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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Photography by Ronald J. Francis
Graphics by R. Douglas Cunningham
### 1974

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### Session Registration Dates

<table>
<thead>
<tr>
<th>Session</th>
<th>Registration Dates</th>
<th>Classes Begin</th>
<th>Classes End</th>
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<tbody>
<tr>
<td>I</td>
<td>August 28 - 30</td>
<td>September 3 (Supper hour and evening)</td>
<td>December 19</td>
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<tr>
<td>II</td>
<td>January 2 - 6</td>
<td>September 4 (Day classes), January 6 (Supper hour and evening)</td>
<td>April 21</td>
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<tr>
<td>IIIA</td>
<td>April 24 and 25</td>
<td>January 7 (Day classes), April 28</td>
<td>June 18</td>
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<td>IIIB</td>
<td>June 20 and 23</td>
<td>June 24</td>
<td>August 14</td>
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An advanced registration period for currently enrolled students will be announced prior to each session.

### 1975

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<th>JANUARY</th>
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VALENCIA COMMUNITY COLLEGE

Orlando, Florida

Calendar for Session I

1974 - 1975

(Subject to Change)

July 17 (Wednesday) through August 2 (Friday)

July 31 (Wednesday)

August 7 (Wednesday) through August 9 (Friday)

August 27 (Tuesday)

August 28 (Wednesday)

August 28 (Wednesday) and August 29 (Thursday)

August 28 (Wednesday) through August 30 (Friday)

September 2 (Monday)

September 3 (Tuesday)

September 4 (Wednesday)

September 3 (Tuesday) through September 9 (Monday)

September 3 (Tuesday) through September 6 (Friday)

September 25 (Wednesday)

September 30 (Monday)

October 14 (Monday)

October 23 (Wednesday)

October 24 (Thursday)

Mail registration for Session I, 1974-75, for students taking only supper hour, evening and Saturday classes. Mail registrations must be postmarked by August 2, 1974.

Last day to make application for financial aid for the 1974-75 academic year.

Advanced registration by appointment only for currently enrolled students for Session I, 1974-75. (Evening students may advance register by mail.)

By this date admission requirements should have been met and final registration appointments made for Session I, 1975-76. Students applying for admission after this date will be considered on an individual basis.

All faculty report for duty at 8:00 a.m.

Evening registration for Session I, 1974-75, for students taking only supper hour, evening and Saturday courses, 4:30 - 8:30 p.m.

Day registration for Session I, 1974-75, by appointment only.

Labor Day Holiday. Administrative offices will be closed.

Seventh annual student convocation at 9:30 a.m. Supper hour and evening classes begin for Session I, 1974-75.

Day classes begin for Session I, 1974-75.

Late registration. No registrations for Session I will be permitted after 8:00 p.m. on Monday, September 9, 1974.

DROP-ADD PERIOD. Schedule changes and adjustments on these dates only (9:00 a.m. to 12:00 noon, 1:30 p.m. to 3:00 p.m. and 6:00 p.m. to 8:00 p.m.)

Deadline is 8:00 p.m. for refund requests for Session I, 1974-75.

Students begin making appointments for program counseling for Session II, 1974-75.

Program counseling for Session II, 1974-75, begins.

End of progress report period.

Progress grades due in the Registrar's office by 7:00 p.m.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>October 29 (Tuesday)</td>
<td>Career Education Program. Supper hour and evening classes will not meet. Day classes will meet as usual.</td>
</tr>
<tr>
<td>October 30 (Wednesday)</td>
<td>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.</td>
</tr>
<tr>
<td>November 11 (Monday)</td>
<td>Students begin making registration appointments for Session II, 1974-75.</td>
</tr>
<tr>
<td>November 18 (Monday)</td>
<td>Mail registration for Session II, 1974-75, for students taking only supper hour, evening and Saturday classes. Mail registration must be postmarked by December 6, 1974.</td>
</tr>
<tr>
<td>through December 6 (Friday)</td>
<td>Supper hour and evening classes will not meet. Day classes will meet as usual.</td>
</tr>
<tr>
<td>November 27 (Wednesday)</td>
<td>Thanksgiving Holiday for faculty, staff and students.</td>
</tr>
<tr>
<td>November 28 (Thursday) and November 29 (Friday)</td>
<td>Classes will not meet.</td>
</tr>
<tr>
<td>November 30 (Saturday)</td>
<td>Last day to make application for Graduation at the end of Session I, 1974-75.</td>
</tr>
<tr>
<td>December 2 (Monday)</td>
<td>Advanced registration by appointment only for currently enrolled students for Session II, 1974-75. Students taking only supper hour, evening and Saturday classes may advance register by mail.</td>
</tr>
<tr>
<td>through December 11 (Wednesday)</td>
<td>Final examination period for Session I classes. (A final examination schedule will be published.)</td>
</tr>
<tr>
<td>December 13 (Friday)</td>
<td>End of Session I, 1974-75.</td>
</tr>
<tr>
<td>through December 19 (Thursday)</td>
<td>Final grades may be turned in as late as 12:00 noon.</td>
</tr>
<tr>
<td>December 19 (Thursday)</td>
<td>By this date admission requirements should have been met for Session II, 1974-75. Students applying after this date will be considered on an individual basis.</td>
</tr>
<tr>
<td>December 20 (Friday)</td>
<td>Christmas and New Year Holiday. Administrative offices will be closed.</td>
</tr>
<tr>
<td>December 20 (Friday)</td>
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<tr>
<td>December 23 (Monday)</td>
<td>Calendar for Session II</td>
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<tr>
<td>through January 1, 1975 (Wednesday)</td>
<td>1974 – 1975</td>
</tr>
<tr>
<td>(Subject to Change)</td>
<td>Students begin making appointments for program counseling for Session II, 1974-75.</td>
</tr>
<tr>
<td>October 14 (Monday)</td>
<td>Program counseling for Session II, 1974-75, begins.</td>
</tr>
<tr>
<td>November 11 (Monday)</td>
<td>Students begin making registration appointments for Session II, 1974-75.</td>
</tr>
<tr>
<td>November 18 (Monday)</td>
<td>Mail registration for Session II, 1974-75, for students taking only supper hour, evening and Saturday courses. Mail registration must be postmarked by December 6, 1974.</td>
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</table>
December 9 (Monday) through December 11 (Wednesday)

December 20 (Friday)

January 2 (Thursday) January 3 (Friday) and January 6 (Monday)

January 2 (Thursday) and January 3 (Friday)

January 6 (Monday)

January 7 (Tuesday) January 7 (Tuesday) through January 10 (Friday)

January 7 (Tuesday) through January 10 (Friday)

January 28 (Tuesday)

February 27 (Thursday) February 28 (Friday)

February 28 (Friday)

March 3 (Monday)

March 10 (Monday)

March 19 (Wednesday) through April 2 (Wednesday)

March 26 (Wednesday)

March 28 (Friday) and March 31 (Monday)

March 29 (Saturday) April 9 (Wednesday) through April 11 (Friday)

Advanced registration by appointment only for currently enrolled students for Session II, 1974-75. Students taking only supper hour, evening and Saturday classes may advance register by mail.

By this date, admission requirements should have been met and final registration appointments made for Session II, 1974-75. Students applying for admission after this date will be considered on an individual basis.

All faculty report for duty at 8:00 a.m.

Day registration for Session II, 1974-75, by appointment only.

Evening registration for Session II, 1974-75, for students taking only supper hour, evening and Saturday courses, 4:30 - 8:30 p.m.

Supper hour and evening classes begin for Session II, 1974-75.

Day classes begin for Session II, 1974-75.

Late registration. No registrations for Session II will be permitted after 8:00 p.m. on Friday, January 10, 1975.

DROP-ADD PERIOD. Schedule changes and adjustments on these dates only (9:00 a.m. to 12:00 noon, 1:30 p.m. to 3:00 p.m. and 6:00 p.m. to 8:00 p.m.).

Deadline is 8:00 p.m. for refund requests for Session II, 1974-75.

End of progress report period.

Progress grades due in the Registrar’s office no later than 7:00 p.m.

Last day to make application for graduation at the end of Session II, 1974-75.

Students begin making appointments for program counseling for Session IIIA and IIIB, 1974-75, and Session I, 1975-76.

Program counseling for Session IIIA and IIIB, 1974-75, and Session I, 1975-76, begins.

Mail registration for Session IIIA, 1974-75, for students taking only evening and Saturday courses. Mail registration must be postmarked by April 2, 1975.

Students begin making registration appointments for Session IIIA and IIIB, 1974-75, and Session I, 1975-76.

Easter Holiday for faculty, staff and students.

Classes will not meet.

Advanced registration by appointment only for currently enrolled students for Session IIIA, 1974-75. Students taking only supper hour, evening and Saturday classes may advance register by mail.
April 15 (Tuesday) through April 21 (Monday)  
Final examination period for Session II classes. (A final examination schedule will be published.)

April 21 (Monday)  
End of Session II, 1974-75.

April 22 (Tuesday)  
Final grades may be turned in as late as 12:00 noon.

April 23 (Wednesday)  
GRADUATION 8:00 p.m.

April 23 (Wednesday)  
By this date, admission requirements should have been met and final registration appointments made for Session IIIA, 1974-75. Students applying for admission after this date will be considered on an individual basis.

Calendar for Session IIIA  
1974 -- 1975  
(Subject to Change)

March 3 (Monday)  
Students begin making appointments for program counseling for Session IIIA and IIIB, 1974-75, and Session I, 1975-76.

March 10 (Monday)  
Program counseling for Session IIIA and IIIB, 1974-75, and Session I, 1975-76.

March 19 (Wednesday) through April 2 (Wednesday)  
Mail registration for Session IIIA, 1974-75, for students taking only supper hour, evening and Saturday classes. Mail registrations must be postmarked by April 2, 1975.

March 26 (Wednesday)  
Students begin making registration appointments for Session IIIA and IIIB, 1974-75, and Session I, 1975-76.

April 9 (Wednesday) through April 11 (Friday)  
Advanced registration by appointment only for currently enrolled students for Session IIIA, 1974-75. Students taking only supper hour, evening and Saturday classes may advance register by mail.

April 23 (Wednesday)  
By this date admission requirements should have been met and final registration appointments made for Session IIIA, 1974-75. Students applying for admission after this date will be considered on an individual basis.

April 24 (Thursday)  
All faculty report for duty at 8:00 a.m.

April 24 (Thursday)  
Evening registration for Session IIIA, 1974-75, for students taking only supper hour, evening and Saturday classes, 4:30 - 8:30 p.m.

April 24 (Thursday) and April 25 (Friday)  
Day registration for Session I, 1974-75, by appointment only.

April 28 (Monday)  
Classes begin for Session IIIA, 1974-75.

April 28 (Monday) and April 29 (Tuesday)  
Late registration. No registration for Session IIIA, 1974-75, will be permitted after 8:00 p.m. on Tuesday, April 29, 1975.

April 28 (Monday) and April 29 (Tuesday)  
DROP-ADD PERIOD. Schedule changes and adjustments on these dates only (9:00 a.m. to 12:00 noon, 1:30 p.m. to 3:00 p.m. and 6:00 p.m. to 8:00 p.m.).
May 5 (Monday)  Students begin making appointments for program counseling for Session IIIB, 1974-75, and Session I, 1975-76.

May 9 (Friday)  Deadline is 4:00 p.m. for refund requests for Session IIIA, 1974-75.

May 12 (Monday)  Program counseling for Session IIIB, 1974-75, and Session I, 1975-76, begins.

May 21 (Wednesday) through June 4 (Wednesday)  Mail registration for Session IIIB, 1974-75, for students taking *only* supper hour, evening and Saturday classes. Mail registrations must be postmarked by June 4, 1975.

May 26 (Monday)  Memorial Day Holiday for faculty, staff and students.

May 28 (Wednesday)  Students begin making registration appointments for Session IIIB, 1974-75, and Session I, 1975-76.

June 6 (Friday)  *Last day to make application for graduation at the end of Session IIIA, 1974-75.*

June 9 (Monday) through June 11 (Wednesday)  Advanced registration by appointment only for currently enrolled students for Session IIIB, 1974-75. Students taking *only* supper hour, evening and Saturday classes may advance register by mail.

June 17 (Tuesday) and June 18 (Wednesday)  Final examination period for Session IIIA classes. (A final examination schedule will be published.)

June 18 (Wednesday)  End of Session IIIA, 1974-75.

June 19 (Thursday)  Final grades may be turned in as late as 12:00 noon.

**Calendar for Session IIIB**

**1974 — 1975**

**(Subject to Change)**

May 5 (Monday)  Students begin making appointments for program counseling for Session IIIB, 1974-75, and Session I, 1975-76.

May 12 (Monday)  Program counseling for Session IIIB, 1974-75, and Session I, 1975-76, begins.

May 21 (Wednesday) through June 4 (Wednesday)  Mail registration for Session IIIB, 1974-75, for students taking *only* supper hour, evening and Saturday classes. Mail registrations must be postmarked by June 4, 1975.

May 28 (Wednesday)  Students begin making registration appointments for Session IIIB, 1974-75, and Session I, 1975-76.

June 9 (Monday) through June 11 (Wednesday)  Advanced registration by appointment only for currently enrolled students for Session IIIB, 1974-75. Students taking *only* supper hour, evening and Saturday classes may advance register by mail.

June 19 (Thursday)  By this date all admission requirements should have been met and final registration appointments made for Session IIIB, 1974-75. Students applying for admission after this date will be considered on an individual basis.
June 20 (Friday)  
All faculty report for duty at 8:00 a.m.  

June 20 (Friday)  
Evening registration for Session III B, 1974-75, for students taking only supper hour, evening and Saturday classes, 4:30 - 8:30 p.m.  

June 24 (Tuesday)  
Day registration for Session III B, 1974-75, by appointment only.  

June 24 (Tuesday) and June 25 (Wednesday)  
Classes begin for Session III B, 1974-75.  

June 24 (Tuesday) and June 25 (Wednesday)  
Late registration. No registrations for Session III B will be permitted after 8:00 p.m. on Wednesday, June 25, 1975.  

June 24 (Tuesday) and June 25 (Wednesday)  
DROP-ADD PERIOD. Schedule changes and adjustments on these dates only (9:00 a.m. to 12:00 noon, 1:30 p.m. to 3:00 p.m. and 6:00 to 8:00 p.m.)  

July 3 (Thursday)  
Supper hour and evening classes will not meet. Day classes will meet as usual.  

July 4 (Friday)  
Independence Day Holiday for faculty, staff and students.  

July 8 (Tuesday)  
Deadline is 8:00 p.m. for refund requests for Session III B, 1974-75.  

July 16 (Wednesday) through August 1 (Friday)  
Mail registration for Session I, 1975-76, for students taking only supper hour, evening and Saturday classes. Mail registrations must be postmarked by August 1, 1975.  

July 31 (Thursday)  
Last day to make application for financial aid for the 1975-76 academic year.  

August 4 (Monday)  
Last day to make application for graduation at the end of Session III B, 1974-75.  

August 13 (Wednesday) and August 14 (Thursday)  
Final examination period for Session III B classes. (A final examination schedule will be published.)  

August 14 (Thursday)  
End of Session III B, 1974-75.  

August 15 (Friday)  
Final grades may be turned in as late as 12:00 noon.
DISTRICT BOARD OF TRUSTEES

ALBERT H. CHUBB
Chairman

MRS. DAN L. McKINNON
Vice Chairman

RAYMER F. MAGUIRE, JR.

DR. WILLIAM C. KING

ANDREW N. SERROS
COLLEGE ADMINISTRATION

JAMES F. GOLLATTSCHECK
President

Office Of The President

James F. Gollattscheck .................................................. President
Robert W. Gilbert ...................................................... Assistant to the President for Facilities Planning
Richard J. O'Sullivan .................................................. Assistant to the President for Administration
Roy E. Kinick .............................................................. Assistant to the President
Louise McMullian .......................................................... Director of Personnel Services
Ronald W. Reinighaus ................................................... Director of Grants and Development
Gloria J. Raines ............................................................. Director of Research and Data Processing Services
James P. Mulcahy ........................................................... Director of Community Relations

Academic Affairs Area

David L. Evans ............................................................... Vice President for Academic Affairs
Charles W. Sample ........................................................ Dean of Continuing Education
Lawrence W. Cunningham .............................................. Dean of Career Programs
Claudia E. Pennington ................................................... Associate Dean for Learning Resources
A. Quinta Terry ............................................................. Chairman of Art Department
Thelma J. Dudley ............................................................ Chairman of Basic Studies Department
Fred E. Hild ................................................................. Chairman of Business Related Programs
Donald J. Tighe ............................................................... Chairman of Communications Department
Robert L. Carmody ........................................................ Chairman of Technical and Engineering Related Programs
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
Robert P. Partridge ......................................................... Chairman of Music Department
Boyd L. Johnson ............................................................ Chairman of Physical Education Department
Robert L. Mike .............................................................. Chairman of Public Safety Related Programs
Benjamin H. Lynd .......................................................... Chairman of Science Department
William C. Prentiss ......................................................... Chairman of Social Science Department

Business Affairs Area

John M. Lockman .......................................................... Dean of Financial Affairs
W. Dean Holland .......................................................... Director of Accounting and Controller

Student Affairs Area

James S. Kellerman ........................................................ Dean of Student Affairs
Dalton D. Howard ........................................................ Director of Admissions and Registrar
A. N. Horton ................................................................. Director of Evening Services
Jerry W. Odom ............................................................... Director of Student Services
Donald E. Rutledge ........................................................ Director of Financial Aids and Placement
Thomas A. Garcia ........................................................ Chairman of Athletic Department
H. Eugene Simmons ....................................................... Chairman of Counseling Department
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

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

APPLEBAUM, IVAN R. .................................................... Psychology
B.G.S., Rollins College; M.C.S., Rollins College

ARCHAMBEAULT, WILLIAM G. ......................................... Prevention & Corrections
B.S., Indiana State University; M.A., Indiana State University

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

BAKER, MARION II. ....................................................... Area Coordinator in Chemistry
B.A., Swarthmore College; M.S., University of Michigan

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

BARFIELD, ONA M. .......................................................... English
A.B., Stetson University; M.A., Stetson University

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

BLAKELY, JEFFREY D. ...................................................... Art
B.F.A., Florida Atlantic University; M.S., Florida State University

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

BOWERS, DeLOSS .......................................................... Engineering Technology
B.F.A., Ohio State University; M.S., Purdue University

BRADBURY, JACK E. ....................................................... Psychology and Sociology
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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.

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Mr. Roland M. Lee, PE
Watson and Company

Dr. Waldron McLellon, Chairman
Civil Eng. & Environmental Sciences
Florida Technological University

Mr. A. Ray Miller, Contractor
Hubbard Construction Company

Mr. William Palm, PE
Glace and Radcliff, Inc.

Mr. Bert Rees, Resident Engineer
Department of Transportation

Mr. Claude Shivers, AIA
Murphy, Hunton & Shivers
Criminal Justice

Mr. Ray Beary
Chief, Winter Park Police Department

Mr. Louis Bowen, Jr.
Public Defender

Mr. Charles Brookfield
Orlando Detention Bureau

Mr. Robert Chewning
Director, Department of Public Safety
City of Orlando

Mr. Mel Colman
Sheriff, Orange County
Sheriff's Department

Honorable Joseph W. Durocher
Judge of the Circuit Court,
Orange County

Mr. W. F. Garvin
Florida Probation & Parole Commission

Mr. Sam Hill, Regional Director
Division of Youth Services

Mr. Jim Shoultz, Director
Orange County Jail

Mr. Fred Shepherd
Florida Probation & Parole Commission

Judge Rogers Turner
Criminal Justice Division

Mr. Lamar Thomas, Commissioner
Orange County Commission

Data Processing Technology

Mrs. Mildred H. Bofto, Manager
Barnett Data Center at Winter Park

Mr. B. L. Cording, CDP
Asst. Manager, Financial Operations
Orlando Utilities Commission

Mr. Erman Evans, Director
Data Processing
Orange County

Dr. David R. Falconer
Associate Professor in
Mathematical Science
Florida Technological University

Mr. Joe Gentry, Chief of
Computer Hardware Technology
Martin Marietta Corporation

Mr. James Reece, Manager
Data Processing
Orange Memorial Hospital

Distribution & Marketing

Mr. Troy Breedlove
Manager, Multi-Peril Division
Shelby Mutual Insurance Company

Mr. Don Christopher
Manager
Food World

Mr. William Frazier
Personnel Manager
Montgomery Ward & Co.

Mr. Ralph Kipkuth
Manager
Raybro Electric Company

Mr. Kenneth Leland
Vice President
George Stuart, Inc.

Mrs. Constance Mustard
Personnel Manager
J.C. Penney Company

Mr. John E. Olive
Vice President
Palmer Electric Company

Mr. David Schuster
Manager, Marketing & Research
Orlando Sentinel-Star
Drafting and Design Technology

Mr. Harry Bertossa, PE
Howard, Needles, Tammen & Bergendoff

Mr. Gene Brown, Draftsman
Repco, Inc.

Mr. W. C. Denson, PE
Tilden, Denson & Associates

Mr. R. J. Reynolds
Chief Draftsman
Florida Gas Transmission Company

Mr. Charles Kayser, President
Gulf Atlantic Machine Tool Corporation

Mr. Ray Kerkhoff
Martin Marietta Corporation

Mr. Robert B. Murphy, AIA
Murphy, Hunton & Shivers

Electromechanical Technology

Mr. Denys O. Akhurst, Dean
College of Engineering
Florida Atlantic University

Mr. George Frye
Vice President of Engineering
Educational Computer Corporation

Mr. John Wilburn
Chief of Quality Laboratories
Martin Marietta Corporation

Mr. Ray T. Hyde
Field Engineer Branch Manager
IBM Corporation

Mr. Edward Rinderle, Manager
Static and Rotating Components
Scott Electronics

Fire Technology

Chief Robert C. Finlayson
Winter Park Fire Department

Chief L. F. Gilliam
Apopka Fire Department

Chief Robert Illyes
Killarney Volunteer Fire Department

Chief O. R. Strickland
McCoy AFB Fire Department

Mr. Paul Pennington, Retired
Chief, Buena Vista Fire Department

Mr. Melvin Rivenbark, Retired
Chief, Orlando Fire Department

Graphic Arts Technology

Mr. Peter Cardascia
Southern Lithographing Company

Mr. Lyle C. Evans, Chairman
Graphic Communications
Mid-Florida Technical Institute

Mr. John F. Ingenito, President
Typo-Graphics

Mr. Reese H. Ivey
Wood-Ivey Systems

Mr. Rod Jones
Printing Industries of Florida

Mr. Gary Lawton
Walt Disney World

Mr. James R. Lytle
Graphic Communications
Martin Marietta Corporation

Mr. James R. MacMahon
MacMahon Advertising, Inc.

Mr. Charles A. Mayer
Presentations Illustration
Martin Marietta Corporation
Hotel-Motel-Restaurant Management

Mr. Duane Chapin
International Motels, Inc.

Mr. George Dietrich
Hilton House of Beef

Mr. Joe Duncaife
Travelodge – South

Mr. Jim Louth
Food & Beverage Director
Langford Hotel

Mr. Blaine Millard, President
MCR Motel Corp.

Mr. George Rackensperger, Sr.
Bavarian House

Mr. Martin Toelhoek, General Manager
Holiday Inn

Mr. John Weed
San Juan Hotel

Ms. Francie Wynalda
Carlton House Resort Inn

Insurance Secretarial Science

Mr. Bruce Arrow
Account Analyst
The Travelers Insurance Companies

Mr. George Edwards
Office Manager
O’Neil, Lee & West, Inc.

Mr. Ralph Enlow
Office Manager
Don Mott Insurance Agency, Inc.

Mrs. Claudine Fleming
Vice President
Kuykendall Insurance Agency, Inc.

Mr. Gary B. Fleming
Treasurer & Office Manager
Kuykendall Insurance Agency, Inc.

Mrs. Laura C. Grant
Office Manager
Hall Brothers Insurance Agency, Inc.

Mr. Monty McBryde
Office Manager
J. Rolfe Davis Insurance Agency, Inc.

Mr. Lyle Nelson
Line Manager
The Travelers Insurance Companies

Mr. Richard Wallace
District Manager
The Travelers Insurance Companies

Medical Laboratory Technology

Mr. Robert T. Besserer
Administrator
Seminole Memorial Hospital

Mr. Edward Carr
Technical Director
Central Florida Blood Bank

Mrs. Eleanor Gray-Lewis
Chief Technologist
Holiday Hospital

Mr. Leslie Lee
Assistant Laboratory Director
Orange Memorial Hospital

Mr. Rolando Ramos
Chief Technologist
Seminole Memorial Hospital

Dr. Wayne Schrader
Pathologist
Holiday Hospital

Lt. (jg.) Donald Smith
Laboratory Officer
Naval Hospital

Dr. Antonio Tamara
Pathologist
Naval Hospital

Mr. Archie Weems
Chief Technologist
Florida Hospital

Dr. Benjamin C. Willard
Chief Pathologist
Orange Memorial Hospital
Nursing

Miss Virginia Albaugh, R.N.
Orlando, Florida
Mrs. Florence Bryan, R.N.
Assistant Director – Nursing
Holiday Hospital
Mr. William R. Daniel, M.D.
Orlando, Florida
Mrs. Mary Harris, R.N.
Director of Nursing
Winter Park Hospital

Mr. Cerk Kuyper
Hospital Administrator
Mercy Hospital
Mrs. Bert (Barbara) Roper
Winter Garden, Florida
Mrs. Margaret Sumner, R.N.
Assistant Administrator
Nursing Services
Florida Hospital

Mrs. Shirley Stasiowski
Director of Nursing
Orange Memorial Hospital

Private & Industrial Security

Mr. Gene Annan
Operations Manager
Protector Security Center
Mr. Larry Graham
Martin Marietta Corp.

Mr. James B. Hailey
Richmond E. Barge Associates
Mr. William E. Hall
Security Specialist
Naval Training Center

Mr. L. Bryant Helmer
Associated Security, Inc.

Ornamental Horticulture Technology

Mr. Glenn G. Blalock
John's Inc.

Mr. Jay Blanchard, Director
Winter Park Parks Department
Mr. Morgan Evans
Landscape Architect

Mr. George Busby, Supervisor
Agricultural Education
Mr. Bert Foster, AILA
Foster & Associates

Mr. Jack Christmas
Oakdell, Inc.
Mr. James F. Griffin, Jr.
Florida Nurseriesmen & Growers Assoc.

Mr. William Colburn, President
Cypress Creek Nursery
Mr. Alan Poole
Apopka Growers Supply

Mr. Jack Siebenthaler
Seminole Nurseries

Mr. Jim Thomas, Consultant
Environmental Design Group, Inc.

Real Estate

Mr. George Beachamp
President Elect
Osceola County Board of Realtors

Mr. R. E. Duckworth, Jr.
Vice President
Duckworth, Duckworth & Pardue, Inc.
Mr. Jack Gale  
President  
Gale Associates, Inc.

Mr. Wilson Green  
Atkins-Green-Stauffer & Co.

Mr. Henry Hoche  
President  
Henry Hoche Realty, Inc.

Mr. E. Everette Huskey  
President, Huskey Realty

Mr. W. H. Morse  
President  
Osceola County Board of Realtors

Mr. David C. Nusbickel  
Associate  
Florida Ranch Lands, Inc.

Mr. Herbert A. Ross  
President  
Florida Home Builders Association

Respiratory Therapy

Dr. Clarence M. Gilbert  
Medical Advisor  
Respiratory Therapy Program

Mr. Larry Horner, B.S.I.T.  
Director, Respiratory Therapy Dept.  
Holiday Hospital

Mr. Robert Rogers, B.S.I.T., A.R.I.T.  
Program Director, Inhalation Therapy  
Florida Technological University

Miss Leslie Shaffer, R.N.  
Head Nurse, ICU  
Orange Memorial Hospital

Mr. Easton Smith, A.R.I.T.  
Director, Cardiopulmonary Department  
Orange Memorial Hospital

The following individuals are listed on several committees and serve in an ex officio capacity:

Mr. Kenneth Girard  
Florida State Employment Service

Ms. Jan McGurk, Counselor  
Division of Vocational Rehabilitation

Mr. William Ullstrom  
Orlando/Orange County Industrial Board
Forget about College... and no one will be the wiser
Especially you!

VALÉNCIA COMMUNITY COLLEGE
TURN LEFT 300 YARDS
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 permanent campus of 185 acres at 1800 South Kirkman Road, Orlando. The enrollment reached a peak of 5,428 credit students for the fall session 1973-74.

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.
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 individuals for employment in the community.

C. To provide such continuing education programs as are most appropriate to meet the needs of the community.

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 Education. 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 Learning Resources Center is the center of the academic program. It is a learning center providing a wide variety of books, periodicals, and audio-visual materials and equipment to support the instructional program, learning and leisure-time activities of the students, faculty and community. With emphasis upon independent work, the 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.

The 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

REQUIREMENTS FOR ADMISSION

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 of degree level courses 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 the Director of Admissions.

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 the Director of Admissions and Registrar 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 the Director of Admissions and Registrar 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 student 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 Director of Admissions and Registrar 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 Director of Admissions and Registrar.

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. 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.

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

D. Due to the high cost of medical services, foreign students admitted to Valencia must possess health insurance before registering for classes.

**Early Admission Students**

High school seniors may be recommended by their high school principal for enrollment in certain courses at the college while still enrolled in high school. These students pay regular fees and attend classes the same as any other students. Credits are validated after successful graduation from high school. Details of the early admission procedures are available through the office of the Director of Admissions and Registrar.

**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. These appointments will be given only when completed transcripts and test scores are on file. 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. Students currently enrolled in courses numbered between 0 and 99 are required to see a counselor for program planning. For those students taking only evening courses, an appointment with a counselor is not required; however, evening students are encouraged to contact the counselors to discuss their academic goals and objectives.
You should submit the following materials before you register: A completed application for admission form • Residency Affidavit • Photograph • Health form • Social Security Number • A $10.00 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 the Director of Admissions and Registrar) • 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 of degree level courses and is in good academic standing.

You should submit the following materials before you register: A completed application for admission form • Residency Affidavit • Photograph • Health form • Social Security Number • A $10.00 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 the Director of Admissions and Registrar) • Florida Twelfth Grade Placement Test Scores or other nationally recognized entrance examinations • Complete information regarding all former enrollments (request that each college or university previously attended send a transcript to the Director of Admissions and Registrar).

NOTE: Transfer students must be eligible to return to the last college attended.

You should submit the following materials before you register: A completed application for admission form • Residency Affidavit • Photograph • Health form • Social Security Number • An early admission 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><strong>IF YOU WANT TO ENROLL AT VCC AS A NON-DEGREE SEEKING STUDENT AND . . . . (SPECIAL STUDENT)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>... you are from a foreign country . . .</strong></td>
</tr>
<tr>
<td>You should submit the following credentials: A completed application for admission form • Photograph • Health form • Social Security Number • A $10.00 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.</td>
</tr>
<tr>
<td>NOTE: Application materials should be submitted three (3) months prior to admission.</td>
</tr>
<tr>
<td><strong>... you desire courses for personal enrichment, job improvement, etc. . . .</strong></td>
</tr>
<tr>
<td>You should submit the following materials before you register: A completed application for admission form • Residency Affidavit • Photograph • Health form • Social Security Number.</td>
</tr>
<tr>
<td>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><strong>... you do not wish to earn college credit . . .</strong></td>
</tr>
<tr>
<td>You should submit the following materials before you register as an audit student: A completed application for admission form • Residency Affidavit • Photograph • Health form • Social Security Number.</td>
</tr>
<tr>
<td>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><strong>... you are currently enrolled at another college or university . . .</strong></td>
</tr>
<tr>
<td>You should submit the following materials before you register: A completed application for admission form • Residency Affidavit • Health form • Social Security Number • A transient form (permission from appropriate administrator of your institution indicating a course or courses you may take at Valencia Community College).</td>
</tr>
<tr>
<td>NOTE: A transient form is required each time you enroll at VCC. Transient students are NOT required to submit the $10.00 application service fee.</td>
</tr>
</tbody>
</table>
FINANCIAL INFORMATION

1974 – 1975

Fees and Tuition

APPLICATION FEE

Students planning to enter Valencia Community College for the first time as a regular student are required to pay a $10.00 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 regular students, whether full-time, part-time, day or evening. All fees other than the application fee must be paid at time of registration.

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>Part-Time Enrollment (Less than 12 credit hours)</th>
<th>Full-Time Enrollment (12 through 19 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLORIDA STUDENTS</td>
<td>Per Semester Hour</td>
<td>Total</td>
</tr>
<tr>
<td>Registration Fee</td>
<td>$11.00</td>
<td>$125.00</td>
</tr>
<tr>
<td>Scholarship Fee*</td>
<td>None</td>
<td>$4.50</td>
</tr>
<tr>
<td>Total . . .</td>
<td>$11.00</td>
<td>Total . . $129.50</td>
</tr>
<tr>
<td>OUT-OF-STATE STUDENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration Fee</td>
<td>$11.00</td>
<td>$125.00</td>
</tr>
<tr>
<td>Scholarship Fee*</td>
<td>None</td>
<td>$4.50</td>
</tr>
<tr>
<td>Tuition</td>
<td>$17.00</td>
<td>$200.00</td>
</tr>
<tr>
<td>Total . . .</td>
<td>$28.00</td>
<td>Total . . $329.50</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 239.78 (8), 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.
MUSIC FEES

In addition to the regular Registration Fee per credit hour, the following schedule applies to music courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Per</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC 173-174</td>
<td>Primary Instrument</td>
<td>course</td>
<td>$50.00 each</td>
</tr>
<tr>
<td>MC 273-274</td>
<td>Primary Instrument</td>
<td>course</td>
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</tr>
<tr>
<td>MC 167</td>
<td>Applied Music</td>
<td>course</td>
<td>50.00 each</td>
</tr>
<tr>
<td>MC 165-166</td>
<td>Applied Music</td>
<td>course</td>
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</tr>
<tr>
<td>MC 171-172</td>
<td>Secondary Instrument</td>
<td>course</td>
<td>25.00 each</td>
</tr>
<tr>
<td>MC 271-272</td>
<td>Secondary Instrument</td>
<td>course</td>
<td>25.00 each</td>
</tr>
<tr>
<td>MC 180</td>
<td>Brass Techniques</td>
<td>course</td>
<td>5.00 each</td>
</tr>
<tr>
<td>MC 181</td>
<td>Woodwind Techniques</td>
<td>course</td>
<td>5.00 each</td>
</tr>
<tr>
<td>MC 182</td>
<td>Percussion Techniques</td>
<td>course</td>
<td>5.00 each</td>
</tr>
<tr>
<td>MC 183</td>
<td>String Techniques</td>
<td>course</td>
<td>5.00 each</td>
</tr>
</tbody>
</table>

NURSING STUDENTS

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

- Uniforms, caps and shoes ............................................... $60.00
- Achievement Tests ......................................................... $10.00
- Name Pins & Uniform Patches ............................................ $2.00
- Insurance ........................................................................ $8.00

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

CONTINUING EDUCATION FEES

Fees for non-credit continuing education courses vary with the length and nature of the individual course. Specific fees and additional information may be found in the course description section of the catalog.

SPECIAL SERVICE FEES

Credit by Examination
- Local Examinations (per examination) ........................................ $15.00
- CLEP General Examinations (one only) ..................................... 15.00
- CLEP General Examinations (two or more) .................................. 30.00
- CLEP Subject Examination (per examination) ............................ 15.00

Edward's Personal Preference Schedule ..................................... 1.50
Strong Vocational Interest Blank ............................................. 1.50
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
- Duplicate Transcript Fee ................................................... 1.00
- Graduation Fee (non-refundable) includes cap and gown when required .................................. 10.00
- Rental of band and orchestral instruments (per session) ............ 5.00
- Child Development Program food fee per child (per month) .......... 7.00

REFUND POLICY

If a student finds it necessary to withdraw from the college, the Dean of Student Affairs must be notified immediately. The amount of the refund will be based on the date of official withdrawal. Then, upon a written request, fees will be refunded as follows:
A. Sessions I & II

Within ten (10) school days of the beginning of the session ........................................ 75%
Within twenty (20) school days of the beginning of the session ........................................ 40%
Withdrawal after the deadline date as stated in the current calendar and catalog .................. NONE

B. Sessions IIIA & IIIB

Within five (5) school days of the beginning of the session ........................................ 75%
Within ten (10) school days of the beginning of the session ........................................ 40%
Withdrawal after the deadline date as stated in the current calendar and catalog .................. NONE

C. Full refunds will be made for courses cancelled by the college.

D. Refunds for part-time students will be on a basis commensurate with those listed for full-time students.

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 bona fide 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 sys-
tem 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 SERVICES

BOOKSTORE

The college Bookstore has general school supplies and textbooks available for sale to students. New hardback and paperback textbooks are sold at the publisher's list price and secondhand books are sold at 70% of the list price.

The store will accept and place special orders for any book not common to its current stock. Payment for all special orders must be made in advance.

The college Bookstore will buy back from students those titles firmly adopted for future use at this college. At the end of each session a nationally recognized jobber will be on campus to buy back those titles dropped from use on this campus.

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 in making decisions in personal matters, academic majors, or career choices. Counseling may involve exploring alternative courses of action, assessing skills and abilities, clarifying values, experiencing the decision-making process, or choosing realistic career goals.

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. A short order service will provide snacks for those desiring these items. A vending room is available for those desiring immediate service from machines. Food service is available from at least one of these areas from 7:00 a.m. to 10:00 p.m.

HEALTH SERVICES

The Valencia Community College Health Services Office is staffed by a registered nurse under the direction of a consulting physician. The major areas of concern are health education and counseling, first aid, and referrals to health agencies. A limited supply of oral medications is available. This medication is primarily available for a one-time dose to relieve minor symptoms, or until the student can be seen by his physician.

In case of a serious emergency, a student's local guardian will be contacted. If he is not available, the student will be seen at 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.

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 three types of placement:

1. Full-time job placement
2. Part-time job placement
3. Placement in a four-year university or college.

Applications for part- or full-time employment can be filed by currently enrolled students as well as graduates of Valencia Community College.

The Placement Office, in cooperation with the Counseling Department, is available to assist students in the transfer process to a four-year college or university.

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.
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 DEVELOPMENTAL LABORATORIES

Student developmental laboratories conducted by the various academic departments are scheduled in each session. Students needing help in study skills and learning techniques may attend on a voluntary basis. Laboratories are designed with flexible content to meet the realistic needs of individual students.

STUDENT INSURANCE

A group accident and sickness insurance plan is available to students at the time of registration. At other times, the insurance plan may be purchased through the Health Services Office.

TESTING

Guidance Test Information

Degree-seeking students who are entering Valencia Community College for the first time are required to submit scores on the Florida Twelfth Grade Placement Test. Out-of-state students may provide the college with scores on other nationally recognized entrance exams such as those given by American College Testing or the College Entrance Examination Board. Students who do not submit scores on these tests will be required to take the School and College Ability Test and the Nelson-Denny Reading Test, administered free of charge at the college.

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

The Counseling Office also makes available the Edwards Personal Preference Schedule, the Strong Vocational Interest Blank, and the General Aptitude Test Battery for students who wish to take advantage of these services.

CREDIT BY EXAMINATION

College Level Examination Program (CLEP)

Students enrolling at Valencia Community College may gain credit in certain specified courses through examinations of the College Level Examina-
tion Program (CLEP), administered by the Educational Testing Services (ETS) for the College Entrance Examination Board (CEEB). These courses are so designated in the course description section in the college catalog. CLEP General Examinations and CLEP Subject Examinations may be taken at Valencia upon application to the Counseling and Testing Specialist, or at any of the CLEP Test Centers. Valencia Community College offers examinations during the third week of each month. Deadline for application is two weeks before the test date.

Valencia Community College will accept a maximum of forty-five (45) semester hours of credit through CLEP, both General and Subject examinations combined. The maximum credit awarded through the General examinations is twenty-seven (27) semester hours.

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.

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 is applicable to an Associate in Science Degree only and may not be acceptable for transfer to other institutions.

Applications for local examinations should be obtained from the department offering the CE course. Signature of the department chairman is necessary.

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.

Fees

Career CE Tests .................................................. $15.00 (each)
*College Level Examination Program (CLEP)
  Subject Exams .................................................. $15.00 (each)
  General Exams .................................................. $15.00 (for one only)
  General Exams .................................................. $30.00 (for two or more)
Strong Vocational Interest Inventory ........................................ $1.50
Edwards Personal Preference Schedule ....................................... $1.50
SCAT and Nelson-Denny Reading Test ...................................... Free
General Aptitude Test Battery ........................................... Free

* For CLEP examinations make check payable to College Entrance Examination Board.

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 the Director of Admissions and Registrar.

The first transcript requested will be sent free of charge; additional transcripts will cost one dollar ($1.00) each.

VETERANS

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

Veterans and dependents of deceased veterans who plan to attend under any of these programs should contact their area Veterans Administration office. The Certificate of Eligibility should be turned in to the Financial Aids Office as soon as it is received. Students planning to receive veterans benefits are required to contact the college Financial Aids Office at the beginning of each session of enrollment. Veterans and veterans’ dependents are required to pay all regular fees and charges at time of registration. Educational allowances are paid by the Veterans Administration directly to the student.

Payment of benefits is based on class attendance. Veterans are expected to attend all classes for which they are enrolled except in cases of illness or emergency. Failure to do so may result in loss of benefits. 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. ATTEND CLASS REGULARLY.
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 academic or special talent or are in financial need. The Office of Financial Aid 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 singly or as a package combining a loan, grant, scholarship or work opportunity to those who qualify.

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 including Educational Opportunity Grant, college scholarships, Florida Student Loans, and the College Work-Study Programs, and should be submitted as soon after the first of November as possible.

The following steps are necessary for application:

1. File the Valencia Community College Financial Aid Application with the Office of Financial Aid. Application forms are available through the Office of Financial Aid. Note: The application for admission and the application for financial aid are not the same.

2. Have parents complete a Parents' Confidential Statement (obtained from high school counselor or the Office of Financial Aid) and mail directly to College Scholarship Service by July 31 as directed on the form.

If applicant's parents have neither claimed him for income tax nor supported him for the previous academic year, he may have his parents complete a Parents' Release Statement which may be obtained at the Office of Financial Aid. The applicant himself must then file a Student Confidential Statement with the College Scholarship Service. Student Confidential Statement forms are available from the Office of Financial Aid. NOTE: Marriage does not exempt a student from requirement 2.
Aid may be renewed only within the limits of available resources. It is necessary for recipients to reapply annually before July 31 in order to be considered for continued assistance.

TYPES OF AID

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 up to $1500 per academic year.

Law Enforcement Education Program Loan – A program to provide assistance to individuals who are in Law Enforcement or plan to enter the field of Law Enforcement or a field directly related to Law Enforcement. Preference will be given to state and local in-service personnel enrolled full-time. Loans up to $1800 per academic year are available.

Florida Student Loan – A student who has been a legal resident of Florida for the past year, is taking twelve (12) academic hours or more for credit, and has at least a 2.0 average for the previous session, is eligible for consideration. This loan is issued in amounts up to $1800. Repayment begins six (6) months after graduation with Bachelor’s degree or termination of full-time college attendance whichever comes first. Loan notes bear interest at 4% per year beginning six (6) months following graduation or termination of full-time attendance.

Florida Insured Student Loan Program – A program to provide a federal guarantee of a loan arranged with the State of Florida up to $1500 per academic year.

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

1. grade point average of 1.5 or better for the previous session
2. repayment within four (4) months from date of loan
3. a co-signer is required if the loan is for more than $50.

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

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 Aid acts as the administering agency. The Financial Aid Office maintains a register of non-
institutional scholarships and private loan programs to which students apply directly.

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, reader’s theater, publication editors, operation 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 Scholarship Committee.

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

GRANTS

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, fees and books.

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.

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

Basic Educational Opportunity Grants — Every student is entitled to $1400 minus the expected family contribution, but not to exceed one-half of the cost of attendance.

Applications are available in the Financial Aid 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, 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 April 1st.

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, a U.S. citizen, be of 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 Aid.

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 $2.00 an hour paid in accordance with 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 Aid.

Institutional Work-Study — Each year a number of students are employed on campus in administrative and departmental offices, library 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.

Regular Part-Time Employment — Some regular part-time employment opportunities are coordinated through the Office of Financial Aid and the National Alliance of Businessmen. Students may obtain applications from the Office of Financial Aid.

Job Opportunities — Many students at Valencia Community College find it necessary to hold part or full-time jobs while attending college. Specific information on job requirements and opportunities may be obtained by contacting the Office of Financial Aid.

TUTORIAL ASSISTANCE

Tutorial assistance is available from four sources:

1. Phi Theta Kappa, Valencia honor fraternity, offers tutorial service to any student who has the need for such service. A student may obtain further information about Phi Theta Kappa tutoring from the organization president or from Financial Aids Office.
2. Each academic department chairman at Valencia Community College has submitted a list of student tutors who have been approved for tutoring in his department. The maximum fee for these services has been set at $2.50 per hour. Students should contact the Financial Aids Office.

3. Under Chapters 31 and 35, Veterans Administration Tutorial Service Benefits, a veteran or eligible dependent is entitled to nine (9) months of tutorial assistance at $50.00 per month throughout his normal college career. Application for this program must be made through the Financial Aids Office. Tutors for this will be faculty members or other qualified educators. The rate of pay will be $10.00 per hour.

4. Students under Chapter 34 of the Veterans Administration Rehabilitation Program can acquire tutorial assistance by obtaining approval from their Veterans Administration Counselor working with the Valencia Financial Aids Office. Tutors for this program will be faculty members or other qualified educators. The rate of pay will be $10.00 per hour.

VALENCIA COMMUNITY COLLEGE SCHOLARSHIPS

American Business Women's Association - Action Chapter
American Business Women's Association - City Beautiful Chapter
American Business Women's Association - Futura Chapter
American Legion Post 80
Arms Academy
Bekins Scholarship Foundation
Boise Cascade Corporation Foundation, Inc.
Boy Scouts of America
John H. Burrows Scholarship Fund
The Campbell Foundation
Central Florida Chapter, Florida Engineering Society
Delta Kappa Gamma Society
Florida Association of Legal Secretaries
Florida Restaurant Education Foundation
John Harland Company Foundation, Atlanta, Georgia
Junior Achievement of Orange County
Kiwanis Club of West Orange
Arno Kollmer Scholarship
National Secretaries Association, Orlando Chapter
National Society, Daughters of the American Revolution
Miriam Neubeck Memorial Fund - Nursing Scholarship
McCroy Corporation Scholarship
Orange County Association of Educational Secretaries
Orange County East Rotary Club
W.H. Payne Scholarship
P.E.O. Educational Fund
Seminole South Rotary
Sigma Alpha Iota, Orlando Alumnae Chapter
Society of the First Division Foundation
St. Cloud Athletic Association, Inc.
Student Nurses Scholarship Fund of Valencia Community College
United Daughters of Confederacy Scholarship
West Orange Junior Service League, Winter Garden
West Orlando Rotary Scholarship
Lily White Security Benefit Association Scholarship
Winn-Dixie Stores Scholarship
Winter Park Firemen's Club Scholarship
Daniel P. Wish Memorial Nursing Scholarship
Zonta International Scholarship

ACTIVE SHORT-TERM LOAN FUNDS

Alpha Delta Kappa Honorary Educational Sorority, Kappa Chapter Orlando
Apopka Woman's Club
Black Student Union, Valencia Community College
Catholic Social Services
The Linda Cisler Memorial Loan Fund
Delta Beta Pi Fraternity, Delta Chapter
East Orange County Rotary Club
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. VanDeventer, Sr., Fund of the Grace Covenant Presbyterian Church of Orlando
West Orlando Rotary Club
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

DEAN’S HONOR LIST – In recognition of scholastic achievement, full-time 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 during Session I or II 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 with a minimum of twelve (12) hours of course work at the 100 or 200 level will be recognized when they have completed requirements for sophomore status and again at graduation.

PRESIDENT’S HONOR LIST – In recognition of scholastic achievement, full-time 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 during Session I or II 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 with a minimum of twelve (12) hours of course work at the 100 or 200 level will be recognized when they have completed requirements for sophomore status and again at graduation.

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 beginning 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 the Director of Admissions and Registrar 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 the Director of Admissions and Registrar 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 Sessions I or II and six (6) or more semester hours in Sessions IIIA or IIIB.

Part-time — A student enrolled for less than twelve (12) semester hours in Sessions I or II and less than six (6) semester hours in Sessions 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 Director of Admissions and 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 is 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 Director of Admissions and Registrar.

**DUAL ENROLLMENT**

A student enrolled at Valencia Community College may not earn college credit at another institution during the same session, except with transient permission from the office of the Director of Admissions and Registrar of Valencia Community College.

**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. Valencia Community College provides educational opportunities in the evenings and on weekends at more than twenty-five differ-
ent locations throughout the greater Orlando area. This allows the serviceman to attend college at other than normal working hours.

3. 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.

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

5. A professional Valencia Community College servicemen’s counselor is available on campus and at the Orlando Naval Training Center at certain specified times. (Contact the Educational Services Officer at the Naval Training Center or VCC’s Financial Aids Office for dates and times.)

6. 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.

**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 Dean of Student Affairs 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>Academic</th>
<th>Hours</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>3</td>
<td>C</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PL 152</td>
<td>3</td>
<td>D</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>
</tr>
<tr>
<td>HY 181</td>
<td>3</td>
<td>F</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>BY 151</td>
<td>3</td>
<td>B</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>BA 171</td>
<td>3</td>
<td>W</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

15

30

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.

PROGRESS GRADES

A progress report in all subjects for all students will be mailed by the Admissions Office during the ninth week of Sessions I and II. This will be the only academic progress report made until the end of the session. There will be no progress report made in Sessions IIIA and IIIB.
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 — The President of Valencia or his authorized representative shall have the authority to suspend or expel a student who shall be found to have committed any of the acts listed above after notice to the student of the charges and a hearing thereon. Hearings shall be conducted by the President or an officer or committee appointed by him. 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 Dean of Student Affairs. He 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 RIGHTS 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. This committee is chaired by a representative of the teaching faculty and includes the Director of Student Services, Director of Admissions and Registrar, a representative of the counseling staff, and two students.

*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, and must be made by him within ten (10) working days of the recommendations by the committee. A copy of the committee’s recommendation shall be sent to the President, to the Dean of Student Affairs, 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. Procedures are listed in the Student Handbook.

**TRANSIENT STUDENTS**

A student may wish to take a course or courses 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 Director of Admissions and Registrar. 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 the Director of Admissions and Registrar.

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 the Director of Admissions and Registrar. 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 the Director of Admissions and Registrar.

B. Obtain signatures of the Director of Library Services, Dean of Financial Affairs, Dean of Student Affairs, and the Director of Financial Aids.

C. Turn in I.D. card to Director of Admissions and Registrar.

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 in 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. The suggested courses of study for students planning to pursue a Bachelors Degree meet the requirements for the Associate in Arts Degree and include the electives generally recommended for certain majors at most of the state universities. The suggested programs may be obtained from the Counseling Office. 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 college write to the Registrar of that college for information concerning work to be taken at Valencia Community College.

Counselors are available in the Office of Student Affairs to assist students in planning courses of study. Final responsibility for choice of program and courses selected rests with the student.

Students should be aware that courses numbered lower than 100 ordinarily do not transfer. Courses designated as Associate in Science Degree courses may or may not transfer, depending upon the major field and the institution selected. “D” grades may or may not transfer depending on the policies of the receiving institution.

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 students should plan ahead to enroll in courses when they are offered.

Listed below are some of the University Parallel Programs offered at Valencia Community College. Others may also be available.

University Parallel Programs

<table>
<thead>
<tr>
<th>Accounting</th>
<th>Health &amp; Physical Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>History</td>
</tr>
<tr>
<td>Allied Health Sciences</td>
<td>Home Economics</td>
</tr>
</tbody>
</table>
Architecture
Art
Astronomy
Biology (Botany, Zoology, Microbiology)
Building Construction
Business Administration
Chemistry
Computer Science
Criminology
Dental
Drama
Economics
Education
Engineering
Engineering Design Technology
Engineering Technology
English
Forestry
French
Geology
German
Humanities
Journalism
Landscape Architecture
Law
Library Science
Mathematics
Medicine
Meteorology
Music
Nursing
Oceanography
Optometry
Pharmacy
Physics
Political Science
Psychology
Sociology & Social Work
Spanish
Speech
Statistics
Veterinary Medicine

NOTE: The above list is not intended to be exhaustive. The first two years of most parallel programs are available at Valencia. Complete suggested programs may be obtained from the Counseling Office.

HONORS,
INDEPENDENT AND DIRECTED STUDIES COURSES

Valencia Community College offers a variety of specialized courses designed to meet the wide variety of talents, abilities and needs of its students. These courses are offered through the specific departments and are designed and described below:

A. HONORS COURSES – Valencia Community College offers honors courses to provide talented students with a college environment designed to help them achieve their greatest potential. The various honors courses offer additional stimulation and higher cultural rewards in a program whose objective is enrichment, not acceleration, and whose focus is on the individual student and his unique interests and abilities. The courses are of sufficient breadth to make the student conscious of the interrelatedness of systems of knowledge and of the complexity of relationships between disciplines.

B. 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. Inde-
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 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, counselors 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.

C. DIRECTED STUDIES COURSES -- Valencia Community College offers some specialized courses for students who have one or more weaknesses in their preparation for college level academic work. The Directed Studies courses consist of both special courses and voluntary laboratories.

Directed Studies courses are designed to develop skills in various academic areas and are considered prerequisites for students whose academic record indicates that they have not met prerequisite requirements for basic freshman level courses. Students are counseled into all or part of the Directed Studies courses on the basis of an evaluation of former school work, scores on the Florida Twelfth Grade Tests, and/or the results of guidance tests administered at Valencia Community College. Directed Studies courses are numbered below 100 and are not applicable toward an Associate in Arts degree. In some instances, a Directed Studies course may be combined with a freshman level course in a six (6) hour block. In such cases the Directed Studies course is considered a co-requisite and the student may earn three (3) institutional and three (3) transfer credits.

The Directed Studies courses consist of the following:

RG 90-91        Reading
MS 61           Introductory Mathematics
EH 51-151       Freshman Composition and
                Directed Studies Laboratory
PL 51-151       American Government I
                and Directed Studies Laboratory
EH 52-152       Freshman Composition
                and Directed Studies Laboratory
PL 52-152       American Government II and
                Directed Studies Laboratory
**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 PROGRAM**

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.

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 reveals 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.

Students are given the opportunity to assess the goals which reflect a total look at themselves in terms of abilities, personality and necessary future training. 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, reading, comprehension, grammatical structure and usage. Students are also encouraged to use the Reading, Writing, and Mathematics laboratories for further help in achieving skills success. Further attention is focused on cultural growth and enrichment opportunities.

### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS 40</td>
<td>Basic Studies Seminar</td>
<td>3</td>
</tr>
<tr>
<td>EI 51-151</td>
<td>Directed Studies Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Freshman Composition</td>
<td>6</td>
</tr>
<tr>
<td>SP 100</td>
<td>Speech Improvement</td>
<td>3</td>
</tr>
<tr>
<td>RG 90</td>
<td>Reading</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
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**Total: 18**

### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
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<tbody>
<tr>
<td>BS 41</td>
<td>Basic Studies Seminar</td>
<td>3</td>
</tr>
<tr>
<td>EI 52-152</td>
<td>Directed Studies Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Freshman Composition</td>
<td>6</td>
</tr>
<tr>
<td>RG 91</td>
<td>Reading</td>
<td>3</td>
</tr>
<tr>
<td>Elective(s)</td>
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**Total: 15 (18)**
Approved Electives

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<th>Code</th>
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<th>Credits</th>
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<tr>
<td>AT 151</td>
<td>Drawing I</td>
<td>3</td>
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<tr>
<td>AT 152</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>AT 155</td>
<td>Introduction to Drawing and Painting</td>
<td>3</td>
</tr>
<tr>
<td>AT 175</td>
<td>The Visual Arts Today</td>
<td>3</td>
</tr>
<tr>
<td>AT 202</td>
<td>Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>AT 203</td>
<td>Printmaking</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>JM 103</td>
<td>College Newspaper</td>
<td>1</td>
</tr>
<tr>
<td>JM 113</td>
<td>College Magazine</td>
<td>1</td>
</tr>
<tr>
<td>PE 151</td>
<td>Beginning Bowling</td>
<td>1</td>
</tr>
<tr>
<td>PE 152</td>
<td>Beginning Golf</td>
<td>1</td>
</tr>
<tr>
<td>PE 153</td>
<td>Beginning Archery</td>
<td>1</td>
</tr>
<tr>
<td>PE 154</td>
<td>Beginning Tennis</td>
<td>1</td>
</tr>
<tr>
<td>PE 155</td>
<td>Individual Conditioning for Men</td>
<td>1</td>
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<tr>
<td>PE 156</td>
<td>Slimnastics and Individual Conditioning</td>
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<td></td>
<td>for Women</td>
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<tr>
<td>PE 157</td>
<td>Tumbling and Gymnastics</td>
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<tr>
<td>PE 175</td>
<td>Senior Life Saving</td>
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<tr>
<td>PL 51-151</td>
<td>American Government</td>
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<td>PL 52-152</td>
<td>American Government</td>
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<tr>
<td>MC 155</td>
<td>Class Voice I</td>
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<tr>
<td>MC 156</td>
<td>Class Voice II</td>
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<tr>
<td>MC 163</td>
<td>Applied Music (Private Instruction)</td>
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<tr>
<td>MC 166</td>
<td>Applied Music (Private Instruction)</td>
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<tr>
<td>MC 170</td>
<td>College Choir</td>
<td>1</td>
</tr>
<tr>
<td>MC 184</td>
<td>Brass Choir</td>
<td>1</td>
</tr>
<tr>
<td>MC 185</td>
<td>College Band</td>
<td>1</td>
</tr>
<tr>
<td>MC 190</td>
<td>Men's Chorale</td>
<td>1</td>
</tr>
<tr>
<td>MC 191</td>
<td>Music Appreciation</td>
<td>1</td>
</tr>
<tr>
<td>MC 195</td>
<td>Women's Chorale</td>
<td>1</td>
</tr>
<tr>
<td>MC 200</td>
<td>Valencia Singers</td>
<td>1</td>
</tr>
<tr>
<td>MS 61</td>
<td>Introductory Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

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 the following Physical Education courses: PE-151, 152, 153, 154, 155, 156, 157, 160, 161, 162, 163 and 175.

NOTE: CAREER COURSES DESIGNATED BY A "C" 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. Satisfactory completion of the general education program.

3. Earn an overall grade-point average of 2.0 (C) on applicable college credit courses. Regardless of the receipt of a degree, a "D" grade used to satisfy degree requirements may or may not transfer, subject to the regulations of the college or university which the student plans to enter. Transferred quality point deficiencies will be included in the computation of grade-point requirements for graduation. No student will be graduated who has less than a "C" average on all applicable work attempted at Valencia Community College.

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.

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

Students who qualify for both the Associate in Arts and the Associate in Science degrees will be awarded the Associate in Arts Degree.

A student in an Associate in Arts Degree Program must satisfy the provisions of the statewide Articulation Agreement adopted by the State Board of Education on April 13, 1971. However it is recognized that there are students in progress toward an Associate in Arts Degree and that the requirements at the time of their entry may not meet the requirements of the Articulation Agreement. Therefore, Valencia Community College is authorized to issue Associate in Arts Degrees based on previous catalog commitments through August 31, 1972.

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 on a 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:*

Six semester hours including EH 151 Freshman Composition, EH 152 Freshman Composition, and/or EH 260 Advanced Composition.

*Elective Courses:*

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 175</td>
<td>The Visual Arts Today</td>
<td>3 semester</td>
</tr>
<tr>
<td>AT 271-272</td>
<td>Introduction to Art History I and II</td>
<td>3 semester</td>
</tr>
</tbody>
</table>

*English*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 250</td>
<td>Introduction to Literature</td>
<td>3 semester</td>
</tr>
<tr>
<td>EH 251-252</td>
<td>English Literature – 3 semester hours each</td>
<td>3 semester</td>
</tr>
<tr>
<td>EH 253-254</td>
<td>American Literature – 3 semester hours each</td>
<td>3 semester</td>
</tr>
<tr>
<td>EH 256</td>
<td>Contemporary Literature</td>
<td>3 semester</td>
</tr>
<tr>
<td>EH 268-269</td>
<td>World Literature – 3 semester hours each</td>
<td>3 semester</td>
</tr>
</tbody>
</table>

*Humanities*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 151</td>
<td>Humanities in a Technological Society</td>
<td>3 semester</td>
</tr>
</tbody>
</table>

*Music*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC 191</td>
<td>Music Appreciation</td>
<td>3 semester</td>
</tr>
<tr>
<td>MC 250</td>
<td>Music History I</td>
<td>3 semester</td>
</tr>
<tr>
<td>MC 251</td>
<td>Music History II</td>
<td>3 semester</td>
</tr>
</tbody>
</table>

*Philosophy*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI 251</td>
<td>Philosophy</td>
<td>3 semester</td>
</tr>
</tbody>
</table>

*Religion*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 261</td>
<td>Understanding Religious Man</td>
<td>3 semester</td>
</tr>
</tbody>
</table>
### Area 3. Mathematics (a minimum of 3 semester hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 151</td>
<td>College Mathematics</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>MS 152</td>
<td>Advanced College Mathematics</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>MS 170</td>
<td>College Algebra</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>MS 171</td>
<td>College Trigonometry</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>MS 173</td>
<td>College Algebra and Trigonometry</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>MS 251-252</td>
<td>Calculus with Analytic Geometry</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>MS 255</td>
<td>Elementary Statistics</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>MS 261</td>
<td>Linear Algebra</td>
<td>3 semester hours</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BY 151-152</td>
<td>Biological Sciences</td>
<td>3 semester hours each</td>
</tr>
<tr>
<td>BY 172</td>
<td>Fundamentals of Biology</td>
<td>4 semester hours</td>
</tr>
<tr>
<td>BY 251</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>BY 255-256</td>
<td>Human Anatomy and Physiology</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>BY 261</td>
<td>Zoology 1</td>
<td>4 semester hours</td>
</tr>
<tr>
<td>BY 262</td>
<td>Botany</td>
<td>4 semester hours</td>
</tr>
<tr>
<td>BY 263</td>
<td>General Zoology II</td>
<td>4 semester hours</td>
</tr>
<tr>
<td>BY 265</td>
<td>Aquatic Biology</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>BY 280</td>
<td>Microbiology</td>
<td>4 semester hours</td>
</tr>
<tr>
<td>BY 285-286</td>
<td>Seminars in Selected Biological Topics</td>
<td>1 semester hour each</td>
</tr>
<tr>
<td>CY 155</td>
<td>Introductory Chemistry</td>
<td>4 semester hours</td>
</tr>
<tr>
<td>CY 156</td>
<td>Chemical Calculations</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>CY 160</td>
<td>Introduction to Inorganic and Biochemistry</td>
<td>4 semester hours</td>
</tr>
<tr>
<td>CY 171-172</td>
<td>General Chemistry and Qualitative Analysis</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>CY 265-266</td>
<td>Organic Chemistry</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>CY 290</td>
<td>Seminar: Special Topics in Chemistry</td>
<td>1 semester hour each</td>
</tr>
<tr>
<td>GL 202</td>
<td>Historical Geology</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PS 191</td>
<td>The Ecology of Physical Science</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PS 192</td>
<td>Earth Sciences</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PS 194</td>
<td>Elementary Astronomy</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PH 151-152</td>
<td>Basic Physics</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>PH 156</td>
<td>Physics Calculations</td>
<td>2 semester hours</td>
</tr>
<tr>
<td>PH 161-162</td>
<td>Introductory Physics</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>PH 261-262</td>
<td>General Physics with Calculus</td>
<td>4 semester hours each</td>
</tr>
<tr>
<td>PH 270</td>
<td>Modern Physics</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PH 290</td>
<td>Seminar: Special Topics in Physics</td>
<td>1 semester hour each</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>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL 151 or 153</td>
<td>American Government I</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PL 152 or 154</td>
<td>American Government II</td>
<td>3 semester hours</td>
</tr>
</tbody>
</table>

**Elective Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AY 201</td>
<td>Introduction to Anthropology</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>ES 151</td>
<td>Basic Economics</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>ES 261-262</td>
<td>Principles of Economics I &amp; II</td>
<td>3 semester hours each</td>
</tr>
<tr>
<td>GY 151</td>
<td>World Geography</td>
<td>3 semester hours</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>HY 181-182</td>
<td>Western Civilization</td>
<td>3 semester hours each</td>
</tr>
<tr>
<td>HY 251-252</td>
<td>United States History</td>
<td>3 semester hours each</td>
</tr>
<tr>
<td>HY 253</td>
<td>History of Florida</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>HY 261</td>
<td>Afro-American History and Culture</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>HY 270</td>
<td>Recent and Contemporary History</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PL 252</td>
<td>State and Local Government</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PL 255</td>
<td>International Politics</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PY 152</td>
<td>Honors Course in General Psychology</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PY 260</td>
<td>Psychology of Childhood and Youth</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>SL 152</td>
<td>Man and Environment II</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>SY 261</td>
<td>Introductory Sociology</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>SY 265</td>
<td>Contemporary American Problems</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>SY 271</td>
<td>Marriage and the Family</td>
<td>3 semester hours</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>BA 175</td>
<td>Introduction to Business</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>EH 259</td>
<td>Introduction to Film</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>EN 150</td>
<td>Orientation to Education</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>EN 290</td>
<td>Field Experience in Education</td>
<td>1 semester hour each</td>
</tr>
<tr>
<td>HH 150</td>
<td>Personal and Community Health</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>LC 151</td>
<td>Practical Logic</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>MS 161</td>
<td>Modern Computational Methods</td>
<td>2 semester hours</td>
</tr>
<tr>
<td>PI 261</td>
<td>Ethics</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PL 290</td>
<td>Seminar: Selected Topics in Political Science</td>
<td>1 semester hour each</td>
</tr>
<tr>
<td>PY 201</td>
<td>Educational Psychology</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>PY 290</td>
<td>Seminar: Selected Topics in Psychology</td>
<td>1 semester hour each</td>
</tr>
<tr>
<td>SL 290</td>
<td>Field Experience in Social Sciences</td>
<td>1 semester hour each</td>
</tr>
<tr>
<td>SP 151-152</td>
<td>Introduction to the Theatre</td>
<td>3 semester hours</td>
</tr>
<tr>
<td>SP 166</td>
<td>Public Speaking</td>
<td>3 semester hours</td>
</tr>
</tbody>
</table>
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. All career courses are conducted at the college level.

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. Satisfactory completion of a prescribed course of study in one of the career programs.

2. Earn an overall grade-point average of 2.0 (C) on all college credit courses. Regardless of the receipt of a degree, a “D” grade used to satisfy degree requirements may or may not transfer, subject to the regulations of the college or university which the student
plans to enter. Transferred quality point deficiencies will be included in the computation of grade-point requirements for graduation. No student will be granted a degree who has less than a "C" average on all applicable work attempted at Valencia Community College.

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 Clerical Certificate, Fire Technology and Law Enforcement programs. These certificates are available for those students who complete the required courses as outlined in the specific program listed in the catalog.
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>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 or College Algebra</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 101</td>
<td>Heating and Ventilation</td>
<td>3</td>
</tr>
<tr>
<td>MS 138/171</td>
<td>Technical Math II or College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>PH 151/161</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>Principles of Refrigeration, Cycles and Equipment</td>
<td>4</td>
</tr>
<tr>
<td>AC 112</td>
<td>Principles of Air Conditioning Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

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Session III-A or III-B

AC 201   Cooperative Placement in Industry       3

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>ML 202</td>
<td>Machine Shop and Welding Practice</td>
<td>2</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>Commercial and Industrial Refrigeration Systems</td>
<td>3</td>
</tr>
<tr>
<td>AC 214</td>
<td>Control Systems for Air Conditioning</td>
<td>3</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>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>AC 222</td>
<td>Air Distribution and Layout</td>
<td>2</td>
</tr>
<tr>
<td>AC 244</td>
<td>Refrigeration Equipment for Air Conditioning Systems</td>
<td>3</td>
</tr>
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</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.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
ARCHITECTURAL AND BUILDING CONSTRUCTION
TECHNOLOGY

This program is designed to train technicians capable of working with architects, engineers, scientists, contractors and others in the total occupational cluster. Instruction in this program provides a balanced curriculum in theory and practical laboratory situations.

<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></td>
<td>3</td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Human Relations in Business &amp; Industry</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AL 191</td>
<td>Building Materials &amp; Construction Methods</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EG 151</td>
<td>Engineering Drawing</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MS 138/171</td>
<td>Technical Mathematics II/College Trigonometry</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communications</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PH 151/161</td>
<td>Basic Physics I/Introductory Physics I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>AL 192</td>
<td>Construction Planning &amp; Control</td>
<td></td>
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</tr>
<tr>
<td>AL 102</td>
<td>Architectural Drawing &amp; Model Building (Wood-Frame)</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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</thead>
<tbody>
<tr>
<td>AL 291</td>
<td>Statics &amp; Strength of Materials</td>
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<tr>
<td>PH 152/162</td>
<td>Basic Physics II/Introductory Physics II</td>
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<tr>
<td>AL 292</td>
<td>Building Service Systems</td>
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<tr>
<td></td>
<td>(Mechanical &amp; Electrical)</td>
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<tr>
<td>AL 201</td>
<td>Architectural Drawing (Steel)</td>
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<td>3</td>
</tr>
<tr>
<td>CV 192</td>
<td>Surveying &amp; Measurements</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>DP 105</td>
<td>Fortran Programming</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AL 294</td>
<td>Contracts, Codes, Specifications &amp; Office Practices</td>
<td></td>
<td>2</td>
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<tr>
<td>AL 295</td>
<td>Building Construction Estimating</td>
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<tr>
<td>AL 202</td>
<td>Architectural Drawing (Concrete)</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 1972-73.
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 137/170</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>AS 150</td>
<td>Engines</td>
<td>3</td>
</tr>
<tr>
<td>AS 160</td>
<td>Electricity</td>
<td>3</td>
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<tr>
<td>AS 180</td>
<td>Service Orientation &amp; Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MS 138/171</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>
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<tr>
<td>AS 165</td>
<td>Cranking and Charging Systems</td>
<td>2</td>
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<tr>
<td>AS 170</td>
<td>Auto Accessories</td>
<td>3</td>
</tr>
<tr>
<td>AS 185</td>
<td>Service Management I</td>
<td>2</td>
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<tr>
<td>AS 190</td>
<td>Suspension and Brakes I</td>
<td>2</td>
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**Session III-A or III-B**

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<th>Course</th>
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<tbody>
<tr>
<td>AS 201</td>
<td>Cooperative Placement in Industry</td>
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### Sophomore Year

<table>
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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>Human Relations in Business and Industry</td>
<td>3</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>AS 275</td>
<td>Transmission and Drive Lines</td>
<td>3</td>
</tr>
<tr>
<td>AS 285</td>
<td>Service Management II</td>
<td>3</td>
</tr>
<tr>
<td>AS 290</td>
<td>Suspension and Brakes II</td>
<td>2</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>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>2</td>
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<tr>
<td>AS 280</td>
<td>Air Conditioning</td>
<td>3</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.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
BANKING AND CONSUMER FINANCE

(Beginning in September, 1974)

Details of this program will be available in later editions of the catalog
and through the Counseling Office.
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>
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<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>
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<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
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<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>
</tr>
<tr>
<td>PY 161</td>
<td>Human Relations in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
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<td></td>
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<td></td>
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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>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>
</tr>
<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>
<tr>
<td></td>
<td></td>
<td><strong>27</strong></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.
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.

### 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>CT 105</td>
<td>Art for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CT 101</td>
<td>Child Development and Management</td>
<td>3</td>
</tr>
<tr>
<td>CT 102</td>
<td>Observing and Recording Child Behavior</td>
<td>4</td>
</tr>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>HH 165</td>
<td>First Aid and Safety</td>
<td>2</td>
</tr>
<tr>
<td>CT 106</td>
<td>Supervised Student Participation</td>
<td>4</td>
</tr>
<tr>
<td>CT 109</td>
<td>Music for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CT 107</td>
<td>Literature for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CT 116</td>
<td>Curriculum for the Young Child</td>
<td>3</td>
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</tbody>
</table>

**Total:** 31

### Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>CT 110</td>
<td>Principles of Pre-School Education</td>
<td>3</td>
</tr>
<tr>
<td>CT 103</td>
<td>Food for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CT 206</td>
<td>Supervised Student Participation</td>
<td>4</td>
</tr>
<tr>
<td>CT 115</td>
<td>Movement Exploration</td>
<td>3</td>
</tr>
<tr>
<td>CT 210</td>
<td>Advanced Child Development and Management</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>SY 261</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>CT 211</td>
<td>Seminar in Child Development</td>
<td>2</td>
</tr>
<tr>
<td>HS 151</td>
<td>Humanities in a Technological Society</td>
<td>3</td>
</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>Elective</td>
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</table>

**Total:** 33

**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.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
CIVIL TECHNOLOGY – HIGHWAY OPTION

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 numerous other areas within 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>MS 137/170</td>
<td>Technical Mathematics I/ College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>PH 151/161</td>
<td>Basic Physics I/Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CV 191</td>
<td>Materials (Chemistry &amp; Properties)</td>
<td>3</td>
</tr>
<tr>
<td>EG 151</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>MS 138/171</td>
<td>Tech. Math II/College Trigonometry</td>
<td>3</td>
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<tr>
<td>PH 152/162</td>
<td>Basic Physics II/Introductory Physics II</td>
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<tr>
<td>CV 192</td>
<td>Surveying &amp; Measurements</td>
<td>3</td>
</tr>
<tr>
<td>CV 193</td>
<td>Mechanics (Statics &amp; Dynamics)</td>
<td>4</td>
</tr>
<tr>
<td>CV 102</td>
<td>Construction Methods &amp; Equipment</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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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>EH 157</td>
<td>Technical Communications</td>
<td>3</td>
</tr>
<tr>
<td>CV 291</td>
<td>Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>DP 105</td>
<td>Fortran Programming</td>
<td>3</td>
</tr>
<tr>
<td>CV 292</td>
<td>Photogrammetry</td>
<td>2</td>
</tr>
<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>Road Design &amp; Construction</td>
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<tr>
<td>CV 297</td>
<td>Reinforced Concrete Construction</td>
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<tr>
<td>CV 298</td>
<td>Hydraulics &amp; Drainage, Sewage &amp; Sewers</td>
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<tr>
<td><strong>Total</strong></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.
REQUIRED PROGRAM LEADING TO A
CLERICAL CERTIFICATE

This is a one-year terminal course. It is intended 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>
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<tbody>
<tr>
<td>*EH 81</td>
<td>English Review</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>*MS 51 or</td>
<td>Business Arithmetic</td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>(3)</td>
</tr>
<tr>
<td>**PL 51-151 or</td>
<td>American Government I with Laboratory</td>
<td>3 (3)</td>
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<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>(3)</td>
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</table>

   15

   Session II

| * BA 55         | Machine Transcription              | 3                     |
| BA 172          | Intermediate Typewriting           | 3                     |
| BA 201          | Business Machines                  | 3                     |
| *HS 95          | Cultural Studies                   | 3                     |
| Elective        |                                    | 3                     |

   15

   Session III

| *BA 85          | Office Practices                   | 3                     |
| BA 271          | Advanced Typewriting               | 3                     |

   6

*Capable students may substitute a higher level course for any of the above with
permission of the department involved.

**Students are required to satisfactorily complete PL 51 or PL 151. If both are
completed satisfactorily, the student may apply three (3) credit hours against the
elective.

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
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 serves.

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</td>
<td>College Mathematics</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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<td>Elective</td>
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Sophomore Year

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<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>LE 201-202</td>
<td>Criminal Investigation I &amp; II</td>
<td>6</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>
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<tr>
<td>LE 231</td>
<td>Police Personnel Supervision or</td>
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</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SY 261</td>
<td>Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SY 265</td>
<td>Contemporary American Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>LC 151</td>
<td>Practical Logic</td>
<td>3</td>
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</tbody>
</table>

* 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.
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.

**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>LE 101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>PC 101</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>EH 157</td>
<td>Technical Writing</td>
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<tr>
<td>LE 121</td>
<td>Crime &amp; Delinquency</td>
<td>3</td>
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<tr>
<td>SY 261</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PL 252</td>
<td>State &amp; Local Government</td>
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<tr>
<td>SY 265</td>
<td>Contemporary American Social Problems</td>
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**Sophomore Year**

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<th>Description</th>
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<tbody>
<tr>
<td>PC 201</td>
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<tr>
<td>PC 151</td>
<td>Correctional Administration</td>
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<tr>
<td>LE 221</td>
<td>Criminal Law &amp; Legal Procedures</td>
<td>3</td>
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<tr>
<td>SP 165</td>
<td>Speech</td>
<td>3</td>
</tr>
<tr>
<td>PC 158</td>
<td>Institutional Procedures, Jails &amp; Detention</td>
<td>3</td>
</tr>
<tr>
<td>HS 151</td>
<td>Humanities in a Technological Society</td>
<td>3</td>
</tr>
<tr>
<td>PC 202</td>
<td>Group &amp; Individual Counseling</td>
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<tr>
<td>LE 222</td>
<td>Criminal Evidence &amp; Legal Procedures</td>
<td>3</td>
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<tr>
<td>PC 252</td>
<td>Community Correctional Services</td>
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<td>PC 260</td>
<td>Probation &amp; Parole</td>
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<td>PC 280</td>
<td>Field Work Experience</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.
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.

<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 Communications</td>
<td>3</td>
</tr>
<tr>
<td>DP 103</td>
<td>Data Processing Mathematics</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>Human Relations in Business &amp; Ind.</td>
<td>3</td>
</tr>
<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 251</td>
<td>Principles of Accounting</td>
<td>3</td>
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<tr>
<td>DP 201</td>
<td>Commercial Programming</td>
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<table>
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<tr>
<th>Course</th>
<th>Description</th>
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<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>
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<tr>
<td>MS 255</td>
<td>Elementary Statistics</td>
<td>3</td>
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<tr>
<td>DP 210</td>
<td>Data Systems and Management</td>
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<tr>
<td>BA 252</td>
<td>Principles of Accounting</td>
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<tr>
<td>BA 275</td>
<td>Business Law I</td>
<td>3</td>
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<tr>
<td>Humanities Elective</td>
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<tr>
<td>DP 202</td>
<td>Commercial Programming</td>
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<tr>
<td>DP 231</td>
<td>Data Processing Management</td>
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<td>Elective</td>
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</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. Revised 1973-74.
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.

### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
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<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
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<td>BA 280</td>
<td>Principles of Marketing</td>
<td>3</td>
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<td>BA 282</td>
<td>Principles of Management</td>
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<tr>
<td>BA 284</td>
<td>Salesmanship</td>
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<tr>
<td>BA 110-111</td>
<td>Work Seminar I, II</td>
<td>6</td>
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<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>PL 151</td>
<td>American Government I</td>
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### Sophomore Year

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<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
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<tr>
<td>BA 275</td>
<td>Business Law I</td>
<td>3</td>
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<tr>
<td>BA 283</td>
<td>Retailing</td>
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<tr>
<td>BA 285</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BA 210-211</td>
<td>Work Seminar III, IV</td>
<td>6</td>
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<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>ES 151</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Human Relations in Business &amp; Industry</td>
<td>3</td>
</tr>
<tr>
<td>SP 165</td>
<td>Fundamentals of Speech</td>
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</tbody>
</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.
REQUIRED PROGRAM LEADING TO AN 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>
</tr>
</thead>
<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>MS 137/170</td>
<td>Technical Mathematics I/College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>EG 157</td>
<td>Engineering Materials &amp; Processes</td>
<td>3</td>
</tr>
<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>EG 151</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communications</td>
<td>3</td>
</tr>
<tr>
<td>MS 138/171</td>
<td>Tech. Mathematics II/College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>PH 151/161</td>
<td>Basic Physics I/Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>EG 152</td>
<td>Descriptive Geometry</td>
<td>3</td>
</tr>
<tr>
<td>DG 111</td>
<td>Mechanical Drafting I</td>
<td>3</td>
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</tbody>
</table>

**Sophomore Year**

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<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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<tr>
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<tr>
<td>MS 161</td>
<td>Modern Computational Methods</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>DG 201</td>
<td>Electromechanical Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>DG 211</td>
<td>Mechanical Drafting II</td>
<td>3</td>
</tr>
<tr>
<td>ES 151</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Human Relations in Business &amp; Industry</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
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<tr>
<td>DG 202</td>
<td>Electromechanical Drafting II</td>
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<tr>
<td>DG 212</td>
<td>Mechanical Drafting III</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.
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**

<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 Mathematics I/College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>EG 151</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>PH 151/161</td>
<td>Basic Physics I/Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>EM 101</td>
<td>Electronics I</td>
<td>4</td>
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<tr>
<td>MS 138/171</td>
<td>Technical Mathematics II/College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>PH 152/162</td>
<td>Basic Physics II/Introductory Physics II</td>
<td>4</td>
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<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
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<tr>
<td>EM 150</td>
<td>Mechanisms</td>
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<tr>
<td>EM 102</td>
<td>Electronics II</td>
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**Sophomore Year**

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<th>Description</th>
<th>Semester Hours Credit</th>
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<tbody>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
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<tr>
<td>EM 215</td>
<td>Control Systems</td>
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<tr>
<td>EM 220</td>
<td>Electromechanical Components</td>
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</tr>
<tr>
<td>EM 201</td>
<td>Digital Computer Fundamentals</td>
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</tr>
<tr>
<td>PY 161</td>
<td>Human Relations in Business &amp; Industry</td>
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<td>FM 230</td>
<td>Storage Principles &amp; Devices</td>
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<tr>
<td>EM 240</td>
<td>Input/Output Devices</td>
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<tr>
<td>EM 202</td>
<td>Digital Computing Systems</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.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN ELECTRONICS TECHNOLOGY

(Beginning in September, 1974)

Details of this program will be available in later editions of the catalog and through the Counseling Office.
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 Secretary Science. Included in this program is a seminar and work experience in executive offices.

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
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<tbody>
<tr>
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<td>Beginning Shorthand</td>
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<td>BA 152</td>
<td>Intermediate Shorthand</td>
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<tr>
<td>*BA 171</td>
<td>Beginning Typewriting</td>
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<td>BA 172</td>
<td>Intermediate Typewriting</td>
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<td>EH 151</td>
<td>Freshman Composition</td>
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<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
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<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PY 161</td>
<td>Human Relations in Business &amp; Ind.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
<td>3</td>
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</tr>
<tr>
<td>DP 101</td>
<td>Introduction to Data Processing</td>
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| Total    | 30                         |

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
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<tr>
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<td>Business Communications</td>
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<td>BA 253</td>
<td>Advanced Shorthand</td>
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<td>BA 255</td>
<td>Shorthand Transcription</td>
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<td>BA 271</td>
<td>Advanced Typewriting</td>
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<td>BA 275</td>
<td>Business Law</td>
<td>3</td>
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<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
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<td><strong>BA 201</strong></td>
<td>Business Machines</td>
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<td>BA 260</td>
<td>Office Procedures</td>
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<td>BA 263</td>
<td>Executive Secretarial Seminar and Work Experience</td>
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<td>Humanities Elective</td>
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<td>3</td>
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</tr>
</tbody>
</table>

| Total    | 30                         |

*Students with prior instruction and/or experience in shorthand and/or typewriting should enroll in next higher shorthand and/or typewriting course. Such students should select elective courses in lieu of BA 151 or 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 with English, humanities or social 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.
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>
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<tbody>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communications</td>
<td>3</td>
<td></td>
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<tr>
<td>FT 101</td>
<td>Introduction to Fire Protection</td>
<td>3</td>
<td></td>
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<tr>
<td>FT 111</td>
<td>Supervision and Leadership</td>
<td>3</td>
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<td>FT 112</td>
<td>Company Management</td>
<td>3</td>
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<tr>
<td>FT 113</td>
<td>Company Fire Ground Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MS 151</td>
<td>College Mathematics</td>
<td>3</td>
<td></td>
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<tr>
<td>PL 151-152</td>
<td>American Government I &amp; II</td>
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<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
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Sophomore Year

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<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>3</td>
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<tr>
<td>SY 261</td>
<td>Introductory Sociology</td>
<td>3</td>
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<tr>
<td>CY 155</td>
<td>Introductory Chemistry</td>
<td>4</td>
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<tr>
<td>FT 201</td>
<td>Fundamentals of Fire Prevention</td>
<td>3</td>
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<tr>
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<td>*Humanities Area Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>FT 221</td>
<td>Fire Protection Systems &amp; Extinguishing Agents</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FT 222</td>
<td>Building Construction and Fundamentals</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FT 231</td>
<td>Fire Department Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

*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.

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.
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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Session III-A or III-B

<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>
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</table>

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<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>Human Relations in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>BA 242</td>
<td>Printing Salesmanship</td>
<td>3</td>
</tr>
<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.
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>
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<td><strong>Total</strong></td>
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**Session III A or III B**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>GA 201</td>
<td>Cooperative Placement in Industry</td>
<td>3</td>
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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>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>Human Relations 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>
</tr>
<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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<tr>
<td></td>
<td><strong>Total</strong></td>
<td>30</td>
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</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.
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>
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<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>Human Relations in Business &amp; Ind.</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>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 Management</td>
<td>3</td>
</tr>
<tr>
<td>HM 212</td>
<td>Hotel-Motel-Restaurant Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HM 230</td>
<td>Hotel-Motel-Restaurant Food Control</td>
<td>3</td>
</tr>
<tr>
<td>HM 240</td>
<td>Internship in Hotel-Motel-Restaurant</td>
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<td>Elective</td>
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</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. Revised 1970-1971.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN INSURANCE SECRETARIAL SCIENCE

This two-year college degree program is designed to meet the needs of students desiring college level training to be usefully employed as insurance secretaries. Included in this program is a work experience in an insurance office.

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 104</td>
<td>Principles of Insurance</td>
<td>3</td>
</tr>
<tr>
<td>*BA 151</td>
<td>Beginning Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>BA 152</td>
<td>Intermediate Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>BA 159</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>*BA 171</td>
<td>Beginning Typing</td>
<td>3</td>
</tr>
<tr>
<td>BA 172</td>
<td>Intermediate Typing</td>
<td>3</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>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td></td>
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</tbody>
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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>PY 161</td>
<td>Human Relations in Business &amp; Ind.</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>**BA 201</td>
<td>Business Machines</td>
<td>3</td>
</tr>
<tr>
<td>BA 203</td>
<td>Insurance Office Practices I</td>
<td>3</td>
</tr>
<tr>
<td>BA 204</td>
<td>Insurance Office Practices II</td>
<td>3</td>
</tr>
<tr>
<td>BA 209</td>
<td>Work Experience &amp; Seminar</td>
<td>3</td>
</tr>
<tr>
<td>BA 253</td>
<td>Advanced Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>BA 255</td>
<td>Shorthand Transcription</td>
<td>3</td>
</tr>
<tr>
<td>BA 271</td>
<td>Advanced Typing</td>
<td>3</td>
</tr>
<tr>
<td>BA 275</td>
<td>Business Law I</td>
<td>3</td>
</tr>
</tbody>
</table>

30

*Students with prior instruction and/or experience in shorthand and/or typewriting should enroll in next higher shorthand and/or typewriting course. Such students should select elective courses in lieu of BA 151 or 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 with English, humanities or social 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.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
LEARNING RESOURCES TECHNOLOGY

(Beginning in September, 1974)

Details of this program will be available in later editions of the catalog
and through the Counseling Office.
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>
</tr>
</thead>
<tbody>
<tr>
<td>*BA 151</td>
<td>Beginning Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>BA 152</td>
<td>Intermediate Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>*BA 171</td>
<td>Beginning Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>BA 172</td>
<td>Intermediate Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>BA 175</td>
<td>Introduction to Business</td>
<td>3</td>
</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>
</tr>
<tr>
<td>BA 275</td>
<td>Business Law I</td>
<td>3</td>
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</tbody>
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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>BA 101</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA 253</td>
<td>Advanced Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>BA 255</td>
<td>Shorthand Transcription</td>
<td>3</td>
</tr>
<tr>
<td>BA 271</td>
<td>Advanced Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>BA 276</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BA 260</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BA 265</td>
<td>Legal Secretarial Seminar and Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>BA 267/268</td>
<td>Legal Secretarial Practices</td>
<td>6</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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* 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.
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.
Admission to the college does not infer acceptance into the Medical Laboratory Technology program. Selection is made on an individual basis by the Admissions Committee.

Admission requirements are:

1. The student must be a citizen of the United States.
2. The student must be a graduate of an accredited high school or its equivalent, and have one (1) unit each of biology and chemistry, and two (2) years of algebra. (Deficiencies in these areas must be made up in advance of final acceptance into the program).
3. The student must submit the Florida Senior Placement Test score or its equivalent.
4. The student must be in good physical and mental health.
5. The student must have a physical examination each year, including a chest x-ray.
6. The student must have a pre-admission interview with a member of the Counseling staff.
7. The student must submit application before April 15 for the following school year.

**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>3</td>
<td></td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MS 170</td>
<td>College Algebra</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BY 251</td>
<td>Human Anatomy &amp; Physiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CY 171-172</td>
<td>Chemistry</td>
<td>8</td>
<td></td>
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<tr>
<td>MT 140</td>
<td>Introduction to Medical Lab</td>
<td>3</td>
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</tr>
<tr>
<td>MT 144</td>
<td>Basic Urinalysis</td>
<td>2</td>
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<tr>
<td>MT 146</td>
<td>Serology &amp; Immunology</td>
<td>2</td>
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<tr>
<td>BY 280</td>
<td>Microbiology</td>
<td>4</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>PL 151</td>
<td>American Government I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MT 142</td>
<td>Hematology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MT 148</td>
<td>Medical Microbiology</td>
<td>4</td>
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<tr>
<td>MT 240</td>
<td>Clinical Chemistry</td>
<td>4</td>
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<tr>
<td>MT 242</td>
<td>Hospital Practicum</td>
<td>16</td>
<td></td>
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<tr>
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</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 1972-73.
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.

<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</td>
<td>American Government I</td>
<td>3</td>
</tr>
<tr>
<td>*BA 171</td>
<td>Beginning Typing</td>
<td>3</td>
</tr>
<tr>
<td>BA 172</td>
<td>Intermediate Typing</td>
<td>3</td>
</tr>
<tr>
<td>BY 110</td>
<td>Anatomy, Physiology and Medical Terminology</td>
<td>4</td>
</tr>
<tr>
<td>BA 118</td>
<td>Medical Transcription I</td>
<td>3</td>
</tr>
<tr>
<td>BA 165</td>
<td>Medical Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BA 218</td>
<td>Medical Transcription II</td>
<td>3</td>
</tr>
<tr>
<td>BA 180</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
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<td></td>
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</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</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 Typing</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>
</tr>
<tr>
<td>**BA 201</td>
<td>Business Machines</td>
<td>3</td>
</tr>
<tr>
<td>BA 240</td>
<td>Medical Secretary Internship</td>
<td>4</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

*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.
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.
Admission requirements are:

1. The student must be at least 17 years of age.
2. The student must be a citizen of the United States or of declared intent.
3. The student must be a graduate of an accredited high school, or its equivalent, and have one unit of each in biology and chemistry.
4. The student must submit the Florida Senior Placement Test Score or its equivalent.
5. The student must be in good physical and mental health and of good moral character.
6. The student must have a physical examination each year.
7. The student must have a pre-admission interview with a member of the Counseling staff, and when indicated, a member of the nursing faculty.
8. The student must submit an application before April 1 for the following school year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BY 255-256</td>
<td>Human Anatomy &amp; Physiology</td>
<td>8</td>
</tr>
<tr>
<td>BY 280</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>NG 101</td>
<td>Nursing I</td>
<td>8</td>
</tr>
<tr>
<td>PY 260</td>
<td>Psychology of Childhood &amp; Youth</td>
<td>3</td>
</tr>
<tr>
<td>NG 104</td>
<td>Nursing II</td>
<td>3</td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>NG 105</td>
<td>Nursing III</td>
<td>3</td>
</tr>
<tr>
<td>NG 106</td>
<td>Nursing IV</td>
<td>4</td>
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Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NG 201</td>
<td>Nursing V</td>
<td>3</td>
</tr>
<tr>
<td>SY 261</td>
<td>Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>PL 151</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>NG 202</td>
<td>Nursing VI</td>
<td>3</td>
</tr>
<tr>
<td>NG 203</td>
<td>Nursing VII</td>
<td>5</td>
</tr>
</tbody>
</table>

Sophomore Year

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.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
ORNAMENTAL HORTICULTURE TECHNOLOGY

This program is designed to produce competent technicians for entry into the ornamental horticulture field in one of several positions in the total occupational cluster. Instruction in this program provides a balanced curriculum in theory and practical laboratory situations.

**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>HT 151</td>
<td>Introduction to Horticulture</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HT 166</td>
<td>Plant Materials I</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HT 173</td>
<td>Horticultural Botany I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HT 181</td>
<td>Plant Physiology and Pathology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Writing</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>HT 167</td>
<td>Plant Materials II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HT 174</td>
<td>Horticultural Botany II</td>
<td>3</td>
<td></td>
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<tr>
<td>HT 191</td>
<td>Entomology</td>
<td>3</td>
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</table>

**Session III-A or III-B**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT 201</td>
<td>Cooperative Placement in Industry</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>PY 161</td>
<td>Human Relations in Business and Ind.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ES 151</td>
<td>Basic Economics</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>HT 205</td>
<td>Nursery Operation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HT 216</td>
<td>Introduction to Design</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HT 268</td>
<td>Plant Materials III</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BA 284</td>
<td>Salesmanship</td>
<td>3</td>
<td></td>
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<tr>
<td>Elective</td>
<td></td>
<td>3</td>
<td></td>
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<tr>
<td>HT 260</td>
<td>Greenhouse Operation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HT 269</td>
<td>Plant Materials IV</td>
<td>2</td>
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<tr>
<td>HT 292</td>
<td>Disease &amp; Weed Control</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>30</td>
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</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.
REQUIRED PROGRAM LEADING TO THE ASSOCIATE IN SCIENCE DEGREE IN PARALEGAL TECHNOLOGY

(Beginning in September, 1974)

Details of this program will be available in later editions of the catalog and through the Counseling Office.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE
IN PRIVATE AND INDUSTRIAL SECURITY

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.

<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>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

<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>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Human Relations in Business &amp; Industry</td>
<td>3</td>
</tr>
<tr>
<td>*IS 231</td>
<td>Safety Management</td>
<td>3</td>
</tr>
<tr>
<td>*IS 211</td>
<td>Principles of Loss Prevention</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>Elective</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>30</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.
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</td>
<td>3</td>
</tr>
<tr>
<td>PY 161</td>
<td>Human Relations in Business &amp; Industry</td>
<td>3</td>
</tr>
<tr>
<td>FS 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>
<tr>
<td></td>
<td></td>
<td><strong>30</strong></td>
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</table>

**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>
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<tr>
<td></td>
<td>Humanities Elective</td>
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</tr>
<tr>
<td></td>
<td></td>
<td><strong>30</strong></td>
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</tbody>
</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.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
REAL ESTATE APPRAISING

(Beginning in September, 1974)

Details of this program will be available in later editions of the catalog and through the Counseling Office.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
RESPIRATORY THERAPY

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

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 student must be at least 17 years of age.
2. The student must be a citizen of the United States or of declared
   intent.
3. The student must be a graduate of an accredited high school, or
   its equivalent, and have one unit each in biology and algebra.
4. The student must submit the Florida Senior Placement Test Score
   or its equivalent.
5. The student must be in good physical and mental health and of
   good moral character.
6. The student must have a physical examination each year.
7. The student must have a pre-admission interview with a member
   of the Counseling staff, and when indicated, a member of the
   Respiratory Therapy Faculty.
8. The student must submit an application before June 1 for the
   following school year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 81, 152, or 170</td>
<td>Intermediate Algebra, Advanced College Mathematics, or College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>EH 151</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>BY 251</td>
<td>Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>CY 155 or 160</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or Introduction and Biochemistry</td>
<td></td>
</tr>
<tr>
<td>PH 121</td>
<td>Applied Physics</td>
<td>4</td>
</tr>
<tr>
<td>EH 157</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>BY 280</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>RT 131</td>
<td>Intro. to Respiratory Equipment</td>
<td>4</td>
</tr>
<tr>
<td>RT 133</td>
<td>Introduction to Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>RT 231</td>
<td>Pulmonary Physiology</td>
<td>4</td>
</tr>
<tr>
<td>RT 132</td>
<td>Respiratory Equip. &amp; Functions</td>
<td>4</td>
</tr>
<tr>
<td>RT 134</td>
<td>Clinical Practice</td>
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Total: 41
### Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>PL 151</td>
<td>American Government I</td>
<td>3</td>
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<tr>
<td>PY 151</td>
<td>General Psychology</td>
<td>3</td>
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<td>RT 232</td>
<td>Clinical Practice</td>
<td>2</td>
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<tr>
<td>RT 233</td>
<td>Respiratory Pathology</td>
<td>4</td>
</tr>
<tr>
<td>RT 234</td>
<td>Cardiopulmonary Therapy</td>
<td>4</td>
</tr>
<tr>
<td>RT 235</td>
<td>Clinical Practice</td>
<td>2</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>RT 236</td>
<td>Advanced Cardiopulmonary Therapy</td>
<td>4</td>
</tr>
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<td>RT 237</td>
<td>Clinical Practice</td>
<td>2</td>
</tr>
<tr>
<td>RT 238</td>
<td>Clinical Practice</td>
<td>2</td>
</tr>
<tr>
<td>RT 240</td>
<td>Hospital Organization &amp; Management</td>
<td>2</td>
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<td><strong>Total: 31</strong></td>
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</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.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
TEACHER AIDE PROGRAM

(Beginning in September, 1974)

Details of this program will be available in later editions of the catalog and through the Counseling Office.
REQUIRED PROGRAM LEADING TO THE
ASSOCIATE IN SCIENCE DEGREE IN
SURVEYING TECHNOLOGY

(Beginning in September, 1974)

Details of this program will be available in later editions of the catalog and through the Counseling Office.
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 to purchase a tract of land in the Eastern area of the county for a second campus, the District Board of Trustees approved a third campus concept – the "open campus."

The open campus will open in July, 1974 in its administrative offices located near the Downtown Center at One West Church Street in Orlando. The purpose of the open campus will be to provide programs, classes, continuing education and community services through the Valencia Community College district. The open campus uses the facilities of many of the local public and private high schools, private colleges, churches, fire stations, police stations, hospitals, community recreational areas, the Downtown Center, the East and West campuses, and other facilities to hold a variety of both credit and non-credit classes.

The concept of the open campus is to bring needed courses to the students of the college district by offering a variety of courses near their homes, or places of employment. It is possible for persons employed in the Downtown Orlando area to become full time students by taking courses before they go to work in the morning, at noon time, and in the evening hours, thus saving considerable time and transportation costs.
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 this service are Continuing Education non-credit courses; upgrading of present occupational skills through short courses, seminars and workshops; cultural activities, conferences and guest speakers; and regular college credit courses which are offered in more than thirty (30) different locations in Orange County. All of the Community Services programs, classes and projects are under the administrative supervision of the Open Campus.

DOWNTOWN CENTER

A Downtown Center was opened at the corner of Orange Avenue and Church Street (One West Church St.) 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, administration offices and three classrooms for various credit and non-credit offerings. Also located in this center in a joint project is the Council for Continuing Education for Women of Central Florida, Inc., whose volunteer counseling staff welcomes all women seeking to return to work, upgrade their present skills, or explore vocational opportunities.
COURSE DESCRIPTIONS

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

Courses designated by “CN” and numbered between 0 and 99 carry no college credit, and are not applicable for credit at Valencia Community College. 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 primarily 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 101 – Heating and Ventilation, 3 credits
Two class periods and one four-hour laboratory. A study of various types of heating and ventilating equipment and their application to comfort heating; the operation, service, and tests of actual equipment.

+AC 111 – Principles of Refrigeration; Cycles and Equipment, 4 credits
Three class periods and one three-hour laboratory. A study of fundamental principles and their application to refrigeration and the component parts of basic commercial systems. Theory of operation of domestic and commercial refrigeration equipment.

+AC 112 – Principles of Air Conditioning Systems, 3 credits
Three class periods. Psychrometrics of air; calculations of heat loads and conditioned air supply. A study of the various types of air conditioning systems and their applications.

+AC 201 – Cooperative Placement in Industry, 3 credits
Eight hours per day, five days per week, Session III-A or III-B. Prerequisites: AC 101, 111, 112. 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 three-hour laboratory. This course covers basic circuit theory, electrical and electronic controls systems, electric motor circuits, servomechanisms which apply to the air conditioning industry; along with instruction in the use, care and maintenance of electrical test equipment.

+AC 212 – Commercial and Industrial Refrig. Systems, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: AC 111. Provides basic instruction in the principles, equipment, and operating and maintenance problems of systems currently in use in the commercial and industrial refrigeration industries.

+AC 214 – Control Systems for Air Conditioning, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: AC 112. Co-requisite: AC 204. Design, selection, application, and trouble-shooting of refrigeration and air conditioning control systems. Covers electrical and pneumatic air conditioning control principles and equipment.

+AC 222 – Air Distribution and Layout, 2 credits
One class period and one three-hour laboratory. Prerequisites: EG 151, AC 112. Fundamentals of air distribution, selection of components and accessories, design, planning and layout of complete distribution systems, instrumentation, and system balancing.

+AC 244 – Refrigeration Equipment for Air Conditioning Systems, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: AC 212. Installation, operation, balancing, and trouble-shooting refrigeration problems in air conditioning. Air distribution and purification principles and equipment; heat rejection methods and equipment; fluid pumps, and water, steam, and refrigeration piping systems.
ARCHITECTURAL AND BUILDING

+AL 102 – Architectural Drawing and Model Building (Wood-Frame Structures), 3 credits
Two class periods and one four-hour laboratory. Prerequisite: EG 151. The second of four drawing courses. Covers residential design and wood-frame construction with additional study in aspects of housing, aesthetics, and working drawings. Attention given to local building codes. Students will construct models of chosen residential design.

+AL 191 – Building Materials and Construction Methods, 3 credits
Two class periods and one four-hour laboratory. Survey of materials used in construction, buildings made from these materials and manner materials and structures are utilized. Covers broad areas of wood, concrete, masonry, metal, finishes and preservatives, and other materials.

+AL 192 – Construction Planning and Control, 3 credits
Three class periods. Prerequisite: AL 191. Survey of points considered in a construction project. Covers methods of quantity, cost of materials, labor, equipment required, scheduling of construction operations and introduction to the Critical Path Method (CPM) of scheduling.

+AL 201 – Architectural Drawing (Steel Structure), 3 credits
Two class periods and one four-hour laboratory. Prerequisite: AL 102. 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.

+AL 202 – Architectural Drawing (Concrete Structures), 3 credits
Two class periods and one four-hour laboratory. Prerequisite: AL 201. 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, shop drawings of plumbing and electrical equipment; and preparation of the working drawings of a single reinforced concrete building.

+AL 291 – Statics and Strength of Materials, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: PH 151/161. 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.

+AL 292 – Building Service Systems (Mechanical and Electrical), 4 credits
Three class periods and one three-hour laboratory. Prerequisite: PH 151/161. 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; plumbing and sewage disposal; and building acoustics.

+AL 294 – Contracts, Codes, Specifications and Office Practices, 2 credits
Two class periods. Course covers organization and operation of architect's, engineer's, or contractor's office and includes study of office practices, accounting methods, codes, restrictions, standards, and legal documents governing the construction of buildings.

+AL 295 – Building Construction Estimating, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: AL 201. Course covers basic methods of estimating and develops a system for doing quantity surveys. Prepares students to make some of the kinds of estimates that are commonly used in architectural and building construction.
AUTOMOTIVE SERVICE TECHNOLOGY

+AS 150 – Engines, 3 credits
Two class periods and one four-hour laboratory. Major objective is to offer the
student practical experience in engine maintenance and service with a foundation
knowledge in engine theory and repair. Principles, design, construction, operation
and service procedures are studied. Development of work skills and proficiency in
engine rebuilding are emphasized. The student learns to disassemble, clean,
inspect, service and assemble an engine.

+AS 155 – Engine Diagnosis and Tune-up, 3 credits
Two class periods and one four-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, starting and charging systems. The
student is given a broad background in diesel, propane, butane and gasoline fuel
applications. Types of carburetion are studied along with air cleaners, emission
control and cooling systems, and diagnostic procedures for exhaust and fuel
system malfunctions. Students perform tests with oscilloscopes, generator,
regulator, alternator testers, battery starter testers and distributor testers. Opera-
tion principles of fluid couplings, torque converter planetary gears, servos, multi-
ple disc clutches, hydraulic circuitry, disassembly and assembly procedure and
diagnosis, adjustment and repair are covered. Laboratory time is spent working
with necessary equipment in measurement, machining and replacement of worn
parts and testing.

+AS 160 – Electricity, 3 credits
Two class periods and one four-hour laboratory. Fundamental theory, Ohm’s
Law, circuit identification, electrical symbols, magnetism, induction, generators,
alternators and motors are covered. Use of such test equipment as the voltmeter,
ammeter, ohmmeter and other devices used in trouble-shooting and diagnosing
automotive electrical problems will be stressed. Principles of automotive electrical
systems are studied including: batteries, charging, cranking and ignition systems,
electrical and electronic diagnostic equipment, transistor circuits and electronic
control devices.

+AS 165 – Cranking and Charging Systems, 2 credits
One class period and one three-hour laboratory. Prerequisite: AS 150.
Comprehensive instruction given on components and circuitry in cranking and
charging systems. Function, design, operation, repair procedures, problem analysis
and use of tools and instruments in cranking and charging systems are studied
with emphasis placed on alternators and battery capacity.

+AS 170 – Auto Accessories, 3 credits
Two class periods and one four-hour laboratory. Service and repair of
power-operated accessories are covered including: seats, windows, convertible
tops, decks, headlights, doors, locks, antennas, windshield washers and wipers,
testing units, gauges, signaling, warning and speed-control devices. Special
emphasis is given to selection, care and maintenance of tires.

+AS 180 – Service Orientation and Maintenance, 3 credits
Two class periods and one four-hour laboratory. Students perform minor
maintenance and service on working vehicles, such as lubrication, minor
adjustments, replacing simple components, correcting malfunctions, appearance
reconditioning on used cars and preparing new cars for delivery.

+AS 185 – Service Management I, 2 credits
Two 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 department. Service department management covered in
depth, ranging from the large organization to the smaller shop. The conventional
line method of management is stressed. Local service managers and dealers will be
fully utilized as resource people to bring live problem solving situations to the
classroom.
+AS 190 – Suspension and Brakes I, 2 credits
One class period and one three-hour laboratory. Nomenclatures 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 with emphasis placed on self-adjusting brakes.

+AS 201 – Cooperative Placement in Industry, 3 credits
Eight hours per day, five days per week, Session III-A or III-B. Prerequisites: AS 150, 155, 160, 165, 170, 180, 185, 190. 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, 2 credits
One class period and one three-hour laboratory. Prerequisite: 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.

+AS 275 – Transmission and Drive Lines, 3 credits
Two class periods and one four-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.

+AS 280 – Air Conditioning, 3 credits
Two class periods and one four-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.

+AS 285 – Service Management II, 3 credits
Three class periods. Prerequisite: AS 185. The human relations aspect of management is applied to the service department in the areas of employer-employee relationships, customer relations and interdepartmental relations. Students are given an understanding of the role and function of an automotive service manager, staff responsibilities and procedures for completing the service of customer vehicles. Advisory committee members and other dealers and service managers are utilized as resource people to relate this course to current industrial practices.

+AS 290 – Suspension and Brakes II, 2 credits
One class period and one three-hour laboratory. Prerequisite: AS 190. Power systems, major components and suspension correction procedures for light frame damage and advanced alignment techniques are covered. Emphasis will be placed on power alignment, brakes, and shock absorbers.
ART

AT 150 – Fundamentals of Applied Art, 3 credits
Six 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.

AT 151 – Drawing I, 3 credits
Six class periods. Introduction to drawing through exploration of various drawing media. Emphasis will be placed upon developing basic skills and concepts.

AT 152 – Drawing II, 3 credits
Six class periods. Prerequisite: AT 151. Continuation of AT 151 based upon drawing the human form.

AT 155 – Introduction to Drawing and Painting, 3 credits
Three class periods. A laboratory course designed for non-art majors, introducing elementary drawing and painting techniques and media.

AT 161 – Design I, 3 credits
Six class periods. An introduction to studio art through the use of two-dimensional elements. An acquaintance with the basic elements of line, shape, color, texture, and value is established.

AT 162 – Design II, 3 credits
Six class periods. Prerequisite: AT 161. A continuation of Design I through the use of three-dimensional form in space, its negative and positive relationships and attention to plastic forms.

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

AT 202 – Ceramics I, 3 credits
Six class periods. An introductory course in pottery design: forming, decorating, glazing and firing.

AT 203 – Ceramics II, 3 credits
Six class periods. Prerequisite: Ceramics I. A continuation of Ceramics I, with emphasis on refinement of techniques and concepts. Wheel throwing, advanced glaze formulation, kiln loading and firing is required.

AT 204 – Printmaking, 3 credits
Six class periods. The course will consist of an experimental approach to printmaking, the graphic processes of relief and intaglio. The class will consist of studio work, demonstrations and study of historical and contemporary printmakers.

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 textile processes including weaving, batik, tie dye and stitchery.

AT 207 – Painting I, 3 credits
Six class periods. Prerequisite: AT 151 or AT 161 or consent of the instructor. Studio problems with emphasis on investigation of basic techniques through the use of oils or acrylics.

AT 208 – Painting II, 3 credits
Six class periods. Prerequisite: Painting I. Continuation of Painting I with emphasis on improving technical skills and moving toward development of individual expression.
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.

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 through use of 35mm camera and darkroom procedures of printing and developing. Emphasis will be upon use of principles of visual design.

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 art and architecture from the Renaissance to the present day.

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 55 – Machine Transcription, 3 credits
Three class periods. Prerequisite: ability to type accurately at forty (40) words per minute. This course is designed to give prospective office workers practice in the art of transcribing from machine dictation. Special emphasis is given to spelling, punctuation, correct English usage, and letter set-up.

BA 85 – Office Practice, 3 credits
Three class periods. Includes instruction in general office practices dealing with telephone techniques, basic filing systems, handling of mail, handling of administrative supplies, and instruction and training in usage of common office machines and peripheral equipment.

+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 110-111 – Work Seminar, I & II, 3-3 credits
Prerequisite: instructor approval. Maximum of 15 hours per week on-the-job experience. Seminar to be arranged by instructor in coordination with student and employer.

+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
Four 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. Instruction in communication skills in order to respond effectively, both in oral and written communications, to business situations. Emphasis will be given to the preparation of business correspondence relevant to modern business procedures.

+BA 165 – Medical Office Procedures, 3 credits
Three class periods. Emphasis is given to receptionist duties, modern filing methods, (terminal digit and codedex), 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
Four 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 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 203-204 – 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 210-211 – Work Seminar, III & IV, 3-3 credits
Prerequisite: BA 110-111 and instructor approval. Maximum of fifteen (15) hours on-the-job experience per week. Seminar to be arranged by instructor in coordination with student and employer.

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 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 culminates 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 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, receivables, inventory evaluation, 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
Four 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
Four class periods. Prerequisite: BA 253 or equivalent. New material dictation at measured and unmeasured speed, and transcription of that dictation into marketable 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, handling travel arrangements, and expediting meetings.

+BA 263 — Executive Secretarial Seminar and Work Experience, 3 credits
The student will work in selected offices in the community fifteen (15) hours each week. There will be a seminar each week to answer questions, share experiences, and gain further knowledge of the varying aspects of secretarial work.

+BA 265 — Legal Secretarial Seminar and Work Experience, 3 credits
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 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 offered 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, agencies and employment, commercial paper, personal property and bailments.

BA 276 – Business Law II, 3 credits
Three class periods. Prerequisite: BA 275. Laws applicable to 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.

BASIC STUDIES

BS 35 – Basic College Experiences, 3 credits
Two class periods per day, for seven weeks. A course designed to give fundamentals in college experiences. An overview of techniques in vocabulary, composition, grammatical structures, use of the library, and effective study methods will help students bridge the transition period between high school and college.

BS 40,41 – Basic Studies Seminar I and II, 3-3 Credits
Five class periods. Discussions and explorations in reading, writing, and speaking, with particular emphasis on problems associated with speech patterns and writing. Other general topics to be included are: Career Planning, Self Concept Evaluation and educational goals.
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 - Anatomy, Physiology and 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.

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 151 is designed for either open-circuit television or for offering as a classroom course. When offered over open-circuit television, voluntary review sessions and a variety of printed materials will be used to supplement the televised documentary.

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.

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.

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.

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.
BY 261 – Zoology I, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: BY 172. A lecture and laboratory study of animals, from the simple to the complex, their structure, function and classification.

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.

BY 263 – General 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.

BY 265 – Aquatic Biology, 3 credits
Three class periods. A general biological survey of lakes and streams including the physical and chemical factors of freshwater ecosystems such as the origin of lakes, evolution of streams, and biogeochemical cycles of fresh water.

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.

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 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.
CONTINUING EDUCATION

CN 1 – Community Urban Education, Non-Credit
Twenty (20) hours of classroom instruction. The urban problems are discussed in detail including organized crime, life style, law enforcement, drugs, attitudes, government. Guest speakers in many of the areas are invited to discuss their particular expertise with the class. (Registration fee, $10.00)

CN 2 – Stock Purchasing and Trading, Non-Credit
Twelve (12) hours of classroom instruction. This course is designed to assist the student in assessing stock and other securities as part of his financial objectives. (Registration fee, $10.00)

CN 3 – Travel Trailer Lore, Non-Credit
Twelve (12) hours of instruction. This course is designed to assist those students contemplating travel by trailer, camper and other modern camping equipment. Safety, planning, enjoyment and facilities are covered. (Registration fee, $10.00)

CN 4 – Japanese Flower Arranging, Non-Credit
Twenty-one (21) hours of classroom instruction. The Japanese art of Ikebana (flower arranging) is discussed. Student participation is required. A small amount of supplies and equipment not to exceed $10.00 will be required during the course. (Registration fee, $15.00)

CN 5 – Care of Horses, Non-Credit
Twenty-four (24) hours of classroom instruction. This course is designed for the horse lover to understand and care for his horse. Grooming, feeding, exercise, medication and other aspects of animal health are covered. Horsemanship is not covered as part of the course. (Registration fee, $10.00)

CN 6 – Beginning Tennis, Non-Credit
Sixteen (16) hours of instruction. This course is designed to teach the basic elements of tennis. Class limited to twelve (12) students. (Registration fee, $10.00)

CN 7 – Beginning Golf, Non-Credit
Sixteen (16) hours of instruction. This course is designed to teach the basic elements of golf. Class limited to twenty (20) students. (Registration fee, $10.00)

CN 8 – Boating Safety and Seamanship, Non-Credit
Eighteen (18) hours of instruction. This course is open to those persons interested in boating and is taught in cooperation with the local U.S. Coast Guard Auxiliary. Safety regulations, seamanship, and other nautical aspects of boating are covered. (Registration fee, by contract)

CN 9 – Beginning Yoga, Non-Credit
Twenty-four (24) hours of classroom instruction. This course is designed to teach the student the body conditioning exercises, control and attitudes of the East. (Registration fee, $15.00)

CN 10 – Introduction to Retailing, Non-Credit
Thirty (30) hours of instruction. This short course is designed for the person who is interested in exploring the broad field of retailing. Topics discussed in this course include human relations, motivation, customer relations, salesmanship, merchandising, stock and inventory procedures, security, display advertising, etc. (Registration fee, $10.00)

CN 11 – Effective Listening, Non-Credit
Two class periods for the course. The course is designed to assist the applicant in improving his listening accuracy, comprehension, and recognition, to remember by the use of key words, and to organize oral and written communications with clarity and intelligence. Offered on demand. (Registration fee, $5.00)
CN 12 – Landscape Horticulture, Non-Credit
Twenty-four (24) hours of instruction. A practical approach to horticulture science involving utilization and care of plants, grass, flowers and trees of the Central Florida area. (Registration fee, $10.00)

CN 13 – Principles of Bank Operations, Non-Credit
Forty-five (45) hours of instruction. Prerequisite: students must be selected by Central Florida Chapter of the American Institute of Banking. Satisfactory completion of this course earns three credits toward award of AIB basic certificate. (Registration fee, by contract)

CN 14 – Basic Dog Obedience, Non-Credit
Eleven (11) hours of instruction. This course is designed to teach the dog handler to train his dog in basic obedience. The instructor will be recommended to the college by the Orlando Dog Training Club. (Registration fee, $15.00)

CN 15 – Weaving: Non-Loom Techniques, Non-Credit
Twenty (20) hours of instruction. This course is an introduction to various textile design techniques including tie-dye, block printing, banner making, and non-loom weaving techniques. (Registration fee, $10.00)

CN 16 – Music to Munch By!, Non-Credit
Sixteen (16) hours of instruction. This course is a series of short lecture-demonstrations uncovering the secrets of music. Each lecture is followed by listening to great popular and classical music. An emphasis is placed on “familiar” tunes and their origin. (Registration fee, $10.00)

CN 17 – Effective Public Relations, Non-Credit
Thirty (30) hours of instruction. This course surveys public relations as related to civic organizations, business functions, research techniques, handling of promotional news, pictures and articles. It includes a brief history of public relations, and the management concept. (Registration fee, $15.00)

CN 19 – Study of the Florida Keys, Non-Credit
Twenty-one (21) hours of instruction. A study of the geology, history, flora and fauna, and environmental problems of the Florida Keys will be discussed in this course. Each student will be required to attend a four day field trip to the Keys at his own expense. The field trip will include snorkeling on a coral reef, a trip to Lignum Vitae Key, bird watching, a tour of Key West and various other attractions. (Registration fee, $10.00)

CN 20 – The Thyroid Gland: In Vitro Testing, Non-Credit
Two hours of instruction. In Vitro testing of the thyroid gland by means of T3, T4, ETR, compensated T4 and radioimmune analysis. (No registration fee required)

CN 21 – Introduction to Real Estate Principles and Practices I, Non-Credit
Thirty-six (36) hours of instruction. An introductory course in Real Estate for adults interested in Real Estate Salesmanship. The course embraces the areas of property rights, contracts, instruments of title, financing, mortgages, and legal descriptions. The course is approved by the State Real Estate Commission as one of the requirements to be satisfied in preparation for the State Examination. (Contact State Real Estate Commission on all matters concerning examination, licensing, etc.) Offered on demand. (Registration fee, $45.00)

CN 22 – Your Federal Income Tax, Non-Credit
Twenty-four (24) hours of instruction. This course is designed to assist the student in gaining a more complete understanding of Federal Income Tax Laws and Regulations. Emphasis is placed on proper preparation of individual tax returns. Offered on demand. (Registration fee, $10.00)
CN 23 – Word Processing, Non-Credit
Thirty (30) hours of instruction. This short course is a laboratory-lecture training course designed to develop student skills and techniques in the proper operation and use of the magnetic tape selective typewriter and composer (MTST). (Registration fee, $10.00)

CN 24 – Introduction to the Bank Teller’s Position, Non-Credit
Eighteen (18) hours of instruction. This is a concentrated course designed especially for adults currently employed as bank tellers and those desiring training in this area. (Registration fee, $10.00)

CN 26 – Intestinal Protozoa, Non-Credit
Forty (40) hours of instruction. This course consists of lecture and laboratory sessions. Emphasis will be placed on the techniques for identifying the important amoebae and flagellates. Participants will have an opportunity to identify unknown samples. Leading parasitologists serve as guest lecturers. (Registration fee, $25.00)

CN 23 – Computers in Everyday Life, Non-Credit
Fifteen (15) hours of instruction. This course is a non-technical presentation of the effect of the computer on our everyday lives. Its purpose is to dispel the mystery of the computer, and to clarify how it is used in business, law, medicine, and recreation. (Registration fee, $10.00)

CN 30 – Parliamentary Procedure, Non-Credit
Sixteen (16) hours of instruction. This course is the study of the techniques used in conducting meetings including the use of parliamentary procedure. Principles of leadership required of committee chairmen and other who have responsibility within an organization will also be discussed. (Registration fee, $10.00)

CN 31 – The Woman Alone, Non-Credit
Twelve (12) hours of instruction. This course is designed to assist women to learn about estates, taxes, trusts, inheritance, social security, financial arrangements and educational opportunities available. The course is open to all interested persons. Offered on demand. Formerly offered as “Teaching Wives to be Widows.” (Registration fee, $5.00)

CN 32 – Beginning Painting, Non-Credit
Twenty-four (24) hours of instruction. An introductory course in painting using oil or acrylic. The emphasis of study will be still life and the figure. (Registration fee, $25.00)

CN 33 – Beginning Ceramics, Non-Credit
Twenty-four (24) hours of instruction. An introductory course in hand building techniques and using the potter’s wheel. Instruction will include glazing and firing procedures. (Registration fee, $25.00)

CN 34 – Conversational Spanish, Non-Credit
Thirty-six (36) hours of instruction. A practical approach to the conversational knowledge of the Spanish language. This course is designed to offer the student some fluency in Spanish to converse with Spanish-speaking persons on an everyday basis. (Registration fee, $10.00)

CN 35 – Volunteer Administration, Non-Credit
Eight (8) hours of instruction. The course is designed to upgrade the skills of individuals in social agencies who are responsible for coordination of volunteer workers and activities. (Registration fee, by organization contract)
CN 36 – Speed Reading, Non-Credit
Twenty-one (21) hours of instruction. This course is designed to increase speed and efficiency. Student proceeds at own rate of advancement to strengthen reading skills under supervision of reading clinicians. The class is designed to increase reading rate for the average or better than average reader. (Registration fee, $10.00)

CN 37 – Emergency Medical Technician, Non-Credit
Eighty one (81) hours of instruction. This course emphasizes the development of student skill in recognition of symptoms of illness, injuries and proper procedures for emergency care, short of those rendered by a physician. (Registration fee, $10.00)

CN 38 – Occupational Safety & Health, Non-Credit
Forty two (42) hours of instruction. This course consists of a review of the Federal occupational and health standards under the OSH Act of 1970, the establishment of good safety programs and general safety practices to include protective clothing and equipment, preventive maintenance along with specific safety practices related to selected industries. Emphasis is placed on the construction trades. (Registration fee, $10.00)

CN 39 – Modern Popular Music, Non-Credit
Eighteen (18) hours of instruction. This is a survey course intended to assist musicians in performance and composition techniques. (Registration fee, $10.00)

CN 40 – Bible History, Non-Credit
Twenty-one (21) hours of instruction. This is a survey course dealing with selected portions from both Old and New Testaments. This course is designed to give the student a basic understanding of the main thrust of the history and content of the Bible. (Registration fee, $10.00)

CN 41 – Emergency Medical Technician (Refresher), Non-Credit
Twenty-seven (27) hours of instruction. This refresher course is designed to assure maintenance of a uniformly high level of training and skill among Emergency Medical Technicians who have successfully completed the basic training program. Specific objectives are to review the basic skills and knowledge of emergency medical care, to bring the student up-to-date on new knowledge in present care skills, employment of acceptable newly developed equipment, faults of new equipment that is not acceptable, and changes in state laws or medical legal requirements. (Registration fee, $10.00)

CN 42 – Quilling, Non-Credit
Eight (8) hours of instruction. This course teaches the ancient craft of quilling, or lacy paper sculpture. This is the art of shaping coils of narrow paper strips into various forms and designs to create three-dimensional decorations, plaques, and pictures. All required materials as recommended by the instructor will be furnished by the student. The estimated cost of materials is $10.00. (Registration fee, $10.00)

CN 43 – Nursing Forums, Non-Credit
Thirty (30) hours of instruction. Prerequisite: Student must be a registered Nurse. A variety of clinical specialties, nursing care and legal aspects applicable to nursing care of the hospitalized patient. The purposes being to upgrade the nursing skills and practice of the graduate, registered nurse practitioner. (Registration fee – by organizational contract.)
CN 44 – Fire Technology Seminar, Non-Credit
Twelve (12) hours of instruction. Included in this seminar is a brief overview of the Fire Standards Council Laws, Rules and Regulations; the 200 hour recruit training program, the Leadership program, and other aspects as pertains to Fire Technology training. (Registration fee, by organizational contract.)

CN 45 – Methods of Teaching for Fire Instructors, Non-Credit
Forty-two (42) hours of instruction. 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. (Registration fee, $10.00)

CN 47 – Philosophy of Leisure, Recreation and Play, Non-Credit
Forty (40) hours of instruction. This course offers a brief introduction to the philosophy of leisure, recreation and play, evaluation of the differences between each, and the interrelationships. (Registration fee, $5.00)

CN 48 – Management in Child Care I, Non-Credit
Thirty (30) hours of instruction. This course is an introductory study of the growth and development of the child from conception through the age of five, including but not limited to physical, social, emotional and intellectual development. The management of the child care program is studied. (Registration fee, $10.00)

CN 49 – Volunteer Tutoring in Reading, Non-Credit
Fifteen (15) hours of instruction. This course is designed to provide those who tutor elementary children in reading some of the basic fundamentals of reading instruction. Practical tutoring experience is arranged concurrently through the public schools. (Registration fee, $10.00)

CN 50 – Management in Child Care II, Non-Credit
Thirty (30) hours of instruction. This course is a continuation of Management in Child Care I and includes an introductory study of the growth and development of the child from conception through the age of five, including but not limited to physical, social, emotional and intellectual development. The management of the child care program is studied. (Registration fee, $10.00)

CN 51 – Great Decisions, 1974, Non-Credit
Sixteen (16) hours of instruction. This course is offered in conjunction with the Foreign Policy Association, a private non-profit, non-partisan organization working to develop, through education, an informed, thoughtful and articulate public opinion on major issues of foreign policy. United Press International and Mutual Broadcasting System are cooperating by distributing a series of articles and radio broadcasts coinciding with each weekly lesson. (Registration fee, including booklet, $2.00)

CN 52 – Transactional Analysis, Non-Credit
Thirty six (36) hours of instruction. This course provides a discussion of Transactional Analysis as a means of improving self-understanding and interpersonal relationships. Topics to be included are ego status, transactions, games and scripts. A variety of classroom exercises will be used to illustrate the concepts of Transactional Analysis. (Registration fee, $10.00)

CN 53 – Intermediate Tennis, Non-Credit
Sixteen (16) hours of instruction. This course is designed for students with a basic knowledge of tennis. Class is limited to twelve students. (Registration fee, $10.00)
CN 54 – Flower Arranging, Non-Credit
Twenty-one (21) hours of instruction. This course is designed to teach the basics of flower arranging including basic types of arrangements, methods, and materials. (Registration fee, $15.00)

CN 55 – How to Use Your Money Wisely, Non-Credit
Twelve (12) hours of instruction. This course is designed especially to assist individuals or families in handling their finances with emphasis placed on budgeting, checking accounts and bank reconciliations; understanding of credit, how to obtain and use consumer credit; the costs and benefits of using credit; how to use the services of financial institutions and credit bureaus, what a collection agency does and whom to consult when you have financial difficulties. (Registration fee, $10.00)

CN 56 – History of Photography: Its Evolution as a Fine Art, Non-Credit
Eighteen (18) hours of instruction. This course is designed to examine past and present works of photography and discover changes that fine art photography has encompassed, and to see photographs as a valuable, highly contemporary art. (Registration fee, $10.00)

CN 57 – Emergency Cardiac Technician, Non-Credit
Two-hundred (200) hours of instruction. This course is designed for the registered Emergency Medical Technician to receive advanced training in cardiac care and other related areas. Included are demonstrations and observations in the emergency room, and other hospital facilities, and in obstetrics, autopsy, and coronary care areas. (Registration fee, $10.00)

CN 58 – Women in Modern Fiction, Non-Credit
Sixteen (16) hours of instruction. A discussion-oriented course stressing how women have been portrayed in modern short fiction. Emphasis on various roles adopted by a woman in the course of her life, as reflected in modern fiction. (Registration fee, $10.00)

CN 59 – Creative Career Concepts, Non-Credit
Twelve (12) hours of instruction. This course is designed to assist the individual in exploring needs, aspirations, and goals. Exciting career opportunities will be examined and training discussed, along with creative ideas for business enterprise and job-seeking "know-how." This course will assist the person who wants to find a place on the employment scene. (Registration fee, $5.00)

CN 60 – Cooking for the Connoisseur, Non-Credit
Twelve (12) hours of instruction. This course will be a gourmet cooking lecture and demonstration course and will be presented by six outstanding chefs of the area. Each lesson will be held at the location where the chef is employed. After each session, the entertainment menu that was featured will be served as luncheon for the class. (Registration fee, $30.00)

CN 61 – “Rusty Lady” Lecture Series, Non-Credit
Eight (8) hours of instruction. This series examines the contemporary knowledge of various subject areas and explores future perspectives. Presented in cooperation with the Council for Continuing Education for Women of Central Florida, Inc., these lectures are geared to the alert, interested person who wants to keep current, stimulated, and informed on what is happening in the various disciplines of our multi-faceted culture. The presentations are made by authorities recognized for their expertise. (Registration fee, $5.00)
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. To be taken concurrently with CT 101.

+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. Pre-requisite: CT 102 or permission of instructor. 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 behavior 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 construction projects. Covers characteristics and capabilities of work equipment; methods of obtaining unit costs of in-place construction; and field reporting practices and responsibilities of field inspection.

CV 191 - Materials (Chemistry and Properties), 3 credits
Two class periods and one four-hour laboratory. Introductory course in the fundamental nature of matter and how chemical reactions take place to form compounds. Origin and use of construction materials and characteristics and use of soils, aggregates, and bitumens as construction materials are presented in detail. Description of chemical nature, reactivity, and properties as well as physical properties presented for each material studied.

CV 192 - Surveying and Measurements, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: EG 151, MS 138/171. Elementary surveying course including fundamentals of plane surveying and use and care of equipment. Accurate measuring of distance; theory and practice of leveling; angles and bearings; principles and use of transit; curves; stadia; and topographic and land surveying studied in coordinated class, laboratory and field assignment.

CV 193 - Mechanics (Statics and Dynamics), 4 credits
Three class periods and one three-hour laboratory. Co-requisite: PH 152/162. Course introduces basic concepts of mechanics, with emphasis on the action of force systems on rigid bodies and the response of those bodies to the applied forces. The first portion of the session is devoted to the study of statics, or stationary bodies, while the second portion is devoted to dynamics, or bodies in action.

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 graphical 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 culverts is stressed. The student becomes familiar with materials and nomenclature associated with design and drafting operations.
+CV 291 -- Strength of Materials, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: CV 193. Course provides introduction to the strength of materials method of determining the internal stresses and deflections of basic local carrying members. The laboratory supplements the classroom presentation by giving students clearer understanding of the response of components and structures to external loads.

+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 calculations and stereoscopic measurements; and applications in radial line plotting, tax map preparation, and mosaic construction.

+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 retaining wall theory; and stability of slopes and subgrades. Foundation design and behavioral characteristics are also covered.

+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.

+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.

+CV 296 -- Roadway Design and 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.

+CV 297 -- Reinforced Concrete Construction and Pile Driving, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: CV 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. Special study units will be devoted to problems of pile driving.

+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.
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.

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 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 — 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.

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 CY 156 concurrently with this course.

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.

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.

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.
CY 290 – Seminar: Special Topics in Chemistry, 1 credit
One two-hour class period. 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 four-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.

+DG 201 – Electromechanical Drafting I, 3 credits
Two class periods and one four-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.

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

+DG 211 – Mechanical Drafting II, 3 credits
Two class periods and one four-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.

+DG 212 – Mechanical Drafting III, 3 credits
Two class periods and one four-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.

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 – Commercial 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 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.

ENGINEERING

EG 151 – Engineering Drawing, 3 credits
Two class periods and one four-hour laboratory. A survey course of the principles and practices involved in making and reading engineering drawings. Emphasis is placed on lettering and industrial symbolism.

EG 152 – Descriptive Geometry, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: EG 151. This course includes the theory and practice in solving graphic problems involving point, line, and space relationships.

EG 157 – Engineering Materials and Processes, 3 credits
Three class periods and one two-hour laboratory. 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 81 – English Review, 3 credits
Three class periods. A comprehensive review of grammar, usage, spelling, vocabulary and style, conducted as an individualized program, with the student concentrating on specific weaknesses. Satisfactory completion of this course should enable the student to proceed without difficulty through a regular college program.

EH 51-151 – Freshman Composition and Directed Studies Laboratory, 6 credits.*
Six class periods. A laboratory course designed to develop basic skills and teach the techniques of effective writing. Reading of modern essays combined with use of multi-media. Six credits earned in this course satisfy requirements for EH 151 in all programs.

EH 52-152 – Freshman Composition and Directed Studies Laboratory, 6 credits.*
Six class periods. Prerequisite: EH 151 or equivalent. A laboratory course designed to develop basic skills and teach the technique of effective writing. Reading of varied selections to provide models, direction and practical patterns as guides combined with multi-media. Six credits earned in this course satisfy requirements for EH 152 in all programs.

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. Reading of drama and poetry 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.

*(Three of the six credits earned are institutional credit. See Institutional Credit section of catalog.)
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.

ELECTROMECHANICAL

+EM 101 – Electronics I, 4 credits
Three class periods and one three-hour laboratory. Corequisites: MS 137/170 and PH 151/161. The first basic lab course covering the concepts of voltage, current, and resistance, network theorems, inductance, capacitance, AC signals, and AC circuits.

+EM 102 – Electronics II, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EM 101. A continuation of EM 101 covering pulse and other non-sinusoidal wave forms, transistors and other semiconductor devices, and pulse, digital, and switching circuits.

+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.
+EM 201 — Digital Computer Fundamentals, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EM 102. Study of the fundamentals of digital computers and other digital systems; the major areas of study will be number systems, boolean algebra, and computer components including digital logic circuits and their applications.

+EM 202 — Digital Computing Systems, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EM 201. 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.

+EM 215 — Control Systems, 4 credits
Three class periods and one three-hour laboratory. Prerequisites: EM 102, EM 150, PH 151/161. Co-requisite: PH 152/162. This course is designed to develop an understanding of basic systems and the devices used in these systems; in class the system and devices will be analyzed and in the laboratory the student will connect, operate, adjust, and test the various devices individually and in simple systems.

+EM 220 — Electromechanical Components, 4 credits
Three class periods and one three-hour laboratory. Prerequisites: EM 102 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.

+EM 230 — Storage Principles and Devices, 4 credits
Three class periods and one three-hour laboratory. Prerequisite: EM 201. 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.

+EM 240 — Input/Output Devices, 4 credits
Three class periods and one three-hour laboratory. Prerequisites: EM 201 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.

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.
ECONOMICS

ES 151 – Basic Economics, 3 credits (IS)
Three class periods. A general survey course of basic 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.

FRENCH

FH 151-152 – Elementary French, 3-3 credits (CE) (IS)
Three class periods. Beginning course in fundamental French grammar and communication skills.

FH 251-252 – 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)
Three class periods. 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
Three class periods. 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
Three class periods. Prerequisite: FT 111. Practical application of principles covered in FT 111. This unit covers the non-fighting 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
Three class periods. 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
Three class periods. 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
Three class periods. 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
Three class periods. 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
Three class periods. Prerequisite: FT 101. Special emphasis on hazardous materials and the fire problems associated with storage, handling and fire control; examination of special fire problems in specific problem occupancies; examination of special fire problems of expanding urban areas and industries; and fire investigation, problems and principles.

+FT 231 – Fire Department Management, 3 credits
Three class periods. 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.

GRAPHIC ARTS TECHNOLOGY

+GA 101 – Introduction to Graphic Communications, 3 credits
Two class periods and one four-hour laboratory. 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 four-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.

+GA 115 – Layout, Design and Copy Preparation, 3 credits
Two class periods and one four-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. Also covered is type specification, paste-up and keylining for posters, displays, reports, magazines, packaging, labels and letterheads.

+GA 150 – Illustrating, 1, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: EG 151. A basic course in the application of freehand sketching and mechanical projection to
industrial/commercial problems in representation and design using axonometric, oblique, and perspective techniques; laboratory problems include illustrations made from objects, notes and sketches, and orthographic multiview drawings; an introduction to shade and shadow and artist's perspective.

+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.

+GA 210 – Graphic Reproduction Processes II, 3 credits
Two class periods and one four-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.

+GA 230 – Illustrating II, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: GA 130 or permission of instructor. An advanced study in initial planning, production, and completion of finished artwork for brochures, reports, catalogs, manuals, flyers and other industrial/commercial publications. Inking techniques will be studied and practiced in conjunction with the use of other commercially available products, i.e. transfer types, dot and screen patterns, overlay and tonal mediums, and various templates. Instruction will also be given in keylining and color separation.

+GA 235 – Offset Stripping and Lithographic Plates, 3 credits
Two class periods and one four-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.

+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 four-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.

+GA 250 – Photolithography I, 3 credits
Two class periods and one four-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.

**GA 260 – Photolithography II, 3 credits**
Two class periods and one four-hour laboratory. Prerequisite: GA 250 or permission of the instructor. An advanced study of the photographic processes 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 photo-mechanical 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.

**GA 265 – Copy Preparation, 3 credits**
Two class periods and one four-hour laboratory. Planning, visualizing advertising and industrial copy; emphasis is on the use of layouts in the preparation of camera ready copy to achieve the appropriate mix of typography, illustration, and photography; the implementation of color in various advertising media such as posters, displays, catalogs, reports, newspapers, and magazines, as well as labels, packaging, and letterheads.

**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.

**GA 280 – Pictorial Rendering, 3 credits**
Two class periods and one four-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.
GEOMETRY

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, glaciation, 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, 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 151-152 - Elementary German, 3-3 credits (CE) (IS)
Three class periods. Beginning course in fundamental German grammar and communication skills.

GN 251-252 - 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 indepth study of one or more countries in each region.

HOME ECONOMICS

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 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 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 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 95 – Cultural Studies, 3 credits
Three class periods. A basic historical and conceptual approach to the art forms of western culture. Emphasis on appreciation of the monuments of literature, art, music, philosophy and religion from ancient times to the modern world.

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 151 – Introduction to Horticulture, 2 credits
One class period and one three-hour laboratory. This course is designed to introduce the student to the many aspects of horticulture, plant culture in general, propagation and the edaphic and environmental factors affecting plant growth. Emphasis is on the home garden rather than commercial production and includes sections on fruit culture, the vegetable garden and lawn care, as well as the ornamental species grown in Florida.
+HT 166 – Plant Materials I, 2 credits
One class period and one three-hour laboratory. 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.

+HT 167 – Plant Materials II, 2 credits
One class period and one three-hour laboratory. Prerequisite: HT 166. A continuation of the study of woody plants to include some of the less common species; also roses, palms, cycads, conifers, and ground covers.

+HT 173 – Horticultural Botany I, 3 credits
Two class periods and two two-hour laboratories. 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.

+HT 174 – Horticultural Botany II, 3 credits
Two class periods and two two-hour laboratories. A continuation of the study of flowering plants; also other plants of horticultural interest such as ferns, cycads and conifers. The topics will include seeds, fruits and their dispersal, organs of perennation, vegetation types and plant communities, elementary genetics and plant breeding.

+HT 181 – Plant Physiology and Pathology, 2 credits
One class period and one three-hour laboratory. General and inorganic chemistry will be reviewed as it pertains to an understanding of plant physiology. The major aspects of plant function will be discussed including photosynthesis, water relations, mineral nutrition, respiration, growth and development and abnormal physiology. The nature of plant disease will be explored and some common types of plant pathogen examined. Typical disease cycles will be studied.

+HT 191 – Entomology, 3 credits
Two class periods and two two-hour laboratories. A survey of the major plant pests including insects, mites and nematodes, 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.

+HT 201 – Cooperative Placement in Industry, 3 credits
Eight hours per day, five days per week, Session III-A or III-B. Prerequisites: HT 151, 167, 173, 174, 181, 191. 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, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: HT 201. Introduction to the techniques and practices used in the production of nursery stock; soil composition and function, pH, the use of lime, fertilizers, and organic soil amendments, soil testing and sterilization procedures; mass production techniques in the propagation; watering and feeding of field and container grown stock; design and organization of the nursery, shade structures and other special equipment.
+HT 216 — Introduction to Design, 2 credits
One class period and one three-hour laboratory. A review of basic drawing and drafting procedures, plants and planting, principles of design and application to the landscaping of industrial and private gardens and parkways.

+HT 260 — Greenhouse Operations, 3 credits
Two class periods and one four-hour laboratory. Prerequisite: HT 205. Commercial production of foliage plants under glass, plastic, saran and lath; propagation, culture, pest and disease control and plant acclimatization.

+HT 268 — Plant Materials III, 2 credits
One class period and one three-hour laboratory. Prerequisite: HT 167. A study of the major annuals, perennials, bulbs, corms and tubers grown in the state of Florida. Emphasis is on identification, culture and usage.

+HT 269 — Plant Materials IV, 2 credits
One class period and one three-hour laboratory. Prerequisite: HT 268. A study of the foliage plants and other exotic species grown in Florida for use in indoor landscaping. Emphasis is on identification, use and maintenance.

+HT 292 — Disease and Weed Control, 3 credits
Two class periods and two two-hour laboratories. Prerequisite: HT 181. A study of the major diseases and weeds encountered when working with ornamentals in the state of Florida; principles of disease and weed control; fungicides, weed killers and methods of application; spraying equipment and its maintenance.
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 253 – 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.

PRIVATE AND INDUSTRIAL SECURITY

+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 211 – Principles of Loss Prevention, 3 credits
An overview of the functional operations of various specialized areas of security such as theft and risk control, security surveys and loss prevention management in proprietary and governmental institutions.

+IS 232 – Safety Management, 3 credits
Three class periods. An introduction to the regulations, principles, and methods pertaining to the field of occupational safety and health. Examines the develop-
ment 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 emphasizes the importance of proper planning for safety.

**JOURNALISM**

**JM 100 - Basic Reporting, 3 credits**
Three class periods. 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.

**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, layout, and other phases of the magazine will also entail activity outside the regular class.

**JM 210 - Editing and Makeup, 3 credits**
Three class periods. Learning and application of copy-desk techniques, evaluation and copy editing, correction of faulty news stories, headline writing, page layout design, and work with wire copy.

**JM 220-221-222-223 - Journalism Internship, 1 credit**
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. May be repeated for up to four credits.

**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.

**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.

**LAW ENFORCEMENT**

**LE 101 - Introduction to Criminal Justice, 3 credits (IS)**
Three class periods. History and philosophy of law enforcement and the development of modern police systems; jurisdiction of local, state and federal law 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
Three class periods. 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
Three class periods. 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
Three class periods. 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
Three class periods. 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
Three class periods. Recording the crime scene, collecting and preserving evidence. Familiarization with the police crime laboratory.

+LE 202 – Criminal Investigation II, 3 credits
Three class periods. Theory of investigation, case preparedness and interviewing and interrogation.

+LE 211 – Organized Crime in the U.S., 3 credits
Three class periods. History of organized crime to its present position of operation in the United States. Syndicates, gangs, racketeers, Mafia operations are researched and evaluated. The professional criminal and his modus operandi are discussed. The political and social implications of organized crime in a democracy are revealed.

+LE 221 – Criminal Law and Legal Procedures, 3 credits
Three class periods. Theory, history and purpose of criminal law; role of the Supreme Court and the Constitution in law enforcement. The law and procedures from incident through arrest. This course also covers the structure, definitions and most frequently used sections of the Florida Statutes dealing with crimes against persons and property.

+LE 222 – Criminal Evidence and Legal Procedures, 3 credits
Three class periods. Prerequisite: LE 221. The student becomes familiar with the kinds of evidence and with the rules governing the acquisition and admissibility of evidence in court. Emphasis is placed on search and seizure, rules of evidence and trial procedures as related to Constitutional provisions.

+LE 231 – Police Personnel Supervision, 3 credits
Three class periods. A consideration of supervisory problems peculiar to a police organization, equating sound principles of human relations and supervisory techniques with effective police performance.

+LE 235 – Police-Community Relations, 3 credits
Three class periods. A study of human relations and its effect on policing and confrontation management. Prejudice, discrimination, civil rights and individual liberties are evaluated. Sources of trouble, unrest and tension are identified. Demonstrations, protests, and civil disorders are discussed. Methods of confrontation management and other remedial resources are presented.
MUSIC

Valencia Community College offers courses in music for all students in the college 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, ballets, operas, recitals, clinics and workshops. In addition, active student involvement in music ensembles is sought, with numerous opportunities for performance on the campus and in the community.

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. Completion of the program normally prepares a student to enter as a junior at a four-year institution.

Every new student (freshman or transfer) desiring to major or minor in music must audition in voice, piano or a principal band or orchestral instrument in order to provide the department with evidence as to the proper level of study indicated. If achievement is below freshman music major level, the student will be required to enroll in MC 167 until a subsequent audition reveals his ability to perform satisfactorily in MC 173. Credit earned in MC 167 will not apply toward meeting requirements in the student's principal instrument.

A student pursuing a degree in music must register for private instruction in his principal instrument, and observe the following requirements:

1. Be examined in performance before a jury of music faculty at the end of each semester. Advancement to successive levels of study will be determined by the recommendations of the jury and the applicable instructor's appraisal of the student's development and proficiency during the semester.
2. Perform in at least one student recital each semester.
3. Attend all regularly scheduled student recitals each semester.
4. Register in at least one vocal or instrumental ensemble (other than techniques courses) each semester. A maximum of 4 credits is allowable for graduation requirements but students are encouraged to enroll in ensembles beyond this requirement for the benefit of further professional experience in their degree programs.

Non-keyboard majors should register for the MC 171-172 sequence in piano or MC 197-198 Class Piano until capable of demonstrating minimum proficiency on that instrument. Candidates for a Music Education degree, except voice majors, should register for the MC 171-172 sequence in voice, or MC 155-156 Class Voice, provided keyboard proficiency can be demonstrated.
Private instruction in voice, piano and principal band or orchestral instruments is also available for non-music majors. Interested students should arrange for auditions through the department chairman. In addition, class instruction in piano, voice, and guitar is offered, for which no audition is required.

**MC 86 – Basic Musicianship, 3 credits**
Three class periods. Designed for non-music majors and those students majoring in music who have deficiencies in basic music theory. Introduction to the piano keyboard, singing, music notation, and the construction of scales, intervals and triads.

**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.

**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.

**MC 165-166 – Applied Music (Private Instruction) I-1 credit ($25.00 Music Fee)**
One one-half hour lesson per week. Private instruction for non-music majors.

**MC 167 – Applied Music (Private Instruction), 1-1 credit ($50.00 Music Fee)**
One one-hour lesson per week. For music major candidates below freshman performance level. Students should continue to register for this course until they have successfully auditioned for MC 173. Credit not applicable toward degree requirements for primary instrument. Also for non-music major desiring one-hour lessons.

**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) I-1 credit ($25.00 Music Fee)**
One one-half hour lesson per week. Freshman music major level. Also available to non-music majors by audition.

**MC 173-174 – Applied Music (Private Instruction—Primary Instrument) 2-2 credits ($50.00 Music Fee)**
One one-hour lesson per week. For music majors and other students by audition.

**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. Not recommended for music majors.

**MC 180 – Brass Techniques, 1 credit ($5.00 Music Fee)**
Two class periods. Basic instruction on the brass instruments. Designed for music education majors, but open to any student by consent of the instructor.

**MC 181 – Woodwind Techniques, 1 credit ($5.00 Music Fee)**
Two class periods. Basic instruction on the woodwind instruments. Designed for music education majors, but open to any student by consent of the instructor.
MC 182 – Percussion Techniques, 1 credit ($5.00 Music Fee)
Two class periods. Basic instruction in percussion techniques. Designed for music education majors, but open to any student by consent of the instructor.

MC 183 – String Techniques, 1 credit ($5.00 Music Fee)
Two class periods. Basic instruction on the orchestral string instruments. Designed for music education majors, but open to any student by consent of the instructor.

MC 184 – Brass Choir, 1 credit
Two class periods. Open to all students who play brass instruments. May be repeated for credit. Maximum of four credits. Admission by audition with instructor.

MC 185 – College Band, 1 credit
Three class periods. Open to all students of the college who play appropriate instruments. May be repeated for credit. Maximum of four credits. (Formerly offered as Instrumental Ensemble.)

MC 186 – Music Theory I, 4 credits (IS)
Three lecture periods and two one-hour laboratories. Prerequisite: satisfactory score on Theory Aptitude Test or completion of MC 86. A study of the elements of music through application of the principles of scale, interval and triad formation. Basic four-part writing including triads in first inversion. Aural skills laboratory: sight-singing, melodic, rhythmic and harmonic dictation.

MC 187 – Music Theory II, 4 credits (IS)
Three lecture periods and two one-hour laboratories. Prerequisite: MC 186. A continuation of the study of the elements of music through four-part writing, harmonization of given soprano and bass lines, and analysis of Bach Chorales. Non-harmonic tones; modulations to nearly related keys; harmonic rhythm. Aural skills laboratory; sight-singing, melodic, rhythmic, and harmonic dictation.

MC 190 – Men's Chorale, 1 credit
Three class periods. Open to all students without audition; music reading not a pre-requisite. A wide range of literature, from classical to contemporary, folk, and popular music is performed on campus and throughout the community, many selections being accompanied by guitar and other popular instruments. A training group for men who enjoy singing. Solos, duets, and other groupings are provided for the more advanced students.

MC 191 – Music Appreciation, 3 credits
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 195 – Women's Chorale, 1 credit
Three class periods. The chorale, known as the "Chalamar," performs throughout the area and studies literature from contemporary and classical through folk and pop music of today with guitar accompaniment. A training group for women who love to sing, music reading and auditions are not required. Solos, duets, and small ensemble experiences are provided for more advanced students.

MC 197-198 – Class Piano I and II (for music majors) 1-1 credit
Two class periods. An elementary course in piano designed to prepare non-keyboard students for minimum proficiency requirements in music major programs. Involves playing of major and minor scales, arpeggios, sight-reading and transposition.
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 a great deal of experience in choral singing. Literature and public performance stressed.

MC 210 – Choral Conducting, 2 credits.
Two class periods. Prerequisite: MC 086 or MC 186, or permission of the instructor. Elementary theory and practice in conducting choruses and choirs; study of choral literature.

MC 250 – Music History I, 3 credits (IS)
Three class periods. A survey of the development of Western music from the ancient Greeks to the Rococo Period. Emphasis upon the stylistic forms of each period. An in-depth course required of all music majors.

MC 251 – Music History II, 3 credits (IS)
Three class periods. Prerequisite: MC 250. A survey of the development of Western music from the Rococo Period to the present. Emphasis upon the stylistic forms of each period. An in-depth course required of all music majors.

MC 271-272 – Applied Music (Private Instruction – Secondary Instrument) 1-1 credit ($25.00 Music Fee)
Prerequisite: MC 172. One one-half hour lesson per week.

MC 273-274 – Applied Music (Private Instruction – Primary Instrument) 2-2 credits ($50.00 Music Fee)
Prerequisite: MC 174 or equivalent. One one-hour lesson per week.

MC 286 – Music Theory III, 4 credits (IS)
Three lecture periods and two one-hour laboratories. Prerequisite: MC 187. Analytical approach to harmonic techniques of composition in the period of common practice (Baroque, Classic, Romantic). Advanced techniques in partwriting, harmonization, and modulations involving secondary dominants, seventh, ninth, eleventh and thirteenth chords. Introduction to counterpoint and basic imitative counterpointal forms through analysis and writing. Aural skills laboratory: sight-singing; melodic, harmonic and rhythmic dictation.

MC 287 – Music Theory IV, 4 credits (IS)
Three lecture periods and two one-hour laboratories. Prerequisite: MC 286. Continuation of harmonic analysis to include the style of the Twentieth Century. Partwriting with altered chords and exercises involving the extension of tonality. Modulation to foreign keys, in both diatonic and chromatic contexts. Composition and analysis of basic contrapuntal forms of two and three parts. Aural skills laboratory: sight-singing; melodic, harmonic, and rhythmic dictation.

MC 288-289 – Keyboard Harmony, 1-1 credit
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.
MECHANICAL TECHNOLOGY

+ML 202 – Machine Shop and Welding Practice, 2 credits
One class period and one three-hour laboratory. This is a laboratory course that covers the basic hand and machine tools used by industry. Standard practices and procedures such as measurements, gauging, tapering, thread standards, and surface finishing are studied. Oxy-acetylene welding, brazing, tube bending, silver and flaring soldering are practiced. An understanding of the processes is emphasized rather than proficiency in them.
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 51 – Business Arithmetic, 3 credits
Three class periods. Designed for students pursuing the one-year clerical certificate program. The course includes the arithmetic of whole numbers, fractions, decimals, percentage, interest, sales records, payrolls and taxes.

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 (Offered as MS 51 prior to 1968-69.)

MS 80 – Elementary Algebra, 3 credits
Three class periods. Designed for students who plan to take college algebra but have had no algebra or only one year of high school algebra. Includes introduction to language of algebra, properties of numbers, equations, inequalities, polynomials in one variable, graphs, linear equations, factoring, factors and quadratic equations.

MS 81 – 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 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 151 – College Mathematics, 3 credits (CE) (IS)
Three class periods. Prerequisite: MS 61; two years of high school mathematics including one full year of algebra or equivalent. The course is designed to meet the General Education mathematics requirement. Emphasis is on concepts. The topics include mathematical logic, set symbolism and terminology, number bases, finite mathematical systems, introductory algebra and geometry and an introduction to the real number system. (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)
Three class periods. Prerequisite: MS 151 or equivalent. An extension of MS 151 stressing the structure of the real number system and including a study of polynomials, linear systems, inequalities, exponents, and radicals, logarithms, functions and graphing, logic binomial theorem, quadratics, complex numbers, and introductory probability. This course is recommended for elementary education majors and as background for business and science majors who plan to take statistics. This course is not designed for engineering or mathematics majors. (Credit is not given for both MS 152 and MS 170.)

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)
Four class periods. 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 above average student planning to study analytic geometry and calculus. (Credit is not given for both MS 173 and MS 170.)

MS 251 – Calculus with Analytic Geometry I, 5 credits
Five class periods, Prerequisite: MS 170 and MS 171; MS 173 or permission of the Mathematics Department. This course emphasizes limits and continuity; derivatives of algebraic forms; applications to graphing; maxima and minima; conic sections; the definite and indefinite integrals with applications.

MS 252 – Calculus with Analytic Geometry II, 5 credits
Five class periods. Prerequisite MS 251. Topics include differentiation and integration of trigonometric and exponential functions; derivatives and integrals with polar and parametric forms; formal methods of integration; applications of integrals; vectors; and indeterminant forms.

MS 253 – Calculus with Analytic Geometry III, 3 credits (IS) (session II)
Three class periods. Prerequisite: MS 252. Topics include infinite series; three dimensional analytic geometry and vectors; introduction to partial derivatives and multiple integration.
MS 255 – Elementary Statistics, 3 credits (CE)
Three class periods. Prerequisite: two years of high school algebra with a grade of "C" or better. MS 81 or MS 152 or MS 170. An introductory course which includes such topics as probability, summarization of data, normal distributions, standard deviation, regression, correlation and inference.

MS 261 – Introduction to Linear Algebra, 3 credits
Three class periods. Prerequisite: MS 251. A course designed to prepare students majoring in engineering, mathematics, and physics for courses in mathematics which require techniques and methods of matrix algebra. Includes vector spaces, systems of equations, matrices and linear transformations.

MEDICAL LABORATORY TECHNOLOGY

+MT 130 – Orientation to Medical Laboratory Techniques, 3 credits
Two lecture sessions and one four hour laboratory session. Prerequisites: acceptance into a School of Medical Laboratory Technology. This course is provided for Medical Laboratory Technology majors who must work while in school. Topics include blood drawing, electro-cardiograms, specimen processing, media preparation for microbiology, slide staining, etc. Classes are conducted in the student laboratory on campus with several hours per week spent in a hospital laboratory. The students may then be hired by the hospitals to work in capacity trained in this course. Taking this course in no way guarantees the student a job.

+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. (Formerly offered as CT 140 for 5 credits.)

+MT 142 – Hematology, 4 credits
Three lecture sessions and one three-hour laboratory. Prerequisite: MT 140. Basic hematology is presented with emphasis on blood counts, hemoglobin determinations, coagulation studies, etc. (Formerly offered as part of CT 141.)

+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. (Formerly offered as part of CT 141.)

+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. (Formerly offered as part of CT 142.)

+MT 148 – Medical Microbiology, 4 credits
Three lecture sessions and two two-hour laboratories. Prerequisite: MT 140 and BY 280. This course includes expanded principles of bacteriology, parasitology and mycology with emphasis on aseptic technique and organism identification. (Formerly offered as part of CT 142.)

+MT 240 – Clinical Chemistry, 4 credits
Three lecture sessions and one three-hour laboratory session. Prerequisites: MT 140 and CY 172. Advanced clinical chemistry with emphasis on quality control, automation, organization of workload, and performance of all routine procedures. (Formerly offered as CT 240 for 5 credits.)

+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. (Formerly offered as CT 241.)
NURSING

+NG 101 – Nursing I, 8 credits
Four (4) class periods and twelve (12) clinical laboratory hours per week. Prerequisite or taken concurrently: BY 255. Nursing 101 is a foundations course designed to enable the student to develop the basic understandings, knowledges, skills and scientific principles in patient care. It includes beginning communications skills leading to development of effective interpersonal relations, nursing activities which aid in meeting the patient’s basic needs, nursing intervention in illness, and orientation to the field of nursing.

+NG 104 – Nursing II, 3 credits
Three (3) class periods and nine (9) clinical laboratory hours per week for seven and one-half (7½) weeks. Prerequisite: NG 101. Maternal and neonate nursing is based upon the concept that optimum health care of mother and infant are basic to the health of the individual, the family, and the nation. The student is provided an 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 so the student may gain skills in understanding and meeting patient’s nursing care needs.

+NG 105 – Nursing III, 3 credits
Three (3) class periods and nine (9) clinical laboratory hours per week for seven and one-half (7½) weeks. Prerequisite: NG 101. The course 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 101 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.

+NG 106 – Nursing IV, 4 credits
Four (4) class periods and twelve (12) clinical laboratory hours per week for seven and one-half (7½) weeks. Prerequisite: NG 101. This course 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 all individuals. The course focuses upon the physical effects of illness on the individual at the beginning level of development.

+NG 201 – Nursing V, 8 credits
Four (4) class periods and twelve (12) clinical laboratory hours per week. Prerequisite: NG 101, 106. The experience in the course will be multi-faceted, all aspects of illness as they affect 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.

+NG 202 – Nursing VI, 8 credits
Four (4) class periods and twelve (12) clinical laboratory hours per week. Prerequisite: NG 201. This course builds upon all previous courses and is a continuation of NG 201. The emphasis throughout is on understanding the pathophysiology of the more complex medical-surgical conditions and on increasing nursing skills, attitudes, and appreciations which will enable the student to give comprehensive nursing under supervision to adult and pediatric patients.

+NG 203 – Nursing VII, 2 credits
Two (2) class periods per week. Prerequisite: NG 106. Will provide the opportunity for students to raise questions of problems in nursing practice, consider 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.
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
Emphasis is placed on the principles of administration in the correctional setting including budgeting and financial control, recruitment, and development of staff; administrative decision making, public relations, and other correctional administrative functions. The student prepares organizational charts and functional charts for a correctional institution. Treatment, custody, and support activities are examined as entities and in relation to each other.

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 programs that are or could be implemented are reviewed. Juvenile detention facilities and practices are examined.

PC 201 – Essentials of Interviewing, 3 credits
The basic elements in all human relationships are reviewed to provide the context and techniques for interviewing and individual treatment as practiced in social work, education and corrections where interviewing is essential.

PC 202 – Group and Individual Counseling, 3 credits
The basic principles of human behavior and some of the techniques of changing attitudes and behavior are evaluated. Individual and group approaches to counseling are reviewed.

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
The student applies theoretical considerations learned in the classroom and relates such theories to practical meanings on the job.
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.

PE 152 – Beginning Golf, 1 credit
Two class periods. Designed for the beginning golfer. The basic fundamentals are stressed. Exposure to all phases of the game. Discussions are held on the rules of etiquette, play, and purchase and care of equipment. All equipment is furnished. The recreational and carryover values of the sport are emphasized.

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.

PE 154 – Beginning Tennis, 1 credit
Two class periods. Fundamental tennis skills are introduced to the student with emphasis placed on body positioning, footwork and stroke techniques. Practical experience as well as discussions on the rules of the game, singles and doubles strategy, and court etiquette are stressed. All equipment is 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.

PE 156 – Gymnastics and Individual Conditioning for Women, 1 credit
Two class periods. A basic program of physical conditioning and testing. Stress is placed on personal inventory and attaining full use of physical inheritance.

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.

PE 160-161 – 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 162-163 – 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 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.

PE 180 – Basketball for Women, 1 credit
Two class periods. The class is designed for the casual or intramural participant interested in improving her skills and knowledge of basketball.
PE 181 – Softball for Women, 1 credit
Two class periods. The class is designed for the casual or intramural participant interested in improving her skills and knowledge of softball.

PE 182 – Volleyball for Women, 1 credit
Two class periods. The class is designed for the casual or intramural participant interested in improving her skills and knowledge of volleyball.

PE 183 – Touch Football for Women, 1 credit
Two class periods. The class is designed for the casual or intramural participant interested in improving her skills and knowledge of touch football.

PE 184 – Team Sports for Men (Touch Football–Softball), 1 credit
Two class periods. The class is designed for the casual or intramural participant interested in improving his skills and knowledge of touch football and softball. Emphasis will be placed on the offensive and defensive playing strategy as well as a review of the fundamental skills, rules and terminology.

PE 185 – Team Sports for Men (Volleyball-Basketball), 1 credit
Two class periods. The class is designed for the casual or intramural participant interested in improving his skills and knowledge of volleyball and basketball. Emphasis will be placed on the offensive and defensive playing strategy as well as a review of the fundamental skills, rules and terminology.

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.

PE 254 – Intermediate Tennis, 1 credit
Specialized instruction with emphasis on technique and strategy used in competitive play. Open to any student with consent of the instructor.

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.

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.

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 program.

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.
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.

PH 151-152 – 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.

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.

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.

PH 261-262 – 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.

PHILOSOPHY

PI 251 – Philosophy, 3 credits (IS)
Three class periods. An introduction to major philosophical themes in Western culture. (Offered as PI 151 prior to 1969-70.)

PI 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 51-151 – American Government I with Directed Studies Laboratory, 6 credits*
Six class periods. A course designed to assist students develop skills required for study in the area of national government. The content is the same as PL 151. Six credits earned in this course satisfies the requirement for PL 151 in all programs.

PL 151 – American Government I, 3 credits (CE) (IS)
Three class periods. Theory, organization, principles, and functions of the national government, stressing the relationship of the individual to his government in the political system. (Formerly offered as National Government.)

PL 52-152 – American Government II with Directed Studies Laboratory, 6 credits*
Six class periods. A course designed to assist students develop skills required for study in the area of state and local government, international politics, and economics. The content is the same as PL 152. Six credits earned in this course satisfies the requirements for PL 152 in all programs.

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 153 – Honors Course in American Government I, 3 credits (IS)
Three class periods. Course content same as PL 151. In addition, students will have opportunities to become highly involved in participatory activities and individual projects. Criteria for enrollment should include interest, motivation, and demonstrated academic ability.

PL 154 – Honors Course in American Government II, 3 credits (IS)
Three class periods. Course content same as PL 152. Course activities and enrollment same as PL 153.

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. Recommended for students on the sophomore level who have completed PL 151-152.

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.

(All except 255 offered as GE prior to 1969-70.)

PL 290 – Seminar: Selected Topics in Political Science, 1 credit
One class period. 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. This course may be repeated for a maximum of three semester hours of credit.

*(Three of the six credits earned are institutional credit. See Institutional Credit section of catalog.)
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 compliment 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.

PSYCHOLOGY

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 152 – Honors Course in General Psychology, 3 credits
Three class periods. 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. In addition emphasis will be given to the scientific and physiological aspects of psychology. Enrollment by interview with counselor or psychology instructor. (Credit is not given for both PY 151 and PY 152.)
PY 161 – Human Relations in Business and Industry, 3 credits (IS)
Three class periods. An introduction to the psychology of human behavior as
applied to employee and management relations. A course designed to study the
many factors involved in human relations, i.e., leadership, ethics, motivation,
morale, organizations, personnel selection, consumer problems, and the work sit-
uation. (Not recommended for psychology majors.)

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 out-
comes of learning, and study of the teaching-learning situation. (This course is
especially designed for prospective teachers.)

PY 260 – Psychology of Childhood and Youth, 3 credits (IS)
Three class periods. Prerequisite: PY 151. A course planned to survey theory and
research on growth and behavior from conception through adolescence. The
course will emphasize the biological, psychological, and social variables which
influence behavior. Research literature in the area will be emphasized.

PY 290 – Seminar: Selected Topics in Psychology, 1 credit
One class period. 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. This course may be repeated for a
maximum of three semester hours of credit.

READING

RG 90 – Reading, 3 credits (IS)
Three class periods. Designed to improve reading skills which facilitate
performance of acceptable college work.

RG 91 – Reading, 3 credits (IS)
Three class periods. Prerequisite: RG 90. A continuation of Reading 90 with
emphasis on study-reading skills.

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 200 – Advanced Reading Techniques, 3 credits (IS)
Three class periods. Designed to assist those students reading on college level to
improve the skills of speed, skimming, scanning, advanced study techniques, and
critical reading. The course requires at two (2) hour laboratory and one (1) hour
discussion or lecture per week.

RESPIRATORY THERAPY

+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
Safety precautions. Preparation for clinical practice.

+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.
+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.

+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.

+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.

+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.

+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.

+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.

+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.

+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 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. (All Respiratory Therapy courses offered as Inhalation Therapy courses prior to 1972-73.)

SPANISH

SH 151-152 – Elementary Spanish, 3-3 credits (CE) (IS)
Three class periods and one one-hour laboratory. Beginning course in fundamental Spanish grammar and communication skills.

SH 251-252 – 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 268-269 – 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 152 is designed to be either an open-circuit television or a classroom course. When offered over open-circuit television, voluntary review sessions and a variety of printed materials will be used to supplement the televised documentaries.

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 151-152 – 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.

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.
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