS

ASSOCIATE IN SCIENCE DEGREE

General Information

The Associate in Science Degree is offered for students who wish to complete a two year college program in preparation for careers requiring specialized study beyond the high school level.

Some of Valencia Community College's career programs are offered on the East Campus while other programs are offered on the West Campus. Students who are enrolled in A.S. programs may take general courses such as American Government and English at any campus or teaching center; however, it may be necessary to go to either the East or the West Campus for specialized career courses. Students who are interested in career programs should contact the Counseling Department at any campus for additional information regarding the programs.

It is important to note that students who choose the Associate in Science Degree programs are NOT necessarily preparing themselves for transfer to a state university. However, many of the programs contain courses which carry credits that could be transferred to a senior institution. Students who wish to pursue the possibility of transfer into a four-year degree program should contact the university regarding transferability of the courses. Students should also confer with the Counseling Office at Valencia Community College. Most senior institutions in the state of Florida now offer a Bachelor of Engineering Technology Degree which is designed to build upon the Associate in Science Degree in engineering related programs.

The General Education courses that are included in all Associate in Science Degree programs are designed to contribute to the overall growth and development of the individual student. In addition to becoming a technician or specialist in one area, the student is required to include broad areas of study for full development as a mature, educated and enlightened citizen which will enhance his employment potential. It is important that the student fully understand this concept of the two-year college degree career programs as being quite different and much broader in scope than the type of training experienced in a vocational school.

Any deviation from the prescribed program in which the student is enrolled must be approved by the department involved.

GRADUATION REQUIREMENTS FOR THE ASSOCIATE IN SCIENCE DEGREE

1. Complete a prescribed course of study in one of the career programs.

2. Earn a grade point average of at least 2.0 on all courses attempted which apply toward the Associate in Science Degree.
Earn a grade point average of at least 2.0 on all courses attempted at Valencia Community College.

Earn a grade point average of at least 2.0 on all courses attempted.

3. Complete the last fifteen (15) college credit hours in residence at Valencia Community College.

4. File application for graduation in the Admissions Office by the deadline date as listed in the college calendar and catalog.

Final responsibility for meeting the requirements for graduation for the Associate in Science degree rests with the student.

A student in an *Associate in Science Degree Program* who graduates within five (5) years of his first admission to Valencia Community College has the right to graduate under the rules, regulations and requirements stated in the catalog in effect at the time of such admission or of the catalog in effect for the year in which graduation occurs.

Certificates are available in the Child Development, Clerical, Fire Technology, Law Enforcement and Prevention and Corrections programs. These certificates are available for those students who complete the required courses as outlined in the specific program listed in the catalog.
MAKE YOUR MOVE TO VALENCIA TODAY!
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

This program is designed to produce competent Air Conditioning and Refrigeration technicians capable of working with architects, engineers, contractors, and others who function in one of the many facets of the total occupational cluster.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 137 or 170</td>
<td>Technical Math I or College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>EG 151</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>CY 155</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>AC 102</td>
<td>Heating, Ventilating &amp; Air Conditioning I</td>
<td>4</td>
</tr>
<tr>
<td>MS 138 or 171</td>
<td>Tech. Math. II or College Trig.</td>
<td>3</td>
</tr>
<tr>
<td>PS 151 or 161</td>
<td>Basic Physics I/Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>HS 151</td>
<td>Humanities in a Technical Society</td>
<td>3</td>
</tr>
<tr>
<td>AC 111</td>
<td>Refrigeration I</td>
<td>4</td>
</tr>
<tr>
<td>AC 113</td>
<td>Air Conditioning II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC 201</td>
<td>Cooperative Placement in Industry or Effective</td>
<td>3</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communications</td>
<td>3</td>
</tr>
<tr>
<td>AC 204</td>
<td>Electricity for Air Conditioning &amp; Refrigeration</td>
<td>4</td>
</tr>
<tr>
<td>AC 212</td>
<td>Refrigeration II</td>
<td>3</td>
</tr>
<tr>
<td>AC 213</td>
<td>Air Conditioning III</td>
<td>4</td>
</tr>
<tr>
<td>AL 292</td>
<td>Building Service Systems</td>
<td>4</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>AC 214</td>
<td>Control Systems for Air Conditioning &amp; Refrigeration</td>
<td>3</td>
</tr>
<tr>
<td>AL 294</td>
<td>Contracts, Codes, Specifications &amp; Office Practices</td>
<td>3</td>
</tr>
<tr>
<td>BA 280 or 284</td>
<td>Principles of Marketing/Salesmanship</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

NOTE: Specialized program courses are offered at the McCoy Center. Other courses in the program such as English, psychology, etc., may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN ARCHITECTURAL AND BUILDING CONSTRUCTION TECHNOLOGY

This program is designed to train competent technicians capable of working with architects, engineers, contractors, building officials and others. The program is planned for persons just entering the field of construction as well as for those currently employed who desire advancement. Instruction in this program provides a balanced curriculum in theory and practical application of typical work experiences and problems.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 137/170</td>
<td>Technical Mathematics I/College Algebra</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
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</tr>
<tr>
<td>AL 190</td>
<td>Building Materials &amp; Construction Methods</td>
<td>4</td>
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<tr>
<td>MS 138/171</td>
<td>Technical Mathematics II/College Trigonometry</td>
<td>3</td>
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<tr>
<td>EH 157</td>
<td>Technical Communications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PH 151/161</td>
<td>Basic Physics I/Introductory Physics I</td>
<td>4</td>
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</tr>
<tr>
<td>AL 192</td>
<td>Construction Planning &amp; Control</td>
<td>3</td>
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<tr>
<td>AL 161</td>
<td>Architectural Drawing I (Wood Frame Structure)</td>
<td>4</td>
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<tr>
<td>AL 194</td>
<td>Contracts, Codes, Specifications &amp; Office Practices</td>
<td>3</td>
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SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
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<tbody>
<tr>
<td>AL 291</td>
<td>Statics &amp; Strength of Materials</td>
<td>4</td>
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<tr>
<td>PH 152/162</td>
<td>Basic Physics II/Introductory Physics II</td>
<td>4</td>
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<tr>
<td>AL 292</td>
<td>Building Service Systems (Mechanical &amp; Electrical)</td>
<td>4</td>
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<tr>
<td>AL 261</td>
<td>Architectural Drawing II (Steel Structures)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CV 192</td>
<td>Surveying &amp; Measurements</td>
<td>3</td>
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<td>Required Elective*</td>
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<tr>
<td>AL 296</td>
<td>Building Construction Estimating</td>
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<td>AL 262</td>
<td>Architectural Drawing III (Concrete Structures)</td>
<td>4</td>
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<tr>
<td>AL 265</td>
<td>Architectural Design</td>
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</table>

*Students shall select one recommended elective from the list below.
DP 101 — Introduction to Data Processing — 3 Credits
DP 105 — Fortran Programming — 3 Credits
GA 280 — Pictorial Rendering — 3 Credits
AL 293 — Cooperative Placement in Industry — 3 Credits

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1972-73.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.

*Graduates of Mid-Florida Technical Institute's drafting program will be awarded credit in these courses after attending Valencia Community College for one semester.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN AUTOMOTIVE SERVICE TECHNOLOGY

This program is designed for students who wish to prepare for responsible positions in the automotive industry. A selected balance of general education courses, industry-related courses, and automotive courses are chosen which will give the graduate the necessary specific knowledge of the automotive service industry and supportive businesses. Human relations, communications, computational, and management skills are stressed.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>MS 137 or 170</td>
<td>Technical Math I or College Algebra</td>
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</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>AS 150</td>
<td>Engines</td>
<td>3</td>
</tr>
<tr>
<td>AS 160</td>
<td>Electricity</td>
<td>3</td>
</tr>
<tr>
<td>MS 138 or 171</td>
<td>Technical Math II or College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>AS 155</td>
<td>Engine Diagnosis &amp; Tune-up</td>
<td>3</td>
</tr>
<tr>
<td>AS 186</td>
<td>Service Management &amp; Parts Procurement</td>
<td>3</td>
</tr>
<tr>
<td>AS 191</td>
<td>Steering, Suspension, and Brakes</td>
<td>3</td>
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<tr>
<td>BA 282</td>
<td>Principles of Management</td>
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<tr>
<td>Elective (General Education)</td>
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SOPHOMORE YEAR

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<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>AS 201</td>
<td>Cooperative Placement</td>
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</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>PH 151 or 161</td>
<td>Basic Physics I or Introductory Physics I</td>
<td>4</td>
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<tr>
<td>AS 275</td>
<td>Transmission and Drive Lines</td>
<td>3</td>
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<tr>
<td>PH 152 or 162</td>
<td>Basic Physics II or Introductory Physics II</td>
<td>4</td>
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<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
<td>3</td>
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<tr>
<td>Elective</td>
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<tr>
<td>AS 260</td>
<td>Electrical Systems</td>
<td>3</td>
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<td>AS 280</td>
<td>Air Conditioning</td>
<td>3</td>
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<tr>
<td>BA 284</td>
<td>Salesmanship</td>
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</tbody>
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NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

NOTE: Specialized program courses are offered at the McCoy Center. Other courses in the program such as English, psychology, etc., may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN BANKING AND CONSUMER CREDIT

This program is designed to train and educate students for gainful employment in banks, savings and loan associations, finance and credit departments of commercial businesses and arrangement will permit the student to receive both classroom instruction and on-the-job experience during the program.

FRESHMAN YEAR

<table>
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<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>ES 151</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BA 231</td>
<td>Principles of Finance</td>
<td>3</td>
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<tr>
<td>BA 232</td>
<td>Financial Institutions</td>
<td>3</td>
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<tr>
<td>BA 251</td>
<td>Principles of Accounting I</td>
<td>3</td>
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<tr>
<td>BA 233</td>
<td>Credit Laws and Regulations</td>
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SOPHOMORE YEAR

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<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>DP 101</td>
<td>Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>BA 234</td>
<td>Installment Credit</td>
<td>3</td>
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<tr>
<td>BA 236</td>
<td>Money and Banking</td>
<td>3</td>
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<tr>
<td>BA 238</td>
<td>Financial Institution Practicum or Cooperative Education</td>
<td>3</td>
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<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
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<tr>
<td>BA 221</td>
<td>Real Estate Finance I</td>
<td>3</td>
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<tr>
<td>BA 235</td>
<td>Credit Administration</td>
<td>3</td>
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<tr>
<td>BA 237</td>
<td>Promotion and Public Relations</td>
<td>3</td>
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<tr>
<td>BA 239</td>
<td>Financial Institution Practicum or Cooperative Education</td>
<td>3</td>
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<tr>
<td>CO 203</td>
<td>Cooperative Education</td>
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</table>

Students are encouraged to supplement the above and enroll in one or more courses: BA 201, Business Machines; HS (Humanities elective); BA-227, Federal Income Tax; BA 275, Business Law I; BA-171 or 172, Beginning or Intermediate Typing; EH-157, Technical Communication.

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

NOTE: Specialized program courses are offered at the East Campus. Other courses in the program such as English, psychology, etc., may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE
IN SCIENCE DEGREE IN BUSINESS
AND MANAGEMENT

This program is designed for students who seek immediate employment in the field of business and for those presently employed in some business career and desiring advancement.

Instruction in this program provides a balanced curriculum of general education and business related subjects.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
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<tr>
<td>*MS 81 or 170</td>
<td>Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PL 151 &amp; 152</td>
<td>American Government I &amp; II</td>
<td>6</td>
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<tr>
<td>PY 161</td>
<td>Psychology in Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>and Industry</td>
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<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
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<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
<td>3</td>
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<tr>
<td>Elective</td>
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**SOPHOMORE YEAR**

<table>
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<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>BA 251 &amp; 252</td>
<td>Principles of Accounting</td>
<td>6</td>
</tr>
<tr>
<td>BA 275 &amp; 276</td>
<td>Business Law</td>
<td>6</td>
</tr>
<tr>
<td>BA 280</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BA 282</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>ES 151</td>
<td>Introduction to Economics</td>
<td>3</td>
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<tr>
<td>*MS 255</td>
<td>Elementary Statistics</td>
<td>3</td>
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<tr>
<td>*BA 283</td>
<td>Retailing</td>
<td>(3)</td>
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<tr>
<td>*BA 284</td>
<td>Salesmanship</td>
<td>(3)</td>
</tr>
</tbody>
</table>

*Students may take either math sequences (MS 81 or 170) or (MS 151 or 152) and MS 255 or the business sequences BA 283 and 284. BA 227 – Federal Income Tax, BA 256 – Managerial Accounting or BA 285 – Advertising is an acceptable elective.

Students interested in *Insurance Careers* should take BA 104 – Introduction to Insurance as an elective. A minimum of sixty (60) semester hours is required for graduation.

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

Suggested Parallel program sheets for the Associate of Arts (A.A. – transfer) Degree for Business Administration are available in the Counseling Office.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN CHILD DEVELOPMENT

This program is designed for students who seek employment in preschool centers, for those persons currently employed in child care centers and parents who are interested in learning more about children. Courses will be offered in the evening as well as in the daytime with the exception of CT 102, CT 106, and CT 206. These courses can only be offered while children are attending the play school during the day. A health card is a program requirement.

A student desiring to earn a certificate may do so by completing a total of 24 hours of credit in Child Development courses, excluding student participation courses (CT 102, 106, 206).

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CT 105</td>
<td>Art for Young Children</td>
<td>3</td>
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<tr>
<td>CT 101</td>
<td>Child Development and Management</td>
<td>3</td>
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<tr>
<td>CT 102</td>
<td>Observing and Recording Child Behavior</td>
<td>4</td>
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<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
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<tr>
<td>HHI 165</td>
<td>First Aid and Safety</td>
<td>2</td>
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<tr>
<td>CT 106</td>
<td>Supervised Student Participation</td>
<td>4</td>
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<tr>
<td>CT 109</td>
<td>Music for Young Children</td>
<td>3</td>
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<tr>
<td>CT 107</td>
<td>Literature for Young Children</td>
<td>3</td>
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<tr>
<td>CT 116</td>
<td>Curriculum for the Young Child</td>
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SOPHOMORE YEAR

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<th>Course</th>
<th>Description</th>
<th>Hours</th>
<th>Credit</th>
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<tbody>
<tr>
<td>CT 110</td>
<td>Principles of Pre-School Education</td>
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<tr>
<td>CT 103</td>
<td>Food for Young Children</td>
<td>3</td>
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<tr>
<td>CT 206</td>
<td>Supervised Student Participation</td>
<td>4</td>
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<td>CT 115</td>
<td>Movement Exploration</td>
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<td>CT 210</td>
<td>Advanced Child Development and Management</td>
<td>3</td>
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<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
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<td>SY 261</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>CT 211</td>
<td>Seminar in Child Development</td>
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<tr>
<td>HS 151</td>
<td>Humanities in a Technological Society</td>
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<tr>
<td>PY 151</td>
<td>General Psychology</td>
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NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1974-75.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc., may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN CIVIL TECHNOLOGY

This program provides theoretical and classroom experience which closely parallels on-the-job situations found in a civil engineer’s office and applies to the design of bridges, causeways, highways, airports, water control systems and “structures” and numerous other areas within the total occupational cluster.

FRESHMAN YEAR

<table>
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<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>MS 137/170</td>
<td>Technical Mathematics I/ College Algebra</td>
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<td>EH 151</td>
<td>Freshman Composition</td>
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<tr>
<td>PH 151/161</td>
<td>Basic Physics I/ Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>AL 191</td>
<td>Building Materials and Construction Methods</td>
<td>3</td>
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<tr>
<td>EG 151</td>
<td>Engineering Drawing</td>
<td>3</td>
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<tr>
<td>MS 138/171</td>
<td>Tech. Math II /College Trigonometry</td>
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<td>PH 152/162</td>
<td>Basic Physics II/ Physics II</td>
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<td>CV 192</td>
<td>Surveying &amp; Measurements</td>
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<td>AL 291</td>
<td>Statics and Strength of Materials</td>
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<tr>
<td>CV 102</td>
<td>Construction Methods &amp; Equipment</td>
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SOPHOMORE YEAR

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<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>EH 157</td>
<td>Technical Communications</td>
<td>3</td>
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<tr>
<td>DP 105</td>
<td>Fortran Programming</td>
<td>3</td>
</tr>
<tr>
<td>CV 292</td>
<td>Photogrammetry</td>
<td>2</td>
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<tr>
<td>CV 293</td>
<td>Soils and Foundations</td>
<td>3</td>
</tr>
<tr>
<td>CV 201</td>
<td>Advanced Drafting for Highway Technology</td>
<td>3</td>
</tr>
<tr>
<td>CV 294</td>
<td>Estimating &amp; Office Practice</td>
<td>3</td>
</tr>
<tr>
<td>CV 295</td>
<td>Route Design &amp; Survey</td>
<td>3</td>
</tr>
<tr>
<td>CV 296</td>
<td>Steel &amp; Wood Construction</td>
<td>3</td>
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<tr>
<td>CV 297</td>
<td>Reinforced Concrete Construction</td>
<td>3</td>
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<tr>
<td>CV 298</td>
<td>Hydraulics &amp; Drainage, Sewage &amp; Sewers</td>
<td>3</td>
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<tr>
<td>Non-technical elective</td>
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</table>

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE
IN CRIMINAL JUSTICE

LAW ENFORCEMENT OPTION *

These programs have been planned in cooperation with various members of the Criminal Justice System. The Criminal Justice Program offers the student major areas of concentration in Police Science and Corrections. It provides a curriculum designed to enable students to become familiar with the basic nature of certain career field services while providing an overview of the entire Criminal Justice System and the common client it shares.

A student desiring to earn a certificate may do so by completing a total of 24 hours of credit in Law Enforcement courses.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>LE 101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>LE 121</td>
<td>Crime &amp; Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>LE 131</td>
<td>Police Administration &amp; Organization</td>
<td>3</td>
</tr>
<tr>
<td>LE 132</td>
<td>Police Operations</td>
<td>3</td>
</tr>
<tr>
<td>MS 151/BA 180</td>
<td>College Mathematics/Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PL 151 &amp; 152</td>
<td>American Government I &amp; II</td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
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 30

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>LE 201, 202</td>
<td>Criminal Investigation I &amp; II</td>
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<td>LE 221</td>
<td>Criminal Law &amp; Legal Procedures</td>
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<td>LE 222</td>
<td>Criminal Evidence &amp; Legal Procedures</td>
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<tr>
<td>LE 231</td>
<td>Police Personnel Supervision or</td>
<td>3</td>
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<tr>
<td>Elective</td>
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<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
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<tr>
<td>PY 180</td>
<td>Applied Psychology for Criminal Justice</td>
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<tr>
<td>SY 261</td>
<td>Introductory Sociology</td>
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<tr>
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<td>Contemporary American Social Problems</td>
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<tr>
<td>LC 151</td>
<td>Practical Logic</td>
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* Students expecting employment in law enforcement must meet all established entrance requirements of the field.

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

Students are eligible for a certificate in Law Enforcement after completing twenty-four (24) hours of courses designated with an LE prefix.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN CRIMINAL JUSTICE PREVENTION/CORRECTIONS OPTION

These programs have been planned in cooperation with various members of the Criminal Justice System. The Criminal Justice Program offers the student major areas of concentration in Police Science and Corrections. It provides a curriculum designed to enable students to become familiar with the basic nature of certain career field services while providing an overview of the entire Criminal Justice System and the common client it shares.

A student desiring to earn a certificate may do so by completing a total of 24 hours of credit in Prevention and Corrections (PC) courses.

### FRESHMAN YEAR

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<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<td>Freshman Composition</td>
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<td>LE 101</td>
<td>Introduction to Criminal Justice</td>
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<td>PC 101</td>
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<td>PL 151</td>
<td>American Government I</td>
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<td>Technical Writing</td>
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<td>Crime &amp; Delinquency</td>
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<td>SY 261</td>
<td>Introduction to Sociology</td>
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<td>*SY 265</td>
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### SOPHOMORE YEAR

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<th>Course</th>
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<tr>
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<td>Criminal Law &amp; Legal Procedures</td>
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<td>Speech</td>
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<tr>
<td>PC 158</td>
<td>Institutional Procedures, Jails &amp; Detention</td>
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<td>Humanities in a Technological Society</td>
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<td>PC 202</td>
<td>Group &amp; Individual Counseling</td>
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<td>PC 225</td>
<td>Legal Issues in Corrections</td>
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<td>PC 252</td>
<td>Community Correctional Services</td>
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<td>PC 260</td>
<td>Probation and Parole</td>
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<td>*PC 280</td>
<td>Field Work Experience</td>
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*Prerequisite required or consent of instructor.

Students wishing to earn a Certificate may do so by completing a total of 24 hours of credit, earned in Prevention and Corrections (PC) courses. Law Enforcement courses – L.E. 101, 121, or 221 may also be counted toward the Certificate.

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE (ASSOCIATE IN SCIENCE DEGREE) IN DATA PROCESSING

This program is designed for the student who wishes to be usefully employed in one of several business data processing fields. With training beyond basic skills, the student may progress to managerial positions.

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<tr>
<th>Course</th>
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<td>EH 151</td>
<td>Freshman Composition</td>
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<td>PL 151 &amp; 152</td>
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<td>Introduction to Business</td>
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<td>BA 251</td>
<td>Principles of Accounting</td>
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<td>Basic Economics</td>
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<td>Elementary Statistics</td>
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<td>Data Systems and Management</td>
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<td>COBOL Programming</td>
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**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN DISTRIBUTION AND MARKETING

This program includes a cooperation plan in which classroom instruction is supplemented with on-the-job training in an approved distribution or marketing occupation. The college appointed coordinator for this program will give assistance where possible; however, the responsibility for securing an acceptable business position rests with the student.

<table>
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<tr>
<th>Course</th>
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<td>BA 180</td>
<td>Business Mathematics</td>
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<td>BA 280</td>
<td>Principles of Marketing</td>
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<td>BA 282</td>
<td>Principles of Management</td>
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<td>BA 284</td>
<td>Salesmanship</td>
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<td>BA 110-112</td>
<td>Marketing Seminar I &amp; II</td>
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<td>BA 111-113</td>
<td>Marketing Practicum I &amp; II</td>
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<td>Freshman Composition</td>
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<td>PL 151</td>
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**SOPHOMORE YEAR**

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<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tr>
<td>BA 101</td>
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<td>BA 275</td>
<td>Business Law I</td>
<td>3</td>
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<td>BA 283</td>
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<td>BA 285</td>
<td>Advertising</td>
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<td>BA 210-212</td>
<td>Marketing Seminar III &amp; IV</td>
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<td>BA 211-213</td>
<td>Marketing Practicum III &amp; IV</td>
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<td>Introduction to Data Processing</td>
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<td>ES 151</td>
<td>Basic Economics</td>
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<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
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<td>SP 165</td>
<td>Fundamentals of Speech</td>
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<td><strong>Total</strong> 30</td>
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</table>

Capable students are encouraged to take BA 251 in place of BA 101.

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN DRAFTING AND DESIGN TECHNOLOGY

This program is designed to train technicians who can be assistants to engineers and architects by transplanting ideas, rough sketches, specifications and calculations into complete and accurate working drawings.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
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<tr>
<td>MS 137/170</td>
<td>Technical Mathematics I/College Algebra</td>
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<tr>
<td>EG 157</td>
<td>Engineering Materials &amp; Processes</td>
<td>3</td>
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<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
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<tr>
<td>*EG 151</td>
<td>Engineering Drawing</td>
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<tr>
<td>EH 167</td>
<td>Technical Communications</td>
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<tr>
<td>MS 138/171</td>
<td>Tech. Mathematics II/College Trigonometry</td>
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<tr>
<td>PH 151/161</td>
<td>Basic Physics I/Introductory Physics I</td>
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<tr>
<td>*EG 152</td>
<td>Descriptive Geometry</td>
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<td>*DG 111</td>
<td>Mechanical Drafting I</td>
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**SOPHOMORE YEAR**

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<th>Course</th>
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<td>Elective</td>
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<tr>
<td>MS 161</td>
<td>Modern Computational Methods</td>
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<td>PH 152/162</td>
<td>Basic Physics II/Introductory Physics II</td>
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<td>*DG 201</td>
<td>Electromechanical Drafting I</td>
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<td>*DG 211</td>
<td>Mechanical Drafting II</td>
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<td>Psychology in Business and Industry</td>
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<td>*DG 202</td>
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<td>Mechanical Drafting III</td>
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**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.

* Graduates of Mid-Florida Technical Institute's drafting program will be awarded credit in these courses after attending Valencia Community College for one semester.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN ELECTRO-MECHANICAL TECHNOLOGY

This program will produce a technician not only competent in areas that require combined or overlapping skills in electronics, mechanics, fluids, optics, acoustics and thermodynamics, but also capable of entering several technical occupations.

FRESHMAN YEAR

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<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
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<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
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<td>MS 137/170</td>
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<td>Basic Physics I/Introductory Physics I</td>
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<td>Technical Mathematics II/College Trigonometry</td>
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<td>Mechanisms</td>
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SOPHOMORE YEAR

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<td>EM 220</td>
<td>Electromechanical Components</td>
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<td>EM 201</td>
<td>Digital Systems Fundamentals</td>
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<td>Storage Principles &amp; Devices</td>
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<td>Input/Output Devices</td>
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NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
ELECTRONICS TECHNOLOGY

This program is designed to produce skilled technicians capable of
assisting in the design, production, operation and servicing of electrical and
electronic systems and equipment. It is organized to provide the latest theory
and practice in electrical and electronics circuitry to enable students to gain
responsible positions in one of the many clusters of occupations in the elec-
tronics field.

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<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
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<td>Basic Physics/Introductory Physics I</td>
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<td>MS 138/171</td>
<td>Technical Math II/College Trigonometry</td>
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<td>EM 215</td>
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<td></td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Students wishing to transfer any credits from this program to another institu-
tion must accept the responsibility for securing approval in advance from the transfer
institution.

NOTE: Specialized program courses are offered on the West Campus. Other courses in
the program such as English, psychology, etc. may be offered at any campus and/or
teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN EXECUTIVE SECRETARIAL SCIENCE

This program is designed to meet the needs of students desiring college level training in Secretarial Science. Included in the program are provisions for an Option in Insurance Secretarial training or the Clerical Certificate.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 151</td>
<td>Beginning Shorthand</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>*BA 152</td>
<td>Intermediate Shorthand</td>
<td>3</td>
<td></td>
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<tr>
<td>*BA 171</td>
<td>Beginning Typewriting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>*BA 172</td>
<td>Intermediate Typewriting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 201</td>
<td>Business Machines</td>
<td>3</td>
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SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 253</td>
<td>Advanced Shorthand</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 255</td>
<td>Shorthand Transcription</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 271</td>
<td>Advanced Typewriting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 275</td>
<td>Business Law</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OP 101</td>
<td>Introduction to Data Processing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 260</td>
<td>Office Procedures</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>**BA 261</td>
<td>Secretarial Procedures</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>**BA 263</td>
<td>Executive Secretarial Seminar</td>
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</tr>
<tr>
<td></td>
<td>and Work Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humanities Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

*Students with prior instruction and/or experience should enroll in next higher shorthand and/or typewriting course. They should select electives in lieu of BA 151, 152, 171 or 172 or take credit by exam (CE) for the course waived.

**Required by Clerical and Executive Secretary students.
Recommended electives as substitutes for * and/or **: ES 151, Basic Economics; BA 276 Business Law II; PY 151 Gen. Psychology; SY 261 Intro. to Sociology; BA 282 Prin. of Management.

INSURANCE SECRETARY OPTION. Recommended Courses.

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 11/74.
EXECUTIVE SECRETARIAL PROGRAM
WITH AN OPTION FOR A
CLERICAL CERTIFICATE

This is a one-year certificate program comprised of selected courses offered as a part of the Executive Secretarial Program. It is designed to provide the student with the basic fundamentals in typing and record keeping, as well as a basic general education background that will be valuable to the student working in a clerical position.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>BA 171</td>
<td>Beginning Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BA 172</td>
<td>Intermediate Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>BA 201</td>
<td>Business Machines</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>BA 263</td>
<td>Executive Secretarial Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>and Work Experience</td>
<td>15</td>
</tr>
<tr>
<td>BA 261</td>
<td>Secretarial Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BA 271</td>
<td>Advanced Typewriting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Students selecting this option are encouraged to enroll in elective courses related to this career area by use of the waiver in lieu of credit by examination (CE) where possible.

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 11/74.

NOTE: Courses in this program may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE
IN FIRE TECHNOLOGY

This program is designed for potential firemen, firemen aspiring to become officers, officers wanting State Fire Fighters Standards Council Certification, and those desiring to expand their technical, theoretical and general knowledge.

A student wishing to earn a certificate rather than an Associate in Science Degree may do so by completing only the Fire Technology courses.

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EHJ 157</td>
<td>Technical Communications</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FT 101</td>
<td>Introduction to Fire Protection</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FT 111</td>
<td>Supervision and Leadership</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FT 112</td>
<td>Company Management</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FT 113</td>
<td>Company Fire Ground Management</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MS 151</td>
<td>College Mathematics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PL 151-152</td>
<td>American Government I &amp; II</td>
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</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td></td>
<td>3</td>
</tr>
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**30**

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SY 261</td>
<td>Introductory Sociology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CY 155</td>
<td>Introductory Chemistry</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>FT 201</td>
<td>Fundamentals of Fire Prevention</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><em>Humanities Area Elective</em></td>
<td></td>
<td>3</td>
<td></td>
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<tr>
<td>Electives</td>
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<td>6</td>
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</tr>
<tr>
<td>FT 221</td>
<td>Fire Protection Systems &amp;</td>
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<td>3</td>
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<tr>
<td>Extinguishing Agents</td>
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<tr>
<td>FT 222</td>
<td>Building Construction and Fundamentals</td>
<td></td>
<td>3</td>
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<tr>
<td>FT 231</td>
<td>Fire Department Management</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

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*The Fire Technology student is required to take one course from Area 2 (Humanities). The Humanities Area courses are outlined and described in the college catalog.

Students with prior experience in the area of Fire Prevention and code enforcement may take FT-201 by (CE) Credit by Examination.

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
GRAPHIC ARTS TECHNOLOGY

PRINTING/MANAGEMENT OPTION

This program is structured for the student who wishes to pursue a
career in Graphic Arts with special emphasis on the managerial aspects of the
photolithographic and reproduction phases. A summer cooperative plan is
included which supplements classroom instruction and provides credit for
on-the-job training.

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>MS 137/170</td>
<td>Technical Math I/College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CY 155</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>AT 161</td>
<td>Design I</td>
<td>3</td>
</tr>
<tr>
<td>GA 101</td>
<td>Introduction to Graphic Communications</td>
<td>3</td>
</tr>
<tr>
<td>MS 138/171</td>
<td>Technical Math II/College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>PH 152/162</td>
<td>Basic Physics/Introductory Physics</td>
<td>4</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>GA 110</td>
<td>Fundamentals of Typography</td>
<td>3</td>
</tr>
<tr>
<td>GA 115</td>
<td>Layout, Design and Copy Preparation</td>
<td>3</td>
</tr>
</tbody>
</table>

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SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA 201</td>
<td>Cooperative Placement in Industry</td>
<td>3</td>
</tr>
<tr>
<td>HS 151</td>
<td>Humanities in a Technical Society</td>
<td>3</td>
</tr>
<tr>
<td>GA 210</td>
<td>Graphic Reproduction Processes</td>
<td>3</td>
</tr>
<tr>
<td>GA 235</td>
<td>Offset Stripping and Lithographic Plates</td>
<td>3</td>
</tr>
<tr>
<td>GA 237</td>
<td>Work Simplification</td>
<td>3</td>
</tr>
<tr>
<td>GA 250</td>
<td>Photolithography I</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>BA 242</td>
<td>Printing Salesmanship</td>
<td>3</td>
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<tr>
<td>BA 244</td>
<td>Graphics Production Management</td>
<td>3</td>
</tr>
<tr>
<td>GA 260</td>
<td>Photolithography II</td>
<td>3</td>
</tr>
<tr>
<td>GA 275</td>
<td>Graphic Arts Estimating</td>
<td>3</td>
</tr>
</tbody>
</table>

30

NOTE: Students wishing to transfer any credits from this program to another
institution must accept the responsibility for securing approval in advance from the
transfer institution.

NOTE: Specialized program courses are offered on the West Campus. Other courses in
the program such as English, psychology, etc. may be offered at any campus and/or
teaching center.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
GRAPHIC ARTS TECHNOLOGY

TECHNICAL ILLUSTRATION OPTION

This program is structured for the student who wishes to pursue a
career in Graphic Arts with special emphasis on layout, design, and illustrating,
both technical and commercial. A summer cooperative plan is included
which supplements classroom instruction and provides credit for on-the-job
training.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>MS 137/170</td>
<td>Technical Math I/College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CY 155</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>AT 161</td>
<td>Design I</td>
<td>3</td>
</tr>
<tr>
<td>GA 101</td>
<td>Introduction to Graphic Communications</td>
<td>3</td>
</tr>
<tr>
<td>MS 138/171</td>
<td>Technical Math II/College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>PH 152/162</td>
<td>Basic Physics/Introductory Physics</td>
<td>4</td>
</tr>
<tr>
<td>EG 151</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>GA 110</td>
<td>Fundamentals of Typography</td>
<td>3</td>
</tr>
<tr>
<td>GA 115</td>
<td>Layout, Design and Copy Preparation</td>
<td>3</td>
</tr>
</tbody>
</table>

FRESHMAN YEAR Total: 32

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA 201</td>
<td>Cooperative Placement in Industry</td>
<td>3</td>
</tr>
<tr>
<td>HS 151</td>
<td>Humanities in a Technical Society</td>
<td>3</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communications</td>
<td>3</td>
</tr>
<tr>
<td>GA 130</td>
<td>Illustrating I</td>
<td>3</td>
</tr>
<tr>
<td>GA 240</td>
<td>Graphical Presentation of Data</td>
<td>3</td>
</tr>
<tr>
<td>GA 250</td>
<td>Photolithography I</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>BA 244</td>
<td>Graphics Production Management</td>
<td>3</td>
</tr>
<tr>
<td>GA 230</td>
<td>Illustrating II</td>
<td>3</td>
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<tr>
<td>GA 265</td>
<td>Copy Preparation</td>
<td>3</td>
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<tr>
<td>GA 280</td>
<td>Pictorial Rendering</td>
<td>3</td>
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</tbody>
</table>

SOPHOMORE YEAR Total: 33

NOTE: Students wishing to transfer any credits from this program to another
institutions must accept the responsibility for securing approval in advance from the
transfer institution.

NOTE: Specialized program courses are offered on the West Campus. Other courses in
the program such as English, psychology, etc. may be offered at any campus and/or
teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN HOTEL—MOTEL—RESTAURANT MANAGEMENT

This program is designed for persons desiring employment in the field of hotel-motel-restaurant management areas as well as for those currently employed who desire advancement.

This program includes work experience in local hotel-motel-restaurant organizations.

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>PL 151 &amp; 152</td>
<td>American Government I &amp; II</td>
<td>6</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>HM 101</td>
<td>Introduction to the Hospitality Ind.</td>
<td>3</td>
</tr>
<tr>
<td>BA 251</td>
<td>Principles of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HM 105</td>
<td>Hotel-Motel-Restaurant Organization</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 30

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 275</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>HM 110</td>
<td>Hotel-Motel Front Office Management</td>
<td>3</td>
</tr>
<tr>
<td>HM 201</td>
<td>Hotel-Motel-Restaurant Management</td>
<td>3</td>
</tr>
<tr>
<td>HM 210</td>
<td>Hotel-Motel-Restaurant Food and Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td>HM 212</td>
<td>Hotel-Motel-Restaurant Accounting</td>
<td>3</td>
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<tr>
<td>HM 230</td>
<td>Hotel-Motel-Restaurant Food and Beverage Control</td>
<td>3</td>
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<tr>
<td>HM 232</td>
<td>Law and Insurance</td>
<td>3</td>
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<tr>
<td>HM 240</td>
<td>Internship in Hotel-Motel-Restaurant Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 30

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised August, 1974.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE AS A LAWYER'S ASSISTANT

This program is designed to train and educate students for gainful employment as lay employees in a law office to assist the lawyer in the performance of legal services for the client. It is organized to permit the student to receive both classroom instruction and office practice during the course of the program.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BA 115</td>
<td>Real Estate Principles &amp; Practices I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
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<td>3</td>
</tr>
<tr>
<td>BA 275</td>
<td>Business Law I</td>
<td></td>
<td>3</td>
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<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td></td>
<td>2</td>
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<tr>
<td>BA 181</td>
<td>Legal Research &amp; Theory</td>
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<tr>
<td>BA 276</td>
<td>Business Law II</td>
<td></td>
<td>3</td>
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<tr>
<td>BA 248</td>
<td>Mechanics of Real Estate Law</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td></td>
<td>3</td>
</tr>
<tr>
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</table>

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
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<tbody>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
<td></td>
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</tr>
<tr>
<td>BA 245</td>
<td>Civil Litigation</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BA 247</td>
<td>Estate Planning &amp; Administration</td>
<td></td>
<td>3</td>
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<tr>
<td>CO 203</td>
<td>Cooperative Education or Elective</td>
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<td>BA 249</td>
<td>Family Law</td>
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<tr>
<td>LE 221</td>
<td>Criminal Law &amp; Legal Procedures</td>
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<td>BA 246</td>
<td>Business Organizations</td>
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<td>BA 250</td>
<td>Law Office Management</td>
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<tr>
<td>CO 203</td>
<td>Cooperative Education or Elective</td>
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</tbody>
</table>

Students are encouraged to supplement the above and enroll in one or more courses: BA 171 or 172, Beginning or Intermediate Typing; BA 201, Business Machines; BA 227, Federal Income Tax; DP 101, Data Processing; EH 157, Technical Communication; HS (Humanities elective).

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.

NOTE: Specialized program courses are offered at the East Campus. Other courses in the program such as English, psychology, etc., may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE
IN SCIENCE DEGREE IN
LEGAL SECRETARIAL SCIENCE

Students desiring employment dealing primarily with law would elect
the Legal Secretarial two-year degree program.

This program includes a seminar and work experience in local law
offices, as well as legal terminology.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>*BA 151</td>
<td>Beginning Shorthand</td>
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</tr>
<tr>
<td>BA 152</td>
<td>Intermediate Shorthand</td>
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</tr>
<tr>
<td>*BA 171</td>
<td>Beginning Typewriting</td>
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<tr>
<td>BA 172</td>
<td>Intermediate Typewriting</td>
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<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
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</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
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<tr>
<td>BA 275</td>
<td>Business Law I</td>
<td>3</td>
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SOPHOMORE YEAR

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<tr>
<th>Course</th>
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<th>Semester Hours Credit</th>
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<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
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</tr>
<tr>
<td>BA 253</td>
<td>Advanced Shorthand</td>
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</tr>
<tr>
<td>BA 255</td>
<td>Shorthand Transcription</td>
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<tr>
<td>BA 271</td>
<td>Advanced Typewriting</td>
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<tr>
<td>BA 276</td>
<td>Business Law II</td>
<td>3</td>
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<tr>
<td>BA 260</td>
<td>Office Procedures</td>
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<tr>
<td>BA 265</td>
<td>Legal Secretarial Seminar and Work Experience</td>
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</tr>
<tr>
<td>BA 267/268</td>
<td>Legal Secretarial Practices</td>
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<td></td>
<td>Humanities Elective</td>
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</tr>
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</tbody>
</table>

* Students with prior instruction and/or experience in shorthand and/or typewriting should enroll in the next higher shorthand and/or typewriting courses. Such students should select elective courses in lieu of BA 151 or BA 171 or take credit by exam (CE) for the course waived. BA 201, PY 161 or SP 165 are recommended as electives.

Capable students are encouraged to take BA 251 in place of BA 101.

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN MEDICAL LABORATORY TECHNOLOGY

This program has been planned with local hospital officials and representatives of the Medical Related Programs in the State Department of Education.

The Medical Laboratory Technology program is designed for persons who desire preparation for employment as Medical Laboratory Technicians. Graduates are eligible to take the Medical Laboratory Technician examination for licensure, and the national registry examination entitling successful graduates to use the initials MLT (ASCP) after their names.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.

Admission requirements are:

1. The applicant must be at least 17 years of age.
2. The applicant must have one unit in Algebra I, II, Biology and Chemistry.
3. High school graduates who meet the following requirements will be considered:
   A. Submit Florida Senior Placement Score or its equivalent (i.e., SCAT, ACT or SAT).
   B. A minimum of “C” in algebra, biology, and chemistry within the previous five years.
   C. An overall grade point average of 3.0(B).
4. College students must meet the following requirements:
   A. A minimum of “C” in a course in algebra, biology, and chemistry within the previous five years.
   B. A minimum of 2.5 grade point average in courses completed at Valencia, Lake-Sumter or Seminole Junior College.
   C. An overall college average of 2.0.
5. Residency requirement priorities will be:
   A. Orange and Osceola counties.
   B. Regional agreement members (Lake-Sumter Community College, Seminole Junior College)
   C. Florida
   D. Out-of-State
6. The student must be in good physical and mental health and of good moral character.

7. The student must have a physical exam each year.

8. The applicant must submit the completed college application including all transcripts to the Admissions Office and the special application to the Health Related Programs office by May 1st for the subsequent fall session.

9. Upon acceptance to the medical laboratory technology program, the student must have his/her first academic advisement with a member of counseling staff.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>CY 156</td>
<td>Chemical Calculation</td>
<td>2</td>
</tr>
<tr>
<td>BY 255/256</td>
<td>Human Anatomy and Physiology</td>
<td>8</td>
</tr>
<tr>
<td>CY 165</td>
<td>Chemistry for Medical Laboratory Tech.</td>
<td>4</td>
</tr>
<tr>
<td>BY 280</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>MT 149</td>
<td>Introduction to Medical Lab. Tech.</td>
<td>2</td>
</tr>
<tr>
<td>MT 142</td>
<td>Hematology</td>
<td>4</td>
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<tr>
<td>MT 150</td>
<td>Basic Urinalysis</td>
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<tr>
<td>MT 151</td>
<td>Immunology: Serology and Blood Bank Techniques</td>
<td>8</td>
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SOPHOMORE YEAR

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<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>MT 148</td>
<td>Medical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>MT 240</td>
<td>Clinical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>MT 143</td>
<td>Hospital Practicum</td>
<td>12</td>
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</table>

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

*12 calendar months.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE
IN SCIENCE DEGREE IN
MEDICAL SECRETARIAL SCIENCE

This program is designed to meet the needs of students desiring employment as medical secretaries in medical offices and hospitals. This program includes work experience in local hospitals and doctors' offices.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tr>
<td>EI 151</td>
<td>Freshman Composition</td>
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</tr>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
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<tr>
<td>PL 151</td>
<td>American Government I</td>
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</tr>
<tr>
<td><strong>BA 171</strong></td>
<td>Beginning Typewriting</td>
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<tr>
<td>BA 172</td>
<td>Intermediate Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>BY 110</td>
<td>Medical Terminology</td>
<td>4</td>
</tr>
<tr>
<td>BA 118</td>
<td>Medical Transcription I</td>
<td>3</td>
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<tr>
<td>BA 165</td>
<td>Medical Office Procedures</td>
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<td>BA 218</td>
<td>Medical Transcription II</td>
<td>3</td>
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<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
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**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA 275</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 271</td>
<td>Advanced Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 219</td>
<td>Medical Transcription III</td>
<td>3</td>
</tr>
<tr>
<td>BA 230</td>
<td>Medical Secretary Procedures</td>
<td>3</td>
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<tr>
<td><strong>BA 201</strong></td>
<td>Business Machines</td>
<td>3</td>
</tr>
<tr>
<td>BA 240</td>
<td>Medical Secretary Internship</td>
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<tr>
<td>Humanities Elective</td>
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</tr>
</tbody>
</table>

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*Students with prior instruction and/or experience in typewriting should enroll in next higher typewriting course. Such students should select elective courses in lieu of BA 171 or take credit by exam (CE) for the course waived.

**Students with prior instruction and/or experience on modern business machines may waive BA 201 and substitute an elective from data processing, English, social, natural or physical science areas.

Capable students are encouraged to take BA 251 in place of BA 101.

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN NURSING

This program has been coordinated with local medical representatives, the State Department of Education and the State Board of Nursing. It is accredited by the State Board of Nursing. Graduates of this program are prepared to administer nursing care as general staff duty nurses and are eligible to take the Florida examination for licensure as registered nurses.

Admission to the college does not infer acceptance into the Nursing Program. Selection is made on an individual basis by the Admissions Committee. Applications for the Nursing Program must be filed before April 1 for the following academic year.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.

Admission requirements are:

1. The applicant must be at least 17 years of age.

2. The applicant must be a graduate of an accredited high school, or its equivalent, and have one unit of each in Algebra, Biology and Chemistry.

3. High school graduates who meet the following requirements will be considered:
   A. Submit Florida Senior Placement Score or its equivalent (i.e., SCAT, ACT or SAT).
   B. A minimum of “C” in Algebra, Biology and Chemistry within the previous five years.
   C. An overall grade point average of 3.0 (B).

4. College students must meet the following requirements:
   A. A minimum of “C” in a course in mathematics, biology, and chemistry within the previous five years.
B. A minimum of 2.5 grade point average in courses completed at Valencia, Lake-Sumter or Seminole.
C. An overall college average of 2.0.

5. Residency requirement priorities will be:
   A. Orange and Osceola counties
   B. Regional agreement members (Lake-Sumter Community College, Seminole Junior College)
   C. Florida,
   D. Out-of-State

6. The student must be in good physical and mental health and of good moral character.

7. The student must have a physical exam each year.

8. The applicant must submit the completed college application including all transcripts to the Admissions Office and the special application to the Health Related Programs office by May 1st for the subsequent fall session.

9. Upon acceptance to the nursing program, the student must have his/her first academic advisement with a member of the counseling staff.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
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<tbody>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>BY 255-256</td>
<td>Human Anatomy &amp; Physiology</td>
<td>8</td>
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<tr>
<td>BY 280</td>
<td>Microbiology</td>
<td>4</td>
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<tr>
<td>NG 101</td>
<td>Nursing I</td>
<td>8</td>
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<tr>
<td>PY 260</td>
<td>Psychology of Childhood &amp; Youth</td>
<td>3</td>
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<td>NG 107</td>
<td>Nursing II</td>
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<td>NG 108</td>
<td>Nursing III</td>
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<td>NG 109</td>
<td>Nursing IV</td>
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| Total   |                                         | 41                    |

**SOPHOMORE YEAR**

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<th>Course</th>
<th>Description</th>
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<tr>
<td>NG 204</td>
<td>Nursing V</td>
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<tr>
<td>SY 261</td>
<td>Introductory Sociology</td>
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<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
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<tr>
<td>PL 151</td>
<td>American Government</td>
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<td>NG 205</td>
<td>Nursing VI</td>
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<tr>
<td>NG 206</td>
<td>Nursing VII</td>
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| Total   |                                         | 27                    |

NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1974-75.
ORNAMENTAL HORTICULTURE
GREENHOUSE
FOLIAGE PRODUCTION OPTION

REQUIRED PROGRAM LEADING TO AN ASSOCIATE OF SCIENCE
ORNAMENTAL HORTICULTURE TECHNOLOGY DEGREE

<table>
<thead>
<tr>
<th>Courses</th>
<th>Freshman Year</th>
<th>Semester Hour Credits</th>
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<td>Intermediate or College Algebra</td>
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</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>HT 175</td>
<td>Introduction to Horticulture Science</td>
<td>3</td>
</tr>
<tr>
<td>BY 172</td>
<td>Fundamentals of Biology</td>
<td>4</td>
</tr>
<tr>
<td>EH 152 or</td>
<td>Freshman Composition or Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>CY 155 or</td>
<td>Introduction to General Chemistry or General Chemistry with Qualitative Analysis</td>
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<tr>
<td>CY 171</td>
<td>General Chemistry</td>
<td></td>
</tr>
<tr>
<td>HT 180</td>
<td>Introduction to Foliage and Flowering</td>
<td>3</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>HT 181</td>
<td>Introduction to Foliage and Flowering</td>
<td>3</td>
</tr>
<tr>
<td>HT 262 or</td>
<td>or Botany</td>
<td>4</td>
</tr>
<tr>
<td>BY 262</td>
<td></td>
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<tr>
<th>Courses</th>
<th>Sophomore Year</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
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<tr>
<td>ES 151</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>HT 250</td>
<td>Introduction to Soils and Fertilizers</td>
<td>3</td>
</tr>
<tr>
<td>HT 282</td>
<td>Introduction to Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td>HT 265</td>
<td>Introduction to Horticultural Plant Pathology</td>
<td>4</td>
</tr>
<tr>
<td>HT 192</td>
<td>Introduction to Horticultural Plant Pests</td>
<td>4</td>
</tr>
<tr>
<td>HT 260</td>
<td>Greenhouse Operation and Management</td>
<td>3</td>
</tr>
<tr>
<td>HT 201</td>
<td>Cooperative Placement Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HT 287</td>
<td>Interior-scaping with Foliage Plants</td>
<td>3</td>
</tr>
<tr>
<td>Elec. (3 hrs.)</td>
<td>Humanities, World Geography, American Government, or Geology</td>
<td>3</td>
</tr>
</tbody>
</table>

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, business, etc. may be offered at any campus and/or teaching center.
NURSERY MANAGEMENT
LANDSCAPE OPTION

REQUIRED PROGRAM LEADING TO
AN ASSOCIATE OF SCIENCE
ORNAMENTAL HORTICULTURE TECHNOLOGY DEGREE

<table>
<thead>
<tr>
<th>Courses</th>
<th>Freshman Year</th>
<th>Semester Hour</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MS 141/170</td>
<td>Intermediate or College Algebra</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HT 175</td>
<td>Introduction to Horticulture Science</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BY 172</td>
<td>Fundamentals of Biology</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>EH 152 or EH 157</td>
<td>Freshman Composition (Technical Writing)</td>
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<td>3</td>
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<tr>
<td>CY 155/171</td>
<td>Introduction to General Chemistry With Qualitative Analysis</td>
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<td>4</td>
</tr>
<tr>
<td>HT 262 or BY 262</td>
<td>Introduction to Horticultural Botany</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>HT 178</td>
<td>Landscape Plant Materials I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HT 179</td>
<td>Landscape Plant Materials II</td>
<td></td>
<td>3</td>
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<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
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<tr>
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<table>
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<tr>
<th>Courses</th>
<th>Sophomore Year</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>ES 151</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>HT 200</td>
<td>Introduction to Soils and Fertilizers</td>
<td>4</td>
</tr>
<tr>
<td>HT 282</td>
<td>Introduction to Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td>HT 265</td>
<td>Introduction to Horticultural Plant Pathology</td>
<td>4</td>
</tr>
<tr>
<td>HT 192</td>
<td>Introduction to Horticultural Plant Pests</td>
<td>4</td>
</tr>
<tr>
<td>HT 205</td>
<td>Nursery Operation and Management</td>
<td>3</td>
</tr>
<tr>
<td>HT 215</td>
<td>Introduction to Landscape Design I</td>
<td>3</td>
</tr>
<tr>
<td>HT 201</td>
<td>Cooperative Placement Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>Elec. (3 hrs.)</td>
<td>Humanities, World Geography, American Government, Geology, Design I, or Engineering Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, business, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN REAL ESTATE

This program is designed for the student who wishes to become gainfully employed in the Real Estate Profession.

### FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>ES 151</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>BA 115</td>
<td>Real Estate Principles &amp; Practices I</td>
<td>3</td>
</tr>
<tr>
<td>BA 116</td>
<td>Real Estate Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 120</td>
<td>Housing &amp; Home Ownership</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 30 hours

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA 280</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BA 284</td>
<td>Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>BA 221</td>
<td>Real Estate Finance I</td>
<td>3</td>
</tr>
<tr>
<td>BA 222</td>
<td>Real Estate Finance II</td>
<td>3</td>
</tr>
<tr>
<td>BA 223</td>
<td>Real Estate Appraising I</td>
<td>3</td>
</tr>
<tr>
<td>BA 224</td>
<td>Real Estate Appraising II</td>
<td>3</td>
</tr>
<tr>
<td>BA 225</td>
<td>Real Estate Consumption</td>
<td>3</td>
</tr>
<tr>
<td>BA 226</td>
<td>Real Estate Management</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 30 hours

Capable students are encouraged to take BA 251 in place of BA 101.

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

**NOTE:** Courses in this program may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
RESPIRATORY THERAPY

The Respiratory Therapy program is designed for students who desire
preparation for employment as Respiratory Therapists. Graduates are eligible
for registry.

This program is approved by the American Medical Association and the
Joint Review Committee for Respiratory Therapy Education.

Admission to the college does not infer acceptance into the Respiratory
Therapy Program. Selection is made by the college Admissions Committee.

Admission requirements are:

1. The applicant must be at least 17 years of age.

2. The applicant must be a graduate of an accredited high school, or
   its equivalent, and have one unit each in Biology, Algebra and
   Chemistry.

3. High school graduates who meet the following requirements will
   be considered:
   A. Submit Florida Senior Placement Score or its equivalent
      (i.e., SCAT, ACT or SAT).
   B. A minimum of "C" in algebra, biology, and chemistry within
      the previous five years.
   C. An overall grade point average of 3.0 (B).

4. College students must meet the following requirements:
   A. A minimum of "C" in a course in algebra, biology, and
      chemistry within the previous five years.
   B. A minimum of 2.5 grade point average in courses completed
      at Valencia, Lake-Sumter or Seminole.
   C. An overall college average of 2.0.

5. Residency requirement priorities will be:
   A. Orange and Osceola counties.
   B. Regional agreement members (Lake-Sumter Community
      College, Seminole Junior College)
   C. Florida
   D. Out-of-State

6. The student must be in good physical and mental health and of
   good moral character.

7. The student must have a physical exam each year.
8. The applicant must submit the completed college application including all transcripts to the Admissions Office and the special application to the Health Related Programs office by May 1st for the subsequent fall session.

9. Upon acceptance to the respiratory therapy program, the student must have his/her first academic advisement with a member of the counseling staff.

FRESHMAN YEAR*

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 141</td>
<td>Intermediate Algebra</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BY 255</td>
<td>Human Anatomy &amp; Physiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BY 256</td>
<td>Human Anatomy &amp; Physiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PH 121</td>
<td>Applied Physics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BY 280</td>
<td>Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Humanities Elec.</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RT 127</td>
<td>Intro. to Respiratory Therapy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RT 128</td>
<td>Basic Respiratory Equipment</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RT 133</td>
<td>Introduction to Pharmacology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RT 231</td>
<td>Pulmonary Physiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>RT 132</td>
<td>Respiratory Equipment &amp; Functions</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>RT 134</td>
<td>Clinical Practice I</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

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SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RT 232</td>
<td>Clinical Practice II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RT 239</td>
<td>Respiratory Pathology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RT 234</td>
<td>Cardiopulmonary Therapy</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>RT 235</td>
<td>Clinical Practice III</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RT 236</td>
<td>Advanced Cardiopulmonary Therapy</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>RT 237</td>
<td>Clinical Practice IV</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RT 238</td>
<td>Clinical Practice V</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RT 240</td>
<td>Hospital Organization and Management</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

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NOTE: Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

NOTE: Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.

*Twelve calendar months.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE
IN SECURITY AND LOSS PREVENTION

This program is designed to impart skills, knowledge and attitudes necessary to enter into this specialized field at the mid-management level in private, industrial, governmental and retail security. The interest of industry in the academically trained security professional is demonstrated by active recruitment of graduates. The program is designed to recognize the increasing complexity of the role and function of security in our society.

A student wishing to earn a certificate rather than the Associate in Science Degree may do so by completing only the courses preceded by asterisks (*). The certificate student is encouraged to continue his studies for the Associate Degree. He may apply the credits earned in the certificate program toward the Associate Degree requirements.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>*IS 101</td>
<td>Introduction to Industrial Security</td>
<td>3</td>
</tr>
<tr>
<td>*FT 101</td>
<td>Introduction to Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>*IS 131</td>
<td>Security and Personnel Administration</td>
<td>3</td>
</tr>
<tr>
<td>*IS 111</td>
<td>Physical Systems or Elective</td>
<td>3</td>
</tr>
<tr>
<td>SY 261</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>*IS 201</td>
<td>Current Problems in Loss Prevention or</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>*LE 201</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>*LE 221</td>
<td>Criminal Law &amp; Legal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>*LE 222</td>
<td>Criminal Evidence &amp; Legal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>*LE 121</td>
<td>Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>*IS 232</td>
<td>Safety Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>*IS 200</td>
<td>Commercial and Retail Loss Prevention or</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*IS 202</td>
<td>Personal Security</td>
<td>3</td>
</tr>
</tbody>
</table>

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution. Revised 1973-74.

**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN SURVEYING TECHNOLOGY

The Surveying program is designed to train technicians to enter the land surveying profession in one of several areas related to the total occupational cluster.

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>MS 137/170</td>
<td>Technical Math I / College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>EG 151</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>MS 161</td>
<td>Modern Computational Methods</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>MS 138/171</td>
<td>Technical Math II/College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>EG 152</td>
<td>Descriptive Geometry</td>
<td>3</td>
</tr>
<tr>
<td>CV 192</td>
<td>Surveying &amp; Measurements</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

**SOPHOMORE YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO 203</td>
<td>Cooperative Education or Elective</td>
<td>3</td>
</tr>
<tr>
<td>CV 292</td>
<td>Photogrammetry</td>
<td>2</td>
</tr>
<tr>
<td>PY 161</td>
<td>Psychology in Business &amp; Industry</td>
<td>3</td>
</tr>
<tr>
<td>ST 212</td>
<td>Surveying II</td>
<td>3</td>
</tr>
<tr>
<td>ST 220</td>
<td>Surveying Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ST 260</td>
<td>Legal Aspects of Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ST 213</td>
<td>Surveying III</td>
<td>3</td>
</tr>
<tr>
<td>ST 214</td>
<td>Electronic and Geodetic Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ST 221</td>
<td>Subdivisions</td>
<td>3</td>
</tr>
<tr>
<td>ST 230</td>
<td>Topography and Mapping</td>
<td>3</td>
</tr>
<tr>
<td>ST 270</td>
<td>Land Surveying and Descriptions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

**NOTE:** Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

**NOTE:** Specialized program courses are offered on the West Campus. Other courses in the program such as English, psychology, etc. may be offered at any campus and/or teaching center.
ASSOCIATE IN GENERAL STUDIES
DEGREE PROGRAM

The Associate in General Studies degree is designed for students who elect to follow their own prescribed course of study. The degree is individualized in that students may elect courses within program areas that meet their individual needs. Additionally, the degree allows a student to plan an individualized program in a concentrated subject area.

Students are encouraged to consult a counselor or educational advisor for specific transfer information since the Associate in General Studies degree may not be transferable to some senior institutions.

GRADUATION REQUIREMENTS FOR THE
ASSOCIATE IN GENERAL STUDIES DEGREE

1. Completion of a minimum of sixty (60) semester hours of credit in courses numbering 100 or higher with a grade of "C" or above.
2. Completion of fifteen (15) of the above semester hours in residence at Valencia Community College.
3. Completion of a graduation check (record evaluation) with a counselor prior to applying for graduation.
4. Filing of an application for graduation in the Admissions office by the deadline date as listed in the college calendar and catalog.
5. Fulfilling of all financial obligations to the college.

The Associate in General Studies degree is designed to meet individuals' particular interests and students are advised that the degree may not transfer to some senior institutions. Students will be asked to sign a form indicating their complete understanding of the limitations of this degree program.

Students receiving the Associate in General Studies degree are eligible to continue work toward meeting the requirements for an Associate in Arts or Associate in Science degree.
OPEN CAMPUS

Since its inception in 1967, Valencia Community College has been designed to be a multi-campus institution. The first campus on Kirkman Road, in the Western section of Orange County, was opened in September, 1971. Concurrently with the approval of plans to build the East Campus which opened in September of 1975, the District Board of Trustees approved a third campus concept -- the "Open Campus."

The administrative offices of the Open Campus are located in the Downtown Center at One West Church Street in Orlando. The purpose of the Open Campus is to meet the changing educational needs of the entire community by providing programs, classes, continuing education and community services near the homes and places of employment of students throughout the entire Valencia Community College district of Orange and Osceola Counties.

DOWNTOWN CENTER

A Downtown Center was opened at the corner of Orange Avenue and Church Street (One West Church Street) to make information readily available for the persons residing or working in this area of the college district. Provided in this center are counseling and testing services, administrative offices and classrooms for various credit and continuing education offerings.

Community Services

One of the main functions of the college is to provide a variety of educational services for the community under its Community Services program. Included in the service are regular college credit courses offered off the East and West Campuses; continuing education non-credit courses; upgrading of present occupational skills through short courses, seminars and workshops; cultural activities, guest speakers and conferences. These services are offered in over 100 different locations in Orange and Osceola counties. All of the Community Services programs, classes and projects are under the administrative supervision of the Open Campus.

OPEN CAMPUS PROGRAMS

Emergency Medical Technician

The Emergency Medical Technician Program, funded under the Division of Allied Health, is designed to prepare the individual to serve as an ambulance attendant or to assist emergency medicine physicians in the Emergency Department of hospitals. Thus, the EMT student is trained to perform and assist in basic life saving services. Students in the Emergency Medical Technician II Program receive advance training (480 hours) in emergency medical skills.

Occupational Safety and Health

Occupational Safety and Health training is offered to employer/employee groups without charge. Funding is provided through a contract
with the American Association of Community and Junior Colleges under the sponsorship of the U.S. Department of Labor. Courses can be offered at any suitable location throughout the state.

**Continuing Education Program for Nurses**

The Continuing Education Program for Nurses is designed to provide nurses with current knowledge and skill relevant to various aspects of nursing in order to enhance performance and competence. This program enables nurses to achieve their educational goals while employed.

**Parent Education Project**

This program of classes, workshops and Co-op Laboratories is offered at many locations. Educational materials and information helpful to parents can be obtained at the Parent Resource Center, 42 East Jackson, Orlando. The Parent Education Project is sponsored by Valencia's Staff and Program Development Fund and Junior Sorosis Club of Orlando.

**Adult Literacy League at Valencia Community College**

In this program volunteer tutors receive training which enables them to work with the non-reader on a one-to-one basis. The tutor and student work at locations convenient for both.

**The Central Florida Institute of Lifetime Learning**

In cooperation with the American Association of Retired Persons and The National Retired Teacher’s Association this program provides a variety of educational opportunities, without charge, to persons 55 and over. Funding for this program is provided by Title I of the Higher Education Act.

**Center for Continuing Education for Women at Valencia Community College**

The Center for Continuing Education for Women, funded under Title I of the Higher Education Act, helps women to assess and fulfill their needs through services which may include referral to academic or vocational education programs and testing and evaluative counseling. Counseling is offered to assist women in examining their values and aid them in setting their goals for the future. A variety of courses for women are offered as part of this program.

**CONTINUING EDUCATION**

The Open Campus Continuing Education Program consists of a comprehensive offering of courses some of which are listed below. For more information about course content and length, class schedules, etc., consult the Continuing Education schedule or contact the Open Campus. Continuing Education courses are designed to meet the needs of individual students or groups of students who may or may not be interested in enrolling for college credit but are interested in upgrading skills or learning to make better use of leisure and recreational time. They are offered in over one hundred (100)
locations throughout Orange and Osceola Counties and can begin whenever fifteen (15) or more students express a common interest.

Courses designated "Non-Credit" carry no college credit and are not applicable to be used in fulfilling graduation requirements at Valencia Community College.

Students satisfactorily completing courses designated "C.E.U." can earn one (1) Continuing Education Unit for every ten (10) contact hours of participation under qualified instruction. The student may request the Registrar's Office to forward transcripts of C.E.U.'s earned. While C.E.U.'s will not apply toward fulfilling graduation requirements, these nationally approved Units are being used by business and industry to validate competencies.

**Home and Personal Improvement**

*Antique Jewelry, CN 117 – Non-Credit
Basic Photography, CN 126 – Non-Credit
*Beginning Yoga, CN 9 – Non-Credit
*Cake Decorating I, CN 135 – Non-Credit
*Cake Decorating II, CN 160 – Non-Credit
*Common Sense Cooking, CN 65 – Non-Credit
Computers in Everyday Life, CN 28 – Non-Credit
Conversational French I, CN 124 – C.E.U.
Conversational German I, CN 143 – C.E.U.
Conversational Italian I, CN 81 – C.E.U.
Conversational Spanish I, CN 34 – C.E.U.
*Cooking for the Connoisseur, CN 60 – Non-Credit
Creative Career Concepts, CN 59 – C.E.U.
Current Topics Facing America, CN 82 – Non-Credit
Do Not Fold Spindle or Mutilate, CN 72 – Non-Credit
Election Information, CN 112 – Non-Credit
Environmental Problems of Today, CN 118 – Non-Credit
Flower Arranging, CN 54 – Non-Credit
Graduate Record Examination (G.R.E.) Review, CN 122 – C.E.U.
Great Decisions, CN 51 – Non-Credit
Health Education for Persons with Lung Problems, CN 108 – Non-Credit
History of Photography: Its Evolution as a Fine Art, CN 56 – C.E.U.
How to Use Your Money Wisely, CN 55 – Non-Credit
Introduction to Creative Writing, CN 133 – Non-Credit
Introduction to Recreational Activities, CN 78 – Non-Credit
Landscape Horticulture, CN 12 – Non-Credit
Law for the Layman, CN 132 – Non-Credit
"Making It": Jobs Ahead, CN 145 – C.E.U.
Metric System, CN 125 – C.E.U.
Nutritional and Mental Health, CN 74 – Non-Credit
Orientation to Leadership Skills, CN 115 – Non-Credit
Parent Education, CN 76 – Non-Credit
Parent Education and Co-Op Laboratory, CN 62 – Non-Credit
Parliamentary Procedure, CN 30 – C.E.U.
Personal Development in Business, CN 121 – Non-Credit
Personal Insurance Planning, CN 130 – Non-Credit
Philosophy of Leisure, Recreation and Play, CN 47 – Non-Credit
Pre-Release Orientation (Sp), CN 150 – Non-Credit
Selected Topics in Psychology, CN 144 – Non-Credit
Self Defense for Women, CN 129 – Non-Credit
Speed Reading, CN 36 – C.E.U.
Standard First Aid & Personal Safety, CN 120 – C.E.U.
*Study of Gem Stones & Jewelry, The; CN 116 – Non-Credit
Tax Aide for Senior Citizens, CN 63 – Non-Credit
*Taxidermy of Birds, CN 101 – Non-Credit
Techniques of Job Hunting, CN 64 – C.E.U.
Toy Safety Workshop, CN 157 – Non-Credit
Transactional Analysis, CN 52 – Non-Credit
Volunteer Tutoring in Reading, CN 49 – C.E.U.
Woman Alone, The; CN 31 – Non-Credit
Women in Citrus, CN 75 – C.E.U.
You and Your Constitutional Rights, CN 83 – Non-Credit

Business & Professional
Abnormal Blood Cell Morphology, CN 77 – C.E.U.
Boundary Description and Legal Principles, CN 67 – C.E.U.
Communications, CN 163 – C.E.U.
Credit Management Training (Sp), CN 147 – C.E.U.
Certified Professional Secretary (CPS) Review, CN 146 – C.E.U.
Drug Administration (Sp), CN 149 – C.E.U.
Effective Listening, CN 11 – Non-Credit
Effective Public Relations, CN 17 – C.E.U.
Emergency Cardiac Technician, CN 57 – C.E.U.
Emergency Medical Technician, CN 37 – C.E.U.
Emergency Medical Technician, (Refresher), CN 41 – C.E.U.
Financial Officer Training (Sp), CN 107 – C.E.U.
Fire Investigation and Arson Detection Seminar, CN 114 – C.E.U.
Fire Technology Seminar, CN 44 – C.E.U.
Group Leadership in the 70’s: Persons & Skills, CN 100 – Non-Credit
Intestinal Protozoa, CN 26 – C.E.U.
Introduction to Real Estate Principles and Practices I, CN 21 – C.E.U.
Introduction to Retailing, CN 10 – C.E.U.
Introduction to the Bank Teller’s Position, CN 24 – C.E.U.
Introduction to the Hotelman’s Law, CN 79 – C.E.U.
Legal Aspects of Nursing, CN 70 – C.E.U.
Management in Child Care I, CN 48 – C.E.U.
Management in Child Care II, CN 50 – C.E.U.
Medical Terminology, CN 113 – C.E.U.
Methods of Teaching for Fire Instructors, CN 45 – C.E.U.
Now is the Time: Women in Politics, CN 158 – C.E.U.
Nursing Forums, CN 43 – C.E.U.
Occupational Safety & Health, CN 38 – C.E.U.
Occupational Safety & Health Voluntary Compliance, CN 156 – C.E.U.
Own Your Own: Starting a Business Enterprise, CN 161 – C.E.U.
Photogrammetry Workshop for Surveyors, CN 151 – C.E.U.
Principles of Bank Operations, CN 13 – C.E.U.
Principles of Business Management, CN 155 – C.E.U.
Refresher Course for Registered Nurses, CN 111 – C.E.U.
Room at the Top: Management for Women, CN 159 – C.E.U.
Stock Purchasing and Trading, CN 2 – Non-Credit
Teacher Student Relationships, CN 154 – C.E.U.
The Thyroid Gland: In Vitro Testing, CN 20 – Non-Credit
Trauma Nursing, CN 148 – C.E.U.
Travel Agency Techniques, CN 102 – C.E.U.
Understanding Today’s Technology, CN 140 – Non-Credit
Volunteer Administration, CN 35 – C.E.U.
Women in Contemporary Society, CN 109 – Non-Credit
Women in Modern Fiction, CN 58 – Non-Credit
Word Processing, CN 23 – C.E.U.

Creative Arts, Crafts, & Music

*Beginning Ceramics, CN 33 – Non-Credit
*Beginning Painting, CN 32 – Non-Credit
Community Chorus, CN 69 – Non-Credit
*Introduction to Music: Selected Topics, CN 153 – Non-Credit
*Japanese Flower Arranging, CN 4 – Non-Credit
Modern Popular Music, CN 39 – C.E.U.
*Musical to Munch By! CN 16 – Non-Credit
Musical Theatre Work Experience Program, CN 66 – C.E.U.
Opera Workshop Chorus, CN 110 – Non-Credit
*Quilling, CN 42 – Non-Credit
*Quilting, CN 164 – Non-Credit
Readers Theater, CN 119 – Non-Credit
“Rusty Lady” Lecture Series, CN 61 – Non-Credit
Selected Oratorio Studies, CN 134 – Non-Credit
*Shakespeare Without Tears, CN 123 – Non-Credit
*Weaving: Non Loom Techniques, CN 15 – Non-Credit

Recreation & Sports

Advanced Tennis, CN 106, Non-Credit
Basketball, CN 96 – Non-Credit
Beginning Archery, CN 105 – Non-Credit
Beginning Bowling, CN 86 – Non-Credit
Beginning Golf, CN 103 – Non-Credit
*Beginning Guitar, CN 71 – Non-Credit
Beginning Tennis, CN 104 – Non-Credit
*Boating Safety & Seamanship, CN 8 – Non-Credit
Care of Horses, CN 5 – Non-Credit
Contemporary Dance, CN 92 – Non-Credit
*Dance Workshop, CN 152 – C.E.U.
*Hawaiian Dancing, CN 128 – Non-Credit
Individual Conditioning for Men, CN 90 – Non-Credit
Intermediate Golf, CN 85 – Non-Credit
Intermediate Tennis, CN 99 – Non-Credit
*Jazz Dance, CN 138 – Non-Credit
*Judo (Females only), CN 142 – Non-Credit
*Judo (Males only), CN 139 – Non-Credit
*Orientation to Sky Diving, CN 80 – Non-Credit
Physical Fitness & Slimnastics to Music, CN 136 – Non-Credit
*Sailing, CN 141 – Non-Credit
Senior Life Saving, CN 89 – Non-Credit
Skillnastics and Individual Conditioning for Women, CN 87 – Non-Credit
Softball, CN 93 – Non-Credit
Sports Officiating I, CN 97 – Non-Credit
Sports Officiating II, CN 98 – Non-Credit
Touch Football, CN 95 – Non-Credit
*Travel Trailer Lore, CN 3 – Non-Credit
Tumbling and Gymnastics, CN 91 – Non-Credit
Volleyball, CN 94 – Non-Credit
Weight Training, CN 88 – Non-Credit

Other

*Basic Dog Obedience, CN 14 – Non-Credit
Bible History, CN 40 – C.E.U.
Community Urban Education, CN 1 – Non-Credit
Contemporary Issues in Biblical Interpretation, CN 162 – Non-Credit
Marine Biology, CN 131 – C.E.U.
Study of the Florida Keys, CN 19 – C.E.U.

* This course is self supported entirely by student fees at no expense to the taxpayer.
COURSE DESCRIPTIONS

In courses hyphenated in sequence under a single classification, the first is considered to be a prerequisite of the second.

Credit courses numbered between 50 and 99 carry institutional credit, which may or may not be accepted by senior institutions and which does not apply toward an Associate in Arts Degree at Valencia Community College. Courses marked 100-199 are open to freshmen and sophomores. Courses marked 200-299 are primarily for sophomores.

Courses designated by a “+” are designed for Associate in Science Degree Programs at Valencia Community College. These courses are not applicable toward an Associate in Arts degree at Valencia Community College and may or may not be transferable to another college or university depending upon the student’s major field and the policies of the receiving institution.

Courses designated by “CE” are approved for credit by examination. Certain senior institutions do not allow credit by examination. It is the responsibility of the student to contact the senior institution to which he expects to transfer and determine the acceptability of such credit. Credit by examination is explained in another section of the catalog.

Courses designated by “IS” are available for Independent Study. Independent Study is explained in another section of the catalog.

A course may be withdrawn from the schedules if insufficient enrollment or other factors warrant such action.
AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

+AC-102 – Heating, Ventilating and Air Conditioning I, 4 credits
Three class periods and one 1 hour laboratory. Co-requisite MS-137. A study of various types of heating, ventilating and air conditioning equipment; warm air, hot water and steam heating systems and piping layouts; fan performance and fan laws; operation and test of actual equipment. (Laboratory fee)

+AC-111 – Refrigeration I, 4 credits
Three class periods and one 1 hour laboratory. Pre- or co-requisite MS 137. A study of fundamental principles and their application to the basic refrigeration cycle, types of equipment and system components. Operation and test of refrigeration systems. (Laboratory fee)

+AC-113 – Air Conditioning II, 2 credits
Two class periods. Prerequisite AC-102. Psychrometrics of air-water vapor mixtures, fundamental principles of heat transfer, heating and cooling load calculations. (Laboratory fee)

+AC 201 – Cooperative Placement in Industry, 3 credits
Eight hours per day, five days per week, Session III-A or III-B. Prerequisites: AC 102, 111, 113. This cooperative arrangement places student in industrial setting performing specific tasks of the air conditioning and refrigeration industry which serves to reinforce and enhance his understanding of the curriculum to date; experiences on the job to be coordinated with the curriculum by a Cooperative Education Coordinator who serves as a liaison between the school and the world of work thereby assuring the student relative and meaningful on-the-job experiences.

+AC 204 – Electricity for Air Conditioning and Refrigeration, 4 credits
Three class periods and one 1 hour laboratory. Prerequisites AC-102, AC-111. Basic electricity; DC and AC motors, generators, circuits, resistance, inductance, capacitance, transformers, starting equipment, application to air conditioning and electrical test equipment in trouble shooting electrical problems. (Laboratory fee)

+AC 212 – Refrigeration II, 3 credits
Three class periods. Prerequisites AC-102 and AC-111. Commercial and industrial refrigeration systems and equipment. Cooling loads and load calculations for food preservation, storage and freezing; beverages; low temperature applications, compound and cascade refrigeration systems; process cooling applications. (Laboratory fee)

+AC 213 – Air Conditioning III, 4 credits
Three class periods and one 1 hour laboratory. Prerequisites: AC 102 and AC 113. A study and analysis of the various types of air conditioning systems and their application, refrigeration systems used, equipment selection, air distribution systems and components, air conditioning system design and layout. System operation, testing, balancing and trouble shooting. (Laboratory fee)

+AC 214 – Control Systems for Air Conditioning and Refrigeration, 3 credits
Two class periods and one 2 hour laboratory. Prerequisites AC 212 and AC 213. Prerequisites or co-requisites AC 204. Design, selection, application and trouble shooting of refrigeration and air conditioning control systems. Covers electrical, electronic and pneumatic controls and control systems. (Laboratory fee)

ARCHITECTURAL AND BUILDING CONSTRUCTION TECHNOLOGY

+AL 161 – Architectural Drawing I (Wood Frame Structures) 4 credits
Four class periods. Prerequisite: A minimum of one unit of high school drafting or equivalent work experience in drafting or EG 151 for those students with no
drafting experience. Covers residential design and wood frame construction with additional study in aspects of housing, aesthetics, and working drawings. Students will prepare assigned drawings and construct a model of their design. (Laboratory fee)

+AL 190 — Building Materials & Construction Methods, 4 credits
Three class periods and one three-hour laboratory. Survey of materials and methods used in construction. Covers broad areas of wood, concrete, masonry, metal, finishes and preservatives, and other materials. Students will construct various projects utilizing different materials and shop equipment for school exhibits and displays. (Laboratory fee)

+AL 192 — Construction Planning and Control, 3 credits
Three class periods. Survey of the important points to be considered in a construction project. Covers development of a CPM (Critical Path Method) plan with emphasis on construction activities, time durations, scheduling, and sequence of operations, follow-up methods, project control and integration of calendar dates to the plan. (Laboratory fee)

+AL 194 — Contracts, Codes, Specifications and Office Practices, 3 credits
Three class periods. Course covers organization and operation of architect’s engineer’s, or contractor’s office and includes study of office practices, codes, restrictions, standards, specifications and legal documents related to the construction industry.

+AL 261 — Architectural Drawing II (Steel Structures), 4 credits
Four class periods. Prerequisite: AL 161. Course offers introduction to steel frame buildings, commercial or institutional, and the problems involved in their representation. Steel frame terminology, fundamentals of design elements, typical details, framing plans, shop drawings and architectural design drawings are covered. (Laboratory fee)

+AL 262 — Architectural Drawing III (Concrete Structures) 4 credits
Four class periods. Prerequisite: AL 161. Course provides experiences in preparing working drawings of commercial structures with specific application to reinforced concrete. Major areas of coverage include: symbols, conventions, standards of reinforced concrete drawings; typical details; precast and prestressed concrete, and preparation of the working drawings. (Laboratory fee)

+AL 265 — Architectural Design, 4 credits
Four class periods. Prerequisite: AL 161, AL 261 or AL 262. Co-requisite: AL 261 or AL 262. Introduction to architectural planning and design. Project team concept is utilized. Student projects will include shopping centers, industrial complexes, warehouses, production facilities, apartment complexes and hi-rise buildings. Students will prepare the necessary drawings to construct the project including site plan, building plans, sections, etc. Students will also build a model of their project. (Laboratory fee)

+AL 291 — Statics and Strength of Materials, 4 credits
Four class periods. Prerequisite: PH 151 or 161. Course covers principles of statics, structural mechanics, and the effects of loads and loading on building elements and frames. Some of the major areas covered include: materials, stress and deformation; properties of sections; gravity loads, shear and bending in beams, stresses in columns. (Laboratory fee)

+AL 292 — Building Service Systems, 4 credits
Four class periods. Course involves study of materials and equipment used in mechanical and electrical service systems of buildings and methods of designing parts of various systems. Major areas covered include: illumination; heat loss and heat gain; heating and heating systems; air conditioning and climate control; and building acoustics. (Laboratory fee)
+AL 295 — Building Construction Estimating, 3 credits
Three class periods. Course covers the basic steps of estimating from review of drawings and specifications to the development of a final estimate including overhead and profit factors. Prepares students to make some of the kinds of estimates that are commonly used in the construction industry. (Laboratory fee)

AUTOMOTIVE SERVICE TECHNOLOGY

+AS 150 — Engines, 3 credits
Two class periods and one two-hour laboratory. Major objective is to offer the student foundation knowledge in engine theory and limited practical experience in engine maintenance. Principles, design, construction, operation and service procedures are studied. The student learns to disassemble, clean, inspect, and assemble an engine. (Laboratory fee)

+AS 155 — Engine Diagnosis and Tune-Up, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: AS-150 Diagnosis and tune-up procedures as they pertain to the function and control of the engine are covered with emphasis on the fuel, ignition, and starting systems. Types of carburetion are studied along with air cleaners and emission system malfunctions. Students perform tests with oscilloscopes, generator, regulator alternator testers, battery starter testers and distributor testers. (Laboratory fee)

+AS 160 — Electricity, 3 credits
Two class periods and one two-hour laboratory. Prerequisites: AS-150 and AS-155 Fundamental theory, Ohm's Law, circuit identification, electrical symbols, magnetism, induction, generators, alternators and motors are covered. Use of such test equipment as the volt meter, ammeter, ohmmeter and other devices used in troubleshooting and diagnosis automotive electrical problems will be stressed. Principles of automotive electrical systems are studied including: batteries, charging, cranking and ignition systems, and electronic diagnostic equipment, transistor circuits and electronic control devices. (Laboratory fee)

+AS 186 — Service Management & Parts Procurement, 3 credits
Three class periods. Various types of business organizations are studied in relation to the automotive industry, wholesale and retail, with final focus directed to the automotive service and parts department. Service department management covered in depth, ranging from the large organization to the smaller shop. The conventional line method of management is stressed. Human relations aspects of management are stressed.

+AS 191 — Steering, Suspension and Brakes, 1, 3 credits
Two class periods and one two-hour laboratory. Nomenclature of suspensions and brakes, theory of operation and service procedures on automotive suspension systems, brake systems, wheels and tires, steering gears and related components are studied stressing self-adjusting brakes. Emphasis will be placed on power alignment, brakes and shock absorbers. (Laboratory fee)

+AS 201 — Cooperative Placement in Industry, 3 credits
Eight hours per day, five days per week, Session III-A or III-B. Prerequisites: AS 160 or permission of the Co-op Education Coordinator. This cooperative arrangement places student in industrial setting performing specific tasks of the automotive industry which serves to reinforce and enhance his understanding of the curriculum to date; experiences on the job to be coordinated with the curriculum by a Cooperative Education Coordinator who serves as a liaison between the school and the world of work thereby assuring the student relative and meaningful on-the-job experiences.
+AS 260 – Electrical Systems, 3 credits
Two class periods and one two-hour laboratory. Prerequisites: AS-160. Intensive study is given to chassis and body wiring diagrams as basis for diagnosis of malfunctions. Replacement (or repair) of lights, horn and accessory circuits, gauges, signal and warning devices will be determined through use of testing instruments and tools. Mockup circuits are built on test panels in the laboratory. Experiments are conducted on generators and alternators with disassembly and assembly of all electrical components. (Laboratory fee)

+AS 275 – Transmission and Drive Lines, 3 credits
Two class periods and one two-hour laboratory. Maintenance and servicing techniques of driveline units, such as clutch assemblies, manual and automatic transmissions, propeller shafts and joints, final drives and differentials are covered. Practical experience in disassembly and reassembly of working units will provide functional knowledge of systems. (Laboratory fee)

+AS 280 – Air Conditioning, 3 credits
Two class periods and one two-hour laboratory. Principles, design, construction, installation, maintenance, removal, problems and service of automotive air conditioners, including temperature controls and air distribution are studied. Nomenclature, testing and troubleshooting are stressed. Safe service procedures are taught through practice. (Laboratory fee)

ART

AT 150 – Fundamentals of Applied Art, 3 credits
Three class periods. An introductory studio art course for non-art majors. The course will place emphasis on creative expression and critical evaluation, using a variety of two-dimensional media, such as painting, stitchery, printmaking, and three dimensional media, such as clay, wood, fibers. (Laboratory fee)

AT 151 – Drawing I, 3 credits
Six class periods. Introduction to the basic skills and concepts of drawing with emphasis on the human figure. (Laboratory fee)

AT 152 – Drawing II, 3 credits
Six class periods. Prerequisite: AT 151. A continuation of Drawing I with emphasis on further development of technique, individual imagery and content. (Laboratory fee)

AT 155 – Introduction to Drawing and Painting, 3 credits
Three class periods. A laboratory course designed for non-art majors who wish to explore drawing and painting techniques and media. (Laboratory fee)

AT 161 – Design I, 3 credits
Six class periods. An introduction to studio art through the analytical use of the elements and principles of design. (Laboratory fee)

AT 162 – Design II, 3 credits
Six class periods. Prerequisite: AT 161. A continuation of Design I through the study of the visual elements and principles and their application in three-dimensional form. (Laboratory fee)

AT 175 – The Visual Arts Today, 3 credits
Three class periods. The course is designed to provide the student with a foundation for understanding the contemporary visual arts. Class work will include field trips, guest speakers, and discussion relating to current trends in art.

AT 202 – Ceramics I, 3 credits
Six class periods. An introductory course in pottery design; handbuilding techniques, glazing, and firing. (Laboratory fee)
AT 203 - Ceramics II, 3 credits
Six class periods. Prerequisite: AT 202. A continuation of Ceramics I, with emphasis on wheel throwing, advanced glaze formulation, kiln loading and firing. (Laboratory fee)

AT 204 - Printmaking I, 3 credits
Six class periods. The course will consist of basic mastery of the graphic techniques of intaglio and/or relief printmaking. The class will consist of studio work, demonstrations of each technique to be mastered and selected studies of the history of printmaking. (Laboratory fee)

AT 205 - Printmaking II, 3 credits
Six class periods. Prerequisite: AT 204 or permission of the instructor. The course will consist of an experimental approach to individual expression with emphasis on imagery, content, and refinement of the techniques of printmaking. (Laboratory fee)

AT 206 - Introduction to Weaving: Off-Loom Techniques, 3 credits
Six class periods. Prerequisite: AT 161 or AT 151 or consent of the instructor. An introduction to fiber processes, including primitive loom building, carding, spinning, stitchery. Emphasis will be on the use of fiber as a medium for expression in the visual arts. (Laboratory fee)

AT 207 - Painting I, 3 credits
Six class periods. Prerequisite: AT 151 and AT 161 or consent of instructor. Introduction to materials and techniques of painting using acrylics or oils. (Laboratory fee)

AT 208 - Painting II, 3 credits
Six class periods. Prerequisite: AT 207. Continuation of Painting I with further exploration of problems relating to basic concepts, technical competency, and personal imagery. (Laboratory fee)

AT 211 - Sculpture I, 3 credits
Six class periods. Prerequisite: AT 161 or AT 162 or consent of the instructor. Experiences with a variety of three-dimensional media such as wood, metal (cast and fabricated), clay, and plastics. Designed to introduce the student to the handling of materials and tools necessary to gain an understanding of the arrangement and relationship of three-dimensional forms. (Laboratory fee)

AT 213 - Photography, 3 credits
Six class periods. Prerequisite: AT 161 or AT 151 or consent of the instructor. An introduction to black and white photography with emphasis upon the following: use of the camera, darkroom procedures of developing, printing and the study of visual design in photography. Student should have camera with adjustable lens and shutter speeds. (Laboratory fee)

AT 214 - Photography II, 3 credits
Six class periods. Prerequisite AT 213. Continuation of Photography I with emphasis on imagery, content and refinement of techniques of the medium.

AT 271 - Introduction to Art History I, 3 credits (IS)
Three class periods. A survey of the development of visual art forms from prehistory through the Middle Ages.

AT 272 - Introduction to Art History II, 3 credits (IS)
Three class periods. A survey of the development of the visual arts from the Renaissance to the present.

AT 290 - Selected Topics in Art, 1-3 credits
One - six class periods. These seminars are for students who are interested in further study in a specific art area.
ANTHROPOLOGY

AY 201 - Introductory Anthropology, 3 credits (IS)
Three class periods. An introduction to the study of man and his culture with special attention given to physical anthropology, archaeology, and linguistics. The main emphasis of this course will be on the social, political, religious and economic institutions in selected preliterate societies.

BUSINESS

+BA 101 - Basic Accounting, 3 credits (IS)
Three class periods. Prerequisites: BA 180 or equivalent. The course provides instruction and practice in the fundamentals of financial record keeping and reporting for professionals, service and merchandising enterprises.

+BA 104 - Principles of Insurance, 3 credits
Three class periods. Introduction to the basic principles of insurance. Emphasis is given to the several kinds of insurance, the purposes served by each and details of insurance regulations and administration.

+BA 110 - Marketing Seminar I, 1 credit
Class meets once per week. Prerequisite: Instructor’s approval. A comprehensive study is made of small business management with the marketing concept. Planning, financing and structuring of small businesses stressed.

+BA 112 - Marketing Seminar II, 1 credit
Class meets once per week. Prerequisite: BA 110 and instructor’s approval. Continues study of small business management with emphasis on the starting and managing of small business under competitive situations.

+BA 111, +BA 113 - Marketing Practicum I and II, 2-2 credits
Prerequisites: Instructor approval. Maximum of 15 hours on-the-job per week. One research project per course will be completed directly related to the career objectives in the area of Distribution and/or Marketing.

BA 115 - Real Estate Principles and Practices I, 3 credits
Three class periods. A study of the legal and economic aspects of real estate with emphasis on ownership, realty market, instruments of record, mortgages, taxes, and government regulations. A standardized final examination given. Successful students may apply to State Real Estate Commission for examination as licensed salesmen.

BA 116 - Florida Real Estate Law, 3 credits
Three class periods. Prerequisite: BA 115. An introduction to Florida Real Estate License Law and Rules & Regulations of Florida Real Estate Commission. Legal and ethical principles covered are required knowledge for students entering the real estate field and for State Real Estate License Examinations.

+BA 118 - Medical Transcription I, 3 credits
Three class periods. Prerequisite or co-requisite: BY 110. Stressing fundamentals of transcribing medical correspondence and simple dictation from medical recording devices.

+BA 120 - Housing and Home Ownership, 3 credits
Three class periods. An introduction to the economic, physical, legal, and esthetic properties of home ownership, home construction, and design. Specific attention is given to those factors which should be considered in the purchase and maintenance of a home.

BA 151 - Beginning Shorthand, 3 credits
Four class periods. The basic principles of Gregg (Diamond Jubilee) shorthand with emphasis on theory and development of reading and writing skills. For students with less than one year of high school shorthand.
BA 152 – Intermediate Shorthand, 3 credits
Three class periods. Prerequisite: BA 151 or one year of high school shorthand. A continuation of Gregg (Diamond Jubilee) shorthand with continued emphasis on theory and the development of dictation skills.

BA 159 – Business Communications, 3 credits
Three class periods. Prerequisite: EH 151. Practice in developing effective oral and written business communication skills to create successful human relations. Emphasis will be placed on written business correspondence.

+BA 165 – Medical Office Procedures, 3 credits
Three class periods. Emphasis is given to receptionist duties, modern filing methods (terminal digit and coundex), bookkeeping, and proper completion of insurance billing forms, workman’s compensation forms, governmental and medicare forms, and requests from third party payers and outside agencies.

BA 171 – Beginning Typewriting, 3 credits
Five class periods. The basic skills of typewriting including their application to correspondence and statistical typing. For students with less than one year of high school typewriting.

BA 172 – Intermediate Typewriting, 3 credits
Three class periods. Prerequisite: BA 171 or one year of high school typewriting. A continuation of the skills of typewriting, including their application to more advanced styles of correspondence, statistical typing and manuscripts.

BA 175 – Introduction to Business, 3 credits (IS)
Three class periods. The fundamentals of business organization and procedures to acquaint the student with management, terms, organization, and control of large and small business.

+BA 180 – Business Mathematics, 3 credits (IS)
Three class periods. Prerequisite: MS 51 or 61 or placement test. The practical application of mathematics to the computational problems of business and consumerism. Includes percent, simple and compound interest, payrolls, ratios, analyses and computations applicable to merchandising.

+BA 181 – Legal Research and Theory, 3 credits
Three class periods. The student will study the law library system and its functions. He will develop research skills through the use of digests, encyclopedias, reporter systems and practice manuals.

+BA 201 – Business Machines, 3 credits
Three class periods. Prerequisite: BA 180. This course is designed to acquaint the student with the fundamental operations of present day business machines, including electronic calculators, duplicating equipment, and modern adding machines.

+BA 203, +BA 204 – Insurance Office Practices, I, II, 3-3 credits
Three class periods each during first and second sessions of sophomore year. Prerequisite: BA-203 for entry to BA-204. Intensive practice in the handling of insurance forms and policies, records, filing, insurance vocabulary and terminology and insurance office routines.

+BA 209 – Work Seminar, 3 credits
Prerequisite: approval by instructor. The student will work in selected offices in the community a maximum of fifteen (15) hours each week during the final session. Seminar will be held weekly to evaluate personal experiences and different aspects of the secretarial work.
+BA 210 – Marketing Seminar III, 1 credit
One class meeting per week. Prerequisite: Instructor’s approval. A course in career development. A comprehensive study is made in how to achieve career success in one or more of the areas of Distribution and/or Marketing.

+BA 211, +BA 213, Marketing Practicum III, IV, 2-2 credits
Prerequisite: Recommended completion of BA 111, BA 113. Instructor’s approval. Maximum of 15 hours per week on-the-job. Continuation of research project requirements. Project selection of more sophistication encouraged.

+BA 212 – Marketing Seminar IV, 1 credit
One class meeting per week. Prerequisite: Instructor’s approval. +BA 210 recommended. A comprehensive study is made of personnel management from the marketing approach. Special attention is given on how to handle people in the job as a marketing manager under business situations.

+BA 218 – Medical Transcription II, 3 credits
Three class periods. Prerequisite: BA 118. An advanced course in transcription of medical documents using more difficult medical terminology.

+BA 219 – Medical Transcription III, 3 credits
Three class periods. Prerequisite: BA 218. This course uses sophisticated medical terminology such as employed in the surgical specialties of cardiovascular surgery, orthopedics, neurosurgery and plastic surgery.

+BA 221 – Real Estate Finance I, 3 credits
Three class periods. A detailed study of the basic concepts of financing real estate with emphasis given to legal aspects, sources of funds, and methodologies of major lenders for real estate transactions.

+BA 222 – Real Estate Finance II, 3 credits
Three class periods. Prerequisite: BA 221. A continuation of Real Estate Finance I. Emphasis is given to the application of the management approach to financing with special attention given to the use of funds, the many facets of mortgages, long term leases, purchases, and lease-back arrangements.

+BA 223 – Real Estate Appraising I, 3 credits
Three class periods. An introduction to the basic theories and policies pertaining to the social, economic, and governmental forces influencing property values. Treatment is given to such factors as urban forces versus property values, site analysis, neighborhood characteristics, and building construction.

+BA 224 – Real Estate Appraising II, 3 credits
Three class periods. Prerequisite: BA 223. A continuation of Real Estate Appraising I. Emphasis is given to the application of theories studied in BA 223 as well as the study of the current methods of determining property valuation by use of the market, cost, and income approaches.

BA 225 – Real Estate Consumption, 3 credits
Course is designed to develop an understanding of urban land economics, the legal and social factors influencing the usage and ownership of real property. Special attention is given to those commercial and financial transactions necessary to the conveyance of interests and ownership in real property.

BA 226 – Real Estate Management, 3 credits
Three class periods. Prerequisite: BA 225. A study of the theories and techniques of professional management of real estate. Areas covered include residential, business, industrial, and investment properties.
BA 227 – Federal Income Tax, 3 credits
Three class periods. Fundamental regulations covering the Federal Income Tax applicable to individuals and business entities. Includes computation of tax, preparation of forms, and tax planning.

BA 230 – Medical Secretary Procedures, 3 credits
Three class periods. Prerequisite: BA 165. Instruction is given in the office procedures dealing with physical examinations, medical research, and an understanding of the care and sterilization of surgical instruments. Basic instruction is given in pharmacology, immunology, diagnostic laboratory procedures as well as orientation in the administration of extended health care facilities.

BA 231 – Principles of Finance, 3 credits
Three class periods. A study of business finance in the American economy; equity, credit and intermediate capital, working capital, turnover ratios and cash flow budgets.

BA 232 – Financial Institutions, 3 credits
Three class periods. A review and discussion is given to the organization, administration and important functions of financial institutions serving consumers. The primary institutions studied are: commercial banks, savings and loan companies, department stores, hospitals, commercial finance companies and credit bureaus.

BA 233 – Credit Laws and Regulations, 3 credits
Three class periods. A study is given to the Florida State and Federal Laws and Regulations which affect credit transactions. The impact of each law is explained in such important operations as installment sales; consumer loans; credit cards; debt adjustments; fine print clauses; default; Truth-In-Lending; the credit bureau; credit reports and civil penalties.

BA 234 – Installment Credit, 3 credits
Three class periods. The techniques of installment lending are presented. Emphasis is placed on establishing the credit, obtaining and checking information and collecting the amounts due. Other topics studied are inventory financing; special loan programs; short-term and long-term borrowing.

BA 235 – Credit Administration, 3 credits
Three class periods. Prerequisite: BA 231. A study is made of credit policy; the functions of the credit department; sources of credit information; correspondence; unsecured and secured loans; term loans; real estate loans; servicing the loan; influence of the Federal Reserve System and opportunities and responsibilities of loan officers.

BA 236 – Money and Banking, 3 credits
Three class periods. Prerequisite: BA 231. General surveys of economics of money and banking. Areas covered include the nature and functions of money; monetary standards; structure of the commercial banking system; bank deposits; monetary and fiscal policy and function of the Federal Reserve System.

BA 237 – Promotion and Public Relations, 3 credits
Three class periods. Study is given to two kinds of advertising techniques used by financial institutions, promotional and institutional. Specific attention is given to community relations; how images are created; credit market research; opinion surveys; selling the services; the relationships between customers and representatives of institutions.

BA 238 – BA 239, Financial Institution Practicum, 3-3 credits
Prerequisite: approval by instructor. The student will select a financial institution of his choice. Maximum allowable is 15 hours on-the-job experience per week. Job critiques will be scheduled at least monthly by the instructor in coordination with the employer and student.
+BA 240 – Internship as Medical Secretary, 4 credits
Prerequisite: approval by the instructor. An internship in which student spends a maximum of fifteen (15) hours a week either in a physician's office, public health facility, an extended care facility or a hospital. Course culmination in evaluation seminars with various instructors and on-the-job trainers.

+BA 242 – Printing Salesmanship, 3 credits
Three class periods. This course employs a maximum use of case study and is designed as a self-development program emphasizing the sales objectives of contacts, relationships, follow-up calls, suggestions, objections, resistance, acceptance, and repeat business.

+BA 244 – Graphics Production Management, 3 credits
Three class periods. This course is designed to acquaint owners and managers of businesses with the fundamental principles, policies and procedures in the successful operation of graphics production. Twelve areas are covered: organization, planning, estimating, scheduling, routing, the production order, purchasing, inventory control, quality control, personnel, plant layout and records of performance.

+BA 245 – Civil Litigation, 3 credits
Three class periods. Prerequisite: BA 275. This course focuses on the litigation process as it relates to the court system of Florida. Attention is given to the function of law, the role of the attorney, the basic substantive law, pleadings, discovery, trial, settlement and appeal.

+BA 246 – Business Organizations, 3 credits
Three class periods. Emphasis is given to the primary entities under which business is conducted in the state of Florida; sole proprietorship, partnership and corporation. Study is given to the Fictitious Name statute and the several partnership agreements. Attention is given to procedure and form preparation in filing documents to create and operate corporations, employment agreements, stock options and stock restrictions, Security Exchange Commission filing and the New York Stock and American Stock Exchange filings.

+BA 247 – Estate Planning and Administration, 3 credits
Three class periods. Prerequisite or Co-requisite: BA 245. This course is a study of the preparation and probate of wills; citations, appointments of administrators; trust and estate accounting; administering estates and trust agreements. Attention is also given to the legal procedures concerning gifts, inheritance and estate taxes.

+BA 248 – Mechanics of Real Estate Law, 3 credits
Three class periods. Prerequisite: BA 115. The student will study the procedures and the instruments in a basic real estate transaction. Specific attention will be given to the contract; the loan commitment; legal descriptions and surveys; abstract and title work including opinions and insurance; business items including termite bonds and zoning evidence; closing instruments and laws applicable thereto. (This course is designed especially for the student pursuing a degree as a Lawyer's Assistant.)

+BA 249 – Family Law, 3 credits
Three class periods. A study of the elements of a valid marriage, grounds for divorce, dissolution and annulment; separation, defenses, custody, support, alimony, property rights and tax consequences; Florida law concerning children, parental support, adoption and guardianship.

+BA 250 – Law Office Management, 3 credits
Three class periods. Prerequisite: BA 181. The student will study a law office organization, specialized bookkeeping and accounting for attorneys, fees and billing procedures, scheduling and calendaring; management of personnel; legal drafting and legal office correspondence. Special attention will be given to those
Canons, Ethical Considerations and Disciplinary Rules which define the types of
ethical conduct the public has a right to expect from both the lawyer and the
non-professional employee. (This course is designed especially for the student
pursuing a degree as a Lawyer's Assistant.)

BA 251 – Principles of Accounting I, 3 credits
Three class periods. Prerequisite: BA 180 or equivalent. The concepts, principles
and techniques applicable to the accounting cycle, notes, accruals, deferrals, re-
ceivables, inventory valuation, depreciation, asset valuation and payrolls.

BA 252 – Principles of Accounting II, 3 credits
Three class periods. Prerequisite: BA 251. The principles and techniques of
accounting applicable to partnerships and corporations, and controlling enterprises
and managerial decision-making.

BA 253 – Advanced Shorthand, 3 credits
Three class periods. Prerequisite: BA 152 or equivalent. Dictation and
transcription from new material at measured rates of speed, spelling, punctuation
and vocabulary will be emphasized in transcription.

BA 255 – Shorthand Transcription, 3 credits
Three class periods. Prerequisite: BA 253 or equivalent. New material dictation at
measured and unmeasured speed, and transcription of that dictation into mailable
copy free of errors in spelling, grammar and punctuation.

+BA 256 – Managerial Accounting, 3 credits
Three class periods. Emphasis is given to the use of accounting and other
quantitative information in solving management problems. The course requires
good reasoning ability and understanding of mathematics through algebra, for
example MS 81, MS 170 or equivalent. Not recommended for accounting majors.

+BA 260 – Office Procedures, 3 credits
Three class periods. Offered Session I only. Prerequisite: BA 172, co-requisite or
prerequisite BA 152. Development and practice in such secretarial-managerial
operations as records management, processing mail, telephone techniques, hand-
ling travel arrangements, and expediting meetings.

+BA 261 – Secretarial Procedures, 3 credits
Three class periods. Prerequisite: +BA 260 recommended. A course designed to
aid the secretarial or clerical student in mastering office skills, such as: managing
records, presenting statistical information, following payroll procedures and
handling tax duties. Special emphasis will be placed on developing personal qual-
ities and traits important in an office setting. Units and projects presented will be
selected in terms of the learning differences and needs of the individual student.

+BA 263 – Executive Secretarial Seminar and Work Experience, 3 credits
Prerequisite: Approval of the Program Director. The student will work in a se-
lected office a maximum of 15 hours per week. Seminars will be held to answer
questions, share experiences and give further knowledge of the varying aspects of
secretarial work.

+BA 265 – Legal Secretarial Seminar and Work Experience, 3 credits
Prerequisite: Approval of the Program Director. The student will work in selected
legal offices in the community fifteen (15) hours a week. There will be a seminar
each week to answer questions, share experiences, and gain further knowledge of
the varying aspects of legal secretarial work.

+BA 267-268 – Legal Secretarial Practices and Procedures, 3-3 credits
Three class periods each semester. Pre- or co-requisites: BA 152 and BA 172, or
their equivalents. Intensive practice in the handling of legal forms, filing and
records, legal vocabulary and terminology and legal office routines. BA 267 offer-
ed only in Session II and BA 268 offered only in Session I.
BA 271 - Advanced Typewriting, 3 credits
Three class periods. Prerequisite: BA 172, or equivalent. Intensive work with business letters, forms, papers and duplication materials. Continuing effort will be made to increase speed and accuracy on both straight copy and production work.

BA 275 - Business Law I, 3 credits
Three class periods. An introduction to law: its social forces, classes, agencies for enforcement, court procedure, contracts, agency and employment, and commercial paper.

BA 276 - Business Law II, 3 credits
Three class periods. Prerequisite: BA 275. Laws applicable to personal property and bailment, sales of goods, security devices, partnerships, corporations, real property, estates and bankruptcy, government regulation of business and labor.

BA 280 - Principles of Marketing, 3 credits (IS)
Three class periods. Prerequisite: BA 175. The functions, institutions, methods and problems of marketing goods and services.

BA 282 - Principles of Management, 3 credits (IS)
Three class periods. Prerequisite: BA 175. The principles encompassed in the managerial functions of planning, organizing, staffing, coordinating and controlling and their application to the operation of a business enterprise.

BA 283 - Retailing, 3 credits (IS)
Three class periods. Prerequisite: BA 175 or experience. This course gives an introduction to the nature and scope of retail merchandising as seen within the total economic structure. Emphasis is given to the many functions of a retail establishment including employee services and consumer relationships.

BA 284 - Salesmanship, 3 credits (IS)
Three class periods. Prerequisite: BA 175 or experience. This course is a combination of the principles and techniques of selling. Emphasis is placed on person to person situations, consumer motivations, persuasion, and problems dealing with the psychology of sales situations.

BA 285 - Advertising, 3 credits
Three class periods. Prerequisite: BA 175 or experience. Study of modern advertising from the marketing, communications, consumer, and legal viewpoints. Emphasis given to media selection, sales promotion, and creative development of advertising.

BIOLOGY

For 200-level biology courses, it is recommended that at least a "C" grade be earned in the prerequisite course or courses.

BY 110 - Medical Terminology, 4 credits
Three class periods and three one-hour laboratory periods. This course deals with the structure of the human body and the normal functions of the system. Content of the course is directed toward the human anatomy as an integral whole with extensive work in related diagnostic, systematic, and operative terminology. (Laboratory fee)

BY 151 - Man and Environment, 3 credits (CE) (IS)
A general education course designed to provide students and the public with an understanding of man's interdependence with his environment and his responsibility for it. Many aspects of our environmental crisis such as pollution, urbanization, population trends and changes in life styles will be investigated along with present and projected solutions to our problems.

BY 152 - Biological Science, 3 credits (IS)
Three class periods. This general, non-laboratory course is designed for the student
not majoring in biology and is not a prerequisite for any other biology course. This course includes a study of the human body, human evolution, genetics, reproduction, development, and diseases of man. The emphasis is placed on the human organism as the central figure in the biosphere and concepts are covered concerning his interaction with the environment. (Revised 1971-72.)

**BY 172 – Fundamentals of Biology, 4 credits (CE)**
Three class periods and one three-hour laboratory per week. An introduction to basic biological principles emphasizing the common attributes of all living organisms. These unifying concepts of biology include the chemical structure of living matter, the structure and function of the cell, specialized cells, major metabolic functions, control systems, reproduction, genetics, evolution, and ecology. This course is intended for those planning to take more advanced biology courses. (Laboratory fee)

**BY 251 – Introduction to Human Anatomy and Physiology, 4 credits**
Three class periods and one three-hour laboratory. Prerequisite: BY 172 or permission of the Department. This course deals with the structure of the human body and the normal functions of its systems: the cell, tissues, organs, systems, and the body as an integrated whole. (Laboratory fee)

**BY 255 – Human Anatomy and Physiology, 4 credits**
Three class periods and one three-hour laboratory. Prerequisite: CY 155 and BY 172 or permission of Department. This course deals with the structure, function and chemistry of the human body including the cell and tissues with the integumentary, skeletal, muscular, endocrine, circulatory and reproductive systems. Laboratory exercises emphasize physiological and biochemical principles associated with classroom work. See course description for BY 251 for alternate one-semester presentation. (Laboratory fee)

**BY 256 – Human Anatomy and Physiology, 4 credits**
Three class periods and one three-hour laboratory. Prerequisite: Satisfactory completion of BY 255. A continuation of BY 255 including the nervous, respiratory, digestive and excretory systems, the organs of special sense and the chemistry of body fluids. (Laboratory fee)

**BY 261 – Zoology I, 4 credits**
Three class periods and one three-hour laboratory. Prerequisite: BY 172. A lecture and laboratory study of invertebrate animals, from simple to complex. Emphasis is placed on taxonomy, structure, function and evolution. (Laboratory fee)

**BY 262 – Botany, 4 credits**
Three class periods and one three-hour laboratory. Prerequisite: BY 172. A study of the structural organization, classification, physiology, reproduction, heredity and evolution of plants. (Laboratory fee)

**BY 263 – Zoology II, 4 credits**
A sequel to BY 261 – Zoology I. Three class periods and one three-hour laboratory. Prerequisite: BY 172 and BY 261. A lecture and laboratory study of chordate zoology with emphasis on the taxonomy, ecology, evolution, function, and structure of the vertebrates. (Laboratory fee)

**BY 265 – Aquatic Biology, 3 credits**
Three class periods. Prerequisite: BY 172 or permission of the Department. A lecture, laboratory and field biological survey of lakes and streams including the taxonomy, ecology and life cycles of freshwater organisms with emphasis on the invertebrates. Covers the physical and chemical factors of freshwater ecosystems such as the origin of lakes, evolution of streams, and biogeochemical cycles of freshwater. The biology of polluted water is discussed. (Laboratory fee)
BY 266 – Marine Biology, 3 credits
Three class periods. Prerequisite: BY 172. A survey of basic aspects of oceanography, marine organisms and salt water aquariums. Some of the class meetings during the semester will be held at Sea World. (Laboratory fee)

BY 280 – Microbiology, 4 credits
Three class periods and two two-hour laboratories. Prerequisite: BY 172 or BY 251. Pre- or co-requisite: CY 155, CY 160 or CY 171. A survey of microbial forms with emphasis on the bacteria, their morphology, physiology and genetic mechanisms. (Laboratory fee)

BY 285 – Seminar: Ecology; BY 286 – Seminar: Development; BY 287 – Seminar: Genetics; BY 288 – Seminar: Evolution; BY 289 – Seminar: Cellular Biology, 1 credit for each
One class period. Prerequisite: BY 172 and permission of the Department. These courses are for the honor student in biology who wishes to pursue certain biological areas in greater detail, to do research on topics, to present information and to lead discussions with other students and faculty members.

BY 290 – Selected Topics in Biology, 1-3 credits
This course deals with selected topics in the biological sciences based on a historical, traditional or contemporary approach as the background and interest of the students and instructor dictates.

BY 295 – Comparative Vertebrate Anatomy, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: BY 261. An evolutionary approach to a comparative study of organ systems of several representative chordates. Dissection of these organisms will be performed in sequence in the laboratory to gain an understanding of similarities. (Laboratory fee)

**COOPERATIVE EDUCATION**

CO 202 – Cooperative Education, 2 credits
Fifteen (15) to twenty-four (24) hours of work per week per session. Prerequisite: permission of instructor. This cooperative arrangement places the student in a supervised training assignment directly related to his major field of study. May be repeated for credit. A maximum of six (6) co-op credits may apply toward elective credits in a degree program.

CO 203 – Cooperative Education, 3 credits
Twenty-five (25) to thirty-four (34) hours per week per session. Prerequisite: permission of instructor. This cooperative arrangement places the student in a supervised training assignment directly related to his major field of study. May be repeated for credit. A maximum of six (6) co-op credits may apply toward elective credits in a degree program.

CO 204 – Cooperative Education, 4 credits
A minimum of thirty-five (35) hours per week per session. Prerequisite: permission of instructor. This cooperative arrangement places the student in a supervised full-time training assignment directly related to his major field of study. May be repeated for credit. A maximum of six (6) co-op credits may apply toward elective credits in a degree program.

**CAREER DEVELOPMENT**

CD 101 – Career Development, 3 credits
Three class periods. This course emphasizes the development of decision-making skills enabling individuals to explore potential careers in terms of their interests, values and educational goals. The use of career resources will be an important aspect of this course.
CHILD DEVELOPMENT

CT 101 - Child Development & Management, 3 credits
Three class periods. An introductory study of the growth and development of the child from conception through the age of five, including physical, social, emotional and intellectual development, influences of environment, principles and theories of development in home and pre-school situations.

*CT 102 - Observing and Recording Child Behavior, 4 credits
One two-hour class period, and 3 three-hour labs. Designed to increase objectivity and proficiency in observing, recording, interpreting children's behavior, and increase awareness of normal patterns of behavior of children from birth through five years of age. Includes observation of toddlers and pre-schoolers, and case studies will be done in off-campus child care centers. Selection and use of basic equipment, materials for young children, and identification of the role of staff.

+CT 103 - Foods For the Young Child, 3 credits
Three class periods. Designed to become aware of the nutritional needs of the pre-school child. Will include in-class preparation of snacks and light lunches suitable for the young child.

CT 105 - Art for Young Children, 3 credits
Three class periods. An introductory course designed to acquaint students with the wide variety of arts suitable for use with young children. Designed to assist in understanding the importance of art media in enriching opportunities for children. A combination of lectures and demonstrations.

*CT 106 - Supervised Student Participation, 4 credits
One two-hour lecture period and four 3 hour laboratory periods. The student will participate in the child care laboratory on campus under a qualified supervisor.

CT 107 - Literature for Young Children, 3 credits
Three class periods. Designed to acquaint the student with the various forms of children's literature, and develop ability to select quality literature appropriate for various age groups.

CT 109 - Music for Young Children, 3 credits
Three class periods. Teaching of basic skills necessary to involve children in simple music activities. Familiarity with simple musical instruments is stressed.

CT 110 - Principles of Pre-School Education, 3 credits

*CT 115 - Movement Exploration, 3 credits
Three class periods. Study of techniques of using physical activities with young children. Games and play equipment for young children will be researched and designed in class.

+CT 116 - Curriculum for the Young Child, 3 credits
Three class periods. The study of basic concepts, methods and materials of social studies, mathematical concepts and science investigations appropriate to the education of the young child.

*CT 206 - Supervised Student Participation, 4 credits
Five three-hour labs. Prerequisite: CT 106. Participation in the child care laboratory on campus. Mastery of the planning necessary for the operation of a child care center under supervision of the instructor. Decision on units to be taught, supply purchasing and general responsibility of the center.
CT 210 – Advanced Child Development and Management, 3 credits
Three class periods. Prerequisite: CT 101. A continuation of CT 101. Study of
child’s development up to pre-adolescence. Included are child guidance and be-
havior problems such as emotions, attitudes, and values.

CT 211 – Seminar in Child Development, 2 credits
One two-hour class period. Prerequisite: CT 206. Will provide the opportunity for
students to raise questions of problems in child development and child care. Will
explore the opportunities of child care as a business and help the student become
an administrator.

CIVIL TECHNOLOGY

CV 102 – Construction Methods and Equipment, 3 credits
Three class periods. Prerequisite: EG 151. An introductory study of methods to
determine quantities of materials, equipment, labor, and money required for con-
struction projects. Covers characteristics and capabilities of work equipment;
methos of obtaining unit costs of in-place construction; and field reporting prac-
tices and responsibilities of field inspection.

CV 192 – Surveying and Measurements, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: MS 138/171. Ele-
mentary surveying course including fundamentals of plane surveying and use and
care of equipment. Accurate measuring of distance; theory and practice of level-
ing; angles and bearings; principles and use of transit; curves; stadia; and topo-
graphic and land surveying studied in coordinated class, laboratory and field
assignment. (Laboratory fee)

CV 201 – Advanced Drafting for Highway Technology, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: CV 102. Course
covers drafting room procedures and methods used in map drawing and in graphi-
cal presentation of steel and concrete structures. Emphasis placed on drawing
topographic maps, plans and profiles, and cross sections. The detailing of steel and
reinforced concrete members of bridges, piers, trestles, retaining walls, and culvert.
is stressed. The student becomes familiar with materials and nomenclature associ-
ated with design and drafting operations. (Laboratory fee)

CV 292 – Photogrammetry, 2 credits
One class period and one three-hour laboratory. Prerequisite: MS 138/171. Course
provides introduction to the principles, equipment, techniques, and applications of
photogrammetry as used in highway design and construction. Covers principles of
photogrammetry and aerial photography; photointerpretation, displacement calcula-
tions and stereoscopic measurements; and applications in radial line plotting, tax
map preparation, and mosaic construction (Laboratory fee)

CV 293 – Soils and Foundations, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: CV 102. Course
covers criteria used in selection, design and construction of the elements of a
structure that transfers its total load to the underlying formations. Theoretical
aspects considered and treated are: analysis of subsoil conditions; bearing capacity
and settlement analysis; character of natural soil deposits; earth pressure and re-
taining wall theory; and stability of slopes and subgrades. Foundation design and
behavioral characteristics are also covered. Pole driving. (Laboratory fee)
+CV 294 – Estimating and Office Practice, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: CV 201. Introduction to estimating and construction office practice to familiarize student with the construction process as a whole; ways contractors organize offices to accomplish a job of construction; the generation of plans and specifications and their use; systems of accounting; and how material quantity “take-off” forms the basis for accounting. Critical-path method of planning and scheduling is studied intensively to teach this increasingly important technique. (Laboratory fee)

+CV 295 – Route Design and Survey, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: CV 292. Course concerned with effects of traffic and vehicular characteristics on road design, length of highway, curvature and elevation of roadbeds as they affect costs and location; geometric design; field and office practice in route and curve layout; earthwork computations; and principles of aerial photography applied in highway route design. (Laboratory fee)

+CV 296 – Steel and Wood Construction, 3 credits
Two class periods and one four-hour laboratory. Prerequisites: CV 102, CV 292. Course concerned with the elements of a transportation roadway and their functions; roadway foundations; pavement types, characteristics, composition, and structural design; construction procedures; and characteristics of railroad tracks and beds. Basic studies of commercial and industrial buildings. (Laboratory fee)

+CV 297 – Reinforced Concrete Construction, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: AL 291. Course includes study of properties of concrete, elementary stress calculations, and the specifications for columns, beams, and slabs. Construction considerations include forming, shoring, reinforcing, and the relationship between construction cost and design. (Laboratory fee)

+CV 298 – Hydraulics, Drainage, Sewage and Sewers, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: CV 293. A study of the basic theory of the hydraulics of flow in pipes and in open channels including also the hydrology of drainage areas, storm water runoff, and streamflow analyses, design concepts and techniques cover subsurface drainage and storm drainage structures such as ditch checks, conduit systems and bridges, with major emphasis on culverts. (Laboratory fee)
CHEMISTRY

CY 155 – Introduction to General Chemistry, 4 credits
Three class periods and one three-hour laboratory. Prerequisites: One year of high school algebra or MS 80. This course is designed to prepare students without high school chemistry or those with an inadequate background for CY 171. The course may also satisfy the general education requirements in the sciences. Modern chemical theories are used to develop an understanding of the fundamentals of inorganic chemistry and its applications. Quantitative relationships are emphasized throughout the course, using dimensional analysis to solve all problems. Laboratory experiences are an integral part of the course. The course may not be taken for credit subsequent to earning a grade of “C” or better in CY 171-172. (Laboratory fee)

CY 156 – Chemical Calculations, 2 credits
One two-hour class period. Prerequisite: CY 155 or one year of high school chemistry and one year high school algebra or MS 80. Designed to be taken concurrently with CY 171 in order to provide special instruction for the student who needs additional work in the quantitative aspects of chemistry. Students are instructed in the use of the slide rule, logarithms and dimensional analysis. Topics include weight relationships in chemical reactions, gas laws, and solution chemistry. This course may not be taken for credit subsequent to a grade of “C” or better in CY 171-172.

CY 160 – Introduction to Inorganic, Organic, and Biochemistry, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: High school Chemistry or CY 155. The course is designed to introduce the fundamentals of a study of biochemistry. Laboratory experience will include experiments in inorganic, organic and biochemistry. This course provides the necessary background in chemistry for further studies in the health related fields as well as counting toward General Education requirements. It is not designed for students majoring in chemistry or for those whose curriculum requires a full year of college chemistry. (Laboratory fee)

+CY 165 – General Chemistry for Medical Laboratory Technology, 4 credits.
Three class periods and one three-hour laboratory. Prerequisites: admission to the Medical Laboratory Technology Program. This course emphasizes essentials of general chemistry and a brief introduction to the structure and nomenclature of organic compounds. It is designed to prepare students for the study of chemistry-related Medical Laboratory Technology courses. (Laboratory fee)

CY 171 – General Chemistry with Qualitative Analysis I, 4 credits (CE)
Three class periods and one three-hour laboratory. Prerequisites: CY 155 or one year of high school chemistry completed with a grade of “C” or better; and MS 81, or two years of high school algebra. A study of the basic principles of chemistry, emphasizing the formation of a unifying model from a collection of observations and measurements. The laboratory illustrates principles discussed in the classroom. Students who need extra instruction in the problem solving aspects of chemistry are urged to take CY156 concurrently with this course. (Laboratory fee)

CY 172 – General Chemistry With Qualitative Analysis II, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: satisfactory completion of CY 171. A continuation of CY 171 dealing mainly with equilibrium theory and the thermodynamics. The laboratory is designed to illustrate the principles of ionic equilibria within the framework of qualitative analysis. (Laboratory fee)

CY 265 – Organic Chemistry I, 4 credits. Session I only.
Three class periods and one three-hour laboratory. Prerequisite: CY 172 or a comparable college level general chemistry course. A basic course dealing with aliphatic aromatic compounds, their properties, reactions, and synthesis, emphasizing the dependence of properties and reaction mechanisms upon structure. The
laboratory illustrates techniques of separation, identification and purification.

(Laboratory fee)

CY 266 – Organic Chemistry II, 4 credits. Session II only.
Three class periods and one three-hour laboratory. Prerequisite: satisfactory completion of CY 265. A continuation of CY 265 with the laboratory devoted to multistep synthesis. (Laboratory fee)

CY 275 – Quantitative Analysis, 4 credits (IS)
Two class periods and two three-hour laboratories. Prerequisite: CY 172. Introduction to the theoretical principles and laboratory practice of modern analytical chemistry including separations and gravimetric, titrimetric, electrometric, absorption spectrometric and chromatographic techniques. (Laboratory fee)

CY 290 – Special Topics in Chemistry, 1-3 credits
Prerequisite: CY 171 and permission of the department. This seminar is for the honor student in chemistry who wishes to pursue certain topics in chemistry, as chosen by the class, in detail; to research topics; to present information and lead discussions with other students and faculty members. This course may be repeated for a maximum of three semester hours of credit.

DRAFTING & DESIGN

+DG 111 – Mechanical Drafting I, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: EG-151. Drawing basic machine elements and subassemblies including screw threads, linkage, gears and cams with consideration to precision and limit dimensioning, tolerance allowances and limits. Study of working assembly and outline drawings with attention to drawing of an assembly and details from pictorial drawings and sectional views of assemblies. (Laboratory fee)

+DG 201 – Electromechanical Drafting I, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: DG 111. Emphasis placed on drawing to specifications; chassis, panels, terminal boards, resistors, capacitors, inductors, transformers, tubes, diodes, transistors, etc. Basic electronic package design will be developed through complete multiple drawing series suitable for manufacturing purposes by utilization of the Design Team Concept. (Laboratory fee)

+DG 202 – Electromechanical Drafting II, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: DG 201. A continuation of DG 201 with emphasis on printed circuit drafting, microcircuit, and integrated circuit drafting techniques. (Laboratory fee)

+DG 211 – Mechanical Drafting II, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: DG-111. A continuation of DG-111 which includes basic instruction in piping and structural drawing as related to mechanical drafting; integrates knowledge previously acquired in mechanical mechanisms and introduces charts, graphs, diagrams and various pictorial presentations of engineering information. Additional emphasis on jigs, tools, and fixtures. (Laboratory fee)

+DG 212 – Mechanical Drafting III, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: DG 211. A continuation of DG 211 which includes advanced assembly and detailed drawings of small machines, mechanical mechanisms or electromechanical devices with consideration given to application of principles covered in EG 157. Attention given to designating specifications on shafting gears, belts, clutches, brakes, and miscellaneous machine elements. (Laboratory fee)

DATA PROCESSING

DP 101 – Introduction to Data Processing, 3 credits (IS)
Three class periods. An overview of the entire field for data processing. It will cover such topics as manual and automatic record keeping, types of computers, a
brief history of computing devices, data representation, computer arithmetic, computer components and stored program concepts.

+DP 103 - Data Processing Mathematics, 3 credits (IS)
Three class periods. Corequisite: DP 101. A survey of the mathematics required in a dynamic data processing environment. Practical business applications are stressed. Course designed to meet the needs of student programmers, system analysts, and data processing managers. Covers basic math, math for computers, linear algebra, and optimization techniques.

DP 105 - Fortran Programming, 3 credits (IS)
Three class periods. An extensive study of FORTRAN statements and their use in the solution of appropriate problems. Emphasis will be placed on problem organization, data manipulation, and input-output operations.

DP 201-202 - COBOL Programming, 3-3 credits (IS)
Three class periods. Prerequisite: DP 101 or permission of instructor. The study of a high level business oriented programming language (COBOL) in sufficient detail to enable students to effectively solve problems normally encountered in the business area.

+DP 205 - Advanced Programming, 3 credits (IS)
Three class periods. Prerequisite: DP 101, DP 201 and DP 202 or permission of instructor. A survey of other programming languages available and a continuation of DP 202, providing for wider and more extensive application of COBOL to business data processing applications and problems. Major emphasis will be on program writing, testing, debugging, and complete documentation.

+DP 210 - Data Systems and Management, 3 credits (IS)
Three class periods. This course will cover the analysis, design and control of data systems. Methods in information storage and retrieval, magnetic tape and disk file organization will be stressed.

+DP 231 - Data Processing Management, 3 credits (IS)
Three class periods. Prerequisite: DP 210 or permission of instructor. A study of the critically important management principles concerned with the administration and control of the data processing function. The manager role in planning, evaluating, organizing and decision making functions is continually stressed.

+DP 240 - Scientific Program Applications, 3 credits
Three class periods. This course is designed to acquaint the student with typical scientific Data Processing applications. Students learn to apply through lecture and practical case studies, the equipment and programming techniques in previous semesters.

DP 250 - Computers for Everyone, 3 credits
This general education course is designed to provide a broad overview and understanding of computers. Many aspects about computers such as principles, methods and applications will be investigated along with the impact and role of computers in our society.

ENGINEERING

EG 151 - Engineering Drawing, 3 credits
Two class periods and one two-hour laboratory. A survey course of the principles and practices involved in making and reading engineering drawings. Emphasis is placed on lettering, industrial symbolism, visualization, orthographic projection, and line techniques. (Laboratory fee)
EG 152 – Descriptive Geometry, 3 credits
Two class periods and one two-hour laboratory. A survey course of the principles and practices involved in making and reading engineering drawings. Emphasis is placed on lettering, industrial symbolism, and line techniques. (Laboratory fee)

EG 157 – Engineering Materials and Processes, 3 credits
Three class periods. This is a survey of the basic materials used in industry, metallic and non-metallic, and the processes used to form, fabricate, and finish these materials.

ENGLISH

EH 140 – Fundamental English I, 3 credits
Three class periods. A comprehensive study of grammar, usage, punctuation, capitalization, vocabulary, and spelling. Emphasis on writing clear, concise, grammatically accurate sentences and putting those sentences together in a unified paragraph. Satisfactory completion should prepare the student to succeed in EH 151 and in other courses where writing clear paragraphs is needed.

EH 141 – Fundamental English II, 1-3 credits
A series of mini-courses that focus on individual students' specific problems with grammar, usage, punctuation, capitalization, vocabulary, and spelling. This course is designed to meet the needs of three groups of students: (1) those identified as needing a comprehensive individual program to develop writing skills, (2) those EH 151 students referred by their instructors for help in specific areas, and (3) those seeking help in learning or polishing specific writing skills. Mini-courses available to help students take notes, answer essay questions, prepare job applications and resumes, summarize, research, document accurately. Students take as many mini-courses as necessary to correct problems or develop skills. Credit by arrangements with course facilitator.

EH 151 – Freshman Composition, 3 credits (CE) (IS)
Three class periods. Instruction and practice in effective writing. Reading of modern essays combined with multi-media approach.

EH 152 – Freshman Composition, 3 credits (CE) (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. Instruction and practice in effective writing. Various literary types combined with multi-media approach.

EH 157 – Technical Communication, 3 credits (IS)
Three class periods. Prerequisite: EH 151. Emphasis on clear, simple and precise English. Writing of business letters, office memos, technical reports, proposals and recommendations. Practice in collecting and organizing data and preparing report formats. Oral reports and interview techniques included.

EH 250 – Introduction to Literature, 3 credits (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. An introduction to the following literary types: short story, novel, drama and poetry, with emphasis on contemporary literary works.

EH 251 – Survey in English Literature, 1300-1800, 3 credits (CE) (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. A humanistic study of British Literature through the eighteenth century. Representative selections from each period are studied for interpretation, background, artistic qualities and ethical meaning, with emphasis on human values and application to life.

EH 252 – Survey in English Literature, 1800 to Present, 3 credits (CE) (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. A study of British Literature of the nineteenth and twentieth centuries from the same approach as that of EH 251.
EH 253 — Survey in American Literature, Colonial Period to Civil War, 3 credits (CE) (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. A survey of literary trends from the Colonial period to the Civil War. Emphasis will be placed on the romantic rediscovery (nature, man, society) in the works of such writers as Poe, Emerson, Thoreau, Hawthorne, Melville, and Whitman.

EH 254 — Survey in American Literature, Civil War to Present, 3 credits (CE) (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. An introduction to the main themes and personalities of the American Literary scene from the Civil War to the present, including Afro-American authors. New direction of modern poetry, rise in realism and naturalism in short stories and approach to symbolic drama.

EH 256 — Contemporary Literature, 3 credits (IS)
Three class periods. Prerequisite: EH 151. A study of representative works of contemporary American, British, and Continental poets, novelists, short story writers, science fiction writers, dramatists, and non-fiction writers especially significant since World War II. Emphasis will be placed on the issues and ideas as related to our present and future society. To include the works of such authors as Baldwin, Bellow, Brooks, Camus, Ellison, Hesse, Malamud, Sartre.

EH 259 — Introduction to Film, 3 credits
Three class periods. An introduction to the developments in American, British, and foreign films. Emphasis on films of the 30's through the 70's. Attention given to silent films, early talkies and documentaries.

EH 260 — Advanced Composition and Creative Writing, 3 credits (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. Instruction in advanced techniques of composition leading to development of writing style and form compatible with individual interests. Also offered for students desiring experience in writing short stories, poems, plays, novels, personal essays and magazine articles with students free to develop writing skills in chosen literary type. Group reading and analysis of student writing.

EH 268 — Survey in World Literature, 900 B.C. to 1700, 3 credits (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. A study of the major poetry, fiction, drama and essays of world literature from the Ancients to and including the Renaissance. Emphasis on selections that make reading stimulating and pleasurable.

EH 269 — Survey in World Literature, 1700 to Present, 3 credits (IS)
Three class periods. Prerequisite: EH 151 or permission of the Department. A study of world literature from the Renaissance to the Modern from the same approach as that of EH 268.

EH 290 — Selected Topics in English, 1-3 credits (IS)
One-three hours per week. Prerequisite: EH 151 or permission of instructor. This seminar is for students interested in research, discussion, and observation of special topics in writing and literature.

ELECTRONICS TECHNOLOGY

+EL 101 — Electric Circuits I, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: A minimum of one unit of high school algebra or equivalent. Co-requisite: MS-137 or 170 or departmental approval. The first basic course covering the concepts of voltage, current, and resistance, basic resistive circuits, network theorems, inductance, and capacitance. Basic measuring instruments and techniques are utilized.

+EL 105 — Electric Circuits II, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 101 or depart-
ment approval. It is recommended that the student have one unit of high school
trigonometry or the equivalent. Corequisite: MS 138 or MS 171 or department
approval. A continuation of EL 101 covering fundamentals of reactive circuits,
including series and parallel RL, RC and RLC circuits, network theorems and
analysis resonance, power, transformers, filters and other selected topics. (Lab-
oratory fee)

+EL 109 — Semiconductor Circuits I, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 101 or depart-
ment approval. Corequisite: EL 105 or department approval. A course covering
techniques of analysis and design of linear transistor amplifiers and other semi-
conductor circuits. Topics include DC circuit biasing, small signal AC hybrid
analysis, field effect transistor, multistage amplifiers, large signal amplifiers, and
stability criteria. (Laboratory fee)

+EL 201 — Pulse and Digital Circuits, 4 credits
Three class periods and one three-hour laboratory. Pre-requisite: EL 105 or de-
partment approval. A course covering pulse and other types of nonsinusoidal
waveforms, network response, transistor switching circuits, boolean algebra, and
basic digital logic circuits. (Laboratory fee)

+EL 202 — Digital Systems Fundamentals, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 201 or depart-
ment approval. A study of digital logic elements and functions including number
systems, boolean algebra, digital codes, logic gates, multivibrators, decoders, arith-
metic units, counters, shift registers, and other complex digital functions. The
laboratory provides experience in connecting, testing, and trouble-shooting digital
circuits. The functions and applications of digital integrated circuits are strongly
emphasized. (Laboratory fee)

+EL 208 Electronic Communications I, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 109 or depart-
ment approval. Corequisite: EL 210 or department approval. This course intro-
duces the principles and circuits used in electronic communications. Included are
system requirements, basic techniques of modulation and demodulation, prin-
ciples of transmitters and receivers, oscillators, tuned amplifiers, antennas, and
other communication system components and using them in circuit relationships
with other units. The laboratory provides experience in connecting, testing, and
troubleshooting, circuits and systems similar to those studied in class utilizing
oscilloscopes, signal generators, and other electronic test equipment. (Laboratory
fee)

+EL 210 — Semiconductor Circuits II, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 109 or depart-
ment approval. A continuation of EL 109 covering applications of circuits an
techniques previously studied. Linear integrated circuits, operational amplifier
theory, feedback theory, oscillators, AGC circuits, regulators, rectifiers, and filters
will be covered. (Laboratory fee)

+EL 212 — Electronic Communications II, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 208 and EL
201 or department approval. This course emphasizes the system aspects of elec-
tronic communications utilizing the basic circuits and methods discussed in EL
208 and continues with the study of transmission and radiation. Topics included
involve information transmittal, noise, bandwidth, pulse communication tech-
niques, multiplexing, television methods, transmission lines, antenna gain, path
loss and related subjects. (Laboratory fee)
ELECTROMECHANICAL

+EM 150 – Mechanisms, 4 credits
Three class periods and one three-hour laboratory. Corequisites: MS 137/170 and PH 151/161. The study of fundamental concepts as found in basic mechanical and electromechanical mechanisms, studies in terms of their function, specifications and operating characteristics with emphasis on the use of these mechanisms in integrated electromechanical systems as found in business machines and data processing equipment; to include study of levers and linkages, gears, transmission components and electric controls. (Laboratory fee)

+EM 202 – Digital Computing Systems, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 202. Study of the computer as a system: its external data forms and functions; data input, program flow charts, instructions, programs; use of the digital computer and its peripheral equipment as a total system. (Laboratory fee)

+EM 215 – Control Systems, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 201, PH 152 or PH 162 or department approval. A course designed to develop a basic understanding of control systems theory, applications, and the operation of components utilized in typical systems. The different types of control systems are analyzed, and the concepts of system stability introduced. (Laboratory fee)

+EM 220 – Electromechanical Components, 4 credits
Three class periods and one three-hour laboratory. Prerequisites: EL 201 and EM 150. An in-depth study of mechanisms as they are specifically related to use in business machines and data processing machines applying the principles and concepts learned in the course in mechanisms. (Laboratory fee)

+EM 230 – Storage Principles and Devices, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EL 202. Study of storage as a basic need in computer systems including temporary, permanent, partial, and final; fundamental information pertaining to addressing, access, synchronization and characteristics of the various media; major areas of study to include magnetic fundamentals, core storage, thin-film memory, magnetic drum storage, magnetic disk storage, magnetic tape storage, card random access memory, read only memories, tunnel-diode memory, electronic storage, mechanical and electromechanical storage, electrostatic storage devices. (Laboratory fee)

+EM 240 – Input/Output Devices, 4 credits
Three class periods and one three-hour laboratory. Prerequisites: EL 202 and EM 215. Includes discussion of input and output requirements of a computing system introducing the student to types of devices in typical systems; individual equipment presented with the object of stressing mechanical, electrical and logical principles of operation. (Laboratory fee)

EDUCATION

EN 150 – Orientation to Education, 3 credits (IS)
Three class periods. A general overview of teaching developed through a study of the processes of teaching and learning, the organization and structure of American education, and current issues and problems related to education.

EN 290 – Field Experience in Education, 1 credit
One class period plus a minimum of two hours per week of appropriate field experience under professional supervision. Co- or prerequisite: EN 150. This course is designed for students who wish to pursue particular interests in the field
of education and to gain some actual experience in the field. The course may be repeated for a maximum of three semester hours of credit.

EN 291 - Selected Topics in Education, 1-3 credits
One-three class periods. Prerequisite: EN 150 or permission of the instructor. These seminars are for students who are interested in special topics and desire to explore further the field of education through research, discussion, and observation.

ECONOMICS

ES 130 - Consumer Economics, 3 credits (IS)
Three class periods. An experience in the practical and theoretical evaluation of personal and family financial planning, buying, borrowing, protection and investing.

ES 151 - Basic Economics, 3 credits (IS)
Three class periods. A general survey course of economic concepts and institutions to prepare the student for intelligent citizenship. Emphasis is on the principles of production, the determination of prices, the distribution of income and economic problems of everyday life. Not intended for majors in economics or certain business curricula requiring six semester hours of "Principles of Economics." No credit will be granted if ES 261 has been satisfactorily completed. (Offered as ES 251 prior to 1968-69).

ES 261 - Principles of Economics I, 3 credits (CE) (IS)
Three class periods. Introduction to economic theory, fundamental problems of any economy and the market economy. Macroeconomics to include National Income accounting, consumption, saving and investment, the influence of government, money and banking, and the problem of unemployment.

ES 262 - Principles of Economics II, 3 credits (CE) (IS)
Three class periods. Continuation of ES 261. Microeconomics, the theory of the market, price determination, factors of production, distribution of income, the theory of the firm, monopoly and oligopoly in competition, international trade, the challenge of the future. Students who have had no prior course in economics are encouraged to consult a counselor or an economics instructor prior to enrollment.

ES 290 - Selected Topics in Economics, 1-3 credits
One-three class periods. These seminars are for students who are interested in special topics and desire to explore further the field of economics through research, discussion, and observation.

FRENCH

FH 151, FH 152 - Elementary French, 3-3 credits (CE) (IS)
Three class periods. Beginning course in fundamental French grammar and communication skills.

FH 251, FH 252 - Intermediate French, 3-3 credits (CE) (IS)
Three class periods. Prerequisite: FH 152 or equivalent or two years of high school French. Conversational approach with readings from modern and classic authors.

FIRE TECHNOLOGY

FT 101 - Introduction to Fire Protection, 3 credits (IS)
A study of chemistry and physics of fire; a detailed study of the effects of fire on
national economy, as well as a review of the fire experience of the United States; a detailed examination of basic fire classifications, fire causes and leading fire problems. The student will also conduct a detailed examination of fire, its control and extinguishment, and how fire relates to municipal, industrial and national backgrounds.

**FT 111 – Supervision and Leadership, 3 credits**
Principles of effective supervisory practices with emphasis on human behavior and motivation, including both individuals and groups, types of leadership, and effective leadership practices. All instruction based upon practical fire-related experiences utilizing a case history method.

**FT 112 – Company Management, 3 credits**
Prerequisite: FT 111. Practical application of principles covered in FT 111. This unit covers the non-firefighting functions of the company officer including planning, report writing, rating employee performance, pre-fire planning and public relations. Case studies of various problems at the company level will be discussed and solved in class.

**FT 113 – Company Fire Ground Management, 3 credits**
Basic concepts of fire fighting, size-up, fire attack principles, utilization of manpower and equipment, at the company level. Emphasis will be on developing thinking skills in relation to common fires and operations at more serious ones.

**FT 201 – Fundamentals of Fire Prevention, 3 credits**
Structure and organization of fire prevention organizations; conducting inspections; interpreting and applying code regulations; a study of procedures and techniques of fire prevention, including surveying and mapping, recognition and elimination of fire hazards; fire risk analysis as applied to municipal and industrial occupancies.

**FT 221 – Fire Protection Systems and Extinguishing Agents, 3 credits**
Prerequisite: FT 101. The functions and general design principles of gaseous and solid particle suppression systems. A review of standards and principles for installation of detection, signaling and communication systems. A review of the principles, characteristics and limitations of extinguishing agents.

**FT 222 – Building Construction and Fundamentals, 3 credits**
State and federal laws applicable to fire protection and construction, building codes and their application to fire protection and fire prevention, building construction and design with emphasis on fire prevention features.

**FT 224 – Special Fire Hazards and Problems, 3 credits**
Prerequisite: FT 101. Special emphasis on hazardous materials and the fire problems associated with storage, handling and fire control; examination of special fire problems of expanding urban areas and industries; and fire investigation, problems and principles.

**FT 231 – Fire Department Management, 3 credits**
Prerequisites: FT 111 and FT 112. Principles and functions of fire department management. The chief officer's role as a manager including objectives of the fire department, planning, budgeting, water supplies, relationship of insurance to fire protection, communications and fire alarms, organization and legal aspects of fire prevention, fire investigation and changing concepts in management.

**FT 245 – Methods of Teaching For Fire Technology Instructors, 3 credits**
Principles, procedures and techniques of teaching are presented with emphasis on methods of instruction, developing training outlines, use of visual aids and testing procedures for Fire Technology instructors.
GRAPHIC ARTS TECHNOLOGY

GA 101 - Introduction to Graphic Communications, 3 credits
Three class periods. Introduction to the various printing techniques; letterpress, offset, gravure, silk screen and other reproduction processes. Includes basic printing methods and terminology, and a study of the history and development of graphic arts.

GA 110 - Fundamentals of Typography, 3 credits
Two class periods and one two-hour laboratory. The fundamentals of typography covers printer’s measurements, arithmetic and copy fitting, history of typography and recognition of popular type faces, specifications of types; proof reading and marking of proofs, use of type face specimen books. (Laboratory fee)

GA 115 - Layout, Design and Copy Preparation, 3 credits
Two class periods and one two-hour laboratory. A practical course in planning and visualizing advertising and industrial copy. The student converts his rough ideas and designs into comprehensive layouts from which he prepares camera ready copy. Experiments are conducted with various media involving design balance and color psychology. The appropriate mix of typography, illustration, and photography. Also covered is type specification, paste-up and key-lining for posters, displays, reports, magazines, packaging, labels and letterheads. (Laboratory fee)

GA 201 - Cooperative Placement in Industry, 3 credits
Eight hours per day, five days per week, Session III-A or III-B only. Prerequisites: GA 101, 110, 115. This cooperative arrangement places student in industrial setting performing specific tasks of the graphic arts industry which serves to reinforce and enhance his understanding of the curriculum to date; experiences on the job to be coordinated with the curriculum by a Cooperative Educational Coordinator who serves as a liaison between the school and the world of work thereby assuring the student relative and meaningful on-the-job experiences. (Laboratory fee)

GA 210 - Graphic Reproduction Processes, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: GA 110 or permission of the instructor. Theory and practice of letterpress work, using platen and cylinder presses as well as a study of the principles and methods of offset presswork. Mechanics of the equipment, press functions, operations, care and maintenance of the equipment, and materials used in both methods of reproduction are explored in depth. In addition, the application of special techniques such as die cutting, scoring, numbering, perforating, and embossing are examined. (Laboratory fee)

GA 230 - Illustrating, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: EG-151. A basic course in the application of freehand sketching and mechanical projection to industrial/commercial problems using axonometric and perspective techniques. Also included are studies in planning, production, and completion of finished artwork for brochures, reports, manuals and other industrial/commercial publications. (Laboratory fee)

GA 235 - Offset Stripping and Lithographic Plates, 3 credits
Two class periods and one two-hour laboratory. Fundamentals of single and multi-color layout and stripping procedures, imposition, tools, and terms involved in lithographic platemaking. This course introduces the student to the various operations and techniques used in the stripping and masking of negatives and the preparation of plates for single and multi-color offset press applications. A study in the elements of platemaking includes work with direct image, electrostatic, transfer image, photo direct, presensitized and plastic plates. Emphasis here is
placed on imaging methods, processing sets, and applications in addition to related operations such as step-and-repeat and room-light contact films. (Laboratory fee)

+GA 237 – Work Simplification, 3 credits
Three class periods. A study of basic time and motion theories; improvement of work environment, job enrichment; compiling and determining work standards (operation time requirements) and work flow.

+GA 240 – Graphical Presentation of Data, 3 credits
Two class periods and one two-hour laboratory. A study of the different types of charts, graphs, and diagrams, and the various methods of presentation. The fundamentals of interpreting and plotting scientific data will be investigated along with the development of information networks such as PERT and CPM. The preparation of finished art for reproduction or projection will be performed and instruction given on flip chart techniques, and the use of tapes and special materials. (Laboratory fee)

+GA 250 – Photolithography I, 3 credits
Two class periods and one two-hour laboratory. A basic course in the fundamental photographic principles, theory, procedures and the application of the photographic techniques in the production of negatives for the printing process. This includes camera operation, developing, enlarging, printing, scaling, the reproduction of line copy, and the stripping methods used in photolithography. (Laboratory fee)

+GA 260 – Photolithography II, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: GA 250 or permission of the instructor. An advanced study of the photographic process involved in the reproduction of black and white continuous tone copy, halftone negatives, and color separation. Included is an analysis of the various halftone screens, dot patterns, and percentages as they relate to the printing process. Direct and indirect methods of color separation are investigated with emphasis on photomechanical reproduction; the use of filters for color halftone separation, color correction methods. Opaque and transparent overlays for line color separation, masking requirements, and color proofing systems are studied in depth. (Laboratory fee)

+GA 275 – Graphic Arts Estimating, 3 credits
Three class periods. An analysis of the economic principles and procedures involved in estimating printing production; both letterpress and offset. An investigation is conducted into the various kinds, uses, sizes, weights and finishes of paper stock; establishing hourly cost rates by the construction and use of scales, charts and budget forecasts; analysis of specifications, costs of materials and outside services, profit margins and pricing from time/cost data. (Laboratory fee)

+GA 280 – Pictorial Rendering, 3 credits
Two class periods and one two-hour laboratory. Designed to give the student a basic grounding in the construction and drawing methods necessary to produce accurate pictorials and architectural renderings. Various mediums will be explored including airbrush and wash drawings, caseins, acrylics, and ink techniques, required to produce drawings suitable for reproduction in advertisements and catalogs, or for production planning and design analysis. Photo retouching will be included in the airbrush section of this course. (Laboratory fee)

GEOLOGY

GL 201 – Physical Geology, 4 credits
Three class periods and one two-hour laboratory per week. The course deals with the physical structure of the earth. It includes effects of volcanic activity, glacia-
tion, diastrophism (formation of major crustal features: continents, ocean beds, folds, faults and mountain building), tectonics (structural deformation and readjustment of the crust), sediments, erosional features, rocks and mineral formation along with new and current geological developments.

GL 202 – Historical Geology, 3 credits (IS)
Three class periods with lecture, demonstrations and activities. Prerequisite: PS 192, Earth Science, GL 201, Physical Geology, or equivalent. For the student interested in additional study in geology. This course deals with the historical aspect of geology from Archeozoic to present time relating and describing patterns, changes and trends of geological features.

GERMAN

GN 151, GN 152 – Elementary German, 3-3 credits (CE) (IS)
Three class periods. Beginning course in fundamental German grammar and communication skills.

GN 251, GN 252 – Intermediate German, 3-3 credits (CE) (IS)
Three class periods. Prerequisite: GN 152 or equivalent or two years of high school German. Conversational approach with reading from modern and classic authors.

GEOGRAPHY

GY 151 – World Geography, 3 credits (IS)
Three class periods. An introductory study of the basic geographic concepts and terms, the problems of conservation of natural resources, and the human and natural resources of the major regions of the world with an in-depth study of one or more countries in each region.

NUTRITION

HE 151 – Fundamentals of Nutrition, 3 credits (IS)
Three class periods per week. The basic fundamentals of nutrition including human nutritional requirements and the role of nutrition in the maintenance of good health.

HEALTH

HH 150 – Personal and Community Health, 3 credits (IS)
Three class periods. The aim of this course is to acquaint each individual with sound principles of healthful living. Emphasis will be placed upon helping the student meet the physical, mental and social stresses of daily life. Topics to be discussed include adjustment to college, nutrition, exercise, fatigue, circulatory system, mental health, reproduction and birth, alcohol, nicotine, and drug education. Modern practices of public health agencies are also considered.

HH 155 – Contemporary Drug Problems, 3 credits
Three class periods. This course is designed to provide information concerning drug problems. The topics will include the use, abuse, and prevention of drug use and rehabilitation of drug users.

HH 165 – First Aid and Safety, 2 credits
Two class periods. Designed to acquaint the individual with the principles of safety and first aid in daily living. Approved practices and training essential for use in emergencies.
HOTEL-MOTEL-RESTAURANT MANAGEMENT

+HM 101 – Introduction to Hospitality Industry, 3 credits
Three class periods. Introduction to the many facets of the hotel-motel and food service industries. This course includes a study of the history, scope, and innovations in the industry as well as orientation visits to local establishments.

+HM 105 – Hotel-Motel-Restaurant Organization, 3 credits
Three class periods. A study of the practical applications of organizational theory to the hospitality industries. This course is designed to provide a thorough understanding of the many administrative techniques required to manage today's motel. Emphasis will be placed on four (4) areas of activity: customers, employees, building and equipment, and finances.

+HM 110 – Hotel-Motel Front Office Management, 3 credits (IS)
Three class periods. A study of front desk procedures with emphasis on responsibilities of front desk personnel for sales, guest accounts, and guest relations.

+HM 201 – Hotel-Motel-Restaurant Management, 3 credits
Three class periods. Emphasis on management theory and scientific management principles along with their relationship to the hospitality industry. Introduction to market and feasibility studies. Also stresses the importance of human relations.

+HM 210 – Hotel-Motel-Restaurant Food and Beverage Management, 3 credits
Three class periods. Application of principles in menu planning, kitchen layout, and equipment selection. Also trains students how to design restaurants for ease in operation as well as promoting safety and health standards.

+HM 212 – Hotel-Motel-Restaurant Accounting, 3 credits
Three class periods. Instructions in the use of accounting machines used in hotels and motels for front desk procedures and night audits.

+HM 230 – Hotel-Motel-Restaurant Food and Beverage Control, 3 Credits
Three class periods. Emphasis given to methods of menu pricing, systems of controlling and accounting for food and beverage costs, and methods for controlling sales income.

+HM 232 – Law and Insurance, 3 credits
Three class periods per week. Study is made of the nature and function of our legal system as it applies to the operation of an inn. Specific attention is given to the innkeeper-guest relationship, contracts, torts, civil and property rights and insurable risks.

+HM 240 – Internship in Hotel-Motel-Restaurant Management, 3 credits
Prerequisite: permission of instructor. On-the-job training program of 240 hours of employment in a hotel-motel-restaurant under supervision of an industry manager and college instructor.

HUMANITIES

HS 151 – Humanities in a Technological Society, 3 credits
Three class periods. An examination of some of the great creative efforts of the past and their corresponding relationship to the individual in the world of today.

HS 251 – Humanities, Prehistoric to 1300, 3 credits (CE) (IS)
Three class periods. An introduction to the integrated study of the disciplines of western culture including art, literature, music, philosophy and religion. This course includes a foundation of vocabulary, and a critical examination of the evolution of ideas from Ancient Greece through the late Gothic era.

HS 252 – Humanities 1300 to 1900, 3 credits (CE) (IS)
Three class periods. This course completes the study of past cultures begun in HS
251 by critically analyzing the development of idea clusters which influence thought in the modern world— from the re-introduction of classical ideas in the Renaissance to the climax of German Romanticism.

HS 253 — Humanities, Twentieth Century, 3 credits (IS)
Three class periods. An examination of ideas and forms in the process of change during the twentieth century.

HS 261 — Understanding Religious Man, 3 credits (IS)
Three class periods. A humanistic investigation through a critical examination of art, philosophy, theology, music and literature into the vital role of religion in forming man’s concept of reality.

HS 270 — Overseas Study in Humanities, 6 Credits
Prerequisite: Permission of the Department Chairman. The Humanities travel course will consist of two phases: seminars and travel. In seminars preceding the travel a foundation will be established for critically examining art, philosophy, literature, and religion in relationship to the significant historical and philosophical currents of western civilization. The meetings of the seminars will be held at the discretion of the instructor relative to the material to be covered. During the travel phase, the students will be given the opportunity to apply their general knowledge by visiting cities which best exemplify the development of western culture. At the conclusion of the trip, seminars will synchronize the general cultural development with the students’ personal experience. Cost: Registration fee plus cost of tour. (Not offered prior to Session IIIA, 1974.)

ORNAMENTAL HORTICULTURE

+HT 176 — Introduction to Horticultural Science, 3 credits
Three class periods and one one-hour laboratory. Prerequisite: BY 172 or departmental approval. A study of the scientific concepts on which horticulture is based. For the beginning horticulture student, Part I introduces the biology of horticulture; Part II deals with techniques of horticulture; and Part III surveys the industry, emphasizing its distinguishing characteristics and special problems. The aesthetic aspects of horticulture are included. Laboratory periods will cover such practices as pruning, propagation, plant classification. (Formerly HT 155) (Laboratory fee)

+HT 178 — Landscape Plant Materials I, 3 credits (IS)
Two class periods and one two-hour laboratory. Prerequisite: HT 176 or department approval. A detailed study of the more common woody plants used outdoors in Florida. Trees, shrubs, and vines, both evergreen and deciduous will be discussed along with methods for identification, growth characteristics, propagation, culture and uses. The student will be introduced to the use of taxonomic keys and literature for the identification of plant materials. Labs taught off campus at Harry P. Leu Gardens. (Formerly HT 168) (Laboratory fee)

+HT 179 — Landscape Plant Materials II, 3 credits (IS)
Two class periods and one two-hour laboratory. Prerequisite: HT 178. A continuation of the study of woody plants to include some of the less common species; also palms, cycads, conifers, ground covers, etc. Labs taught off campus at Harry P. Leu Gardens. (Formerly HT 169) (Laboratory fee)

+HT 180 — Introduction to Foliage and Flowering House Plants I, 3 credits (IS)
Two class periods and one two-hour laboratory. Prerequisites: HT 176. An intensive study of the rare and exotic foliage and flowering plants of tropical and subtropical regions of the world including the identification, adaptation, cultural requirements, propagation and economic importance. Specific problems in taxonomy, physiology and anatomy of these plants. (Formerly HT 268) (Laboratory fee)
+HT 182 – Introduction to Foliage and Flowering House Plants II, 3 credits (IS)
Two class periods lecture and two class periods laboratory. Prerequisite: HT 180. A continuing, comprehensive study of rare and exotic foliage and flowering house plants suitable for home use. Their identification, use, culture, and special handling will be dealt with in depth. (Formerly HT 181) (Laboratory fee)

+HT 184 – Introduction to Floriculture, 3 credits (IS)
Two class periods and one class period laboratory. Prerequisite: HT 176. A detailed study of specific groups of flowers, such as bulbs, annuals, biennials, perennials, and roses to their culture and use. (Formerly HT 265) (Laboratory fee)

+HT 192 – Introduction to Horticultural Plant Pests (Entomology), 4 credits (IS)
Three class periods and one two-hour laboratory. Prerequisite: HT 176. A survey of the major plant insect pests, their characteristics, identification, life cycles and type of injury inflicted; control including cultural, biological and chemical methods; pesticides, their methods of application and precautions in handling. (Laboratory fee)

+HT 193 – Introduction to Vegetable Gardening, 3 credits (IS)
Two class periods and one one-hour laboratory. Prerequisite: HT 176. A study of the fundamental principles underlying commercial production of vegetables. Seeding, fertilization, harvesting and storage. (Formerly HT 270) (Laboratory fee)

+HT 200 – Introduction to Soils and Fertilizers, 4 credits
Three class periods and one two-hour laboratory. Prerequisites: HT 176, CY 155 or CY 171. A general study of properties and processes with emphasis upon their influence on soil management, fertilizer and lime usages, and crop production. (Formerly HT 250) (Laboratory fee)

+HT 201 – Cooperative Placement in Industry, 3 credits
Eight hours per day, five days per week, Session III-A or III-B. Prerequisite: permission of department. Cooperative arrangement with student placed in industrial setting performing specific tasks of the ornamental horticulture industry which serves to reinforce and enhance his understanding of the curriculum to date; experiences on the job to be coordinated with the curriculum by a Cooperative Education Coordinator who serves as a liaison between the school and the world of work, thereby assuring the student relative and meaningful on-the-job experiences.

+HT 205 – Nursery Operation and Management, 3 credits (IS)
Two class periods and one two-hour laboratory. Prerequisites: HT 176 and HT 178. Methods used in the production of nursery stocks; soil composition and function, pH, the use of lime, fertilizers, and organic soils, amendments, soil testing and sterilization procedures; mass production techniques in propagation; water and feeding of field and container grown stock; design and organization of the nursery shade structures and special equipment. (Laboratory fee)

+HT 210 – Fruit Production (Pomology), 3 credits (IS)
Two class periods and one one-hour laboratory. Prerequisite: HT 176 General principles and practices involved in handling home and commercial plantings of the major fruit crops. (Laboratory fee)

+HT 211 – Citrus Culture, 3 credits (IS)
Three class periods and one one-hour laboratory. Prerequisite: HT 176. Citrus production and marketing. This includes a study of such practices as propagation, planting, pruning, cultivating, fertilizing, spraying, irrigating, harvesting, grading, storing, and marketing. (Laboratory fee)

+HT 215 – Introduction to Landscape Design I, 3 credits
Two class periods and one two-hour laboratory. Prerequisites: HT 176, EG 151, HT 178, HT 262. The application of principles of design to landscaping the home grounds. The identification, use and maintenance of ornamental plants and lawn grasses. Special attention will be given to the use of native plants for home beautification. Lecture, field trips, and laboratory. (Laboratory fee)
+HT 245 — Introduction to Lawn and Turfgrass Care and Management, 3 credits (IS)
Three class periods and one one-hour laboratory. Prerequisites: HT 176, HT 200. A detailed study of varieties of fine turf grasses and the establishing and maintenance of fine turf, including soil and turf relationship, fertilizing and liming, and drainage and irrigation, and pesticide treatments. (Laboratory fee)

+HT 260 — Greenhouse Operation and Management, 3 credits
Two class periods and one two-hour laboratory. Prerequisite: HT 176 and HT 180. A study of producing plants under transparency. Includes greenhouse management problems; heating, cooling, and humidity control; also culture practices of growing foliage and other house plants with regard to propagation, pest and disease control and plant acclimatization and marketing. (Laboratory fee)

+HT 262 — Introduction to Horticulture Botany, 4 credits
Three class periods and one two-hour laboratory. Prerequisite: BY 172; can substitute BY 262 for HT 262. Students will be introduced to the basic concepts of life and the composition of the plant kingdom. Emphasis will be on the higher flowering plants, their morphology, phases of growth and development, the cellular construction of the plants and basic tissues, modifications of form and specialized structures, seed germination, the inflorescence, flower, pollination, and fertilization. (Formerly HT 174) (Laboratory fee)

+HT 263 — Introduction to Orchidology, 3 credits (IS)
Two class periods and one two-hour laboratory. Prerequisites: HT 176, HT 262. A survey course covering the taxonomy, morphology, ecology, and culture of the orchid family. Emphasis upon cultural aspects for the Central Florida area. (Formerly HT 290) (Laboratory fee)

+HT 264 — Interior-scaping with Foliage Plants and Flowering House Plants, 3 credits (IS)
Two class periods and one two-hour laboratory. Prerequisite: HT 176, HT 180, HT 181. The application of principles of design to interior-scaping with foliage and flowering house plants in a home or commercial situation. Emphasis on care, maintenance, and management of plants. Acclimatization also emphasized. (Laboratory fee)

+HT 266 — Introduction to Plant Pathology, 4 credits (IS)
Three class periods and one two-hour laboratory. Prerequisites: HT 176, HT 262. This course deals with the more common and important diseases of horticultural plants. The signs, symptoms, life history of the casual organisms, and treatments of the diseases are discussed. (Formerly HT 183) (Laboratory fee)

+HT 267 — Introduction to Tropical Air Plants (Epiphytes), 3 credits (IS)
Two class periods and one two-hour laboratory. Prerequisites: HT 176 to HT 262. A survey course covering the taxonomy, morphology, and culture of the dominant groups of tropical "air plants." Emphasis will be on the bromeliads and fern groups. (Formerly HT 291) (Laboratory fee)

+HT 282 — Introduction to Plant Propagation, 3 credits (IS)
Two class periods and one two-hour laboratory. Prerequisite: HT 176, HT 262. A study of the methods of propagating horticultural plants. Includes cuttings, grafting, air-layering, and budding. (Laboratory fee)

+HT 295 — Selected Topics in Horticulture, 1-4 credits (IS)
Prerequisite: HT 176. This course is designed to encompass topics of interest or research in horticulture. Subject matter may include topics not offered specifically in other courses in the program. (Formerly HT 290) (Laboratory fee)

HISTORY

HY 181 — Western Civilization to 1750, 3 credits (CE) (IS)
Three class periods. The major social, political, economic and cultural characteristics of western society.
HY 182 – Western Civilization 1750 to Present, 3 credits (CE) (IS)
Three class periods. A continuation of HY 181 with emphasis on the modern world.

HY 251 – United States History to 1865, 3 credits (CE) (IS)
Three class periods. The history of the United States beginning with the European background and dealing with the evolution of the American nation until the end of the Civil War in 1865.

HY 252 – United States History 1865 to Present, 3 credits (CE) (IS)
Three class periods. The history of the United States from the Reconstruction Era until the present, with special emphasis on the rise of America to world power and its position in the twentieth century.

HY 255 – History of Florida, 3 credits (IS)
Three class periods. Designed to create an understanding of and appreciation for the historical evolution of Florida. The course emphasizes direct student involvement in compiling and collecting documents, artifacts, photographs, slides, tapes, papers, etc. Individual reports, guest speakers, and lectures will constitute the format of the course.

HY 261 – Afro-American History and Culture, 3 credits (IS)
Three class periods. Designed to acquaint students with and stimulate interest in the life and history of the Afro-American, with emphasis on his origins, enslavement, subculture, and his struggle for civil rights and human dignity.

HY 270 – Recent and Contemporary History, 3 credits (IS)
Three class periods. Designed to create an understanding of the political, social, economic, intellectual and ideological forces rampant in recent years through study and analysis of recent and contemporary national and international problems.

HY 290 – Selected Topics in History, 1-3 credits
One-three class periods. These seminars are for students who are interested in special topics and desire to explore further the field of history through research, discussion, and observation.

SECURITY AND LOSS PREVENTION

IS 101 – Introduction to Security, 3 credits
The historical, philosophical and legal basis of security. The role of security and the security individual in modern society; the concept of professionalism; a survey of the administrative, personnel, and physical aspects of the security field.

+IS 111 – Physical Systems, 3 credits
The concept of physical security integrated with management systems; physical security requirements and standards; study of alarm and surveillance devices; study of various aspects of protection; costing, planning and engineering.

+IS 131 – Security and Personnel Administration, 3 credits
Organization, administration and management of security personnel and plant protection units. Policy and decision making. Personnel selection including hiring, management, and budgeting. Programs in business, industry and government, including retailing, transportation, and public and private institutions. Private guard and alarm services.

+IS 200 – Commercial and Retail Loss Prevention, 3 credits
An examination of loss problems encountered in retail sales establishments. Emphasis is placed upon prevention of shoplifting, employee theft, credit card fraud, inventory shrinkage, fraudulent checks, and related problems.

+IS 201 – Current Problems in Loss Prevention, 3 credits
A study of current problems in the field of loss prevention. Topics to be covered
include drug abuse in industry, transportation security, organized crime in business, civil disturbances and riot control, bomb threats, and other subjects as they become of current interest and concern to loss prevention administrators.

+IS 202 – Personnel Security, 3 credits
A study of standards and criteria for the screening and selection of personnel. An analysis of current legal restrictions on personnel screening, background investigation procedures, and employer practices. Techniques of information gathering will be emphasized.

+IS 232 – Safety Management, 3 credits
An introduction to the regulations, principles, and methods pertaining to the field of occupational safety and health. Examines the development and current status of safety regulations promulgated by state and federal legislative bodies, reviews the responsibilities of safety personnel in the establishment and maintenance of safety programs, and emphasized the importance of proper planning for safety.

JOURNALISM

JM 100 – News Reporting, 3 credits
Three hours per week. A course in journalistic writing designed for mastery of in-depth reporting with an emphasis on the modern news and feature story. Elements of news, style, structure of news stories, news sources, and the mechanics of newspaper production are stressed. It is recommended that students taking JM 100 also enroll in either College Newspaper or College Magazine.

JM 101 – Survey of Mass Communications, 3 credits
Three class periods. An introduction to the history, development and current practices of the media of mass communication – designed to present functions of newspapers, magazines, radio, television, and advertising in light of their responsibilities to the public.

JM 103-104-203-204 – College Newspaper, 1 credit each
Three hours per week. A laboratory course for the production of the college newspaper. The staff will meet for three hours each week. Reporting, editing, business, make-up, and other phases of newspaper production will also be undertaken.

JM 113-114-213-214 – College Magazine, 1 credit each
Three class periods. A laboratory course for the production of the college magazine. The staff will meet for three hours each week. Writing, editing, lay-out, and other phases of the magazine will also entail activity outside the regular class.

JM 210 – Editing and Makeup, 3 credits
Three hours per week. Learning and application of copydesk techniques, evaluation and copy editing, correction of faulty news stories, headline writing, page layout design, and work with wire copy. It is recommended that students taking JM 210 also enroll in either College newspaper or College Magazine.

JM 220-221-222-223 – Journalism Internship, 1 credit each
Three hours per week. Prerequisite: JM 100 or permission of the instructor. Qualified students will receive practical experience working with local or college communications media under supervision of professional media specialists and the journalism faculty.

JM 250 – Writing for Mass Communications, 3 credits
Three class periods. Provides fundamental instruction and practice in writing for journalism, advertising, broadcasting, and public relations. Designed as a pre-professional course for students majoring in journalism and communications.
JM 290 – Selected Topics in Journalism, 1-3 credits (IS)
One-three hours per week. These seminars are for students interested in research, discussion, and observation of special topics in journalism.

LOGIC

LC 151 – Practical Logic, 3 credits (IS)
Three class periods. A study of effective thinking based on procedures of logic. To assist in decision making, there will be an appraisal of the evaluation of evidence, practice in the detection of fallacies and irrelevancies, and the testing of arguments for validity and reliability.

LC 251 – Formal Logic, 3 credits
This course presents a formal, rigorous approach to symbolic logic. Emphasizes techniques of sound deductive reasoning through the use of rules of inference and truth tables. The course provides practice with translation of ordinary language into symbolic form.

LAW ENFORCEMENT

LE 101 – Introduction to Criminal Justice, 3 credits
History and philosophy of law enforcement and the development of modern police systems; jurisdiction of local, state and federal enforcement agencies; philosophy and operations of correctional institutions and probation and parole; fundamentals of criminal behavior in the social order; and an introduction to social pathology, court structure, and current police problems.

LE 111 – Patrol Procedures & Field Operations, 3 credits
Theories, history and development of police patrol. Examines the methods and techniques of the various types of patrol and their importance to the police function. Focuses on the responsibilities of patrol officers and supervisors in identifying police hazards, crime prevention and repression and establishing public relations. Emphasis is placed on field notetaking, interrogation, conducting the preliminary investigation and performing the duties related to crime scene evidence technicians.

LE 121 – Crime & Delinquency, 3 credits
A survey of the nature and extent of crime and delinquency, together with the major approaches to causation, apprehension, control, and treatment.

LE 131 – Police Administration and Organization, 3 credits
Principles of organization and administration as applied to line auxiliary and staff functions. Planning and research, personnel and training, inspection and control. (Formerly offered as Police Administration I.)

LE 132 – Police Operations, 3 credits
Principles of organization and administration as applied to operational functions. Patrol, criminal investigation, vice, juvenile, and traffic. (Formerly offered as Police Administration II.)

LE 201 – Criminal Investigation I, 3 credits
Recording the crime scene, collecting and preserving evidence. Familiarization with police crime laboratory and interview and interrogation theories are presented.

LE 202 – Criminal Investigation II, 3 credits
Tactics of investigation are applied to specific types of crimes. The modus operandi, motives and corpus delicti of various crimes and criminals are surveyed.
MUSIC

Valencia Community College offers courses in music for all students and strives to bring the performing arts to the community. The college seeks to contribute to the cultural life of the community by sponsoring or providing concerts, recitals, clinics and workshops and continuing education courses in music. Numerous opportunities for performance on the campus and in the community are available through ensembles.

The department offers a broad foundation of instruction in the first two years of a typical four-year degree in applied music, music education or various other related music programs.

Private instruction in voice, piano and principal band or orchestral instruments is available for music majors only. A music major is defined as a student who is concurrently enrolled in musicianship, performance, ensemble and proficiency courses (unless requirements are waived by the department after an audition or through testing). Interested students should arrange for an audition through the department chairperson. Students who do not seek classification as a music major may register for class instruction in piano, voice and guitar.

Every new student (freshman or transfer) who desires to major in music must audition in voice, piano, or a principal band or orchestral instrument to provide the department with evidence concerning the proper level of study for the student. If the audition indicates a level of achievement below entering freshman music major level, the student will be required to enroll in MC 167 until a subsequent audition reveals ability to perform satisfactorily in the MC 173 performance level. Credit earned in MC 167 will not satisfy requirements in the student’s principal instrument.

A student pursuing the Associate of Arts (Major in Music) degree must observe the following requirements:

1. Be examined in performance before a panel of music faculty at the end of each semester. Advancements to higher levels of study will be determined by the recommendation of the panel and the explicable appraisal of the student’s development and proficiency during the semester in terms of department approved repertoire and technique.

2. Perform in at least one student recital each semester.

3. Attend all student recitals and seminars scheduled each semester.

Completion of the following required program will prepare the music major for entrance into most four-year institutions as a junior:
ASSOCIATE OF ARTS  
(MAJOR IN MUSIC)  
Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>*MC 101-102</td>
<td>Musicianship</td>
<td>8</td>
</tr>
<tr>
<td>MC 173-174</td>
<td>Performance</td>
<td>4</td>
</tr>
<tr>
<td>**Ensembles</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>***Proficiency</td>
<td></td>
<td>0-2</td>
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<tr>
<td>EH 151, 152</td>
<td>English</td>
<td>6</td>
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<td>(or 260)</td>
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<tr>
<td>MS 141, 151</td>
<td>Math</td>
<td>3</td>
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<tr>
<td>or 152</td>
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<tr>
<td>PL 151</td>
<td>American Government</td>
<td>3</td>
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<tr>
<td>Science Elec.</td>
<td></td>
<td>3</td>
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Sophomore Year

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<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit</th>
</tr>
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<tbody>
<tr>
<td>MC 201-202</td>
<td>Musicianship</td>
<td>8</td>
</tr>
<tr>
<td>MC 273-274</td>
<td>Performance</td>
<td>4</td>
</tr>
<tr>
<td>**Ensembles</td>
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<td>2</td>
</tr>
<tr>
<td>***Proficiency</td>
<td></td>
<td>0-2</td>
</tr>
<tr>
<td>MC 192</td>
<td>Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>Social Science Elec.</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
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<td>3</td>
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<tr>
<td>General Education Elective</td>
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<td>3</td>
</tr>
<tr>
<td>PH 290</td>
<td>Selected Topics in Physics-Musical Acoustics</td>
<td>3</td>
</tr>
<tr>
<td>HS 253</td>
<td>Twentieth Century Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
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<td>31-33</td>
</tr>
</tbody>
</table>

*MC 101 Musicianship counts as 4 credit hours toward the satisfaction of 9 credit hours required in Area II of the General Education requirements.

**Choose from among the following:
- MC 170 Concert Choir
- MC 185 Concert Band
- MC 200 Valencia Singers (Audition)
- MC 220 Stage Band

***All music majors must demonstrate proficiency in either voice or piano on the major instrument chosen. Proficiency may be demonstrated to the Music Department. Non-keyboard majors who need additional instruction must register for MC 171-172, Private Piano, or MC 197-198, Class Piano until capable of demonstrating proficiency in piano. Candidates for a Music Education degree, except voice majors, should register for MC 171-172, Private Voice, or MC 155-156, Class Voice, after keyboard proficiency has been demonstrated.

MC 101 – Musicianship I, 4 credits (IS)
Three one-hour lecture periods and three one hour laboratories. A study of the fundamentals of music through the analysis and composition of music in the Baroque and Classical styles. Development of basic skills in dictation and sight-singing.

MC 102 – Musicianship II, 4 credits (IS)
Three one-hour lecture periods and three one-hour laboratories. Prerequisite: MC 101 or permission of instructor. A continuation of the fundamentals of music through the analysis and composition of music in the Baroque and Classical styles. Continued development of basic skills in dictation and sight-singing.
MC 145-146 – Class Guitar, I-II, 1-1 credit
Two class periods. Group instruction for beginning guitar students. Open to all students. Not recommended for students majoring in guitar. (Laboratory fee)

MC 147-148 – Class Guitar, III-IV, 1-1 credit
Two class periods. Group instruction for intermediate & advanced guitar students. (Open to all students). Not recommended for students majoring in guitar. (Laboratory fee)

MC 153 – Jazz/Popular Music I, 4 credits
Three class periods and 2 one hour laboratories. Prerequisite: Satisfactory grade on theory Aptitude Test or completion of MC 086. A study of harmony, arranging and improvisation for students interested in Music in this idiom. Aural Laboratory includes dictation and sightsinging.

MC 154 – Jazz/Popular Music II, 4 credits
Three lecture periods and two one-hour laboratories. Prerequisite: MC 153, or permission of the instructor. Advanced analysis and application of techniques and styles representative of the Jazz/Popular idiom. Aural laboratory in dictation and sight singing.

MC 155-156 – Class Voice I-II, 1-1 credit
Two class periods. For instrumental music majors and students with no previous vocal study. Emphasis on breath control, diction, tone production, and development of repertoire. May be used for secondary instrument requirements for music majors. (Laboratory fee)

MC 157-158 – Class Voice, III-IV, 1-1 credit
Two class periods. For intermediate and advanced students with vocal experience. Emphasis on interpretation, vocal development, and literature. May be used for secondary instrument requirements for music majors. (Laboratory fee)

MC 167 – Applied Music (Private Instruction-Principal Instrument), 1-1 credit ($30.00 Music fee)
One one-hour lesson per week. For music major candidates below freshman performance level. Music Major candidates should continue to register for this course until they can successfully audition for MC 173. Credit not applicable toward degree requirements for primary instrument.

MC 170 – Concert Choir, 1 credit
Three class periods. Established for people who love to sing and perform, the Concert Choir does not require auditions or music reading. This large mixed choral group performs a variety of music throughout the area. Solos, duets and small ensemble experience are provided for the more advanced students. Students may register for this course without prior approval of the instructor.

MC 171-172 – Applied Music (Private Instruction – Secondary Instrument) 1-1 credit ($60.00 Music fee)
One one-half hour lesson per week. Freshman music major level.

MC 173-174 – Performance I & II, 2-2 Credits ($60.00 Music fee)
One one-hour private lesson and one one-hour seminar per week. Instruction and performance of selected technique and literature from department-approved repertoire at the Freshman level.

MC 177-178 – Class Piano I-II, 1-1 credit
Two class periods. Group instruction on electronic pianos for students with little or no experience in reading music or playing the piano. Concurrent enrollment in MC 86 is recommended but not required. Not recommended for music majors, who should register for MC 197-198. (Laboratory fee)
MC 184 – Brass Choir, 1 credit
Two class periods. Open to all students who play brass instruments. May be repeated for credit. (Laboratory fee)

MC 185 – College Band, 1 credit
Three class periods. Performance of standard concert band literature. Performance of serious literature. Open to all students who play appropriate instruments. May be repeated for credit. (Laboratory fee)

MC 188 – Instrumental Techniques, 1 credit
Introduction to the instruments of the orchestra, involving fundamentals of performance, acoustical principles, teaching methods and materials. Students are assigned to two one-hour sections weekly in either woodwinds, brass, strings or percussion, with all sections meeting together for one one-hour laboratory weekly. May be repeated for credit. (Laboratory fee)
MC 191 – Music Appreciation, 3 credits (IS)
Three class periods. A general survey of music and its composers, with extensive listening in order to develop intelligent understanding and appreciation of the world's great music. This course is open to all students.

MC 192 – Music Literature, 3 credits (IS)
A survey of the compositional and performance styles of significant composers from the Middle Ages to the present. Extensive live and recorded listening experiences. Required of all music majors.

MC 197, MC 198 – Class Piano I and II (for music majors) 1-1 credits
Two class periods. An elementary course in piano designed to prepare non-keyboard music majors for minimum proficiency requirements in music major programs. Involves major and minor scales, arpeggios, sight-reading and transposition. Open to non-music majors by special permission of the instructor. (Laboratory fee)

MC 200 – Valencia Singers, 1 credit
Three class periods. Open to all students of the college through auditions held before and during registration. A select performing group established for music majors and/or students with experience in choral singing, or music-reading ability. Literature and public performance stressed.

MC 203 – Musicianship III, 4 credits (IS)
Three one-hour lecture periods and three one-hour laboratories. Prerequisite: MC 102 or permission of instructor. Advanced techniques of composition together with an introduction to counterpoint and simpler instrumental and vocal forms. Extensive listening to selected live and recorded performances. Further development of skills in dictation and sight-singing.

MC 204 – Musicianship IV, 4 credits (IS)
Three one-hour lecture periods and three one-hour laboratories. Prerequisite: MC 201 or permission of instructor. Advanced techniques of composition to include the style of the 20th century. Composition and analysis of basic homophonic and contrapuntal forms of two and three parts. Extensive listening to live and recorded performances of selected literature. Further development of skills in dictation and sight-singing.

MC 220 – Stage Band, 1 credit
Three class periods. Open to all students who play appropriate instruments. Performance of varied literature in areas of Jazz, Swing and Rock. May be repeated for credit.

MC 271, MC 272 – Applied Music (Private Instruction – Secondary Instrument)
1-1 credit ($30.00 Music Fee)
Prerequisite: MC 172. One one-half hour lesson per week.

MC 273-274 – Performance III & IV, 2-2 Credits ($60.00 Music fee)
One one-hour private lesson and one one-hour seminar per week. Instruction and performance of selected technique and literature from department-approved repertoire at the Sophomore level.

MC 288, MC 289 – Keyboard Harmony, 1-1 credit (IS)
Two class periods. Prerequisite: three semesters of piano or permission of the instructor. The application of the materials studied in Music Theory, with particular attention to improvisation and harmonization of melodies and elementary score reading.
MATHEMATICS

Each student enrolling in mathematics courses at Valencia Community College is encouraged to discuss his educational goals with a counselor or a mathematics instructor prior to registration. When a student is taking a sequence of mathematics courses, it is recommended that he have at least a "C" grade in any course which is a prerequisite to another.

MS 61 - Introductory Mathematics, 3 credits
Three class periods. This course is designed to increase the student's understanding of arithmetic and elementary algebra and to improve his manipulative skills. Required for those students not meeting admission standards for other mathematics courses.

MS 125 - The Metric System, 1 credit
A course designed to familiarize the student with the metric system. The course includes a study of the history of the metric system, classroom applications of metric mensuration, advantages and disadvantages of the metric system and conversion of units between the customary and metric systems and conversion of units within the metric system.

+MS 137 - Technical Mathematics I, 3 credits
Three class periods. Prerequisite: one year of high school algebra and one year of geometry, or MS 80. Applied mathematics including a brief review of arithmetic, slide rule computation, principles and laws of basic algebra, linear equations, ratio and proportion, basic geometric concepts and formulas. The work is supplemented with problems of a technical nature.

+MS 138 - Technical Mathematics II, 3 credits
Three class periods. Prerequisite: MS 137 or MS 170. Applied mathematics involving the trigonometry of the right triangle; graphing of algebraic and trigonometric relations; solving both algebraic and trigonometric equations; oblique triangle solutions; and logarithms. Emphasis will be placed on numerical computations. The course is designed for students in technical programs.

MS 140 - Elementary Algebra, 3 credits
Designed for students who have had little previous algebra. In this course the student will identify, define and apply the language of algebra and the arithmetic of real numbers for solving first and second degree polynomial equations and inequalities, algebraically and/or graphically.

MS 141 - Intermediate Algebra, 3 credits (IS)
Three class periods. Prerequisite: MS 80 or equivalent. Primarily intended for the student who plans to take college algebra and lacks the prerequisites, but also provides algebra required for other areas, such as statistics, respiratory therapy, and chemistry. Topics include: a brief review of elementary algebra, rational expressions, negative and fractional exponents, radicals, first degree equations and inequalities, quadratic equations, systems of equations and computations with common logarithms. Some sections are offered by programmed instruction. (The programmed option is intended primarily for the student in need of review of his second year of algebra.)

MS 151 - College Mathematics, 3 credits (CE) (IS)
Prerequisite: MS 61; or two years of high school mathematics including one full year of algebra. The course is designed to meet the General Education mathematics requirement. Topics selected from set theory, logic, probability, statistics,
mathematical systems, numeral systems, calculators and computers, geometry, and the history of mathematics. (Credit is not given for both MS 151 and MS 170 if MS 170 is taken first.)

**MS 152 – Advanced College Mathematics, 3 credits (IS)**
Prerequisite: one year of high school geometry and one or more years of high school algebra with grade of “C” or better or permission of instructor. This course is designed to meet the General Education requirement for students with strong mathematical preparation in high school but not planning careers requiring college algebra. Emphasis is on concepts. Topics will include BASIC as a computer language; matrices and linear programming; and a brief look at trigonometry, non-Euclidean geometries, and calculus.

**MS 161 – Modern Computational Methods, 2 credits (IS)**
One class period and two hours of laboratory. This course is open to every student and is designed to enable the student to use the slide rule, adding machine, calculators, and programmable calculators to solve problems. Each student will be expected to complete an individual project in which he uses modern computational methods to solve problems in his field of study. This course is recommended for pre-engineering, pre-science and pre-business students.

**MS 170 – College Algebra, 3 credits (CE) (IS)**
Three class periods. Prerequisite: two years of high school algebra and one year of high school geometry; MS 81 or equivalent. A study of the techniques of algebra. An analysis of the real number system is introduced. Topics include: factoring, exponents, and radicals, linear and quadratic equations, systems of equations, introduction to matrices, graphs, mathematical induction, theory of equations. (Credit is not given for this course and MS 152 or MS 173.)

**MS 171 – College Trigonometry, 3 credits (CE) (IS)**
Three class periods. Prerequisite: MS 170 or two years of high school algebra and one year of high school geometry with a grade of at least a “C”. A study of angles and their measures, trigonometric functions of angles and of real numbers, solutions of plane triangles, trigonometric equations and inverse functions. (Credit is not given for both MS 171 and MS 173.)

**MS 173 – College Algebra and Trigonometry, 4 credits (CE)**
Prerequisite: two years of high school algebra, one year of geometry, one-half year of trigonometry with a grade of “C” or better or permission of the Mathematics Department. An integrated study of college algebra and trigonometry. Intended for the average student planning to study analytic geometry and calculus. (Credit is not given for both MS 173 and MS 170 nor for both MS 173 and MS 171.)

**MS 251 – Calculus with Analytic Geometry I, 5 credits**
Prerequisite: The equivalent of MS 170, MS 171, or MS 173. Topics include the circle and parabola, limits and continuity, derivatives of algebraic forms, applications of the derivative, the definite and indefinite integral.

**MS 252 – Calculus with Analytic Geometry II, 5 credits**
Prerequisite: MS 251. Topics include differentiation and integration of the transcendental functions, polar coordinates, techniques of integration, applications of the integral, indeterminant forms, conic sections, infinite series.

**MS 253 – Calculus with Analytic Geometry III, 3 credits (IS)**
Prerequisite: MS 252. Topics include: vectors, three dimensional analytic geometry, parametric equations, partial derivatives, multiple integration. Offered in Session II, other sessions on demand.

**MS 255 – Elementary Statistics, 3 credits (CE) (IS)**
Prerequisite: two years of high school algebra with a grade of “C” or better, MS 152 or MS 170. The collection, organization, analysis, and interpretation of numerical data. Probability, basic patterns of statistical inference, confidence
estimation and significance testing regarding measures of location, variation, correlation and selected non-parametric statistics.

**MS 261 - Introduction to Matrices, 3 credits**
Prerequisite: MS 251. A course designed to prepare students majoring in engineering, mathematics, the natural sciences or the behavioral sciences which require matrix techniques. Includes matrix algebra, determinants, systems of linear equations, eigenvectors, special matrices.

**MS 265 - Introduction to Modern Algebra, 3 credits (IS)**
Prerequisite: MS 171 or equivalent. A course designed for the prospective mathematics major or mathematics teacher to develop the student's understanding of mathematical logic and proof. The study of selected topics in sets, groups, rings, integral domains, and fields.

**MS 281 - Mathematics for Elementary Education Majors, 3 credits (IS)**
Prerequisite: MS 151 or MS 152. New approaches to arithmetic and mathematics appropriate for elementary school curricula. Topics selected from sets, systems of numeration, development of computational techniques, informal logic, development of ideas in geometry and algebra from a teaching perspective.

**MS 290 - Selected Topics in Mathematics, 1-3 credits, (IS)**
Prerequisites: MS 170 and instructor's approval. In these classes the student will examine selected topics in mathematics based on a historical, theoretical, application or research approach.

**MEDICAL LABORATORY TECHNOLOGY**

**+MT 140 - Introduction to Medical Laboratory Technology, 3 credits**
Two lecture sessions and one three-hour laboratory. Prerequisites: CY 171 and BY 251. An orientation to the field of laboratory medicine introducing basic equipment and techniques in all phases of the medical laboratory.

**+MT 142 - Hematology, 4 Credits**
Three lecture sessions and one three-hour laboratory. Prerequisite: MT 149. Students will study the formed elements of the blood and perform the laboratory procedures for identification of blood components. Emphasis will be placed on complete blood counts, coagulation mechanisms and instrumentation.

**+MT 144 - Basic Urinalysis, 2 credits**
Two lecture sessions and one two-hour laboratory. Prerequisite: MT 140. Principles of renal function and routine analysis of the urine are studied.

**+MT 146 - Serology and Immunology, 2 credits**
Two lecture sessions and one two-hour laboratory. Prerequisite: MT 140. Principles of antigen antibody reactions both in the body and in the laboratory are studied.

**+MT 148 - Medical Microbiology, 4 credits**
Three lecture sessions and two two-hour laboratories. Prerequisite: MT 149 and BY 280. Bacteriology, parasitology, virology and mycology with emphasis on pathogenic organism culture, isolation and identification.

**+MT 149 - Introduction to Medical Laboratory Technology, 2 credits**
Two lecture sessions and one two-hour laboratory. Prerequisite: acceptance into the Medical Laboratory Technology Program; Co-requisite: CY 165. An orientation to the field of medical laboratory technology introducing basic techniques and equipment, medical ethics and terminology, safety procedures and a general understanding of the role of the Medical Laboratory Technician in the clinical laboratory. (Laboratory fee)

**+MT 150 - Basic Urinalysis, 4 credits**
Two lecture sessions and one two-hour campus laboratory per week for seven and one-half weeks followed by two forty-hour weeks of clinical practice in the urin-
analysis department of the hospital laboratory. Prerequisite: MT 149. Principles of renal function, routine examination and special analysis of urine will be emphasized. Clinical application of urinalysis techniques will be utilized in the clinical laboratory. (Formerly MT 144). (Laboratory fee)

**+MT 151 – Immunology: Serology and Blood Bank Techniques, 8 credits.**
Two lecture sessions and one two-hour campus laboratory per week for seven and one-half weeks followed by four forty-hour weeks of clinical practice in the serology department and blood bank. Prerequisite: MT 149. Principles of antigen-antibody reactions, ABO-Rh typing, and crossmatching will be emphasized and clinical application will be applied during the hospital experience. (Formerly MT 146). (Laboratory fee)

**+MT 240 Clinical Chemistry, 4 credits**
Three lecture sessions and one three-hour laboratory. Prerequisites: MT 149 and CY 165. Advanced clinical chemistry with emphasis on quality control, instrumentation, and performance of all routine chemical analytical procedures. (Laboratory fee)

**+MT 242 – Hospital Practicum, 16 credits**
Seminars and hospital laboratory. Forty (40) hours per week. Prerequisite: Instructor permission. The student technician is placed in a functioning hospital laboratory where he performs tests under supervision in real situations. (Laboratory fee)

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**NURSING**

**+NG 101 – Nursing I, 8 credits**
Four (4) class hours and twelve (12) clinical laboratory hours per week. Prerequisite or taken concurrently: BY 255. Nursing I is designed to introduce the student to basic health concepts and health maintenance measures in physiological and psychological functioning of the individual. Selected principles from the physical, biological, and social sciences applicable to the development of basic nursing skills are utilized. Observations reporting and beginning nursing care planning skills are an integral part of this course. (Laboratory fee)

**+NG 107 – Nursing II, 4 credits**
Four (4) class hours and twelve (12) clinical laboratory hours per week for seven and one-half (7½) weeks. Prerequisite: NG 101. Nursing II focuses on Maternal and neonate nursing based upon the concept that optimum health care of mother and infant are basic to the health of the individual, the family, and the society. The student is provided the opportunity to study the nursing care of the mother throughout the maternity cycle and participates in selected nursing care experiences. Theory and clinical practice will follow a concurrent pattern of the student may gain skills in understanding and meeting patient's nursing care needs. (Laboratory fee)

**+NG 108 – Nursing III, 4 credits**
Four (4) class hours and twelve (12) clinical laboratory hours per week for seven and one-half (7½) weeks. Prerequisite: NG 101. Nursing III is designed to assist the student in understanding the dynamics of human behavior and developing related attitudes and skills. Mental health concepts developed in NG I and the social sciences are applied to the nursing care of patients with specific emotional problems. The clinical rotation is in the psychiatric hospital setting with limited experience in community mental health. (Laboratory fee)

**+NG 109 – Nursing IV, 4 credits**
Four (4) class hours and twelve (12) clinical laboratory hours per week for seven and one-half (7½) weeks. Prerequisite: NG 101. Nursing IV is an introduction to medical-surgical nursing utilizing a basic conceptual and developmental approach to the nurse's role in the patient-side care of ill individuals. The course focuses
upon the physical effects of illness on the individual at the beginning level of
development. (Laboratory fee)

+NG 110 – Fundamentals of the Nursing Process, 2 credits
Two class periods per week. This course is designed for Licensed Practical Nurses
and other students with experience in health care who have been accepted in the
nursing program and earned credit in NG 101 through credit by examination.
Students are presented theory relative to the philosophy and process of profes-
sional nursing. Skills of the nursing process of problem-solving are applied toward
the development and understanding of a therapeutic nurse-patient relationship.
(Laboratory fee)

+NG 204 – Nursing V, 8 credits
Four (4) class hours and twelve (12) clinical laboratory hours per week. Prereq-
usite: NG 109. Nursing V will be multi-faceted in approach; all aspects of illness
as they effect nursing care of all age groups are studied along with the principles
of rehabilitation, nutrition, pharmacology, psycho-social and the economic
impact. The student is expected to use prior learning experiences as a foundation to
the achievement of more complex skills. (Laboratory fee)

+NG 205 – Nursing VI, 8 credits
Four (4) class hours and twelve (12) clinical laboratory hours per week. Prereq-
usite: NG 204. Nursing VI builds upon all previous courses and is a continuation
of NG 204. The emphasis throughout is on understanding the patho-physiology of
the more complex medical-surgical conditions and on increasing nursing skills,
attitudes, and appreciations which will enable the student to give comprehensive
nursing care under supervision to adult and pediatric patients. (Laboratory fee)

+NG 206 – Nursing VII, 2 credits
Two (2) class hours per week. Prerequisite: NG 109. Nursing VII will provide the
opportunity for students to raise questions of problems in nursing practice, con-
sider ways of solution, and to understand the modifications necessary as indicated
by society’s health needs. An attempt is made to facilitate the transition from the
nursing student to the graduate nurse. (Laboratory fee)

PREVENTION AND CORRECTIONS

+PC 101 – Introduction to Corrections, 3 credits
An examination of the total correctional process from law enforcement through
the administration of justice, probation, prisons, other correctional institutions,
and parole.

+PC 151 – Correctional Administration, 3 credits
Prerequisite is PC 101 or consent of instructor. A comprehensive examination is
made of the principles of contemporary correctional administration, organization,
and personnel management. Emphasis is placed on the role of the mid-level super-
visor in the operations of community correctional agencies, residential facilities,
and custody institutions. Topics include: organizational structure and planning;
personnel recruitment, training, supervision; and public relations.

+PC 158 – Institutional Procedures, Jails and Detention, 3 credits
The function of the custodial staff is examined with special emphasis on the
correctional officer. Institutional procedures are reviewed, including reception,
classification, program assignment, and release procedures. The jail and practices
are examined.

+PC 201 – Essentials of Interviewing, 3 credits
The emphasis of the course is on learning basic principles and developing effective
techniques of interviewing and individual counseling skills applicable to correc-
tional field, agency, and institutional settings. A foundation for interviewing and
individual counseling is laid by first examining the nature of the correctional environment, its effect on interpersonal relationships between correctional workers and offender populations, and concepts of correctional treatment planning and behavior change. Comparisons are made with the techniques of interrogation.

PC 202 – Group and Individual Counseling, 3 credits
Course is a continuation of PC 201. Emphasis is on further development of individual counseling skills and on the processes and techniques of correctional group counseling. Role playing, guided group interaction, transactional analysis, and other group treatment approaches will be discussed.

PC 225 – Legal Issues in Corrections, 3 credits
Course will examine current legal issues in the confinement and supervisory control of adjudicated and non-adjudicated offenders. The constitutional rights of confined prisoners; state and federal regulations, minimum correctional standards and the liabilities and responsibilities of correctional personnel will be examined.

PC 252 – Community Correctional Services, 3 credits
Community resources that are endemic to the correctional process, their functions, organizations, and operations are reviewed. Organizations to be studied include those offering legal, social, welfare, counseling, psychological, vocational, medical, guidance or other rehabilitative services.

PC 260 – Probation and Parole, 3 credits
Evaluates and examines probation as a judicial process and parole as an executive function as related to community based correctional programs.

PC 280 – Field Work Experience, 3 credits
Prerequisite: nine (9) hours of Prevention and Corrections course work or consent of instructor. Students are offered the opportunity of applying the academic learning of the classroom to actual correctional practice in field, agency, or institutional settings.

PHYSICAL EDUCATION

PE 151 – Beginning Bowling, 1 credit
Two class periods. Designed to introduce the individual to the sport of bowling. Stress is placed on correctness of performance as well as the competitive nature of the game. Physical demands in this course are low, and skills learned have value for use in leisure hours. Also offered as CN 86, non-credit.

PE 152 – Beginning Golf, 1 credit
Designed for the beginning golfer. The basic fundamentals in the proper grip, stance and execution of putting, chipping, and full swing shall be stressed. Discussions are held on the rules of etiquette, play, and purchase and care of equipment. All equipment will be furnished. The recreational and carry over values of the sport are emphasized. Also, offered as CN 103, non-credit.

PE 153 – Beginning Archery, 1 credit
Two class periods. The basic fundamentals of shooting are stressed. Emphasis is on target archery. Experiences in barebow and sight shooting are provided. The recreational and carryover values of the sport are stressed. All equipment is furnished. Also offered as CN 105, non-credit.

PE 154 – Tennis I, 1 credit
Designed specifically for the beginning tennis player. Body movements, positioning, footwork and stroke technique will be introduced and related to the forehand drive, backhand drive, fore and backhand volley and the serve. Practical playing experiences will be used to teach rules, etiquette and some strategy. All equipment will be furnished.
PE 155 – Individual Conditioning for Men, 1 credit
Two class periods. A basic program consisting of physical testing, self evaluation, and conditioning with an introduction to physiological principles of efficient movement. Also offered as CN 90, non-credit.

PE 156 – Slimnastics and Individual Conditioning for Women, 1 credit
Two class periods. A program of physical fitness based on the popular ‘Aerobics’ exercise program. Special exercise programs will be designed for women of all ages. There will be discussions on the physical, emotional and medical benefits of the program. Also offered as CN 87, non-credit.

PE 157 – Tumbling and Gymnastics, 1 credit
Two class periods. A program of tumbling and gymnastics utilizing the trampoline and other apparatus. Emphasis is on personal enjoyment as well as development of self-confidence and good body mechanics through coordination, rhythm and balance. Also offered as CN 91, non-credit.

PE 158 – Beginning Horsemanship, 1 credit
Two class periods. Designed to create an interest in horsemanship and develop sufficient knowledge and skills to enjoy this sport as a recreational activity. Instructional emphasis will be placed on seat, horse care, control and safety. Special fee.

PE 160, PE 161 – Varsity Baseball, 1-1 credit
Student must participate as a member of the college varsity baseball team for a full season for each credit earned. Permission of head coach required.
PE 162, PE 163 – Varsity Basketball, 1-1 credit
Student must participate as a member of the college varsity basketball team for a full season for each credit earned. Permission of head coach required.

PE 164 – Tennis II, 1 credit
Designed specifically for the student wanting to develop advanced skills of a good tennis player. The lob, overhead and drop shot will be introduced while advanced development of the fundamental strokes will be emphasized. Practical playing experience will aid in teaching strategy. Students should have better than average tennis form for the ground strokes, volley and serve. Open to any student with consent of the instructor.

PE 170 – Handball-Racketball, 1 credit
Designed to introduce the student to the fundamental skills needed to enjoy playing racketball and handball. Basic strokes, foot work, body movement and positioning will be emphasized in conjunction with court etiquette and rules.

PE 175 – Senior Life Saving, 1 credit
One class period and one two-hour laboratory. Prerequisite: Advanced swimming skills and good physical condition. Includes elements of personal and group water safety with development of ability to assist or rescue others in danger. Satisfactory completion of course qualifies student for life-saving certificate. Also offered as CN 89, non-credit.

PE 180 – Basketball, 1 credit
Two class periods. The class is designed for casual or intramural participants interested in improving their skills and knowledge of basketball. Also offered as CN 96, non-credit.

PE 181 – Softball, 1 credit
Two class periods. The class is designed for casual or intramural participants interested in improving their skills and knowledge of softball. Also offered as CN 93, non-credit.

PE 182 – Volleyball, 1 credit
Two class periods. The class is designed for casual or intramural participants interested in improving their skills and knowledge of volleyball. Also offered as CN 94, non-credit.

PE 183 – Touch Football, 1 credit
Two class periods. The class is designed for casual or intramural participants interested in improving their skills and knowledge of touch football. Also offered as CN 95, non-credit.

PE 252 – Intermediate Golf, 1 credit
Review of basic fundamentals. Advanced skills and emphasis on play and tournaments. Open to any student with consent of the instructor. Also offered as CN 85, non-credit.

PE 254 – Tennis III, 1 credit
Specialized instruction with emphasis on technique and strategy used in competitive play. Open to any student with consent of the instructor. Also offered as CN 106, non-credit.

PE 260 – Introduction to Physical Education, 3 credits
Three class periods. Designed primarily for students planning to major in physical education. An examination of the place, function and contribution of physical education to the total educational program. Discussion of history, philosophy and problems of physical education.
PE 273 – Weight Training, 1 credit
Two class periods. Designed to introduce the individual to sound physiological principles of weight training for body development. Also offered as CN 88, non-credit.

PE 275 – Sports Officiating, 1 credit
Two class periods. Theory and practice of officiating football, volleyball and basketball. Field work will consist of officiating in the school’s intramural program. Also offered as CN 97, non-credit.

PE 276 – Sports Officiating, 1 credit
Two class periods. Theory and practice of officiating basketball, softball-baseball, track & field and swimming. Field work will consist of officiating in the school’s intramural program. Also offered as CN 98, non-credit.

PE 280 – Contemporary Dance, 1 credit
Two class periods. Basic theory and practice in using body movements to express or demonstrate ideas or thoughts. To broaden knowledge of rhythms, music and self expression through the medium of movement. Leotards are required. Also offered as CN 92, non-credit.

PE 281 – Jazz Dance, 1 credit
Two class periods. The student will learn coordinated movements with isolated parts of the body while using the jazz style of dance. Basic routines will be choreographed to pop rock and soul music. Also offered as CN 138 non-credit.

PHYSICS

PH 121 – Applied Physics, 4 credits
Three class periods and one three-hour laboratory. A one semester course for health related majors. Prerequisite: MS 81 or two (2) years high school algebra. A survey of those topics in physics which are related to the health field will be presented. Applications of physics to principles of mechanics, heat, light, sound, electricity and magnetism, and radioactivity as they apply to the health field. This course may not be taken for credit subsequent to receiving a grade of “C” or better in any higher physics course. (Laboratory fee)

PH 151, PH 152 – Basic Physics, 4-4 credits
Three class periods and one three-hour laboratory. Pre- or co-requisite: MS 137 or equivalent for PH 151, MS 138 or equivalent for PH 152. The physical principles of mechanics, properties of matter, heat and thermodynamics are studied in the first semester. The second semester presents the physical principles of wave motion, sound, light, electricity and magnetism, and modern physics. Application of physics to technical fields will be emphasized in discussions and problems. Laboratory work is designed to develop the theories presented in the course. (Laboratory fee)

PH 156 – Physics Calculations, 2 credits
One two-hour class period. Designed to be taken concurrently with PH 161 or PH 261 in order to provide special instruction for the student who needs additional work in solving physics problems. This course may not be taken for credit subsequent to a grade of “C” or better in PH 161, 162, or PH 261, 262.

PH 161 – Introductory Physics I, 4 credits
Three class periods and one three-hour laboratory. Pre- or Co-requisite: MS 171 or MS 173. Mechanics, heat and sound are covered. The course is designed for students whose requirements for the baccalaureate degree includes a basic course in physics. Students who need extra instruction in the problem solving aspects of physics are urged to take PH 156 concurrently with this course. (Laboratory fee)
PH 162 — Introductory Physics II, 4 credits
Three class periods and one three-hour laboratory. Pre- or Co-requisite: MS 171 or MS 173 and PH 161 or departmental waiver. Electricity and magnetism, optics, and elements of modern physics are covered. (Laboratory fee)

PH 261, PH 262 — General Physics with Calculus I-II, 4-4 credits
Three class periods and one three-hour laboratory. Pre- or Co-requisite for PH 261: MS 251. Pre- or Co-requisite for PH 262: MS 252. The first semester covers mechanics, heat, and sound with emphasis upon fundamental principles. The second semester covers electricity and magnetism, and optics. Designed for physics, mathematics, chemistry and pre-engineering majors. (Laboratory fee)

PH 270 — Modern Physics, 3 credits
Three class periods with demonstrations. Prerequisites: MS 251 and PH 161 or PH 261. This course deals with relativity, atomic theory, quantum mechanics, solid state, laser techniques, the nucleus and modern particles.

PH 290 — Selected Topics in Physics, 1-3 credits
Prerequisites: PH 161 or PH 261 and departmental permission. For the student in science who desires some in-depth study of special topics in the areas of classical and modern physics. Also, experimental topics may be included upon demand.

PHILOSOPHY

PL 251 — Philosophy, 3 credits (IS)
Three class periods. An introduction to major philosophical themes in Western culture. (Offered as PL 151 prior to 1969-70.)

PL 261 — Ethics, 3 credits (IS)
Three class periods. A study of the major theoretical principles on which claims to the good life and moral action have been based, such as hedonism, utilitarianism and rationalism. Each theory will be illustrated by reading representative selections from the works of great philosophers from the classical period to 20th century.

POLITICAL SCIENCE

PL 151 — American Government I, 3 credits (CE), (IS)
Three class periods. Theory, organization, principles, and functions of the national government, stressing the relationships of the individual to all levels of his government in the political system.

PL 152 — American Government II, 3 credits (CE), (IS)
Three class periods. A survey course covering an introduction to international politics, state and local government, and fundamental economic concepts.

PL 199 — Introduction to Political Science, 3 credits (IS)
Three class periods. A survey of the discipline of political science. An examination of important concepts in the development of Western political thought. A discussion of selected topics in various fields of inquiry within political science.

PL 207 — Introduction to Comparative Politics, 3 credits (IS)
Three class periods. Prerequisite: PL 151. A comparative study of foreign political systems in selected Western and non-Western nations, including political cultures, social change, public policy, and institutions.

PL 252 — State and Local Government, 3 credits (IS)
Three class periods. In-depth study of state, county and municipal government with emphasis on contemporary problems.
PL 255 — International Politics, 3 credits (IS)
Three class periods. The nature of international politics: Nationalism, armaments, imperialism, militarism, the history of international politics, foreign policies, international law and organizations, the United Nations, the human factor in international politics.

PL 290 — Selected Topics in Political Science, 1-3 credits
One-three class periods. Prerequisite: PL 151 or permission of Department. These seminars are for students who are interested in special topics and desire to explore further the field of political science through research, discussion, and observation.

PHYSICAL AND EARTH SCIENCES

PS 191 — The Ecology of Physical Science, 3 credits (CE) (IS)
Three class periods. An ecological approach to the physical sciences. The elementary aspects of physics and chemistry pertaining to air, water and land environments. This course is designed to help fulfill the general education requirement and would complement BY 151. (Formerly offered as Physical Science prior to 1972-73.

PS 192 — Earth Sciences, 3 credits (IS)
Three class periods. A survey of the earth sciences, including geology, meteorology and descriptive astronomy.

PS 194 — Astronomy, 3 credits
Three class periods. An introductory non-mathematical qualitative survey of the astronomical universe. Includes a study of the earth as an astronomical body, solar system, stars, galaxies, and cosmological theories of the universe in general. Much emphasis will be placed on the unprecedented growth of knowledge in astronomy during the past decade.

PS 290 — Selected Topics in Physical Science, 1-3 credits
This course deals with selected topics in the physical sciences based on a historical, traditional or contemporary approach, as the background and interests of the students and instructor might dictate.

PSYCHOLOGY

PY 101 — Psychology of Adjustment, 3 credits (IS)
Three class periods. Biological and learned factors involved in the processes of personal and social adjustment and the study of mental health principles and their application to human adjustment.

PY 130 — Psychology of Adolescence, 3 credits (IS)
Three class periods. This course approaches the study of adolescent development from a multi-disciplinary viewpoint. Emphasizes social, physical, and emotional development; adolescent problems including delinquency and drugs; learning problems; and factors affecting life and vocational/career choices.

PY 151 — General Psychology, 3 credits (CE) (IS)
Three class periods. A life-oriented course in psychology, designed to give the student a factual foundation in the techniques and vocabulary of psychology. This course provides a biological basis for behavior and surveys the research and application of psychology in the areas of learning, intelligence, motivation, emotion, personality, behavior disorders, mental health and therapy.

PY 161 — Psychology in Business and Industry, 3 credits (IS)
Three class periods. An introduction to the psychology of human behavior as applied to business and industry. A course designed to study the many psycho-
logical factors involved in the work situation including leadership, motivation, communications, morale, organizational structure, personnel selection, training and appraisal, consumer problems.

PY 180 – Applied Psychology for Criminal Justice, 3 credits (IS)
Three class periods. The course will cover the basic elements of general psychology such as learning, perception, personality theory, etc., with emphasis on the application of psychological principles by law enforcement and correctional officers.

PY 201 – Educational Psychology, 3 credits (IS)
Three class periods. Prerequisite: PY 151. A study of psychological principles and how they apply to the educational process. Major areas considered are: principles of learning, individual differences, motivation, mental abilities, measuring outcomes of learning, and study of the teaching-learning situation. (This course is especially designed for prospective teachers).

PY 260 – Developmental Psychology, 3 credits (IS)
Three class periods. Prerequisite: PY 151. A course designed to survey theory and research on development from prenatal stages through adulthood (childhood development is stressed). The course will emphasize the biological, psychological and social variables which influence human behavior.

PH 290 – Selected Topics in Psychology, 1-3 credits
One or three class periods. Prerequisite: PY 151. These seminars are for students who are interested in special topics and desire to explore further the field of psychology through research, discussion and observation.

READING

RG 101 – Reading Skills, 3 credits (IS)
Three class periods. Designed to improve competence in reading comprehension and vocabulary development requisite to acceptable college work.

RG 102 – Reading-Study Skills, 3 credits (IS)
Prerequisite: RG 90. A reading-study skills development course with emphasis on reading for comprehension in specific subject areas.

RG 155 – Reading Techniques, 3 credits (IS)
Three class periods. A college level course stressing increased efficiency and flexibility, proficiency in comprehension, study and retention techniques in subject areas, test-taking competence, and vocabulary improvements. Practice with specialized equipment and materials is provided. Recommended for the average or above average reader who wishes to improve his reading potential.

RG 290 – Selected Topics in Reading, 1-3 credits (IS)
One or three hours per week. This seminar is for students interested in research, discussion, and observation of special topics in reading.

RESPIRATORY THERAPY

+RT 127 – Introduction to Respiratory Therapy, 2 credits
Two one-hour lectures. Prerequisites: None. A survey of the respiratory therapy profession including its history, ethics and standards. A survey of other health related sciences and their inter-relationships. (Laboratory fee)

+RT 128 – Basic Respiratory Equipment, 3 credits
Two one-hour lectures and one three-hour laboratory. Prerequisites: RT 127, BY 255. Corequisites: PH 121, BY 256, BY 280. Fundamental functions of basic respiratory therapy equipment. Systems of oxygen storage. Safety precautions. Preparation for clinical practice. (Laboratory fee)
+RT 131 – Introduction to Respiratory Equipment, 4 credits
Three one-hour lectures and one three-hour laboratory. Prerequisites: CY 155 (may be taken concurrently), PH 121, BY 172. Fundamental functions of basic respiratory therapy equipment. Historical information. System of Oxygen storage. Safety precautions. Preparation for clinical practice. (Laboratory fee)

+RT 132 – Advanced Respiratory Equipment and Functions, 4 credits
Three one-hour lectures and one three-hour laboratory. Prerequisite: RT 131. Functions of advanced respiratory equipment. Arterial blood-gas equipment. Prolonged mechanical ventilation. Bedside respiratory volumetric monitoring. Evaluation prior to and during weaning from respirator. (Laboratory fee)

+RT 133 – Introduction to Pharmacology, 2 credits
Two one-hour lectures. Prerequisites: PH 121, CY 155, BY 251. History of Pharmacology. Regulatory agencies and regulations concerning the use of drugs. Drug action, absorption, distribution and use in the human body. Emphasis on respiratory drugs, cardiac drugs and related drugs the Therapist is exposed to in the hospital. (Laboratory fee)

+RT 134 – Clinical Practice I, 2 credits
Two-hundred hospital clock hours, approximately twelve and one-half (12½) hours for every two semester hours credit. Prerequisites: RT 131, RT 132 (may be taken concurrently), RT 133. Each student assigned clinical tasks (on a level with RT 131 and RT 132) in patient floor care under the supervision of a staff Respiratory Therapist or Clinical Instructor. (Laboratory fee)

+RT 231 – Pulmonary Physiology, 4 credits
Three one-hour lectures and one three-hour laboratory. Prerequisites: CY 155, PH 121, BY 251. This course includes the following pulmonary functions: normal ventilation and regulation of respiration; response to gases and ions, lung reflexes; and ventilatory and mechanical factors. Also included are pulmonary circulation, gas diffusion, manifestations of disease and blood gas analysis. (Laboratory fee)

+RT 232 – Clinical Practice II, 2 credits
Two hundred hospital clock hours, approximately twelve and one-half (12½) hours for every two semester hours credit. Prerequisite: RT 134. Each student assigned clinical practice in the Intensive Care, Cardiac Care, Progressive Care and Emergency Room Units under the supervision of a staff Respiratory Therapist or Clinical Instructor. Emphasis on volume ventilators and advanced patient care. (Laboratory fee)

+RT 233 – Respiratory Pathology, 4 credits
Three one-hour lectures and one three-hour laboratory. Prerequisites: BY 251, BY 280, RT 132. Cellular pathology with emphasis on pathology of respiratory and cardiovascular systems. (Laboratory fee)

+RT 234 – Cardiopulmonary Therapy, 4 credits
Three one-hour lectures and one three-hour laboratory. Prerequisites: RT 132, RT 232, concurrent with RT 231. This course includes resuscitative procedures in respiratory and cardiac emergencies and airway maintenance, pulmonary function, spirometry and pulmonary rehabilitation. (Laboratory fee)

+RT 235 – Clinical Practice III, 2 credits
Two hundred hospital clock hours, approximately twelve and one-half (12½) hours for every two semester hours. Prerequisite: RT 232, concurrently with RT 234. Each student assigned clinical tasks and orientation in Pulmonary Function Lab., Cardiac Catheterization, and Open Heart Surgery under the supervision of the staff Respiratory Therapist or Clinical Instructor.

+RT 236 – Advanced Cardiopulmonary Therapy, 4 credits
Three one-hour lectures and one three-hour laboratory. Prerequisite: RT 234. Surgical treatment of cardiopulmonary disorders and possible associated
complications. Respiratory aspects of infancy and childhood. A unit on medicine will be presented. (Laboratory fee)

+RT 237 – Clinical Practice IV, 2 credit
Two hundred hospital clock hours, approximately twelve and one-half (12½) hours for every two semester hours credit. Prerequisite: RT 234, RT 235. Each student assigned clinical tasks in Pediatrics, Pulmonary Rehabilitation, and Medicine, under the supervision of a physician and Clinical Instructor.

+RT 238 – Clinical Practice V, 2 credits
Two hundred hospital clock hours, approximately twelve and one-half (12½) hours for every two semester hours credit. Prerequisites: RT 236, RT 237. Each student assigned clinical tasks in the areas of General Thoracic, and Neuro Surgery. The student may be assigned other areas under the direction of the Clinical Instructor.

+RT 239 – Respiratory Pathology, 3 credits
Three one-hour lectures. Prerequisites: BY 255, BY 256, BY 280, RT 132. Corequisites: RT 232, RT 234, RT 235. Cellular pathology with emphasis on pathology of respiratory and cardiovascular systems.

+RT 240 – Hospital Organization and Management, 2 credits
One two-hour lecture. Prerequisite: Permission of instructor. Organization patterns in hospitals, clinics, and community health agencies, medical staff organization, principles and practices of management. Business and administrative management at the Comptroller and Chief Therapist levels.

SPANISH

+SH 101, +SH 102 – Conversational Spanish for Allied Health Personnel, 3 credits each
Three class periods. Conversational Spanish for students in the Allied Health Programs only. Emphasis on the practical application of Spanish to situations relative to patients.

+SH 103, +SH 104 – Conversational Spanish for Criminal Justice Personnel,
3 credits each
Three class periods. Beginning conversational class for students in Criminal Justice programs. Vocabulary presented would benefit those dealing with Spanish speaking people.

SH 141 – Basic Spanish, 3 credits
Students are recommended to take this course before taking SH 151. This course is designed for students without recent high school language skills. The stress is placed on the everyday use of the language. Students are introduced to basic grammar, vocabulary, and composition through a conversational approach to basic Spanish.

SH 151, SH 152 – Elementary Spanish, 3-3 credits (CE) (1S)
Three class periods and one one-hour laboratory. Beginning course in fundamental Spanish grammar and communication skills.

SH 170, SH 270 – Overseas Study in Spanish Language and Culture
These courses consist of two phases: (1) The orientation program will give the students the opportunity to make certain cultural, personal and educational adjustments prior to the beginning of their summer study at a Spanish University. (2) The period of study at the university will offer the students excursions, field trips, and special activities. After the summer courses, there will be organized travel tours that will broaden the student’s cultural experience. The student will take for credit or audit 6 to 12 hours from the following two courses:
SH 170 – Overseas Study in Spanish Language and Culture I, 6 credits
Prerequisite: Permission of the department chairman. Systematic training in pronunciation. Essentials of grammar, written and conversational exercises. Reading of selected material based on cultural approach and knowledge of Spain and Spanish America.

SH 270 – Overseas Study in Spanish Language and Culture II, 6 credits
Prerequisite: SH 170, three years of high school Spanish or SH 151-152. Review of grammar, composition, and conversation. Reading of contemporary texts.

SH 251, SH 252 – Intermediate Spanish, 3-3 credits (CE) (IS)
Three class periods and one one-hour laboratory. Prerequisite: SH 152; 2 years of high school Spanish or equivalent. Conversation approach with reading from modern Spanish and Spanish-American authors.

SH 261 – Introduction to Spanish Civilization, 3 credits (IS)
Three class periods. Prerequisite: SH 252 or equivalent. A basic study of the history, culture, and art of Spain. Emphasis on the development of conversational skills in Spanish.

SH 268, SH 269 – Introduction to Spanish Literature, 3-3 credits (IS)
Three class periods. Prerequisite: SH 252 or equivalent. The first semester is a survey of the literary masterpieces of Spain from the twelfth century to the golden age. The second semester is a continuation from 1800 to the twentieth century.

SOCIAL SCIENCE

SL 152 – Man and Environment II, 3 credits
This general education course is designed to provide an understanding of the interrelationship of man with the varying aspects of his natural and artificial environment from a resource management viewpoint. Many aspects of the environmental crisis such as the impact of political, economic, and social institutions, differing beliefs and myths, and individual and group maladjustments will be investigated along with possible solutions.

SL 290 – Field Experience in Social Sciences, 1 credit
One class period per week plus two hours per week of appropriate field experience under professional supervision. This course is designed for students who wish to pursue particular interests in areas related to any of the social sciences and to gain some actual experience in the field. The course may be repeated for a maximum of three semester hours of credit.

SPEECH

SP 100 – Speech and Writing Improvement, 3 credits
Three class periods. Emphasis on the improvement of language skills by developing and understanding the effective articulation of American English through the use of the audio-lingual approach.

SP 151, SP 152 – Introduction to the Theatre, 3-3 credits
Three class periods. (Theatre Arts and Speech 101-102 at Rollins College.) A survey of the organization and economic structure of Broadway, educational, and amateur theatre; survey of theatre architecture; study of contemporary play forms; analysis of play structure. Open to all students. This course held on the Rollins College campus.

SP 165 – Fundamentals of Speech, 3 credits
Three class periods. Principles of oral communication common to all speaking and listening. Emphasis on study, practice, and evaluation of preparation and delivery techniques for extemporaneous speaking.
SP 166 – Public Speaking, 3 credits
Three class periods. Prerequisite: SP 165. Advanced principles of audience communication. Varied methods of presentation to include impromptu, extemporaneous and manuscript. Categories of speaking to include informative, entertainment, persuasion and group discussion.

SP 167 – Oral Interpretation, 3 credits
Three class periods. Prerequisite: SP 165. Principles of selection, analysis, preparation, and presentation of materials for oral reading. Experience in choral speaking and readers' theater.

SP 175 – Informal Communication, 3 credits
Three class periods. The study and application of communication principles to remove verbal and non-verbal barriers. Emphasis on role playing, simulated conflicts, and dynamics of group discussion.

SP 265 – Argumentation and Debate, 3 credits
Three class periods. Prerequisite: SP 165 or permission of instructor. Principles of evidence, analysis, argument and refutation common to persuasive speaking and debate. Opportunity for competitive debate.

SP 267 – Forensics Laboratory, 1 credit
Three class periods. A study of advanced techniques of debate and other forensics, keyed primarily to those interested in intercollegiate forensic competition. This course may be taken for one hour credit each semester for a total of three semester hours of credit.

SP 290 – Selected Topics in Speech, 1-3 credits (IS)
One-three hours per week. This seminar is for students interested in research, discussion, and observation of special topics in speech.

SURVEYING TECHNOLOGY

+ST 212 – Surveying II, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: CV 192. A study of field techniques and their associated computations; adjustment of a transit; errors in angle measurements; errors in distance measurements; field techniques of traversing; traverse computations (closure and balancing); field techniques of tying points to control; tie-in computations; layout of horizontal curves; horizontal curve computations; field techniques and computations of precise levels; vertical curve computations. (Laboratory fee)

+ST 213 – Surveying III, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: ST 212. A study of the advanced surveying office computations; traverse, horizontal curve, and vertical curve review; coordinates; area by D.M.D. and coordinates; partitioning problems; intersection problems (line-line, line-curve, curve-curve); missing traverse parts; compound and reverse curve computations; spirals; principles of significant figures and solution analysis. (Laboratory fee)

+ST 214 – Electronic and Geodetic Surveying, 3 credits
Three class periods. Prerequisite: CV 192. A study of electronic distance measurements and geodetic techniques in surveying; theory, construction and use of electronic measuring devices (geodimeter, telurometer, rangefinder-laser, Hewlett-Packard, and others); applied geodetic astronomy (bearing and latitude determination using stars, sun, elongations, etc.); geodetic corrections to surveys of large extent. (Laboratory fee)

+ST 220 – Surveying Drawing, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: EG 151, 152. An
introduction to the drafting techniques and drawings of surveying; lettering; line technique; geometry; lot survey plats; traverse plotting; horizontal, compound, and reverse curves; highway plan, profiles and cross-sections. (Laboratory fee)

ST 221 – Subdivisions, 3 credits
One class period and one four-hour laboratory. Prerequisite: ST 212. A study of plat construction from tract description to final record plat; plat drafting; necessary computations; lettering; meaning of legal parts; current plat laws and regulations. (Laboratory fee)

ST 230 – Topography and Mapping, 3 credits
Two class periods and one three-hour laboratory. Prerequisite: ST 220 or corequisite: ST 212. A study of the field and drafting techniques of map construction; control surveys, detail surveys, transit-tape; transit-tadi; plane table; map drafting; contour construction; use of contour maps; cross-section field work and drafting; earthwork computations; theory and use of state plane coordinate systems; map reproduction techniques. (Laboratory fee)

ST 260 – Legal Aspects of Surveying, 3 credits
Three class periods. Prerequisite: CV 192. A study of the legal principles of boundary location and professionalism; history of boundary surveys; sectional surveys; legal descriptions, property transfer; resurveys; subdivision plats; surveyor in court; water boundaries. (Laboratory fee)

ST 270 – Land Surveying and Descriptions, 3 credits
Three class periods and one two-hour laboratory. Prerequisites: ST 212 and 260. A study of the construction of land descriptions and techniques of surveying the boundaries of a described parcel of land; metes and bounds descriptions and surveys; lot and block descriptions and surveys; sectional descriptions and surveys; water boundary descriptions and surveys. (Including all associated computations.) (Laboratory fee)

SOCIOLOGY

SY 261 – Introductory Sociology, 3 credits (CE) (IS)
Three class periods. Nature and application of sociological concepts, theories, and methods; analysis of societies and groups; social processes and social change.

SY 265 – Contemporary American Social Problems, 3 credits (IS)
Three class periods. Prerequisite: SY 261 or permission of instructor. An analysis of the major social problems confronting American society. Special emphasis is placed upon critical thinking abilities in evaluating causes, effects, and various approaches in dealing with social problems. Class discussion will include such topics as mental illness, crime, juvenile delinquency, race relations, pollution, population, urbanization, and influences detrimental to family stability (divorce, alcoholism, gambling, drug abuse).

SY 271 – Marriage and the Family, 3 credits (IS)
Three class periods. A functional course designed to assist the student in developing perspective concerning the planning of courtship, marriage and family life. Attention will be given to the problems of courtship, mate selection, engagement, marriage, child-rearing and family crises.

SY 290 – Selected Topics in Sociology, 1-3 credits
One-three class periods. Prerequisite: SY 261 or permission of the instructor. These seminars are for students who are interested in special topics and desire to explore further the field of sociology through research, discussion, and observation.
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