

2008 - 2009
CATALOG



CALHOUN
COMMUNITY
COLLEGE



2008-2009 CATALOG

DECATUR CAMPUS
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Decatur, AL 35609-2216
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HUNTSVILLE/CUMMINGS RESEARCH PARK CAMPUS
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<http://www.calhoun.edu>

FIRST EDITION

Calhoun Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate's degrees and certificates. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Calhoun Community College.

Member of
American Association of Community Colleges
Alabama Community College System

It is the intent of the compilers of this catalog that it contain policies, procedures, and guidelines adopted or approved by The State Board of Education of Alabama. Users are cautioned that changes in policies, procedures, and guidelines may have occurred since the publication of this material. In the event of such a conflict, the current statements of Board policy shall prevail.

EQUAL OPPORTUNITY IN EDUCATION AND EMPLOYMENT

Calhoun Community College is committed to equal opportunity in employment and education. The College does not discriminate in any program or activity on the basis of race, color, religion, sex, age, or national origin, or against qualified disabled persons, and it maintains an affirmative action program for protected minorities and women.

NONDISCRIMINATION STATEMENT

Calhoun Community College has filed with the Federal Government an Assurance of Compliance with all requirements imposed by or pursuant to Title VI of the Civil Rights Act of 1964 and the Regulation issued thereunder, to the end that no person in the United States shall, on the basis of race, color or national origin, be excluded from participation in, be denied the benefits thereof, or be otherwise subjected to discrimination under any program or activity sponsored by this institution. It is also the policy of Calhoun to be in accordance that "no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Title IX Coordinator for administrators, faculty, and staff is Ms. Kim Gaines, Office of Human Resources, P.O. Box 2216, Decatur, Alabama 35609-2216; telephone (256) 306-2592. The Title IX Coordinator for students is Dr. Kermit Carter, Dean for Student Affairs, P. O. Box 2216, Decatur, Alabama 35609-2216; telephone (256) 306-2613.

In addition, the College does not discriminate on the basis of disability in its educational programs and activities, pursuant to the requirements of Section 504 of the Rehabilitation Act of 1973, Public Law 93-112, and the Americans with Disabilities Act of 1990 (ADA), Public Law 101-336. This policy extends to employment by and admission to the college. The Section 504 Coordinator for administrators, faculty and staff is Ms. Kim Gaines, Office of Human Resources, P.O. Box 2216, Decatur, AL 35609-2216; telephone (256) 306-2592. The Section 504 Coordinator for students is Dr. Kermit Carter, Dean for Student Affairs, P.O. Box 2216, Decatur, AL 35609-2216; telephone (256) 306-2613 or 890-4700. The Dean for Student Affairs is the ADA Coordinator for the College.

Persons or any specific class of individuals who believe they have been subjected to discrimination prohibited by Titles VI, IX, Section 504, ADA, or an Act or Regulation issued thereunder may, alone or with a representative, file with the United States Commissioner of Education or with this institution, or with both, a written complaint.

Calhoun Community College engages in continual study on our effectiveness. Students may be required to participate in tests/surveys or other activities as part of this process.

Calhoun Community College owns all photographs of students and participants taken at Calhoun events and reserves the right to use these photographs for college promotional materials, both digital and print. Students who do not wish to have their photographs used must have a "Do Not Use Photograph" form completed and on file in the Calhoun Public Relations Office.

Welcome to Calhoun Community College

HISTORY OF CALHOUN COMMUNITY COLLEGE

Calhoun Community College is the result of the consolidation of the Tennessee Valley State Technical School and John C. Calhoun State Technical Junior College. The Tennessee Valley State Technical School was instituted by the Wallace-Patterson Trade School Act of 1947. John C. Calhoun State Technical Junior College was established under the Alabama Trade School Authority Act of 1963. The two schools were merged into a comprehensive institution to become John C. Calhoun State Technical Junior College and Technical School in September 1965. Both the Technical School and the Junior College are under the supervision of the Alabama State Board of Education. The president is directly responsible to the State Board through the Chancellor of the Department of Postsecondary Education. The present designation as a community college was formalized by a State Board of Education resolution of September 23, 1973.

ALABAMA STATE BOARD OF EDUCATION

Governor Bob RileyPresident of the Board, Montgomery
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Mr. Bradley Byrne
Chancellor
The Alabama Community College System

WELCOME

Message from the President

Calhoun Community College has a strong and well-known reputation for instructional excellence and workforce training. The College has positioned itself to be a benchmark institution leading the way for innovative technology for both faculty and students, and we are proud of the many accomplishments we have realized throughout the 60 years of our existence.

Calhoun's reputation for academic excellence is well known throughout our service area, the state of Alabama and the nation. It is our goal to provide life-changing opportunities for the citizens we serve, and we are pleased that you have made the decision to become a member of the Calhoun family.



MARILYN C. BECK
President

Vision

Calhoun Community College:
Your Community - Your College - Your Future.

Mission

The Mission of Calhoun Community College is to ensure student success and promote community development and cultural enrichment.

Strategies for Accomplishing the Mission

1. Provide quality, innovative instruction
2. Ensure open access
3. Promote lifelong learning
4. Value diversity
5. Secure partnerships for economic development
6. Provide comprehensive student support services
7. Institutionalize assessment, accountability, and improvement
8. Provide a supportive, responsive environment
9. Ensure opportunities for professional development

Values

- | | |
|-------------|------------------|
| • Integrity | • Accountability |
| • Honesty | • Excellence |
| • Fairness | • Diversity |
| • Service | • Teamwork |
| • Growth | • Creativity |
| • Respect | |

2008-2009 CALENDAR

Fall Semester

Faculty Duty Days – 87
Instructional Days – 78

Professional Development/Duty Day	M	Aug 18
Duty Day	T	Aug 19
Registration/Duty Day	W	Aug 20
Registration/Duty Day	Th	Aug 21
Duty Day	F	Aug 22
Classes Begin	M	Aug 25
Holiday – Labor Day	M	Sept 1
Holiday – Veterans' Day	T	Nov 11
State Professional Development/Faculty Duty Day	M-T	Nov 24-25
Faculty Duty Day	W	Nov 26
Holiday – Thanksgiving	Th/F	Nov 27 - 28
Finals	M – F	Dec 15 - 19
Grade Reporting/Duty Day	M	Dec 22

	Faculty Duty Days	Instructional Days
Aug.	10	5
Sept.	21	21
Oct.	23	23
Nov.	17	14
Dec.	16	15
Total	87	78

Spring Semester

Faculty Duty Days – 88
Instructional Days – 80

Holiday	Th	Jan 1
Duty Day	T	Jan 6
Registration/Duty Day	W	Jan 7
Registration/Duty Day	Th	Jan 8
Duty Day	F	Jan 9
Classes Begin	M	Jan 12
Holiday - King	M	Jan 19
Spring Break	M-F	Mar 16-20
Classes Resume	M	Mar 23
Final Exams	T-M	May 5-11
Duty Day	T	May 12
Duty Day	W	May 13
Grade Reporting/Duty Day	Th	May 14
Graduation/Duty Day	F	May 15

	Faculty Duty Days	Instructional Days
Jan.	18	14
Feb.	20	20
Mar.	17	17
Apr.	22	22
May	11	7
Total	88	80

Summer Semester

Faculty Duty Days – 54
Instructional Days – 50

Registration/Duty Day	T	May 26
Classes Begin	W	May 27
Holiday/Independence Day	F	July 3
Final Exams	W - F	Aug 5-7
Grade Reporting/Duty Day	M	Aug 10

	Faculty Duty Days	Instructional Days
May	4	2
June	22	22
July	22	22
Aug	6	4
Total	54	50

Grand Totals

Faculty Duty Days and Instructional Days

Semester	Faculty Duty Days	Instructional Days
Fall	87	78
Spring	88	80
Total	175	158
Summer	54	50
Grand Total	229	208

The College will be closed the following nine holidays:

Monday	September 1, 2008	Labor Day
Tuesday	November 11, 2008	Veterans' Day
Thursday	November 27, 2008	Thanksgiving Day
Friday	November 28, 2008	Day after Thanksgiving
Wednesday	December 24, 2008	Christmas Eve
Thursday	December 25, 2008	Christmas Day
Thursday	January 1, 2009	New Year's Day
Monday	January 19, 2009	Martin Luther King
Monday	May 25, 2009	Memorial Day
Friday	July 3, 2009	Independence Day

In addition, the College will be closed the following days:

Friday	December 26, 2008
Monday	December 29, 2008
Tuesday	December 30, 2008
Wednesday	December 31, 2008
Thursday	March 19, 2009
Friday	March 20, 2009

TABLE OF CONTENTS

Non-Discrimination/Equal Opportunity Statements	2	Special Programs	41
Welcome	3	Adult Education	41
Mission Statement	4	Community Education	42
Calendar	5	Cooperative Education	42
College Policies and Regulations	8	Servicemembers' Opportunity College	42
Notice of Available Accommodations for Students, Employees and Applicants with Disabilities	8	Tech Prep	42
Student Responsibilities	8	Distance Education	43
Student Disciplinary Procedures	9	Weekend College	43
Computer Use Policy	12	Campus/Site Information	43
Student Grievance Procedures Involving Discrimination, Sexual Harassment, and Rights of the Disabled	14	Decatur Campus	43
Campus Security/Police	16	Huntsville/Research Park	43
Student Identification Cards	16	Limestone Correctional Facility	44
Motor Vehicle Registration	16	Statewide Transfer and Articulation Reporting System (STARS)	44
Admission Policies	17	Business and Industry Services	44
Student Records and Transcripts	22	Academic Programs Index and CIP Codes	46
Financial Information	23	Electives (defined)	47
Tuition/Fees	23	General Education Requirements	48
Business Office Hours	24	Associate of Arts/Science Degrees	49
Residency/Out-of-State and International Students	24	Accounting	49
Financial Aid	26	Agricultural Science	49
Bookstore	30	Art	49
Security/Police	30	Biological Science	50
Instructional Information and Regulations	31	Biotechnology	50
Classification of Students	31	Business	50
Grading Policies	31	Chemistry	51
Academic Bankruptcy	34	Computer Information Systems	51
Advanced Standing Credit	34	Criminal Justice	52
Probation and Suspension	36	Child Development	52
Attendance Policies	36	Elementary Teacher Education	52
Recognition of Academic Excellence	36	English (Associate of Arts)	53
Graduation	37	Family Financial Planning and Counseling	53
Degrees	37	Fire Services Management	53
Certificates	37	General Education	54
Honor Graduates	37	Health and Physical Education	54
Visiting Student Program	37	Law/Pre-Law (Associate of Arts)	54
Library Services	38	Mathematics	55
Student Affairs	39	Medicine/Pre-Medicine or Pre-Dentistry	55
Philosophy	39	Medicine/Pre-Veterinary Medicine	55
Student Services	39	Music Education	56
Services for Special Student Populations	39	Nursing/Pre-Nursing	56
		Pharmacy/Pre-Pharmacy	57
		Photography and Film Communications	57
		Pre-Engineering	57
		Secondary Teacher Education	58
		Theatre Arts	58

Applied Degrees/Certificates	59	Paralegal Studies	118
Applied Technology.....	59	Practical Nursing.....	113
Aerospace Technology	59	Security.....	118
Air Conditioning & Refrigeration	60	Surgical Technology.....	118
Automation	66		
Design Drafting Technology	68	Special Programs.....	120
Electrical Technology	69	Automotive Body Repair	120
Industrial Maintenance/Mechanical	71	Automotive Mechanics.....	121
Industrial Maintenance/Electrical.....	73	Carpentry	121
Industrial Maintenance/Air Conditioning	74	Design Drafting	121
Industrial Maintenance/Instrumentation.....	76	Horticulture	122
Machine Tool Technology	77	Masonry	123
Process Technology.....	83	Upholstery.....	123
Barbering	84	Welding.....	124
Business Administration	85		
Child Development.....	87	Course Descriptions.....	125
Clinical Laboratory Technician	88	Course Prefixes.....	126
Computer Graphics	90	Credit Hour Equivalencies	127
Computer Information Systems	91		
Cosmetology	93	Administration/Faculty/Staff	221
Dental Assisting	94		
Emergency Medical Services.....	97	Campus Maps	228
Fire Science.....	101		
Massage Therapy	101	Index.....	230
Missile and Munitions Technology.....	102		
Music-Church Music	104	Vision, Mission, Goals, and Objectives of the	
Music Industry Communications	104	Alabama Community College System.....	232
Nursing Assistant.....	104		
Nursing	105		

General Information

COLLEGE POLICIES AND REGULATIONS

NOTICE OF AVAILABLE ACCOMMODATIONS FOR STUDENTS, EMPLOYEES, AND APPLICANTS WITH DISABILITIES.

Calhoun Community College does not discriminate on the basis of disability in admitting students to, providing access to, or in the operations of its programs, services, or activities, or in its hiring or employment practices.

Questions, concerns, complaints, requests for information, or requests for the provision of reasonable accommodations to persons with disabilities should be directed to Calhoun Community College's ADA Compliance Coordinator, whose name, address, e-mail, and phone number are shown below:

Dr. Kermit Carter
Dean for Student Affairs
Chasteen Student Center, Room 205
P.O. Box 2216
Decatur, Alabama 35609-2216
klc@calhoun.edu
Phone: (256) 306-2613
Fax Number: (256) 306-2948
Office Hours: 7:45 a.m. - 4:15 p.m., Monday-Friday

Students who need auxiliary aids for effective communication in participating in the programs and services of Calhoun Community College should make these needs known to the ADA Compliance Coordinator or designee.

This notice is provided pursuant to the requirements of the Americans with Disabilities Act of 1990. It is also available in larger print, on audio tape, and in braille from the ADA Compliance Coordinator.

Student Code of Conduct and Disciplinary Procedures

STUDENT RESPONSIBILITIES

Conduct Expectations

The College assumes that entering students are adults who have developed mature behavior patterns, positive attitudes, and conduct above reproach. Students are treated in accordance with this belief. The College reserves the right to dismiss any student whose on- or off-campus behavior is considered undesirable or harmful to the College.

Children are not allowed to attend classes with students or faculty. No minors should be left unattended in any building of Calhoun Community College.

No animal or pet may be brought on campus. Exceptions to this policy include guide dogs for the disabled, laboratory animals, and animals to be used for previously-approved instructional or special programs.

DRUG POLICY

In compliance with the Drug Free Schools and Communities Act Amendment passed by the U.S. Congress in 1989, Calhoun Community College has adopted and implemented a program to prevent the use of illicit drugs and the abuse of alcohol by students and employees. This publication contains information concerning standards of conduct – legal sanctions, health risks, available treatment and disciplinary sanctions for violations of the policy.

Drug Policy Standards of Conduct and Enforcement

Calhoun Community College is a public educational institution of the State of Alabama and, as such, shall not permit on its premises, or at any activity which it sponsors, the possession, use, or distribution of any alcoholic beverage or any illicit drug by any student, employee, or visitor. In the event of the confirmation of such prohibited possession, use, or distribution by a student or employee, Calhoun Community College shall, within the scope of applicable Federal and State due process requirements, take such administrative or disciplinary action as is appropriate. For a student, the disciplinary action may include, but shall not be limited to, suspension or expulsion. For an employee, such administrative or disciplinary action may include, but shall not be limited to, reprimand, or suspension or termination of employment, or requirement that the employee participate in and/or successfully complete an appropriate rehabilitation program. Any visitor engaging in any act prohibited by this policy shall be called upon to immediately cease such behavior. If any employee, student or visitor shall engage in any behavior prohibited by this policy which is also a violation of Federal, State, or local law or ordinance, that employee, student, or visitor shall be subject to referral to law enforcement officials for arrest and prosecution.

Legal Sanctions

There are legal sanctions on the local, State, and Federal levels regarding unlawful use, possession, and distribution of alcoholic beverages and illicit drugs. An outline of these sanctions is currently published in a document titled "Legal Actions Regarding Unlawful Use, Possession, or Distribution of Alcoholic Beverages and Illicit Drugs." Copies of this document can be found in the Albert P. Brewer Library, the Office of the Dean for Student Affairs, and in all counselors' offices at the Decatur campus and the extension sites.

A. CODE OF CONDUCT

All students of Calhoun Community College shall be expected to conduct themselves in an honorable, ethical fashion. However, in the event of proven misconduct, appropriate disciplinary action will be taken. The following sections address the Student Code of Conduct, as well as the College's disciplinary procedures.

Misconduct Defined. A student shall be subject to disciplinary action by the College, up to and including dismissal, for misconduct on any property owned or controlled by the College, or off campus at any function which is authorized, sponsored, or conducted by the College or in parking lots adjacent to areas or buildings where College functions are being conducted. Such misconduct shall include the **commission of**, the **attempt to commit**, or the **solicitation of** any of the

following offenses:

1. Any form of dishonesty, including cheating, plagiarism, or furnishing false information to the College.

Cheating is defined, for academic purposes, to include, but not be limited to, the use of unauthorized aids (such as crib sheets or other items such as written materials; drawings; lab reports; discarded computer printouts, stored information, or programs); unauthorized assistance on take-home exams or projects; copying, or copying from, another student's work; soliciting, providing, and/or receiving any unauthorized aid or assistance (whether orally or in writing); or similar or equivalent acts contrary to the principles of academic honesty.

Plagiarism is defined to include the act of using in one's work, or as one's work, the work of another without clearly indicating that the work is someone else's and stating the source of the other's work.

2. Forgery, alteration, or misuse of College documents, records or identification.
3. *Intoxication from, or the use, display, or possession of, alcoholic beverages or any controlled substance (drug), as outlined by the *Code of Alabama*, unless the student has a valid prescription for the use of the respective controlled substance.
4. Use, possession, or distribution of firearms, ammunition, fireworks, or any type of explosive or incendiary device or material. Only duly constituted law enforcement officers may possess firearms on campus.
5. Disorderly or disruptive conduct, including rioting, inciting to riot, assembling to riot, raiding, inciting to raid, and assembling to raid college properties. This offense also includes in-class behavior, which, in the opinion of the respective instructor, unduly disrupts the order of a class.
6. Lewd, indecent, obscene, or unduly offensive behavior or expression. This offense includes, but is not limited to, the usage of verbal or symbolic expressions, which would tend to be reasonably interpreted as insulting to one's race, gender, religion, age, national origin, or disability.
7. Participation in any form of gambling.
8. Unauthorized entry to College facilities.
9. Unauthorized possession of a key to College facilities.
10. Unauthorized interference with the use of or access to a College facility.
11. *Theft of, or intentional damage to, property of the College or to the property of any member of the College community or visitor to the College.
12. *Intentional misuse of any College fire alarm or fire-fighting equipment.
13. *Actual or threatened physical abuse of any person, including hazing or any other act, which would tend to endanger the health

or safety of any person.

14. *Failure to promptly comply with directions of college officials or law enforcement officers acting in the performance of their duties as such officials and officers.
15. The wearing of attire which, in the opinion of the administration of the College, is lewd or immodest to the extent that it would tend to disrupt the educational process and/or infringe upon the rights of any other student or employee of the College.
16. Violation of any College policy or regulation as published or referred to in the College catalog or student handbook, including, but not limited to, those governing the time, place and manner of public expression; the registration of student organizations; and use of parking of motor vehicles on the campus.
17. Violation of any Federal, State, or local law or ordinance.

***The commission of any of these particular offenses will subject the student to immediate, automatic disciplinary suspension or expulsion from the College, if the Dean for Student Affairs has probable cause to believe that the respective student committed such an offense. In such case, the Dean for Student Affairs will set a hearing for the earliest reasonable date after the alleged occurrence of the violation.**

B. STUDENT DISCIPLINARY PROCEDURES

Students are guaranteed procedural due process in all cases involving formal discipline charges. College disciplinary procedures are designed to assure a student's right to procedural and substantive due process and to the fullest extent feasible, safeguard personal and confidential information concerning the student.

Disciplinary Action by Instructor. With regard to a matter of academic dishonesty in taking a college course, the College's respective faculty members are authorized to administer certain appropriate disciplinary action. If a given faculty member has substantive evidence of a student's having committed, attempted to commit, or solicited an act of cheating, plagiarism, or any other form of academic dishonesty, the faculty member shall have the authority to (1) impose a grade of "F" for the respective assignment or test; (2) impose an "F" for the respective course; (3) require that an assignment be redone or a test be retaken; (4) impose other similar sanctions designed to preserve academic integrity. The faculty member shall not have the right to suspend or expel a student. That authority is reserved for the Dean for Student Affairs and the College Disciplinary Committee. If the faculty member believes that the improper conduct should be subject to greater punishment, or additional punishment, then the case should be referred to the Dean for Student Affairs for disciplinary review.

In any situation where a student is alleged to have committed academic dishonesty of any nature, the faculty member making the allegation shall, within three (3) business days after the alleged wrongful act or the faculty member's first knowledge of the act, give the student written notice of the allegation and give the student the opportunity to respond to each allegation made. The student shall have a maximum of (3) business days to respond to any allegation made.

General Information

No disciplinary grade imposed by a faculty member shall be considered final unless and until the student has been given written notice of the alleged wrongdoing and the opportunity to respond. It is not necessary that the student give a response for a grade to be finalized, only that the student has been given an opportunity to respond and that the instructor give due consideration to any response which is made. Each instructor shall keep a confidential file of any and all written allegations of academic dishonesty and all actions taken with regard to such allegations.

Any student against whom a sanction is imposed by a faculty member as a result of an allegation of academic dishonesty shall have the right to appeal the sanction to the Dean for Student Affairs. The appeal must be filed with the Dean within five (5) business days after the student is first made aware of the date that the decision has been made to impose a sanction and must include: (1) a copy of the faculty member's written allegation of academic dishonesty; (2) a statement of the sanction imposed; (3) the dates on which the student received the written allegation and on which the student responded to the allegation; (4) the nature of the student's response to the faculty member concerning the allegation; and (5) the rationale for the appeal of the sanction. The student shall have the option of admitting to the Dean the act of academic dishonesty and proposing an alternative sanction.

The Dean for Student Affairs shall, within fifteen (15) business days after receipt of the appeal, issue a report by which the Dean will (1) affirm the sanction; (2) overrule the sanction; or (3) modify the sanction. The Dean shall not overrule or modify any sanction imposed by a faculty member except where there is a compelling and substantial academic or legal reason for doing so.

The decision of the Dean shall be final and binding as to each party, and any grade affected by the Dean's decision shall be recorded so as to reflect the Dean's decision.

Disciplinary Action by Dean or Disciplinary Committee. With regard to all alleged violations of the Student Code of Conduct other than those handled at the faculty level, the Dean for Student Affairs shall have the authority to make disciplinary decisions at the administrative level and shall refer appropriate appeals to the College Disciplinary Committee who shall ensure that the fundamental elements of due process are followed through a fair and reasonable hearing. The Dean shall also have the discretion of referring a case to the Disciplinary Committee for the initial hearing. The Dean shall maintain appropriate records of all reports of student misconduct and all disciplinary proceedings.

Alleged violations of College regulations must be filed, within sixty (60) calendar days of their respective occurrence or the first discovery of their occurrence, in writing with the Dean for Student Affairs in order to initiate a disciplinary review. Any student, faculty member, or staff member may register a complaint with the Dean for Student Affairs. The Dean for Student Affairs will then inform the accused in writing, will request a conference, and will render a decision to the student regarding the case in question. The decision will be one or more of the following:

1. Find the accused not guilty and dismiss the case.
2. Refer the student to a counselor for personalized assistance.
3. Find the student guilty as charged and apply the appropriate penalty stated under "Disciplinary Actions."
4. Refer the case directly to the College Disciplinary Committee for a hearing and determination as to disciplinary action.

Upon communicating his/her decision to the student, the Dean for Student Affairs will also explain the student's right to appeal to the Disciplinary Committee any disciplinary action imposed by the Dean. If the student wishes to appeal a decision by the Dean, he/she must file a written request, stating the reason(s) for the appeal, with the Dean for Student Affairs within 48 hours. The Dean for Student Affairs will then have 48 hours to refer the case to the Disciplinary Committee along with his/her recommendation for disciplinary action. The Committee will schedule and conduct a hearing under the guidelines specified in "Hearing Procedures," and will submit its decision in writing to the Dean for Student Affairs and the accused student.

College Disciplinary Committee. Recognizing the right of students to be granted due process in all matters of a disciplinary nature, the College assures due process through the authority and activities of the College Disciplinary Committee.

The College Disciplinary Committee shall consist of three (3) members of the administration, faculty, library or counseling staff, appointed by the Dean for Student Affairs (At least two of the three should be teaching faculty and two students appointed by the President of the Student Government Association in consultation with the Student Activities Facilitator. If the Committee is selected at a time when there is no sitting SGA President, or when the SGA President is unavailable, then the two students shall be selected by the Dean for Student Affairs.

The purposes of the Disciplinary Committee are as follows:

1. Hear charges and evidence concerning alleged student misconduct and direct action to be taken in cases appealed by students referred to the Committee by the Dean for Student Affairs.
2. Impose appropriate disciplinary action when such action is warranted by evidence presented in a disciplinary hearing.
3. Review and make recommendations to the Dean for Student Affairs on student disciplinary policies and procedures.

HEARING PROCEDURES

Each party to a disciplinary hearing shall be given prior written notice by the Chairperson of the Disciplinary Committee of the date, time, and place of the hearing. Whenever feasible, this notice shall be at least 72 hours in advance. The notice will be by personal service or certified mail. If the Committee determines that a party is intentionally avoiding service, the Committee may elect to hold the hearing in the

absence of such party upon a majority vote of the Committee members.

Attendance at Hearing.

1. Disciplinary Committee hearings shall be private and confidential and will be limited to persons officially involved. Persons present shall include Disciplinary Committee members, the Dean for Student Affairs or his/her designee, the student who is the subject of the hearing and his/her advisor, appropriate staff members, a recorder, and witnesses for both parties. Nonparty witnesses will be present only when giving testimony. The Dean for Student Affairs, or his/her designee, shall be responsible for preparing and presenting the College's case. NOTE: All references in these hearing procedures to the "Dean for Student Affairs" shall also apply to any designee of the Dean.
2. The student shall have the right to have one advisor, who may be, but does not have to be, an attorney, present during the hearing. The advisor may not address the hearing to give evidence on behalf of the student. In answering or asking questions, the student may seek advice from the advisor before proceeding.
3. In the event that a disciplinary hearing is scheduled for a student, and the student has been made aware of the date, time, and place, but fails to appear at the hearing, the hearing may be conducted in the student's absence.
4. The hearing will be recorded by either a certified court reporter or on audio or videotape. The record of the hearing, including a copy of all evidence offered, whether admitted or not, will be filed in the office of the Dean for Student Affairs and will be kept confidential.

Order of Hearing.

1. Opening remarks by the Chairperson of the Disciplinary Committee.
2. Review of charges and any action previously taken in the case by the Dean for Student Affairs.
3. Opening statement by Dean or his/her designee (not more than ten minutes).
4. Opening statement of not more than ten minutes by the accused student.
5. Presentations of evidence by the parties, including testimony and questioning of witnesses. Witnesses for the College will present testimony first. Following the testimony of all College witnesses, the student may call his/her witnesses. Both parties to the action and the members of the Disciplinary Committee have the right to question all witnesses. The Committee shall not have the authority to compel an accused student to testify against himself/herself; but the Committee may take the failure of the student to testify when deliberating the evidence.
6. Closing statement (not to exceed 20 minutes) by the student.
7. Closing statement (not to exceed 20 minutes) by the Dean for Student Affairs.

8. Deliberation by the Disciplinary Committee.
9. Report of Committee Findings.

The Disciplinary Committee will conduct its deliberation in closed and confidential session and, after reaching its decision, will orally inform the parties of the decision. Each party will subsequently be provided a written rendition of the findings of the Committee.

Prior to beginning any hearing, the Disciplinary Committee shall make an assessment as to what would be a reasonable amount of time to be allotted for a hearing and may limit the time for any or all aspects of the hearing so as to conform to the allotted time.

Rules of Evidence.

The evidentiary standard to be used by the Committee shall be the "Preponderance of Evidence" standard, rather than the "Beyond a Reasonable Doubt" standard. That is to say that the Committee shall determine, strictly upon the evidence presented, whether it was more likely than not that the allegation(s) made against the accused student was (were) true in terms of which of the evidence was more credible and convincing to the reasonable mind.

The Committee shall inform the parties that the rules relating to the admissibility of evidence shall be similar to, but less stringent than, those which apply to civil trials in the courts of Alabama. Generally speaking, irrelevant or immaterial evidence and privileged information (such as personal medical information or attorney-client communications) shall be excluded. However, hearsay evidence and unauthorized documentary evidence may be admitted if the hearing chairperson determines that the evidence offered is of the type and nature commonly relied upon or taken into consideration by a responsible, prudent person in conducting his/her affairs.

In the event of an objection by any party to any testimony or other evidence offered at the hearing, the chairperson shall have the authority to rule on the admissibility of the evidence, and this ruling shall be final and binding.

Disciplinary Action

The following disciplinary actions will be administered according to the severity of the infraction as determined by the Dean for Student Affairs and/or the Disciplinary Committee:

1. *Disciplinary Reprimand.* This may be an oral or written warning. It notifies a student that any further violation of College regulations may subject the student to more severe disciplinary actions.
2. *Disciplinary Probation.* This is designated to encourage and require a student to cease and desist from violating College regulations. Students on probation are notified in writing that any further misbehavior on their part will lead to more severe action.

Disciplinary Probation will be for the remainder of the existing semester and for all of the following semesters of attendance.

General Information

3. *Disciplinary Suspension.* This excludes a student from the College for a designated period of time, usually not more than two semesters. While on suspension, a student will not be allowed to take any course at the College. At the end of the designated period of time, the student must make formal reapplication for admission.
4. *Class Suspension.* A student may be suspended from attending one or more specified courses for improper behavior. Class suspensions are for the remainder of the semester, and the student will be assigned a letter grade of "F" for each course from which he/she is suspended.
5. *Library Suspension.* A student may be suspended from using the library for improper or disruptive behavior in the library. Library suspension will be for a period of time not to exceed the remainder of the semester.
6. *Disciplinary Expulsion.* This is the strongest disciplinary action. This category of severe penalty generally indicates the recipient may not return to the College. Disciplinary expulsion normally would be the least-used disciplinary action and would be applied only to students who are guilty of chronic misbehavior or a major breach of conduct. The College reserves the right, but has no duty, to lift the probation against re-enrollment upon its consideration of a written application for readmission evidencing that the student has demonstrated an ability and readiness to comply with all College rules and regulations. The College will not consider such a request until at least one year from the date of expulsion.
7. *Payment of Damages.* Payment will be assessed against a given student or students for the amount necessary to repair damage caused by student or students' behavior.

Factual findings of the Disciplinary Committee shall be deemed correct and shall not be subject to appeal. Nor shall disciplinary actions imposed by the Disciplinary Committee be subject to appeal, except upon a written demonstration to the President of the College that the Committee: (1) was not formed in accordance with the above-described selection process or (2) acted blatantly contrary to the above-stated provisions for disciplinary action in terms of the type and/or severity of punishment imposed. In any case where the President determines that either of the two foregoing conditions was present, the President shall have the discretion of either affirming the disciplinary action, reversing the action, or dismissing in part and affirming in part the subject disciplinary action.

A disciplinary suspension or expulsion shall not result in a notation on a student's permanent record. A notice that a student is currently on suspension or expulsion and ineligible to return to the College until a certain date shall be attached to the student's file. In the event that the student becomes eligible to re-enroll, the notice shall be removed.

COMPUTER USE POLICY

Calhoun Community College has a specific computer use policy. Students are expected to know the policy and to strictly follow said policy. Any student who violates that policy will be formally charged in writing by the Dean for Student Affairs.

COMPUTER TECHNOLOGY ACCEPTABLE USE POLICY

Individuals are Fully Responsible for their own actions while using Calhoun Community College's (Calhoun) "computer technology" (defined as Calhoun computers and computer-related equipment, programs, supplies, and network communications, including Internet access gained through Calhoun's computer network). Users must respect the privacy and rights of others, and the integrity of both the hardware and software being used. Accordingly, users must assume responsibility for making the best possible use of access privileges and for not abusing them. Employee questions concerning access, acceptable and unacceptable use, should be directed to the Director of Information Technology. Student questions should be directed to the appropriate instructor or the Campus Dean or designee.

Limited Access: Calhoun reserves the right to limit the access of any and all employees to certain software programs or directories. Each user is provided with a certain access level. A user may not access a computer without authorization or exceed authorized access. A user's activity is restricted to access of only those programs or directories in that user's respective access level. Likewise, a user may not obtain access to another level by means of another user's access. Any user who exceeds his/her respective level, assists another user to gain access to an otherwise inaccessible level, or allows another user to gain access to an otherwise inaccessible level will be held accountable for the violation of this policy. A user may not continue to enter an access level which was previously assigned to the user, but which has since been suspended, revoked, or otherwise continued.

No user may knowingly:

- Use either Calhoun computer technology or personal technology to "break into" or "hack into" college or other computers and storage devices for the purpose of reading, copying, deleting, modifying or distributing data and/or information of others, or any other purpose;
- Give passwords, access codes or other security level access information to others;
- Share personal E-mail accounts.

Internet Access: Any employee or student access to the Internet through Calhoun's computer network is limited to the acceptable use as set out below. Likewise, any employee or student who accesses the Internet through Calhoun's computer network for an unacceptable use as defined above or causes an unacceptable result will be held accountable for the violation.

The use of the Internet must be in support of education, research, college-related service activities, or college administration and consistent with the mission of Calhoun Community College. Transmission of any material in violation of any federal or state regulation is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or material protected by trade secret. Any use of the Internet through Calhoun's computer network for political advertisement or political lobbying is also strictly prohibited.

Users of the Internet through Calhoun's computer network are

expected to abide by the rules of network etiquette. Any swearing, vulgarities or other inappropriate language is prohibited. Users are also prohibited from revealing personal addresses or phone numbers of students or colleagues.

Users are hereby warned that electronic mail (e-mail) is not guaranteed to be private. People who operate the system do have access to all mail. Messages relating to or in support of illegal activities may be reported to the authorities.

Acceptable Use: It is acceptable to use Calhoun computer technology for purposes relating directly to education, educational research, college-related service activities, and administration of Calhoun.

Examples of acceptable use are:

- Using the software/hardware only in the condition and settings provided by Calhoun. Users may not modify software settings, to add or delete hardware components or modify software features, unless so instructed by appropriate college officials.
- Using the network for the purpose of instructional support. This may include class assignments, research, skill development, and/or the production of materials used in the educational process.

Unacceptable Use: It is unacceptable to use Calhoun computer technology for any illegal purpose or to interfere with or disrupt other users, services or equipment. Such unacceptable use includes, but is not limited to, the following:

- Engaging in activities to damage or disrupt computer, computer system, network information, data or a program by such acts as virus creation and propagation, wasting system resources, or overloading networks with excessive data.
- Engaging in activities for the purpose of promoting personal gain and/or profit or use of college technology for organizations other than Calhoun.
- Engaging in any activity which is in violation of the Code of Alabama (1975) §§36-25-1 through 36-25-30, as amended (the "State Ethics Law"), or which, in the opinion of the Calhoun administration, may be contrary to such law.
- Using any computer technology in a manner that violates patent protection or license agreements.
- Engaging in any activity that violates any and all copyright laws. Such activity may include utilizing Calhoun technology to copy and/or distribute copyrighted materials of any type that the user does not have a valid and legal right to copy.
- Engaging in any use that is illegal or results in the commission of any illegal activity.
- Using Calhoun computer technology to support or oppose any candidates or candidates for public office, or for any other political purpose. (Use of State property for political purposes is against Alabama law.)
- Transmitting messages of a romantic or sexual nature to any person or persons.
- Creating, displaying, transmitting or making accessible threatening, racist, sexist, offensive, annoying or harassing language and/or material.
- Knowingly accessing or transmitting information which contains obscene or indecent material as defined by law.
- Knowingly performing an act, which will interfere with the normal operation or use of computers, terminals, peripherals, or

networks.

- Creating copies, or taking into the user's personal possession copies of Calhoun owned software and/or hardware technology such as computers, components, disks, or peripherals.
- Using another person's computer account or allowing someone else to use your account (e-mail, secure systems, etc.).
- Sharing personal e-mail accounts.
- Masking the identity of an account or machine or in any manner misrepresenting your identity in e-mail or other electronic communication.
- Communicating any information concerning password, identifying code, personal identification number or other confidential information without the permission of its owner.
- Creating, modifying, executing or re-transmitting any computer program or instructions intended to obscure the true identity of the sender of electronic mail or electronic messages, collectively referred to as "Messages," including, but not limited to, forgery of Messages and/or alteration of system and/or user data used to identify the sender of Messages.
- Attempting to gain unauthorized access to any information facility, whether successful or not. This includes running programs that attempt to calculate or guess passwords, or that are designed and crafted to trick other users into disclosing their passwords, and any attempts to circumvent data protection schemes or uncover security loopholes. It also includes electronic eavesdropping or communication facilities.

Access is a Privilege, Not a Right: Calhoun reserves the right to deny the privilege of the use of any or all types of computer technology to individuals who violate this Acceptable Use Policy. Users may also be held accountable for violations of Federal and/or Alabama Laws (i.e., Computer-Related Crime, etc.). Violations of this policy may result in the termination or suspension of employment, suspension of computing privileges, disciplinary review, any other forms of employee or student discipline, and/or financial restitution to Calhoun for any damages and costs related to inappropriate or unacceptable use, and/or criminal or civil legal action. Calhoun reserves the right to modify or clarify this policy at any time.

Computer Crimes: The Alabama Computer Crime Act, codified at Code of Alabama (1975) §§1 3A-8-101 - 13A-8-103, makes it a crime for a person to damage, or without authorization to modify, computer equipment, computer networks, and computer programs and supplies or without authorization to access, examine, or use computer data and programs, and provides for punishment up to a Class B Felony (imprisonment for 2-20 years and/or a fine up to \$10,000 or double the damage or loss to the victim). Federal law also makes it a crime to without authorization access level to computers or computer networks devoted in part to Federal purposes. Any violation of such State or Federal laws respecting computers shall also constitute a violation of the Calhoun Computer Technology Acceptable Use Policy. Furthermore, this policy prohibits various actions (described above) which may or may not constitute a crime.

General Information

STUDENT GRIEVANCE PROCEDURES INVOLVING DISCRIMINATION, SEXUAL HARASSMENT, AND RIGHTS OF THE DISABLED

INTRODUCTION

Calhoun Community College promotes the exchange of ideas among all members of the college community including students, faculty, staff, and administration. An environment conducive to open exchange of ideas is essential to intellectual growth and positive change. However, the College recognizes that, at times, people may have differences which they are unable or unwilling to resolve themselves. Calhoun Community College offers the following grievance procedures as the appropriate course of action for settling disputes and resolving problems. Students and members of the Calhoun faculty, staff, or administration are guaranteed procedural due process.

INITIAL STEPS

Any student of Calhoun Community College who has a grievance against another student or a member of the Calhoun faculty, staff, or administration concerning any form of discrimination (Title VI, Civil Rights Act of 1964), sexual harassment (Title IX of the Educational Amendments of 1972), or violation of the rights of the disabled (Sec. 504 of the Rehabilitation Act of 1973) should first attempt to resolve his/her situation with the individual involved. However, a student who believes herself or himself to have been subjected to sexual harassment is not required to first speak to or attempt to resolve the situation with the perpetrator of sexual harassment before filing a complaint. If for some reason resolution of the grievance is not possible, the student should make his/her grievance known to the immediate superior of the individual against whom the student has a grievance, and/or to the Dean for Student Affairs in order to seek an informal resolution to the problem. If, after the discussion between the student and the respective College official or representative, it is determined that the complaint is valid, the College official or representative will take appropriate action to resolve the complaint using a formal "plan of resolution."

If the student's complaint requires a formal "plan of resolution," a written report must be submitted to the Dean for Student Affairs. The report shall be submitted by the College official or representative within ten business days of the initial complaint and shall detail the complaint and the plan to resolve the complaint. If a student's complaint cannot be resolved in the manner described above, an unresolved complaint shall be termed a "grievance."

INTERIM RESOLUTION

If the Dean for Student Affairs should determine that the grievance is of a nature that there should be imposed an interim resolution pending the outcome of the grievance procedure, the Dean for Student Affairs shall recommend such an interim resolution to the President or designee. The President or designee shall have the discretion to impose or not impose an interim resolution.

GRIEVANCE PROCESS

A student who submits a complaint to the appropriate College official or representative in the manner described above and who is not informed of a satisfactory resolution or plan of resolution within ten business days after the complaint's initial submission shall have the right to file, within ten business days, a formal grievance statement.

The written grievance statement shall be filed using Grievance Form A, which will be provided by the Grievance Officer and shall include the following information:

1. Date the original complaint was reported;
2. Name of the person to whom the original complaint was reported;
3. Facts of the complaint; and,
4. Action taken, if any, by the receiving official to resolve the complaint.

The grievance statement shall also contain any other information relevant to the grievance the Grievant wants to be considered by the Dean for Student Affairs. Any grievance must be filed within 45 calendar days of the occurrence of the alleged discriminatory act or the date of which the Grievant became aware that the discriminatory act took place.

The Dean for Student Affairs will notify the student or a member of the Calhoun faculty, staff or administration of the charge(s) against him/her within five days (excluding Saturday, Sunday, and holidays) of receiving the formal grievance statement. If after a reasonable attempt to notify the student, faculty member, staff member, or administrator of the charges against him/her, the Dean for Student Affairs is unable to do so, then the Dean for Student Affairs may suspend the student, or the President of the College or his/her designee may suspend with pay the faculty member, staff member, or administrator until a hearing is held and decision rendered.

The College shall have thirty (30) calendar days from the date of receipt by the Dean for Student Affairs of the grievance to conduct an investigation of the allegation(s), hold a hearing on the grievance, and submit a written report to the Grievant of the findings arising from the hearing. Grievance Form A shall be used to report both the grievance and the hearing findings.

INVESTIGATION PROCEDURE

The Dean for Student Affairs shall have the right to conduct such preliminary hearing(s) as the Dean for Student Affairs or designee shall deem necessary to complete his/her investigation. The Dean for Student Affairs shall conduct a factual investigation of the grievance allegations and shall research each applicable statute, regulation, and/or policy, if any. The Dean for Student Affairs shall determine, after completion of the investigation, whether or not there is substantial evidence to support the grievance. The factual findings in the investigation and the conclusion of the Dean for Student Affairs (Grievance Officer) shall be stated in a preliminary written report which shall be submitted to the Grievant and to the party or parties against whom the complaint was made and shall be made a part of the hearing record, if a hearing is subsequently conducted. Each of the parties shall have the opportunity to file written objections to any of the factual findings and, if there is a hearing, to make their objections part of the hearing record. If the Grievance Officer finds the grievance is supported by substantial evidence, he or she shall make a recommendation in the report as to how the grievance should be resolved. Upon the receipt of the Grievance Officer's preliminary report, the Grievant and the Respondent shall have three (3) business days to notify the Grievance Officer of the respective party's request for a hearing. The Dean for Student Affairs may, nevertheless, at his/her discretion, schedule a hearing on the grievance if to do so would be in the best interest of the College. In the event that no hearing is to be conducted, the Grievance Officer's report shall be deemed a final report and shall be filed with the President, with a copy to be

provided to the Grievant.

HEARING PROCEDURE

In the event that the Dean for Student Affairs schedules a hearing, the Campus Dean or designee will appoint a qualified five-person committee. The Dean for Student Affairs shall serve as the nonvoting chairperson. A quorum shall consist of four members of the committee and the chairperson. Unless the President or Dean determines otherwise, or both parties agree in writing for the hearing to be public, the hearing shall not be open to the public.

At the hearing, the Grievant and the Respondent(s) shall be read the grievance statement. After the grievance is read into the record, the Grievant shall have the opportunity to present such oral testimony and offer such other supporting evidence as he/she shall deem appropriate to his/her claim. Each Respondent shall then be given the opportunity to present such testimony and offer such other evidence as he/she deems appropriate to the Respondent's defense against the grievance. In the event that the College, or the administration of the College at large, is the party against whom the grievance is filed, the President shall designate a representative to appear at the hearing on behalf of the College.

Any party to a grievance hearing shall have the right to retain, at the respective party's own cost, the assistance of legal counsel or other personal representative. However, the respective attorney or personal representative, if any, shall act in an advisory role only and shall not be allowed to address the hearing body or question any witness. In the event that the College or its administration at large is the Respondent, the College representative shall not be an attorney or use an attorney unless the Grievant is also permitted to be assisted by an attorney or other personal representative.

A student does not forfeit any of his/her constitutional rights upon his/her admission into Calhoun Community College, nor does a faculty member, staff member, or administrator forfeit his/her constitutional rights upon employment with Calhoun Community College. The Committee shall not have the authority to compel any witness to testify. However, insofar as it is not contrary to law, the Committee may take into account the refusal of a witness to testify when deliberating the evidence.

With regard to a College employee, the President shall have the authority to direct the employee to testify at a hearing if, in the discretion of the President, such testimony could be material to an accurate determination of the facts in the case.

The hearing shall be recorded by either a court reporter or on audio or video tape or by other electronic recording medium. In addition, all items offered into evidence by the parties, whether admitted into evidence or not, shall be marked and preserved as part of the hearing record.

REPORT OF FINDINGS AND CONCLUSIONS

Within five (5) working days following the hearing, there shall be a written report from the chairperson on the findings of the hearing committee (with a copy forwarded to the President, the Grievant, and each Respondent). The report shall contain at least the following:

1. Date and place of the hearing;
2. The name of each member of the hearing committee;
3. A list of all witnesses for all parties to the grievance;
4. Findings of facts relevant to the grievance;
5. Conclusions of law, regulations, or policy relevant to the grievance;
6. Recommendations(s) arising from the grievance and the hearing thereon.

RESOLUTION OF GRIEVANCE

In the event of a finding by the Committee that the grievance was supported, in whole or in part, by the evidence presented, the Dean for Student Affairs shall meet with the Grievant, the Respondent(s) and the appropriate College representative(s) and attempt to bring about a reasonable agreed-upon resolution of the grievance. If there is no mutual resolution, the President shall impose a resolution of the grievance which shall be final and binding.

APPEAL PROCEDURE

The President of Calhoun Community College shall be the appeal authority in upholding, rejecting, or modifying the recommendations of the Grievance Committee. The President shall not be bound in any manner by the recommendation(s) of the hearing committee, but shall take it (them) into consideration in imposing his/her decision.

The charged student, faculty member, staff member, or administrator may file a written request with the Vice President for Instruction and Student Services of the College and Dean for Student Affairs requesting that the President of the College review the decision of the Grievance Committee. The written request must be filed within 15 calendar days following the party's receipt of the hearing report. If the appeal is not filed by the close of business on the fifteenth day following the party's receipt of the report, the party's opportunity to appeal shall have been waived. If the appeal does not contain clear and specific objections to the hearing report, it shall be denied by the President. The President of the College shall issue his/her opinion to accept, reject, or modify the decision of the Grievance Committee within 15 calendar days of the initiation of the appeal process.

If the decision of the Grievance Committee does not satisfy the complainant and should the grievance allege discrimination (Title VI), sexual harassment (Title IX), or violation of the rights of the handicapped (Sec. 504), the complainant may file a written grievance with:

1. The Alabama State Board of Education pursuant to Alabama State Board of Education policies and procedures, with respect to Title IX violations;
2. The regional office of the Office of Civil Rights of the U.S. Department of Education within 180 days of the discriminatory act;
3. The Equal Employment Opportunity Commission within 180 days of the discriminatory act.

General Information

EXCEPTION

When a complainant or grievant complains of, asserts the existence of, or indicates the possibility of sexual harassment violation of law, Calhoun Community College policy, or standards of appropriate conduct, the President may, in his/her discretion, determine that the matter will not be resolved through procedures set forth above, but will be reasonably, appropriately, and promptly investigated and resolved by the College pursuant to such process as the President determines in accordance with the College's objective of maintaining a work and educational environment free from sexual harassment.

REFERENCE:

Title VI of the Civil Rights Act of 1964, "No person in the United States shall on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Title IX of the Educational Amendments of 1972, "No person in the United States shall on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance."

Section 504 of the Rehabilitation Act of 1973 as amended in 1974, "No otherwise qualified handicapped individual in the United States, as defined in Section 706 (6) of this title, shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

It is the official policy of the Alabama State Department of Education, including Postsecondary institutions under the control of the State Board of Education, that no person in Alabama shall, on the grounds of race, color, disability, sex, religion, creed, national origin, or age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program, activity, or employment.

SECURITY/POLICE

We take your safety seriously! To ensure the continued health and safety of Calhoun students and employees, we must all consider our own security, as well as the security of others, a priority when on campus. Should a crime occur on campus, Calhoun strongly encourages you to report this crime immediately to the College's Campus Security/Police Department by calling (256) 306-2575. For emergencies only call (256) 306-2911 on the Decatur campus or (256) 890-4711 on the Huntsville campus. The Decatur campus security office is located in the former ACT building, next to Noble Russell. Huntsville Police Department officers are located in the Administrative Office at the Huntsville/Cummings Research Park campus.

Calhoun Community College is proud of its historically safe campus. In an effort to promote awareness and enhance safety, we would like to inform you of our campus crime disclosure report. We hope this information is helpful to you. Should you have any questions or suggestions regarding campus safety, please contact the campus police at 306-2574. If an emergency, call 306-2911.

Calhoun Community College Campus Crime Statistical Disclosure Report

<u>Crime</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Murder	0	0	0
Rape	0	0	0
Sex Offenses:			
Forcible	0	0	1
Non-Forcible	0	0	0
Robbery	0	0	0
Aggravated Assaults	0	0	3
Burglary	0	0	0
Breaking & Entering			
Motor Vehicle	2	3	2
Arrests	2	0	2
Motor Vehicle Thefts	0	0	0
Liquor Law Violations	0	0	1
Drug Violations	0	0	0
Weapons Violations	0	0	1
Criminal Mischief	0	1	1
Thefts	12	6	13
Harassment	2	5	9
Leaving Scene of Accident	7	5	3
Public Intoxication	0	0	1
Property Damage	3	1	3
Trespassing	2	0	0
Disorderly Conduct	1	0	1
Misc. Calls for Service	1,173	1,078	1,156

STUDENT IDENTIFICATION CARDS

All students enrolled at Calhoun Community College are required to have in their possession a valid Student I.D. card for general identification purposes and to present it upon demand when requested by a school official. The Student I.D. card is valid for each semester of the student's attendance. Students I.D. cards are issued during the first two weeks of each semester for new and transferring students. Replacement I.D. cards for returning students can be made at a cost of \$20.00. Replacement cost cannot be charged to student accounts and must be paid in cash. The I.D. card can be used for (1) book buying (campus bookstore only), (2) library book checkout, (3) access to learning labs, (4) entrance into college-sponsored activities, (4) check cashing, (5) library privileges at other designated colleges, and (6) student discounts.

MOTOR VEHICLE REGISTRATION

All students driving any type of motor vehicle must secure and properly affix an official decal to the vehicle regardless of the location of classes. Parking decals are available from the Campus Police/Security Office. Traffic regulations pertaining to the registration and operation of motor vehicles can result in a monetary fine, the withholding of semester schedules, the withholding of transcripts, or appropriate disciplinary action. All decals expire on August 31 of each year.

ABANDONED VEHICLES

If a vehicle is left unattended or is left in the same place for more than ten (10) days, the vehicle will be considered abandoned and will be

towed at the owner's expense. If a vehicle is illegally parked (for example, blocking another vehicle that is legally parked), the illegally-parked vehicle will be towed at the owner's expense.

PARKING/TRAFFIC CITATION APPEALS COMMITTEE

This is a three-member committee made up of students appointed by the Student Government Association. It is charged with the responsibility of hearing and ruling on each case in which a student appeals having received a parking ticket. The committee meets each Friday at 11:00 a.m. in the Student Activities Office, Decatur campus. Parking appeals at the Huntsville/Cummings Research Park campus should be made to the Dean for the Cummings Research Park campus.

RESTROOM POLICY

Restrooms are designated separately for men and women. Any individual caught in the opposite gender's restroom will be subject to disciplinary action and criminal trespassing. There will be no loitering in restrooms on Calhoun's campuses.

WEAPONS POLICY

No person shall keep, use, possess, display, or carry any rifle, shotgun, handgun, knife, bow and arrow, or other lethal or dangerous weapons or devices capable of casting a projectile by air, gas or explosion, or mechanical means on any property or in any building owned or operated by Calhoun Community College or in any vehicle on campus. Realistic facsimiles of weapons are also specifically not allowed.

If an instructor approves such items to be demonstrated for class purposes only, the instructor and student must obtain permission from Calhoun Police.

Any such person seen with or using such weapons on campus will be subject to disciplinary and criminal charges.

Pursuant to state board policy 511.01, Calhoun Community College adheres to the following:

Firearms are prohibited on campus or any other facility operated by the college. Exceptions to this policy are: Law enforcement officers legally authorized to carry such weapons who are officially enrolled in classes or are acting in the performance of their duties or an instructional program in which firearms are required equipment. If the off-duty officer is a student, he/she must notify campus police once a semester. A weapon is prohibited from any type of hearing for personal business.



ADMISSIONS POLICIES

ADMISSION OF FIRST-TIME COLLEGE STUDENTS

Applicants who have not previously attended a postsecondary institution accredited by a regional accrediting agency or the Council on Occupational Education will be classified as first-time college students or "native" students.

ADMISSION TO COURSES CREDITABLE TOWARD AN ASSOCIATE DEGREE

To be eligible for admission to courses creditable toward an associates degree, a first-time college student must meet one of the following criteria:

1. Applicant holds the Alabama High School Diploma (standard or advanced), the high school diploma of another state equivalent to the Alabama High School Diploma, or an equivalent diploma issued by a non-public regionally and/or state accredited high school; or
2. Applicant holds a high school diploma equivalent to the Alabama High School Diploma (standard or advanced) issued by a non-public high school and has passed the Alabama Public High School Graduation Examination; or
3. Applicant holds a high school diploma equivalent to the Alabama High School Diploma* (standard or advanced) and has achieved a minimum ACT composite score of 16 or a total of 790 on the SAT; or
4. Applicant holds the Alabama Occupational Diploma, the high school diploma of another state equivalent to the Alabama Occupational Diploma, or an equivalent diploma issued by a non-public high school, and has achieved a minimum ACT composite score of 16 or a total of 790 on the SAT; or
5. Applicant holds a GED Certificate issued by the appropriate state agency.

*Minimum credit requirements for an Alabama standard diploma

- Minimum of 24 credits to include:

English Language	4 credits
Mathematics	4 credits to include:
	Algebra 1 credit
	Geometry 1 credit
Science	4 credits to include:
	Biology 1 credit
	Physical Science 1 credit
Social Sciences	4 credits to include:
	Social Studies 1 credit
	World History 1 credit
	U.S. History 1 credit
	Government .5 credits
	Economics .5 credits
Physical Education, Health Education and/or Fine Arts	2 credits
Computer Applications	.5 credits (may be imbedded)
Electives	5.5 credits

General Information

Applicants who meet one of these criteria shall be classified as “Degree-Eligible” students. Calhoun Community College may establish additional admission requirements to specific courses or occupational degree programs when student enrollment must be limited.

ADMISSION TO COURSES NOT CREDITABLE TOWARD AN ASSOCIATE DEGREE

Applicants to courses not creditable toward an associate degree and programs comprised exclusively of courses not creditable to an associate degree may be admitted provided they meet the standard admission criteria. Limestone Correctional Facility programs may have different admission requirements based on program eligibility.

Calhoun Community College has established higher or additional admission requirements for specific programs or services when student enrollment must be limited or to assure ability to benefit.

UNCONDITIONAL ADMISSION OF FIRST-TIME COLLEGE STUDENTS

For Unconditional Admission, applicants must have on file at the college a completed application for admission and at least one of the following:

1. An official transcript showing graduation with the Alabama High School Diploma (standard or advanced), the high school diploma of another state equivalent to the Alabama High School Diploma, or an equivalent diploma issued by a non-public regionally and/or state accredited high school; or
2. An official transcript showing graduation from high school with a high school diploma equivalent to the Alabama Public High School Diploma issued by a non-public high school and proof of passage of the Alabama Public High School Graduation Examination; or
3. An official transcript showing graduation from high school with a high school diploma equivalent to the Alabama High School Diploma issued by a non-public high school and evidence of a minimum ACT composite score of 16 or a total score of 790 on the SAT; or (See Admission to Courses Creditable . . . minimum requirements)
4. An official transcript showing graduation from high school with the Alabama Occupational Diploma, the high school diploma of another state equivalent to the Alabama Occupational Diploma, or an equivalent diploma issued by a non-public high school, and has achieved a minimum ACT composite score of 16 or a total score of 790 on the SAT; or
5. An official GED Certificate.

All male students between the ages of 18 and 26 must show proof of registration with the U.S. Selective Service System in accordance with §36-26-15.1 of the Code of Alabama of 1974 (as amended).

CONDITIONAL ADMISSION OF FIRST-TIME COLLEGE STUDENTS

Provided the applicant meets the admission standards for a first-time college student, a conditional admission may be granted to an applicant who does not have on file at the college at least one of the items listed under “Unconditional Admission of First-Time College Students” above.

No student shall be allowed to enroll for a second term unless all required admission records have been received by the college prior to registration for the second term. It is the student's responsibility to contact the appropriate high school and/or agencies and have the official required documents mailed directly to Calhoun Community College.

If all required admission records have not been received by the college prior to issuance of first semester grades, the grades will be reported on the transcript, but the transcript will read CONTINUED ENROLLMENT DENIED PENDING RECEIPT OF ADMISSION RECORDS. This notation will be removed only upon receipt of all required admission records.

ADMISSION OF TRANSFER STUDENTS

An applicant who has previously attended another postsecondary institution which is accredited by a regional accrediting agency or by The Council on Occupational Education will be considered a transfer student and will be required to furnish official transcripts of all work attempted at all said institutions. Calhoun Community College may require submission of documents required of first-time college students to verify completion of a high school diploma, a GED, and the required ACT or SAT test scores.

A transfer student who meets requirements for admission to degree creditable courses and programs shall be classified as “degree-eligible.” A transfer student who does not meet the admission requirements will not be granted admission to Calhoun Community College.

Applicants who have been suspended from another institution for academic or disciplinary reasons will not be considered for admission except upon written appeal to the College Admissions Committee. Written appeals, along with official or unofficial college transcripts, must be submitted at least thirty days before the term of intended enrollment.

UNCONDITIONAL ADMISSION OF TRANSFER STUDENTS

1. For Unconditional Admission, transfer students must have submitted to the college an application for admission, official transcripts from all required sources, and any other documents required for admission.
2. Transfer students who attend another postsecondary institution and who desire to earn credits for transfer to that parent institution may be admitted to the college as **transient** students. The student must submit an application for admission and a transient letter from the institution they have been attending which certifies that the credits they earn will be accepted as a part of their academic program. Students are not required to submit transcripts since the transient approval letter will serve in lieu of transcripts.
3. Applicants who have completed the baccalaureate degree will be required to submit only the transcript from the institution granting the baccalaureate degree. NOTE: If the student intends to obtain a degree or certificate from Calhoun Community College, transcripts from all institutions must be submitted for evaluation prior to graduation. If the student intends to register for courses requiring prerequisites that have been fulfilled at another institution, transcripts from those institutions must be submitted for evaluation prior to enrolling in those courses at Calhoun Community College.

CONDITIONAL ADMISSION OF TRANSFER STUDENTS

1. Transfer students who do not have on file official transcripts from all postsecondary institutions attended and any additional required documents may be granted a Conditional Admission for one term. No transfer student shall be allowed to enroll for a second semester unless all required admission records have been received by the College prior to registration for the second

semester.

2. If all required admission documents are not received by the end of the first term, continued enrollment will be denied. Grades for the first term will be posted to a transcript and annotated to read **CONTINUED ENROLLMENT DENIED PENDING RECEIPT OF ADMISSION RECORDS**. This notation will be removed only upon receipt and review of all required admission records.

INITIAL ACADEMIC STATUS OF TRANSFER STUDENTS

1. An initial academic status cannot officially be determined until all official documents are received and reviewed. Once records are received, an initial status will be determined for the student's first term of enrollment. Submission of incorrect or false information on the application for admission could result in immediate removal from the college and forfeiture of all tuition, fees, and other monies.
2. A transfer student whose cumulative grade point average of the transfer institutions is 2.0 or above on a 4.0 scale will be admitted with Clear academic status.
3. A transfer student whose cumulative grade point average at the transfer institution is less than a 2.0 on a 4.0 scale but is not on academic suspension/dismissal will be admitted on Academic Probation. The Calhoun transcript will be annotated to read **ADMITTED ON ACADEMIC PROBATION**.
4. A transfer student applicant who has been academically suspended (dismissed) from another regionally or Council on Occupational Education accredited postsecondary institution may be admitted only after following the appeal process established for "native" students. Calhoun Community College requires that the applicant submit a written appeal to the College Admissions Committee along with all official transcripts. Written appeals, an application, and transcripts must be received by the Admissions Committee, prior to the first official class day. No appeals will be considered on or after the first official class day for that term. If the transfer student is admitted upon appeal, the student will enter the college on Academic Probation. The Calhoun transcript will read **ADMITTED UPON APPEAL – ACADEMIC PROBATION**.
5. A transfer student admitted on academic probation retains that status until the student has attempted 12 credit hours at Calhoun Community College. If the student's cumulative GPA at Calhoun is below a 1.5 after the semester in which 12 or more credit hours are attempted, the student will be placed on academic suspension for at least one semester. More stringent guidelines may be placed on students by the College Admissions Committee when written appeals are approved.

GENERAL PRINCIPLES FOR TRANSFER OF CREDIT

1. Transfer credit will be evaluated and recorded by the end of a student's first term of enrollment. Transfer credit evaluations will only be conducted when all official transcripts have been received. Students will be notified in writing of the results of their evaluation. (A review of records by counselors, advisors, faculty, etc. for advising purposes does not constitute an official evaluation.)
2. Coursework transferred or accepted for credit toward an undergraduate program must represent collegiate coursework relevant to the formal award with course content and level of instruction resulting in student competencies at least equivalent to those of students enrolled in the institution's own undergraduate formal award programs. A course completed at other regionally or Council on Occupational Education accredited postsecondary institutions with a passing grade (C minimum required in

Composition courses) will be accepted for transfer as potentially creditable toward graduation requirements.

3. A transfer student from a collegiate institution not accredited by the appropriate regional association or Council on Occupational Education may request an evaluation of transfer credits after completing 15 semester hours with a cumulative GPA of 2.0 or above.
4. A transfer grade of "D" will only be accepted when the transfer student's cumulative transfer GPA is 2.0 or above. Regardless of the GPA, a "D" in English Composition courses will be not accepted in transfer. Please note that some programs/courses require minimum grades of "C", thus a "D" will not transfer.
5. Transfer course grades are not calculated into a student's grade point average. Transfer grades are only calculated into a grade point average for graduation and honors consideration.
6. Credit may be extended based on a comprehensive evaluation of demonstrated and documented competencies and previous formal training. Please refer to the section on Credit from Nontraditional Sources in this catalog.
7. The criteria for awarding credit for work completed in foreign colleges and universities will be the same as for other institutions within the United States. Students wishing to receive transfer credit for such foreign study must provide an English translation and a detailed report from an acceptable foreign credentials evaluation firm. Such a report must outline recommendations for awarding specific credit for specific courses. Currently, most of these reports are "course-by-course" evaluations provided by Educational Credential Evaluators, Inc., P.O. Box 17499, Milwaukee, WI 53217. There are other companies which provide the same service. For further information, contact the International Student Advisor.

INTERNATIONAL STUDENTS—(F-1 VISA HOLDERS)

Calhoun Community College accepts international students who have F-1 visas and who meet the academic, linguistic, and financial requirements outlined below:

First Time College Students

- An international student who holds an American high school diploma or a diploma from his/her country that is equivalent may be eligible for admission.
 - Prospective international students must submit all of the following to be considered for admission.
 - 1) A complete application in English.
 - 2) Official transcripts/leaving certificate in English that document graduating from a secondary school that is equivalent to a U.S. high school diploma. The transcript/leaving certificate must be forwarded directly to Calhoun Community College from all institutions previously attended. Translation of all documents is the responsibility of the applicant.
 - 3) Test of English as a Foreign Language (TOEFL) requirements:
 - a. A minimum written score of 500 (or)
 - b. A minimum computer-based score of 173.
 - c. The scores must be mailed directly from the Educational Testing Services to the Office of Admissions and Records. Personal copies are **not accepted**.
 - d. The TOEFL Test is not administered at Calhoun Community College.
- EXCEPTIONS (TOEFL)**
- a. a graduate of an accredited U.S. high school or an

General Information

- accredited American high school overseas (or)
 - b. a citizen of an English-speaking country that has been granted exemption to the TOEFL policy.
 - 4) A signed, notarized statement declaring that the international applicant will be fully responsible and that funds are available for financial obligations during an enrollment with Calhoun Community College. Financial obligations include but are not limited to: tuition and fees, books and supplies, living expenses, housing, and miscellaneous expenses.
 - 5) Official documents in English that document graduation from a secondary school that is at least equivalent to a U.S. high school diploma. Records must be forwarded directly to Calhoun Community College from the institution attended. Personal copies are not accepted.
 - 6) Documentation of insurance must declare adequate health and life insurance (which must include medical repatriation and medical evacuation expenses). It must be maintained during any and all terms of enrollment with Calhoun Community College.

All required documents should be forwarded directly to the International Student Advisor, Calhoun Community College.

Transfer Students – International

Any international student who has attended an accredited college or university may be considered for admission as a transfer student. Transfer students must comply with all items listed under **First-Time Students – International** except Item 5. In addition to all items listed, an international student who wishes to apply to Calhoun Community College must:

- a) Have official transcripts from all previously attended colleges and universities attended mailed directly to Calhoun Community College.
- b) Complete a transfer clearance form (obtain from school advisor to which he/she is transferring).
- c) Be in-status at the most recent college/university attended. Individuals who are out-of-status must apply for reinstatement through their former school.

All documents required for admission as a First Time college student or Transfer student must be on file before an admission decision will be made. I-20s will only be issued to applicants who meet all criteria and are, if transferring, in status with the Immigration and Naturalization Services. Calhoun is unable to issue an I-20 for any individual who is out-of-status.

Note: International students who have completed ENG 101 or its equivalent at an accredited college or university with a grade of C or better may be exempt from the TOEFL requirement.

HIGH SCHOOL HONORS PROGRAMS

Calhoun Community College, in conjunction with our area high schools, offers “honor” students the opportunity to enroll for college coursework. Two programs have been approved by the Alabama State Board of Education, the Accelerated High School Student Program and the Dual Enrollment/Dual Credit for High School Student program. Even though the basic criteria for enrollment is similar, each program is unique. Review the following and discuss with your counselor your eligibility and which program best meets your needs.

ACCELERATED HIGH SCHOOL PROGRAM

Calhoun Community College offers qualified high school students the opportunity to earn college credit while still in high school. Students who attend accredited high schools must meet the criteria listed below:

1. The student must have successfully completed the 10th grade;
2. The student must provide certification (form available online at www.calhoun.edu) from the local principal and/or his/her designee that the student has a minimum cumulative “B” average and recommends the student for enrollment;
3. The student may enroll only in postsecondary courses for which the high school prerequisites have been completed (for example: a student may not take English Composition until all required high school English courses have been completed).

Exceptions may be granted by the Chancellor for a student documented as gifted and talented according to the standards included in the State Plan of Exceptional Children and Youth. Exceptions may only apply to items 1 and 2 noted above.

Students who attend a non-accredited high school must meet additional criteria as listed below:

1. Comply with items 1, 2, and 3 as noted above.
2. Provide ACT scores with a composite of at least 16 or total math and writing of 790 on the SAT.

Students who are home schooled are not eligible unless they are under the auspices of an accredited high school and can provide proper documentation of all items noted above.

DUAL ENROLLMENT/DUAL CREDIT FOR HIGH SCHOOL STUDENTS PROGRAM

The Dual Enrollment/Dual Credit for High School Students program allows qualified students the opportunity to receive both high school and college credit. The program is restricted to qualified students in Alabama high schools and home schools which have signed a working agreement with Calhoun Community College.

Criteria for student eligibility is developed by each individual school system and may be more restrictive than the minimum criteria that follows:

1. The student must have a “B” average in completed high school courses;
2. The student must have written approval (application and approval form available online at www.calhoun.edu) of his/her principal and the local superintendent of education; and
3. The student must be in grade 10, 11, or 12.

Determination of the equivalencies of Calhoun Community College coursework toward high school graduation requirements is at the discretion of the high school system. Minimally, one 3-semester hour course equates to one-half unit.

Courses eligible for Dual Enrollment include any college-level courses in English, foreign languages, mathematics, science, or social science; any occupational/technical courses; or any other courses agreed upon by the school system and the college. Students must meet the course prerequisites prior to enrollment in any of these courses including completion of the Calhoun Placement Examination and/or minimum levels on the ACT or SAT in English and

Mathematics. Students may not enroll in developmental courses, physical education courses, nor may they enroll in any course on an audit basis under the Dual Enrollment/Dual Credit program. Students are not eligible for federal financial aid.

Students in the Dual Enrollment/Dual Credit program may take their coursework at any Calhoun campus. Students should consult the college's current course offering schedule or contact the academic advising centers for information on the dates, times and locations of courses. Calhoun also offers courses at selected school campuses. Information is available through local high school counselors.

For additional or more specific information contact your high school counselor or the Calhoun Community College Dual Enrollment Coordinator, Ms. Gwen Baker at (256) 306-2665.

EARLY COLLEGE ENROLLMENT PROGRAM (ECEP)

The Early College Enrollment Program (ECEP) allows qualified high school juniors and seniors with a stated interest in vocational/technical fields to enter a technical or community college early. Students must have a minimum of a 2.5 grade point average on a 4.0 scale in required high school courses and must have passed the high school exit exam.

Students selected to participate in ECEP complete their remaining high school credits on the college campus, while also taking courses in their chosen vocational/technical field. Students will be enrolled with full-time status on the college campus (at least 12 hours) each semester. Four degree options are available to students, depending on their grade level at entry and the type of degree/certificate they choose to pursue.

Once enrolled in ECEP, the local school system pays for the student's tuition at a flat rate of \$1000 per semester. Books, supplies and other materials are the responsibility of the student, although the college is directed to assist those students with financial needs. ECEP students are still eligible to participate in athletics and other extracurricular activities at their high school if they meet the requirements set for other students at the school.

For additional or more specific information contact your high school counselor or the Calhoun Community College Dual Enrollment Coordinator, Ms. Gwen Baker, at (256) 306-2665.

AUDIT STUDENTS

Auditors are students who register for credit courses on essentially a non-credit basis. The College may require complete academic records for any applicant. In the absence of complete academic records, the College may accept as the basis of admission the information provided by the applicant on the regular application form. Auditors will under no circumstances receive credits applicable to degree requirements. Students will not receive punitive grades, but they may be assigned a W for absences or removal from class. Tuition and fees for courses audited are the same as those for courses taken for credit. Students may not change from "Credit" to "Audit" or "Audit" to "Credit" after the Drop/Add period.

APPLICATION PROCEDURES

Students Entering College for the First Time

1. Applicants must complete an application for admission and sub-

mit it to the Admissions Office at Calhoun Community College. Applicants should submit their application as early as possible prior to the semester in which they plan to enroll. Applications may be mailed to the address listed below:

Admissions Office
Calhoun Community College
P.O. Box 2216
Decatur, AL 35609-2216

2. Applicants must request that the high school from which they graduated mail their official transcript directly to the Admissions Office at the address listed above. Test scores, if applicable, must also be forwarded directly to Admissions.
3. Applicants who hold a GED must have an official GED transcript sent directly to the Admissions Office at the address noted above.

Transfer Students

1. Transfer applicants must complete an application for admission and submit it in person or by mail to the Admissions Office, Calhoun Community College. The application should be submitted as early as possible prior to the semester of intended enrollment. Applications may be mailed to the address listed below:

Admissions Office
Calhoun Community College
P.O. Box 2216
Decatur, AL 35609-2216

2. All transfer applicants must have official transcripts from all other colleges or universities forwarded directly to Calhoun's Admissions Office at the address noted above. It is the student's responsibility to request his/her official records be forwarded in a prompt and complete manner to clear his/her admission to Calhoun Community College. Transcripts from high school, ACT/SAT test scores or a GED certificate are also required from students who attended a non-regionally accredited college or university.

Former Students Applying for Readmission

1. Applicants who previously applied for admission but did not attend are required to submit a new application for admission and provide all required admission records.
2. Students who have not been in attendance for one semester, excluding summer, will be required to complete a readmission application. If the student has been in attendance at another college or university since his/her last enrollment with Calhoun, official transcripts must be requested and forwarded directly to the Admissions Office, Calhoun Community College.

SENIOR CITIZENS ATTENDING UNDER THE SENIOR ADULT SCHOLARSHIP PROGRAM

Senior citizens sixty (60) years of age or older may be eligible for a tuition waiver if they qualify for the Senior Adults Scholarship Program. Applicants must meet the following conditions:

1. They must comply with the college admission standards as noted earlier in this catalog under Admission, First-Time Students, Admission of Transfer Students or Former Students Applying for Readmission. Please refer to the appropriate section for details of admission requirements.
2. Must be Alabama residents.

General Information

- Must be sixty (60) years of age or older.
- Students must enroll for credit; non-credit enrollment is not allowed.

The student is responsible for any fees or other charges applied to the general student body. Senior citizens granted a tuition waiver under the Senior Adult Scholarship Program may receive the tuition waiver only one time per course. Any time a senior citizen repeats a course the student is responsible not only for fees but also for tuition.

Questions regarding admission and eligibility should be directed to the staff of the Admissions and Records Office or the Financial Aid Office.

NOTE: Senior citizen course enrollment under the Senior Adult Scholarship Program is restricted to a space available basis. A course will not be expanded beyond the optimal number to accommodate the enrollment of a senior citizen attending under the Senior Adult Scholarship Program.

COLLEGE ADMISSIONS COMMITTEE

Students on academic suspension must file a written appeal directly to the Director of Admissions for submission to the College Admissions Committee. Appeals for admission should be submitted at least thirty days prior to the intended term of enrollment. Decisions of the Admissions Committee are final.

STUDENT RECORDS AND TRANSCRIPTS

Family Educational Rights and Privacy Act of 1974

Calhoun Community College complies with the provisions of the Family Educational Rights and Privacy Act (FERPA) of 1974 as amended. FERPA sets forth the requirements pertaining to the privacy of student records. The law governs the release of educational records and access to the records.

Student Records and FERPA

Students are notified that when a student attains the age of 18 or is attending an institution of postsecondary education, the permission or consent required of and the rights accorded to the parents of the student shall thereafter only be required of and accorded to the student. Therefore, a person other than the student requesting information on a student must submit written authorization from the student if the request is beyond the scope of authorized exceptions to the Act.

Responsibility for protection of the privacy of educational records rests primarily with the Director of Admissions and Registrar of the college. FERPA defines educational records to include records, files, documents, and other materials that contain information directly related to students and are maintained by an educational agency or institution with exceptions under the Act.

Notification of Rights under FERPA

FERPA affords students certain rights with respect to their educational records. The rights provided to students are:

- The right to review their educational records with certain exceptions. Students and former students may present a valid photo identification card and request to review their records. The college may delay a record review up to 45 days if circumstances

so dictate. Record reviews are conducted in the Records Office, Chasteen Student Center, Decatur campus. Note: The College is not required to provide access to records of applicants for admission who are denied acceptance or, if accepted, do not attend.

- The right to request the amendment of the student's educational records that the student believes is inaccurate or misleading. The student should submit to the Director of Admissions and Registrar a written statement which identifies the part of the record they want changed, why it should be changed, and any documentation to support the request. The student will be notified in writing of the decision to amend or not to amend. A student will be notified of a hearing procedure process they may initiate if the result of the student's request is not to amend their record.
- The right to consent to disclosure of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure.

Calhoun Community College considers the following to be directory information and may be released to individuals and/or agencies, institutions, etc. unless the student signs a Do Not Release form.

Directory Information

Name
Address
Telephone listing
Date and place of birth
Major field of study
Dates of attendance
Enrollment status
Class standing
Degrees, honors, and awards received
Most recent educational agency or institution attended

It should be noted that directory information is used to verify a student's enrollment with insurance agencies, banks, employers, etc. unless prohibited in writing by the Do Not Release Information form. Calhoun does not provide mailing lists unless required to do so by federal legislation (Solomon Amendment), a court directive, or as deemed appropriate by the President of the college or his/her agent.

FERPA has established rules that allow some personnel and agencies to have access to student's records without their written consent. The exception to the requirement of written consent follows:

- Authorized representatives of the following for audit and evaluation of federal and/or state supported programs or for enforcement of a compliance with federal legal requirements which relate to these programs:
 - Comptroller General of the United States
 - Attorney General of the United States
 - Secretary of the Department of Education
 - State and local educational authorities
 - State and local officials to whom disclosure is specifically required by state statute adopted prior to November 19, 1974.
 - Veterans Administration officials
 - Other school officials with the institution determined by the institution to have a legitimate educational interest
 - Officials of other institutions at which the student seeks or intends to enroll, provided the institution makes a reasonable attempt to inform the student of the disclosure, unless the student initiates the transfer or the annual notification of the institution includes a notice that the institution for-

wards education records to other institutions at which the student seeks or intends to enroll have requested the records. (Students are so notified.)

- Persons or organizations providing financial aid to students or determining financial aid decisions on the condition that the information is necessary to: 1) determine eligibility for aid, 2) determine the amount of aid, 3) determine the conditions for the aid, or 4) enforce the terms and conditions of the aid.
- Organizations conducting studies for or on behalf of education agencies or institutions to develop, validate, and administer predictive tests, to administer student aid programs, or to improve instruction. Conditioned on organizations not to disclose personally identifiable information on students, information must be destroyed when no longer needed for project.
- Accrediting organizations carrying out their accreditation functions.
- Parents of a student who have established a student's status as a dependent according to IRS Code of 1986, Section 152.
- Persons in compliance with a judicial order or lawfully issued subpoena provided that the institution makes a reasonable attempt to notify the student in advance of compliance. An institution may not provide advance notice of subpoena compliance if the subpoena is issued by a federal grand jury or for law enforcement purposes provided the subpoena orders the institution not to disclose the existence or contents of the subpoena.
- An institution is not required to obtain a subpoena to produce education records of a student if the institution is sued by the student or takes legal action against a student. The records produced must be needed by the institution to proceed with legal action as plaintiff or to defend itself.
- Persons in an emergency if the knowledge of information, in fact, is necessary to protect the health or safety of students or other persons.
- Additional instances may occur where the college is required by law to release information. Contact the Registrar for the answers to specific questions.

In the event a student believes that his/her FERPA rights were not met, they have the right to file a written complaint with The Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue SE, Washington, DC 20202-4605.

Transcript Policy

The transcript policy of Calhoun Community College includes the following items:

- In compliance with the Family Educational Rights and Privacy Act, Calhoun Community College does not release transcripts of a student's work, except upon the student's written request;
- Official transcripts are sent to institutions, companies, agencies, etc., upon the student's written release;
- Transcript requests are processed as they are received. REQUESTS SHOULD BE MADE AT LEAST TWO WEEKS BEFORE THE TRANSCRIPTS ARE NEEDED;
- Transcripts will not be issued for persons who have financial, academic, or administrative obligations to the college;

- Written transcript requests should be sent to:
Calhoun Community College
Admissions and Records Office, Transcripts
P.O. Box 2216
Decatur, AL 35609-2216

Include name, signature, dates of attendance, social security number and address to which transcript should be forwarded. (NOTE: Students with name changes should include all former names.)

- A signed fax request containing the same information as noted in item E may be faxed to 256-306-2941.
- The Office of Admissions and Records does not release official transcripts from other institutions. Requests for official transcripts from other institutions must be directed to the institution concerned.

FINANCIAL INFORMATION

TUITION AND FEES

The following information reflects the current tuition and fee schedule enacted by the Alabama State Board of Education.

TUITION

In-State Students	\$ 71.00 per credit hour
Out-of-State	\$142.00 per credit hour
Distance Learning	\$ 95.00 per credit hour*
Distance Learning Out-of-State	\$190.00 per credit hour*

FEES

Technology Fee	\$9.00 per credit hour
Facility Renewal Fee	\$9.00 per credit hour
Special Building Fee	\$5.00 per credit hour
Bond Surety Fee	\$1.00 per credit hour

*No fees apply to Distance Learning classes

Students who register after classes begin will be charged a \$25 late registration fee.

NOTE: Tuition and fees are subject to change without prior notice.

TUITION AND FEES REFUND POLICY

Before Classes Begin100% Refund

During Drop/Add

Drops a class or classes but less than total...100% of net
Drops **ALL** classes during drop/add75% of net

After Drop/Add (Withdrawal Refund Period)

Drops a class or classes but less than total.....No refund
Total withdrawal during first week of classes75% of net
Total withdrawal during second week of classes50% of net
Total withdrawal during third week of classes25% of net
Total withdrawal after third week of classes.....No refund

NET AMOUNT IS TUITION AND FEES LESS 5% ADMINISTRATIVE FEE.

General Information

Refund checks will be mailed from the Business Office to the student at the address on the official withdrawal form. Approximately three weeks are required for processing.

ADDITIONAL FEES (SUBJECT TO CHANGE WITHOUT NOTICE)

Additional charges by the institution and not mentioned above include the following:

1. Returned check fee (by Alabama law) \$25*
2. Parking traffic citations (variable, depending on type of citation; check student handbook)
3. Library fines for overdue books (variable, depending on length of overdue status)
4. Audit fees (auditing a course costs the same as taking the course for credit)

*Negotiating a worthless negotiable instrument is a Class A misdemeanor. Pursuant to Alabama law (Act No. 80-200, S. 317), a person will be given 10 days to tender payment of the full amount of such instrument plus a service charge of not more than \$25. Unless this amount is paid in full within the specified time, the individual may assume that this instrument will be turned over to the proper authorities for criminal prosecution.

GENERAL EDUCATION DEVELOPMENT (GED) TEST FEE

Those desiring to take the General Education Test at Calhoun Community College will be required to pay a \$30 fee. Call (256) 306-2648 or 306-2610 for more information.

BUSINESS OFFICE HOURS (Decatur Campus)

Monday-Thursday	8:00 a.m. – 7:00 p.m.
Friday	8:00 a.m. - 3:00 p.m.

BUSINESS OFFICE HOURS (Huntsville Campus)

Room 105 890-4726

Monday-Thursday	9:00 a.m. – 5:45 p.m.
Friday	9:00 a.m. - 12:30 p.m.

MASTERCARD, VISA, AND DISCOVER

Calhoun Community College accepts Mastercard, Visa, and Discover for payment of tuition, fees, and books.

RESIDENCY/OUT-OF-STATE AND INTERNATIONAL STUDENTS

Guidelines for determining “In-State” Tuition Rates

I. ELIGIBLE FOR “IN-STATE” TUITION

A student or prospective student described in either part A or part B below may be eligible for “In-State” tuition rates. Non-resident students described in Part B must submit a written appeal with documentation to the Tuition Eligibility Committee to obtain “in-state” tuition rates. The Tuition Eligibility Committee will determine whether or not a student meets the criteria. The

Committee’s decision is final. All written appeals should be forwarded with documentation directly to the Registrar at Calhoun Community College.

Resident Student

A Resident Student shall be charged the in-state tuition rate established by the State Board of Education.

A Resident Student is an applicant for admission who is a citizen of the United States or a duly registered resident in the State of Alabama for at least 12 months immediately preceding application for admission, or whose non-estranged spouse has resided and had habitation, home, and permanent abode in the State of Alabama for at least 12 months immediately preceding application for admission. **Consequently, an out-of-state student cannot attain Resident Student status simply by attending school for twelve months in the State of Alabama.**

In the case of minor dependents seeking admission, the parents, parent, or legal guardian of such minor dependent must have resided in the State of Alabama for at least 12 months immediately preceding application for admission. If the parents are divorced, residence will be determined by the residency of the parent to whom the court has granted custody.

MINOR: An individual who because of age lacks the capacity to contract under Alabama law. Under current law, this means a single individual under 19 years of age and a married individual under 18 years of age, but excludes an individual whose disabilities of non-age have been removed by a court of competent jurisdiction for a reason other than establishing a legal residence in Alabama. If current law changes, this definition shall change accordingly.

SUPPORTING PERSON: Either or both of the parents of the student, if the parents are living together or if the parents are divorced or living separately, then either the parent having legal custody or, if different, the parent providing the greater amount of financial support. If both parents are deceased or if neither has legal custody, support person shall mean, in the following order: the legal custodian of the student, the guardian, and the conservator.

In determining Resident Student status for the purpose of charging tuition, the burden of proof lies with the applicant for admission.

- A. Students participating in the Southern Regional Electronic Campus (or any successor organization) shall be considered Resident Students for tuition purposes.
- B. An individual claiming to be a resident shall certify by a signed statement each of the following:
 1. A specific address or location within the State of Alabama as his or her residence.
 2. An intention to remain at this address indefinitely.
 3. Possession of more substantial connections with the State of Alabama than with any other state.
- C. Though certification of an address and in intent to remain in the state indefinitely shall be prerequisites to establishing status as a resident, ultimate determi-

nation of that status shall be made by the institution by evaluating the presence or absence of connections with the State of Alabama. This evaluation shall include the consideration of all of the following connections:

1. Consideration of the location of high school graduation.
2. Payment of Alabama state income taxes as a resident.
3. Ownership of a residence or other real property in the state and payment of state ad valorem taxes on the residence or property.
4. Full-time employment in the state.
5. Residence in the state of a spouse, parents, or children.
6. Previous periods of residency in the state continuing for one year or more.
7. Voter registration and voting in the state; more significantly, continuing voter registration in the state that initially occurred at least one year prior to the initial registration of the student in Alabama at a public institution of higher education.
8. Possession of state or local licenses to do business or practice a profession in the state.
9. Ownership of personal property in the state, payment of state taxes on the property, and possession of state license plates.
10. Continuous physical presence in the state for a purpose other than attending school, except for temporary absences for travel, military service, and temporary employment.
11. Membership in religious, professional, business, civic, or social organizations in the state.
12. Maintenance in the state of checking and savings accounts, safe deposit boxes, or investment accounts.
13. In-state address shown on selective service registration, driver's license, automobile title registration, hunting and fishing licenses, insurance policies, stock and bond registrations, last will and testament, annuities, or retirement plans.

Students determined to be eligible for resident tuition will maintain that eligibility upon re-enrollment within one full academic year of their most previous enrollment unless there is evidence that the student subsequently has abandoned resident status, for example, registering to vote in another state. Students failing to re-enroll within one full academic year must establish eligibility upon re-enrollment.

Non-Resident Student (additional persons for resident tuition)

A Non-Resident Student, one who does not meet the standard of having resided in the State of Alabama for at least 12 months immediately preceding application for admission, shall be charged the in-state tuition rate established by the State Board of Education under the following circumstances provided such student is a citizen of the United States.

The dependent student

- a. whose supporting person is a full-time permanent employee of the institution at which the student is registering; or
- b. whose supporting person can verify full-time permanent employment in Alabama and will commence said employment within 90 days of registration; or
- c. whose supporting person is a member of the United States military on full-time active duty stationed in Alabama under orders for duties other than attending school; or
- d. whose supporting person is an accredited member of a consular staff assigned to duties in Alabama.

The student is not a dependent (as defined by Internal Revenue Codes) who

- a. is a full-time permanent employee of the institution at which the student is registering or is the spouse of such an employee; or
- b. can verify full-time permanent employment within the State of Alabama or is the spouse of such an employee and will commence said employment within 90 days of registration with the institution; or
- c. is a member of or the spouse of a member of the United States military on full-time active duty stationed in Alabama under orders for duties other than attending school; or
- d. is an accredited member of or the spouse of an accredited member of a consular staff assigned to duties in Alabama.

In determining Non-Resident Student status for the purpose of charging tuition, the burden of proof lies with the applicant for admission. The college may request proof that the applicant meets the stipulations noted above prior to admission.

Students who reside in Bedford, Franklin, Marshall, Maury, Moore, Lawrence, Lincoln, Wayne, or Giles counties in Tennessee will be accessed tuition at the "in-state" rate upon submission of documentation verifying residency.

II. OUT OF STATE STUDENT

Any applicant for admission who does not fall into one of the categories noted above shall be charged a minimum tuition of two times the resident tuition rate charged by that institution. All international students are accessed at the out-of-state rate and are not eligible for in-state rates.

Students initially classified as ineligible for resident tuition will retain that classification for tuition purposes until they provide documentation that they have qualified for resident tuition.

FINANCIAL AID

Financial aid is available at Calhoun Community College in a variety of forms. Students needing assistance with college expenses should communicate with personnel in the Office of Student Financial Services at the following address:

Office of Student Financial Services
Calhoun Community College
P.O. Box 2216
Decatur, AL 35609-2216

FINANCIAL AID PROGRAMS AVAILABLE at Calhoun Community College include the following:

1. Alabama Student Assistance Grants (ASAG)
2. Federal Work-Study (FWS)
3. Pell Grants
4. Academic Competitiveness Grant (ACG)
5. Stafford Loan (SL)
6. Dorothy B. Johnson Loan Fund
7. Federal Supplemental Educational Opportunity Grants (FSEOG)
8. Veterans', Servicemembers', and their Dependents' Benefits
9. Workforce Investment Act (WIA)
10. Scholarships
 - a. Academic
 - b. Calhoun Foundation
 - c. Performing Arts
 - d. Senior Adult Program
 - e. Student Activity and Leadership

WHO MAY APPLY FOR FEDERAL FINANCIAL AID PROGRAMS?

Federal Student Financial Aid Programs are Pell Grants, Stafford Loan (SL), Federal Supplemental Educational Opportunity Grants (FSEOG), Federal Work-Study (FWS), Alabama Student Assistance Grants (ASAG), and Workforce Investment Act (WIA).

To qualify for financial aid from one of these five programs, one must:

- demonstrate financial need, except for some loan programs;
- have a high school diploma or a GED certificate, or pass an independently administered test approved by the U. S. Department of Education;
- be enrolled as a regular, degree seeking student working toward a AA, AS, AAS or certificate in an eligible program;
- be a U.S. citizen or eligible non-citizen;
- maintain satisfactory academic progress according to the institutional policy;
- not be in default on a Direct Stafford Loan or Federal Family Education Loan (FFEL); and
- not owe a repayment on any federal financial aid program.

NO EXCEPTIONS WILL BE MADE TO THE ABOVE REGULATIONS.

TRANSIENT STUDENTS

Students from other colleges and universities enrolling only for a few courses and/or during the summer are not eligible to receive Title IV funds.

FEDERAL FINANCIAL AID APPLICATION PROCEDURES

Expenses for tuition, books, supplies, at-home maintenance, transportation, and miscellaneous personal costs are used in preparing an annual budget to help determine the applicant's financial need. Therefore, those who qualify must apply for financial aid each year.

Students who qualify may apply for financial aid at any time. However, processing time is generally four to six weeks; therefore, begin the application process as early as possible. All financial aid application forms and instructions are available in the Office of Student Financial Services as well as the capability to process electronically via www.fafsa.ed.gov.

Priority in making awards for FSEOG and Federal Work-Study shall be given to students completing the application process prior to April 1 each year. Awards for applications submitted after the deadline will be based on availability of funds.

Dependent/Independent Policy

The Federal Government has identified for student financial assistance programs certain categories of students who must be considered independent financial aid applicants. As a result, a student is considered an independent financial aid applicant if he or she meets one of the following criteria.

- Student was born before January 1, 1984
- Student is a veteran or ward of the court or was a ward of the court until age of 18.
- Student has a child who receives more than half support from student.
- Student has a dependent (other than child or spouse) that lives with and will receive more than half support from student through June 30, of the academic year.
- Student is a married student.
- Student is a graduate or professional student.

An independent financial aid applicant is not required to submit parental information in the application process. However, if the independent applicant is married, spousal information must be reported. A student who cannot meet at least one of the above criteria is considered a dependent applicant and must provide parental information in the application process.

STUDENT RESPONSIBILITIES

- Review and consider all information about Calhoun's programs before you enroll.
- Pay special attention to your application for student financial aid, complete it accurately and submit it on time to the right place. Errors can delay receiving your financial aid. Intentional misreporting of information on application forms for Federal financial aid is a violation of the law and is considered a criminal offense subject to penalties under the U.S. Criminal Code.
- Provide all additional documentation, verification, corrections and/or new information requested by either the Office of Student Financial Services or the processing center where you submitted your application.
- Read and understand all forms that you are asked to sign, and keep copies of them.
- Accept responsibility for all agreements you sign.
- Perform, in a satisfactory manner, the work that is agreed upon in a Federal Work-Study job.
- Know and comply with the deadlines for application or reapplication for aid.

- Understand the school's refund policy.
- Maintain satisfactory academic progress for continued financial aid eligibility.
- Notify the Office of Student Financial Services if you are planning to attend another institution.
- Pay any tuition, fees or other expenses not paid by financial aid or scholarships by the deadlines.

REFUND POLICY

The Student Financial Aid (SFA) refund requirements only apply when the student fails to register for the period of enrollment for which he or she was charged. A refund is defined as the difference between the amount paid towards institutional charges (including financial aid and/or cash paid) and the amount the school can retain under the institutional refund policy.

The institution must calculate a refund using all possible refund policies in accordance with state and federal laws and regulations.

REPAYMENT POLICIES

Recalculation Policy

A change in a student's original enrollment status may result in a recalculation of Title IV benefits. Payment will be based on the student's enrollment status on the first day of the semester. For students who totally withdraw, the institution will use the appropriate refund policy.

FWS funds are **not** considered in the refund process.

Repayment Policy

The SFA repayment requirement **does not** apply to a student who withdraws from some classes, but continues to be enrolled in other classes.

A **repayment** is the unearned amount of direct disbursement to a student, which the student must pay back. If the institution determines that the student received Title IV funds in excess of the cost to attend school that he or she could have reasonably incurred while still enrolled, then a portion of the Title IV funds was not earned and must be repaid by the student to the SFA programs.

Federal Work Study (FWS) and Student Loan (SL) funds are **excluded** in the repayment policy.

SATISFACTORY ACADEMIC PROGRESS (SAP)

Federal regulations require Calhoun Community College (CCC) to establish Standards of Satisfactory Academic Progress for student financial aid recipients. These regulations require that your entire CCC record be reviewed for satisfactory academic progress, including terms for which you did or did not receive financial aid.

CCC Standards of Satisfactory Academic Progress measure a student's performance in the following three areas: completion rate, cumulative grade point average (GPA), and maximum time frame. The Office of Student Financial Services is responsible for ensuring that all students who receive federal and state aid are meeting these standards. The Standards of Satisfactory Academic Progress apply for all Title IV financial assistance programs including Federal Pell Grant, Federal Work-Study (FWS), Federal Supplemental Education

Opportunity Grant (FSEOG), Federal Family Education Loans (Stafford and PLUS), as well as assistance from the state.

In addition, students who completely withdraw are subject to the CCC Return of Title IV Funds Policy. This federal policy requires Title IV financial aid recipients who completely withdraw from classes prior to completing 60% of any given term to repay a portion of any grants and loans received to the Title IV financial aid programs.

Completion Rate

Each semester, a student's academic progress will be reviewed by comparing the number of attempted credit hours with the credit hours earned. This includes any course for which the student has remained enrolled past the Drop/Add period. The academic records of all students are reviewed based on: (1) the number of semester credit hours attempted and percentage of credit hours completed; (2) cumulative grade point average (GPA); and (3) maximum time frame allowed for completing the degree requirements.

The following are considered when evaluating a student's satisfactory academic progress:

- Withdrawals (W, WP and WF), incompletes (I and IP) and failures (F) are considered attempted but not earned hours.
- Repeated courses and courses for which the student has been granted academic bankruptcy are included in the calculation of both attempted and earned hours. A student is allowed to repeat a course only twice.
- Audited courses are not considered credits attempted or earned. Students can not use Title IV funds to pay for audited courses.
- Transfer credits do not count in the calculation of the GPA, but they are included in the calculation of both attempted and earned hours.

Financial aid recipients must maintain the following cumulative GPA's in order to meet the satisfactory academic progress requirements:

Measure of Progress

Hours Attempted	% of Hours to be completed	Cumulative GPA
8 – 21	58%	1.50
22 – 32	62%	1.75
33 – 66	66%	2.00
67 and above	75%	2.00

Maximum Time Frame

A student's eligibility for financial aid will be terminated at the point where 96 credit hours have been attempted for an associate degree, and when 150 percent of the total hours required, as stated in the College catalog, have been attempted for a certificate. All attempted hours are counted, including transfer hours, whether or not financial aid was received or the course was successfully completed. A maximum of 20 semester credit hours of remedial courses will be excluded from the 96 semester credit hour determination. Title IV funds will only pay for 20 credit hours of remedial courses.

Academic Progress Evaluation

A financial aid recipient's satisfactory academic progress is evaluated each semester. At that time, a student will either be in good standing, be placed on financial aid probation, or denied financial assistance for future enrollment periods. The student must meet all three progress requirements (completion rate, GPA, and be within the maximum time frame) to remain in good standing. Students will be notified by the

General Information

Student Financial Services Office if they are placed on denial status for financial aid.

Probation

Students not meeting the SAP requirements will be placed on financial aid probation. Probation status will not prevent the student from receiving financial aid. The probationary period is meant to inform the student of potential academic problems and provide time for corrective action. Students will be placed on financial aid probation for failing to meet satisfactory academic progress requirements. Students not meeting the requirements below during the probationary period will be denied financial aid. Denial status will prevent the student from receiving any Title IV and/or state financial assistance for future enrollment until such time as the student meets all satisfactory academic progress standards.

Students on financial aid probation must earn grades of 'C' or better in each class, with no withdrawals (grades of W, WP, WF, I and IP calculate as hours attempted in Financial Aid SAP Policy).

Appeal and Reinstatement

Students may appeal their denial status by submitting an Appeal Form to the Financial Aid Appeals Committee. Appeal Forms may be picked up in the Student Financial Services Office or on the CCC web site.

To appeal the financial aid denial, a student must, within 15 calendar days of notification, submit to the Student Financial Services office a signed Appeal Form explaining why he or she should not be suspended. A student may appeal due to mitigating circumstances (medical problems, illness, or death in the family, or employment changes). Documentation verifying the situation may be requested. The Financial Aid Appeals Committee will consider the appeal and render a decision, which the Director of Student Financial Services will convey in writing to the student.

Decisions made by the Financial Aid Committee are final.

INFORMATION ON SPECIFIC FINANCIAL AID PROGRAMS

1. **ALABAMA STUDENT ASSISTANCE GRANT**
The Alabama State Grant Program provides additional assistance to undergraduates who demonstrate exceptional financial need. Students who receive Pell Grants with the lowest family contribution figure (FC) are eligible. The Alabama State Grant is not a loan; therefore, the funds do not have to be paid back.
2. **FEDERAL WORK-STUDY**
The College Work-Study Program provides employment for Calhoun students who need financial assistance. Students work part-time for the college while attending classes.
3. **DOROTHY B. JOHNSON LOAN FUND**
This fund is available to students with an immediate cash flow problem and may be used to cover the cost of tuition and books. It may be repaid from grant or individual accounts within the semester borrowed.
4. **PELL GRANT**
The Pell Grant Program provides financial assistance for students who qualify for funds in order to attend a

postsecondary educational institution. The grant may not exceed an amount equal to 50% of the student's educational and related expenses. A Pell Grant is not a loan; therefore, the funds do not have to be paid back.

5. **ACADEMIC COMPETITIVENESS GRANT (ACG)**
The Academic Competitiveness Grant is for undergraduates receiving Pell Grants who are U.S. citizens enrolled full-time in their first or second academic year of study. For first or second academic year students who have completed a rigorous secondary school program of study. Grant does not have to be repaid.
6. **FEDERAL PLUS LOAN PROGRAM**
The Federal PLUS Loan Program provides loans to parents of eligible dependent students who need additional financial assistance in meeting postsecondary educational expenses. Eligibility is not based on income. This program is intended to supplement the Federal Stafford Loan Program.

A parent may receive an amount not to exceed the student's estimated cost of attendance minus any financial aid the student has been or will be awarded during the period of enrollment. There are no aggregate limits.

Interest Rates: Federal PLUS Loans have an interest rate of 8.5 percent for which the first disbursement is made on or after July 1, 2006.
7. **STAFFORD LOAN**
The Stafford Loan (SL) program is a loan program where a student may borrow funds to cover his/her educational expenses. Students may borrow either a subsidized or unsubsidized loan.

A **subsidized** loan is awarded on the basis of financial need. You will not be charged any interest before you begin repayment or during authorized periods of deferment. The federal government "subsidizes" the interest during these periods.

An **unsubsidized** loan is not awarded on the basis of need. You'll be charged interest from the time the loan is disbursed until it is paid in full. If you allow the interest to accumulate, it will be capitalized; that is, the interest will be added to the principal amount of your loan and additional interest will be based upon the higher amount. This will increase the amount you have to repay. If you choose to pay the interest as it accumulates, you'll repay less in the long run.

- a. If you are a first year student and a first-time borrower, your first payment will not be disbursed until 30 days after the first day of classes.
- b. Loan Entrancing Counseling is mandatory for all first-time borrowers.
- c. Students placed on financial aid probation are not eligible for the student loan program(s).

8. **FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT**
The FSEOG Program provides additional assistance to undergraduates who demonstrate exceptional financial need. Students who receive Pell Grants are eligible. The Supplemental Educational Opportunity Grant is not a loan; therefore, the funds do not have to be repaid.

9. **VETERANS, SERVICEMEMBERS, AND THEIR DEPENDENTS' BENEFITS**
The Veterans Affairs Office is located in Room 101R at the Huntsville/Research Park Campus. Qualified students may also submit paperwork through the Financial Aid Office in the Chasteen Student Center on the Calhoun campus. Appointments for Decatur area students may be arranged at the main campus if the veteran has questions and concerns or may call (256) 306-2500 or 890-4715. The VA Office is the certifying authority for veterans, active duty service members, reservists and National Guard, and dependents that qualify for the federal program. The VA Office serves as the link between the Regional Veterans Affairs Office and the VA benefit recipient who is enrolled at Calhoun Community College.

Calhoun Community College does **not** participate in the VA Advanced Pay Program. Veteran students (except Chapter 31- Rehabilitation and Employment) are required to pay all tuition and fees. After certification has been sent to the Regional Office, the education benefits will be sent directly to the veteran.

Office Hours

Huntsville/Research
Park Campus Monday through Thursday
8:30 a.m. – 7:00 p.m.

Decatur Campus Monday through Thursday
Financial Aid 7:45 a.m. – 6:00 p.m.
Friday
7:45 a.m. – 4:15 p.m.

FAX (256) 306-2948

To apply for the **Alabama G.I. Dependents' Scholarship Program**, please follow the procedure listed below:

- (1) Apply for certificate at your local county Veterans Affairs Office.
- (2) When student receives certificate from the Alabama Department of Veterans Affairs in Montgomery, Alabama, contact Debbie Ott, Business Office, Calhoun Community College at (256) 306-2541 or 890-4700 or 1-800-626-3628.

Courses under Course Number 100 will not be approved for students under this program. Benefits include tuition, technology fee and books only. Facility fees must be paid by the student each semester.

10. **WORKFORCE INVESTMENT ACT (WIA)** is a federally funded program to provide training assistance to dislocated individuals. Students may qualify for tuition

assistance, book allowances and tool assistance. Interested dislocated workers should apply at their local Alabama State Employment Service.

11. **SCHOLARSHIPS AND GRANTS-IN-AID**

- a. **ACADEMIC SCHOLARSHIPS**
March 1st is the date on which applications for academic scholarships are due. Scholarship applications are available online at Calhoun's website at www.calhoun.edu. Each application is reviewed by the Calhoun Scholarship Committee, and each award is based upon academic achievement.
- b. **CALHOUN FOUNDATION SCHOLARSHIPS**
The Calhoun Community College Foundation provides tuition scholarships based upon a variety of qualifying criteria. Recipients must have at least a "B" average for high school grades and/or maintain the average for courses taken at Calhoun. Scholarships are renewable for four semesters unless otherwise specified in the scholarship guidelines.
- c. **FINE ARTS SCHOLARSHIPS**
Fine Arts Scholarships are available for students in art, graphic design, photography, voice, instruments, drama, and music industry. Additional information is available from a faculty member in the Fine Arts Department.
- d. **SENIOR ADULT PROGRAM SCHOLARSHIPS**
This program provides tuition free admission for those who are 60 years of age and older. Students must enroll for credit courses and meet college and program of study admission standards. The award is based upon space availability in each course. Fees and other costs, other than tuition, are paid by the senior adult student.
- e. **STUDENT ACTIVITY AND LEADERSHIP**

SCHOLARSHIPS

These scholarships are received by:

1. President, Vice-President, and Secretary/Treasurer of the Student Government Association;
2. Editor and assistant editor or photographer of the college literary magazine, *The Muse*;
3. Members of the College's official student ambassadors, the Warkhawks; and
4. President of Phi Theta Kappa.

If a student leaves the position for which the scholarship was awarded, the scholarship may be passed to a successor. In addition, the student leaving the leadership position will reimburse the college a prorated amount of the tuition scholarship based upon the amount of time remaining in the college term.

Additional financial aid information can be obtained from the Office of Student Financial Services.

General Information

BOOKSTORE

The College Bookstore is an auxiliary service owned and operated by Calhoun Community College. The purpose of the Bookstore is to provide the college community with the widest possible selection of goods and services of high quality at equitable prices, with particular attention paid to academic requirements. For your convenience, we are located at Decatur and Huntsville/Research Park.

BUSINESS HOURS

DECATUR CAMPUS

Monday-Thursday

7:45 a.m.-6:00 p.m.

Friday

7:45 a.m.-3:30 p.m.

Special Hours

First week of class, special hours will be posted. Hours may vary when classes are not in session.

HUNTSVILLE/RESEARCH PARK

Monday-Thursday

10:00 a.m. - 6:00 p.m.

Friday

9:30 a.m. - 12:30 p.m.

(Bookstore hours are subject to change without notice.)

Hours may vary when classes are not in session.

METHOD OF PAYMENT

Payment may be made by either cash, personal check or Master/Visa/Discover card. The following policy governs payment by check:

1. You must present your current student identification card.
2. Checks are accepted for the amount of purchase only.
3. Checks must be made payable to the college (two party checks and counter checks are not acceptable).
4. Phone number, student number and address must be recorded on face of check.

CASH REFUND POLICY

Full refund for textbooks will be granted provided the following conditions are met:

1. Returns MUST be accompanied by Cash Register receipt and drop or withdrawal slip.
2. Books MUST be in NEW condition, free of all markings with pen, pencil and erasers, etc. (used books obviously exempt). The bookstore will make the decision as to the condition of the book.
3. Returns will be accepted only during the first 15 days of the term for which they were purchased. After this period, refunds are considered on an individual basis.
4. Non-required course materials, supplies, clothing, etc. are not returnable.

**Refund policy for purchases paid for by check or charge card will vary from above procedure.



BOOK BUY BACK POLICY

Textbooks may be sold to the Bookstore during final exams at the end of each semester. Book buyback will be conducted during regular business hours. General buyback policy is as follows:

1. You must present your student identification card, current schedule or Alabama driver's license.
2. All titles will be considered 50% of retail price on current Calhoun titles, Blue Book (wholesale) on all others. This includes overstock, predicted changes and titles not used at Calhoun.
3. Normal markings and underlining expected; however, books with excessive markings, water stains, broken bindings, loose pages, heavily soiled, etc. will not be purchased.

SECURITY/POLICE

The office of the Director of Calhoun Police is located in building #6 across from the Machine Tool building.

The campus police at the Huntsville/Cummings Research Park location can be contacted in the Administrative office at that location. Officers are available whenever classes are in session. Calhoun police have the responsibility for the following:

1. Assisting students
2. Enforcing traffic and parking regulations and state laws
3. Providing for parking and traffic flow for special events (Students, faculty, and staff must notify security when special events are scheduled on campus)
4. Issuing decals
5. Maintaining building security
6. Responding to any emergency situation

Phone: (256) 306-2575, Decatur
(256) 890-4741, Huntsville
Emergency: (256) Phone: 306-2911

NOTE: In case of a medical emergency, security will, at the individual's expense, call an ambulance for transporting to a nearby emergency room for treatment.

INSTRUCTIONAL INFORMATION AND REGULATIONS

CLASSIFICATION OF STUDENTS

University Parallel

Students who plan to enroll for coursework which will transfer to a four-year institution are considered to be university parallel students. Enrollment may be for a minimum of one term or through completion of a two-year degree. Students should meet with an academic advisor to discuss programs of study and transfer requirements.

Transient

Students who have previously attended another college and who will be enrolled for only one semester and then return to the college of original enrollment are considered to be transient students. Students must submit an official letter from the parent institution they have been attending which specifies the course(s) to be taken and certifies that the credits earned will be accepted by transfer.

Career, Technical and Occupational

Students follow one of the career, technical, or occupational programs which lead to a certificate or degree.

Course Load

Students are classified according to the course load based on the credit hours for which they are enrolled on a semester basis.

Credit Hour Loads	Credit Hours
Full-Time	12 or more
Half Time	6-8

NOTE: To be eligible for financial assistance a student typically must be enrolled for at least 6 credit hours.

Drop-and-Add Period

The drop and add period will be the first three days of each semester excluding summer and mini terms. If a course meets once per week, the period will extend to the beginning of the second official class meeting day/evening. No grade will be assigned if a course is dropped during the drop/add period. See the section of this catalog on refund policy for refund information.

Withdrawals

A student who wishes to withdraw from a course(s) after the drop/add period may do so by having a withdrawal/drop form completed by Admissions/Records personnel or their designated representatives. A student may withdraw from a course(s) after drop/add period through the last class day of the term.

A withdrawal may also be initiated by a faculty member when a student exceeds the college/class attendance policy. The grade of W for withdrawal will be assigned for the course.

Grades

The following letter symbols are used to indicate the student's level of achievement in courses taken:

- A - Excellent (90-100)**
- B - Good (80-89)**

- C - Average (70-79)**
- D - Poor (60-69)**
- F - Failure (Below 60)**

- S - Successful**
- U - Unsuccessful**

- AU - Audit**
- I - Incomplete**
- IP - In Progress**
- W - Withdrawal**

NOTE: Some programs and/or courses may require a higher numeric range than the standard noted above.

A, B, C, are letter grades which represent levels of accomplishment sufficient to allow students to progress satisfactorily toward graduation and/or prerequisite requirements.

D is a letter grade which indicates minimum level accomplishment. Some courses/programs require a minimum of a "C" grade to progress to the next course or to remain eligible for continuation in a program of study.

F is the letter grade assigned to students who fail to meet minimum course requirements.

W is the letter grade assigned when a student withdraws from a course/courses after the official drop/add period through the last class day of a term. Faculty may initiate a withdrawal and assign a grade of W on students who exceed the college/class attendance policy. Students must notify the Office of the Registrar of their intent to withdraw from a course, courses, or programs.

I as a letter grade indicates incompleteness of course requirements; thus an "I" is not a satisfactory completion and will not allow a student to progress to the next course level. An "I" is awarded only under extenuating circumstances. An "I" typically is used to signify that an instructor has granted permission to a student to complete work or that the Dean or designee has approved the student take his/her final examination late. Other circumstances as approved by the instructor and/or Dean or designee may be granted. The student must be aware that he is **not** to sign up for the course again, but to see the instructor **promptly** and complete the course requirements.

Regardless of the circumstances, a grade of I must be changed by the end of the following term or it will be converted to an F.

IP as a letter grade indicates IN PROGRESS and may only be assigned to developmental credit courses, practicums, and internships. The awarding of an IP is the option of the instructor, provided the student has been in regular attendance and has demonstrated conscientious effort yet has not achieved course mastery. Students who receive an IP must repeat the course; it is not satisfactory completion. An IP may be used only once for a class.

S – successful, for developmental, co-op, practicums, and training for Business and Industry.

U – Unsuccessful, for developmental, co-op, practicums, and training for Business and Industry.

General Information

Grade Points

A student's academic standing or Grade Point Average (GPA) is a means to evaluate the overall quality of work being done. In order to perform this measure, the following grade points are assigned.

A	4	grade points per hour
B	3	grade points per hour
C	2	grade points per hour
D	1	grade point per hour
F	0	grade points per hour
S	0	grade points per hour
U	0	grade points per hour

The student's grade point average is obtained by dividing the total grade points earned by the total number of semester hours for which the grades of A, B, C, D, F, or WF are assigned. Marks of W, WP, I, IP, and AU do not affect the grade point average. A student must have a total overall grade point average of 2.0 (C) on all courses used for graduation in order to be eligible for graduation from Calhoun. (Developmental courses will not apply to the graduation audit).

Grade Appeal Procedure

Student grade appeals may be expected to occur in a large and complex institution. The prevailing philosophy of the institution is that such appeals be handled informally if possible. Only after full and comprehensive attempts have been made by students and faculty to resolve grade appeals have failed should a formal procedure be initiated. It is self-evident that an appeal should be resolved as close to the beginning of the institution's organizational chart as possible; it is further self-evident that grade appeals be handled informally through discussion if at all possible.

There is no appeal procedure if six months of calendar time have elapsed; therefore, the grade appeal procedure must be initiated by the student within six months from the time the grade is received. There are two procedures for appealing a final grade. The first applies if the appeal is within the first eight weeks of the semester immediately following the one for which the grade was received. The second final grade appeal procedure applies if the appeal is after the first eight weeks of the succeeding term. (The summer term may be excluded.)



- A. Procedure for appealing a final grade during the first eight weeks of the following semester:

A student may appeal the final grade received for a course by following the procedures outlined here. Grades received during the academic term for performance, tests, or other activities are private and confidential material between the student and the instructor and are not intended to be covered by the procedures. Daily grades may be considered only as evidence in the formal part of the appeal process, viewed solely on the basis of "a need to know," and handled in such manner so as to continue confidentiality.

1. The student should consult with the instructor promptly after receiving a final grade which he or she feels is unwarranted. If the appeal is not satisfied at this level, the Department or Division Chairperson should meet with either or both in an informal attempt to reach closure. The burden of proof in the grade appeal lies with the student. If the appeal is resolved at this point, a "memorandum of record" should be prepared by the Division or Department Chairperson and be maintained on file. The memorandum will serve as the institution's record that the disagreement was resolved informally.
2. If closure is not reached by using the informal approach, the student may file a formal grade appeal with the appropriate Department or Division Chairperson. This writing must be dated and filed with the appropriate person prior to the midpoint of the succeeding semester. (The summer term is excluded from the definition of "succeeding semester" except in cases when the instructor who assigned the grade is teaching during the summer term.) The formal grade appeal must state the reasons for the request, include the dates involved, name the instructor who assigned the grade, and include the previous attempts at resolving the situation informally. The burden of proof in the grade appeal lies with the student.
3. Prompted by the Department or Division Chairperson, the divisional grade appeal committee is limited to two calendar weeks from the date of the appeal to convene, gather evidence, and conduct a hearing. Appropriate evidence in support of the appeal must be provided by the student. However, the committee may request the student's materials from the instructor in cases where the instructor possesses the evidence. Grade and attendance records may be requested of the instructor. However, neither tangential issues nor individual personalities will be considered by the committee. To maintain the confidentiality of the hearing, only committee members, the instructor, and the student may be present at the proceedings.

Each division shall maintain a divisional grade appeal committee. Divisions may elect members or members may be appointed by the division chair. The divisional grade appeal committee should contain no fewer than three full-time faculty members. Members should rotate off the committee on a yearly basis. If a com-

mittee member is unable to serve due to involvement in the specific case being heard, the division chair will appoint a substitute for that particular case. The chairperson of the Divisional Grade Appeal Committee will be elected by the membership and will have the following duties: arrange times and places for the committee meetings and hearings; inform in writing all parties of the committee's activities; ensure that proper records are prepared, maintained, and safeguarded; and chair all meetings and hearings.

The Chair of the committee shall ensure that hearings are reasonable and fair; that only matters properly before the committee are discussed; that meetings and hearings are conducted in a professional atmosphere; and that every attempt is made to protect the integrity of the parties involved.

Committee members must be present at all hearings in order to vote following deliberations. (If, in the committee's opinion, special experience or expertise is necessary for sufficient information to be available or if the appeal is of such sensitivity that the committee should not hear the appeal, the Chairperson shall so advise the Dean of Instruction and Student Services or designee. The Dean will then appoint a special appeals committee of institution-wide membership to hear the specific case.)

4. Following the conclusion of the hearing, the committee will deliberate privately as appropriate and prepare a written recommendation for the Dean of Instruction and Student Services or designee to be submitted not later than seven calendar days after the date of the hearing. Their recommendation will be either to retain the grade or to alter it. If the recommendation is to alter, the specific grade after alteration will be indicated. The recommendation should include a brief summary of the facts of the hearing and the reasons for the committee's decision. The deliberations and recommendation of the committee are confidential. The committee may meet with the Dean of Instruction and Student Services or designee at the Dean's discretion to discuss actions, deliberations, and recommendations.
5. The Dean of Instruction and Student Services or designee will provide a statement of the decision to the student within one calendar week following the committee's recommendation. Copies of the statement of decision will be provided to the appeal committee, the Division Chairperson, and the faculty member involved. The decision of the Dean of Instruction and Student Services or designee is final. (CCC)

- B. Procedure for appealing a final grade after the first eight weeks of the following semester:

Within six months from the time the student received the grade being appealed, the student must initiate the process with the instructor of the course for which the grade was received. This appeal process is strictly informal in nature and must remain a discussion between the student and the

instructor of the course. The instructor's decision is final. There is no appeal procedure for final grades if six months of calendar time has elapsed.

Course Forgiveness Policy

Courses undertaken at Calhoun may be repeated at Calhoun. The last grade earned excluding W, WP, and AU will be the grade used for graduation audits. Courses may not be repeated at another institution and used as a component of Calhoun's Course Forgiveness Policy.

1. If a student repeats a course once, the second grade (excluding grades of W, WP, IP or AU) replaces the first grade in his/her cumulative grade point average if the student files a written request with the Admissions and Records Office.
2. When a course is repeated more than once, all grades for the course, excluding the first grade, will be employed in computation of the cumulative grade point average provided the student has requested course repeat as noted in item 1.
3. Transcripts will list all courses and the grades earned. A repeat symbol, 'R,' may denote a course repeat. Zero credit hours can also indicate a course repeat. A transfer institution may choose to average all coursework regardless of Calhoun's institutional policy.
4. A student must request, by submission of the appropriate form, that the Registrar implement the "Course Forgiveness" policy after a course has been repeated.

Auditing a Course

Instructions for auditing a course at Calhoun are as follows:

- A. A student who desires to audit a course must be admitted to the College;
- B. The student's intent to audit a course must be made by the end of the registration period and may not be changed thereafter. The Registrar will designate the student's audit status on the class roll;
- C. The student who audits a course will complete the same assignments as students who register for credit. In addition, the instructor may require the student who audits to take examinations. Nursing students who audit a course do not attend extended clinical labs.
- D. The cost of auditing a course is the same as for taking a course for credit.

ACADEMIC PROGRAM CHANGING

Request for a change of academic program should be submitted in writing to the Office of Admissions and Records.

Students should be aware of the possible consequences resulting from a change of academic program — transferability of courses completed, new requirements for graduation, job potential, limit on total number of courses for financial aid eligibility, etc. Students should confer with an advisor prior to initiating a change of academic program.

Students affected by VA regulations should consult Veterans Services staff in the Financial Aid Office prior to initiating a change of major.

General Information

ACADEMIC BANKRUPTCY

- A. A student may request in writing to the Registrar a declaration of academic bankruptcy under the following conditions for coursework attempted with Calhoun:
 1. If fewer than three (3) calendar years have elapsed since the semester for which the student wishes to declare bankruptcy, he/she may declare academic bankruptcy on all coursework taken during that one semester provided the student has completed a minimum of 18 semester hours of coursework at Calhoun since that semester. All coursework taken during the semester for which academic bankruptcy is declared, including hours completed satisfactorily, will be disregarded in the cumulative grade point average.
 2. If three (3) or more calendar years have elapsed since the most recent semester for which the student wishes to declare bankruptcy, the student may declare academic bankruptcy on all coursework satisfactorily completed during 1-3 semesters/terms provided the student has completed a minimum of 18 semester hours of coursework at Calhoun since the bankruptcy semester occurred. All coursework taken, during semester(s) for which academic bankruptcy is declared, including hours completed satisfactorily, will be disregarded in the cumulative grade point average.
- B. When academic bankruptcy is declared, the term "ACADEMIC BANKRUPTCY" will be noted on the transcript for each semester affected. When academic bankruptcy is declared, the transcript will reflect the semester of its implementation and the transcript will be stamped "ACADEMIC BANKRUPTCY IMPLEMENTED."
- C. A student may declare academic bankruptcy only once.
- D. Implementation of academic bankruptcy at Calhoun does not guarantee that other institutions will approve such action. This determination will be made by the respective transfer institution(s).

Student Course Overloads

A full-time student must be enrolled for 12 semester credit hours or more each term. Students may register for more than 19 semester credit hours only with the written permission of the Dean of Instruction and Student Services or designee. No student will be approved for more than 24 semester credit hours in any one term for

any reason. "Miniterms/minimesters" are only a part of a full term/semester and are not considered as stand-alone/individual terms. No more than two (2) laboratory courses will be approved as part of any overload request.

To be considered for an overload, the student must meet the following criteria:

1. Have successfully completed a minimum of 18 semester credit hours with Calhoun; and
2. have a minimum of a 3.0 GPA for all coursework completed at Calhoun.

ADVANCED STANDING CREDIT

Credit by Transfer

Refer to General Principles for Transfer of Credit on page 19.

Credit from Nontraditional Sources

Calhoun Community College provides an opportunity for students to earn a reasonable amount of credit toward the Associate Degree or Certificate through methods other than formal classroom instruction. While nontraditional credit may apply toward degree and certificate programs granted by the college, it should not be assumed that such credit will automatically be accepted by other colleges.

Not more than 25% of total credit required for any program may be awarded through nontraditional means towards a degree from Calhoun. Students may not earn credit through nontraditional sources for any course in which a grade has been previously received. The types of nontraditional credit and procedures to follow are listed below:

COLLEGE LEVEL EXAMINATION PROGRAM-CLEP

Calhoun Community College honors credit earned through CLEP examinations provided appropriate scores are achieved and certain conditions are met. A minimum score at or above the 50th percentile is required for specific course credit.

Any elective credit earned by nontraditional means may apply toward the total number of hours required for graduation but may not apply toward specific requirements in a particular subject area. For example, elective credit in English will not meet degree requirements of six hours of composition.

Credit for SUBJECT EXAMINATIONS may be granted provided the student has not been enrolled for more than one week in the course for which credit is to be earned. CLEP credit is not granted for college level courses previously failed, for courses in which credit for higher level course work has been earned, or for both subject examination and its course equivalent. The CLEP Subject Exam will supercede the CLEP General Exam; credits will not be awarded for the Subject and General Exam in the same discipline.



CLEP SUBJECT EXAMINATIONS

Scores for computer based tests only.

Examination	Approx. Score	CCC Equivalent	Sem. Hrs.
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Business

Accounting, Principles.....50	BUS 241-242	6
Information Systems and Computer Applications.....50	CIS 130	3
Management, Prin.....50	BUS 275	3
Marketing, Prin.....50	BUS 285	3

Composition and Literature

American Literature.....50	ENG 251-252	6
Freshman College Composition.....50	ENG 101-102	6
English Literature.....50	ENG 261-262	6

Science and Mathematics

Biology.....50	BIO 103-104	4-8
Calculus.....50	MTH 125	4
Chemistry.....50	CHM 111-112	8
Precalculus.....50	MTH 112	3

Social Sciences

American Government.....50	POL 211	3
Human Growth & Dev.50	PSY 210	3
Macroeconomics.....50	ECO 231	3
Microeconomics.....50	ECO 232	3
Psychology, Intro.50	PSY 200	3
Sociology, Intro.....50	SOC 200	3
History of US to 1877.....50	HIS 201	3
History of US II 1865-present...50	HIS 202	3
Western Civ I.....50	HIS 101	3
Western Civ II.....50	HIS 102	3

Foreign Language

Credit for CLEP French, German, and Spanish allowed. Check with Admissions for specific test and scores.

The scores listed above are reflective of the computerized CLEP examination. Students who have CLEP scores from a paper and pen examination should contact the Admissions and Records Office for minimum scores to determine credit awards. Scores are estimates and subject to change without notice.

The policy of granting credit through CLEP at Calhoun Community College may differ from policies at other colleges. Check with other colleges to obtain additional information. Area colleges offering the CLEP are Alabama A&M, Athens State University, and UAH.

POLICE ACADEMY WORK

Credit may be available for completion of approved Peace Officer Training Courses/Programs. Consult the head of the Law Enforcement Program or the Registrar for information.

SPECIALIZED MILITARY TRAINING

Calhoun adheres to policies prescribed by the Guide to the Evaluation of Educational Experiences in the Armed Services published by the American Council on Education, in granting credit for military course work.

CREDIT FOR PRIOR EXPERIENCE

Credit may be granted through the following methods only:

1. Comprehensive Departmental Challenge Examinations;
2. CLEP General or Subject Examinations;
3. An evaluation of training as detailed in the National Guide to Educational Credit for Training Programs;
4. Professional Secretary Certification (CPS);
5. Other experiences which have been received by the American Council on Education and credit recommendations published.

ADVANCED PLACEMENT TEST (AP)

Credit for the Advanced Placement Test will be awarded for a minimum score of three on subject tests. A maximum of 18 credits may be earned through the AP Program.

CAREER MOBILITY FOR PRACTICAL NURSES

Fifteen semester hours of nursing credit may be earned by challenge examination. See Nursing-Career Mobility under the College Program section of this catalog for program entry requirement.

SPECIALIZED TRAINING WITH INDUSTRY

Credit may be awarded for industry training provided:

1. A specific contractual agreement is in effect.
2. Industry training has been reviewed by the appropriate faculty in the discipline affected and specific written credit recommendations made and approved by the Dean or designee.
3. In no way shall this be interpreted as a means of reviewing industry training on an individual basis. Calhoun Community College does not conduct portfolio reviews.

STATEWIDE CAREER/TECHNICAL ARTICULATION AGREEMENTS

Effective January 2006, students who have completed technical coursework in high school and enroll in the same program with Calhoun Community College may be eligible for advanced credit. Programs that are involved include: Industrial Maintenance, Machine Tool Technology, Air Conditioning and Refrigeration, Electrical Technology, and Design Drafting Technology.

To qualify for possible credit, a student must:

1. have earned a "B" or higher in courses to be articulated,
2. must be admitted to Calhoun,
3. credit allowed only for courses in their program of study, and
4. no more than 16 months may have elapsed since high school graduation.

For specific information on programs, what credit may be awarded, and any other limitations, please contact the Division of Technologies and Workforce Development, faculty in specific programs, or the Office of Admissions and Records.

General Information

ADVANCED PLACEMENT VIA TECH PREP ARTICULATION AGREEMENTS

Please refer to the Tech Prep section of this catalog for additional information.

PROBATION AND SUSPENSION

- A. **Academic Standards of Progress**
According to the number of hours a student has attempted with Calhoun, the following GPA levels must be met to remain in good academic standing:
 1. 12-21 credit hours attempted at Calhoun, minimum cumulative GPA of 1.50;
 2. 22-32 credit hours attempted at Calhoun, minimum cumulative GPA of 1.75;
 3. 33 credit hours or more attempted at Calhoun, minimum cumulative GPA of 2.00.
- B. **Clear Academic Status**
A student's status is clear when the cumulative GPA is at or above the GPA required for the total number of credit hours attempted at Calhoun.
- C. **Academic Probation**
 1. When a student's cumulative GPA is below the GPA required for the number of hours attempted at Calhoun, the student is placed on Academic Probation.
 2. When a student on Academic Probation has a cumulative GPA below the requirement based on hours attempted at Calhoun, but the semester GPA is 2.00 or above, the student remains on Academic Probation.
- D. **SUSPENSION - ONE SEMESTER**
When the cumulative GPA of a student on Academic Probation remains below the GPA required for the total number of hours attempted at Calhoun and the semester GPA is below 2.00, the student is suspended for one semester. The transcript will read SUSPENDED - ONE SEMESTER.
- E. **SUSPENSION - ONE YEAR**
A student readmitted after serving a suspension or upon appeal re-enters on Academic Probation. If the cumulative GPA remains below the level required for the total number of hours attempted at Calhoun and the semester GPA is below 2.00, the student will be suspended for one calendar year. The student's transcript will read SUSPENDED - ONE YEAR.
- F. **APPEAL OF SUSPENSION**
A student who wishes a reconsideration of his/her suspension, whether it is for one semester or for one year, must do so in writing to the College Admissions Committee. The student may present a rationale and/or mitigating circumstances in support of his/her request for readmission. The decision of the Admissions Committee for an appeal is final.

ATTENDANCE POLICIES

Class attendance is required. The attendance policy is set by the college and is in effect from the first time a class meets. If a student registers during the drop/add period, attendance is counted from the first class meeting following registration. Students whose absences exceed the maximum absences can be involuntarily dropped from the class roll by the instructor with a grade of W (withdrawal.) The maximum absences for a 15-week term is 4. The maximum absences for a 10-week term is 3. The maximum absences for an 8-week term is 2. The maximum absences for a 5-week term is 1. Distance education students can be involuntarily withdrawn by the instructor if the student has not communicated with the instructor by phone, email, or in person within the first two weeks of a semester. Students are responsible for activities missed during any absence and makeup work will be governed by the instructor as stated in the course syllabus. It is the student's responsibility to keep a record of his/her absences and to understand specific policies detailed in each course syllabus. Communication with the instructor concerning absences is essential. Appeals of involuntary withdrawals are made at the divisional level to the division chairperson. Military personnel who are involuntarily called to active duty for unscheduled and or emergency situations and those individuals called for jury duty will be excused. Official documentation will be required. College related events such as field trips, athletic competitions, and drama productions which the student is required to attend and which are documented by the college, will also be excused. Official documentation will be required.

Each course syllabus will contain a makeup policy, a statement of the maximum number of absences allowed in the course and if the instructor will be assigning the grade of W if the maximum number of absences is exceeded.

Final Examination Attendance

Attendance at final examinations is mandatory. Such examinations are administered in all academic subjects at the end of each semester in accordance with an examination schedule issued by the Dean or designee. Any student who must miss a final examination has the responsibility of notifying his/her instructor to make arrangements to take the final examination on an alternate date, if possible. This is accomplished by filling out a form entitled "Permission to Alter Final Examination Schedule" which may be obtained in divisional/departamental offices. One copy of the form is retained by the faculty member and one copy is retained by the student. Faculty members should not change the published class examination schedule without prior approval from the Dean or designee.

RECOGNITION OF ACADEMIC EXCELLENCE

President's List

Calhoun publishes a President's List at the end of each semester. The President's List contains the names of all students carrying 12 or more semester hours who have earned a grade point average of 4.00. Developmental courses will not count toward minimum course load requirement for academic recognition.

Dean's List

Calhoun publishes a Dean's List at the end of each semester. The Dean's List contains the names of all students carrying 12 or more semester hours who have earned a grade point average of 3.50 through 3.99 and who have made no grade below a "C."

Developmental courses will not count toward minimum course load requirement for academic recognition. The GPA is figured by semester, and the Dean's List is not based on the student's cumulative GPA.

Phi Theta Kappa

Calhoun students who compile a 3.5 grade point average for 12 semester hours of non-remedial course work are invited to join Sigma Lambda Chapter of Phi Theta Kappa, the International Honor Society for two-year colleges. Once admitted, members must maintain at least a 3.00 GPA to retain membership. Phi Theta Kappa members participate in scholastic and community service activities as well as social events and leadership training. Members may qualify for numerous scholarships to four-year colleges and universities throughout the United States. Phi Theta Kappa members are authorized to wear the prestigious gold membership pin after induction, and the distinctive gold tassel and stole with their graduation gown. The transcripts of Phi Theta Kappa members are stamped with the distinctive honors seal when forwarded to other colleges or universities. Membership in the society is considered an asset for an employment resume.

GRADUATION

Calhoun Community College awards the Associate in Arts, the Associate in Science, and the Associate in Applied Science Degrees, and Certificates for non-degree programs.

DEGREES

The **Associate of Arts Degree** is awarded to students who complete a planned university parallel program and the General Education Minimum Requirements for the Associate in Arts Degree as outlined in this catalog.

The **Associate of Science Degree** is awarded to students who complete a planned program in a specific field or area of concentration. A majority of the Associate of Science Degree Programs are designed for those students who plan to transfer to four-year institutions and pursue programs of study requiring specialization on the freshman and sophomore levels. However, certain Associate of Science Degree Programs are intended as two-year career-level programs.

The **Associate of Applied Science Degree** is awarded to students who satisfy the requirements of a specific career, technical, or occupational degree program as outlined in this catalog.

Degree Requirements

1. a. **Seven year review.** Students who have had an extended stay with Calhoun Community College may have coursework completed that is no longer valid. Therefore, any applicant for graduation who has coursework more than seven years old may be required to repeat coursework before a degree/certificate is awarded to insure that their skills and knowledge are at today's standards.
- b. Determine degree requirements for approved catalog. Students may elect to graduate using course requirements under the catalog in effect at the time of enrollment (provided the courses/programs are still available and understanding that a seven year review of courses will occur) or the catalog in effect at the time of graduation. Any exception to the catalog rule must be approved

by the registrar upon submission of an application for graduation.

2. Complete 60 - 72 semester hours of college credit work in planned program of study. (Courses considered as developmental will not apply to degree requirements.)
3. Earn a minimum grade point average of 2.00 in all courses taken for graduation. Degree applicable courses are calculated into a grade point average and can affect the graduation GPA.
4. Complete at least 25% of the total semester hours at Calhoun Community College.
5. Be enrolled during the semester the degree is earned; or with the approval of the Dean or designee, a student may graduate if, within a calendar year of the last semester of attendance, he/she transfers to Calhoun no more than 6 credit hours required for completion of the program. A minimum grade of "C" is required in the courses transferred.
6. Submit an application for graduation to the Office of Admissions and Records at least one semester before graduation. Submit appropriate graduation fee to Business Office.
7. Clear all procedural, operational, and financial obligations to the college.

CERTIFICATES

Certificates are awarded to those students who successfully complete the designated requirements in career programs.

HONOR GRADUATES

To graduate with honor, a student must maintain the following quality point average on all college level course work (developmental courses not included) considered for degree requirements. Also, the degree being conferred must require 32 or more semester hours. NOTE: Please remember, transfer coursework is not calculated into a student's grade point average, except for graduation and honor's consideration.

Cum Laude	3.50 to 3.69 GPA
Magna Cum Laude	3.70 to 3.89 GPA
Summa Cum Laude	3.90 to 4.00 GPA

VISITING STUDENT PROGRAM

A cooperative arrangement exists with Alabama A & M University, Athens State University, Oakwood University, the University of Alabama in Huntsville, and Calhoun Community College. Under this arrangement, a student at any of the participating institutions may request permission to attend a class at one of the other schools. Conditions governing the granting of permission include the following:

1. The student must be a full-time student.
2. The student must have an overall "C" average.
3. The course desired must be unavailable at the student's home institution but be included in the student's home institution catalog.
4. The student's request must be approved by the student's advisor and other appropriate personnel.
5. Permission of the institution teaching the course is

General Information

- dependent upon availability of space for the visitor after its own students are accommodated.
- Distance Education and CIS courses are restricted enrollment and are not normally available to visiting students.
 - Enrollment in courses is subject to appropriate prerequisite and/or placement testing.

Any student interested in participating in the Visiting Student Program should contact the Office of Admissions for additional information.

NOTE: Enrollment in courses is subject to appropriate prerequisite and/or placement testing.

LIBRARY SERVICES

<http://lib.calhoun.edu/lib/>

Mission: We put information in the hands of users.

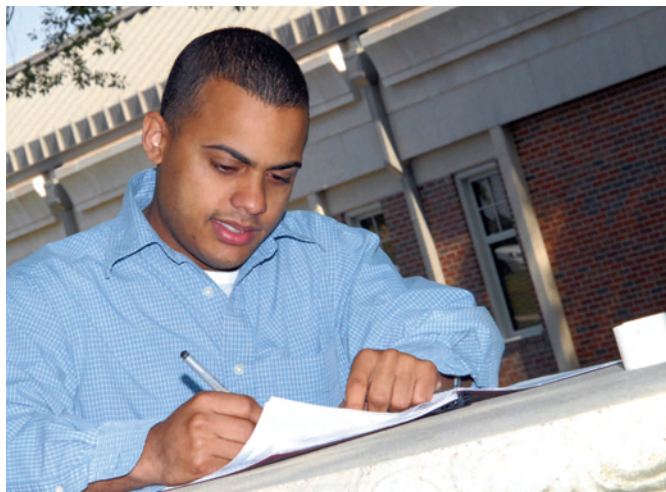
Brewer Library, Decatur Campus

The Albert P. Brewer Library is located on the Decatur Campus. Books, eBooks, eAudiobooks, magazines, journals, newspapers, books-on-tape, books-on-CD, microform, and reserve shelf materials are available.

Computer workstations provide access to online library resources through the Brewer Library/LRC Web site at <http://lib.calhoun.edu/lib/> as well as offer users Microsoft Office software (Word, Excel, PowerPoint, Access). Students can also access SPACE, Tegrity, WebAdvisor and WebCT from Library workstations.

Calhoun students (including Dual Enrollment) and faculty have online access to an array of licensed, online databases offered through the Alabama Virtual Library. Thousands of magazines, journals, newspapers, and trade publications offer full-text articles. All licensed, online databases are accessible on campus from networked computers and all are accessible remotely via authentication of a Username and Password.

Reciprocal borrowing privileges permit Calhoun students and faculty to borrow books at the libraries of Athens State University and Alabama A&M University without a charge. The UAH Library charges



a \$15 annual fee for the checkout of materials. All three libraries require the presentation of valid identification that identifies the student as registered at Calhoun for the current semester.

Point-of-use instruction and personal assistance in conducting library research and traditional reference services are offered. Electronic reference service is available through the Library/LRC Web site and email.

Hands-on instruction for English 101 can be scheduled for the Library Instruction Room (equipped with 23 student workstations) by calling x 2777.

Library and LRC orientation is provided through handouts, library guides, flyers, posters, 2CTV, and 4CTV as well as TILT (see below).

For more information about Brewer Library, including hours, please access the Brewer Library/LRC Web site. The URL is located at the top of this page.

Orientation 101 – TILT

Orientation 101 students are required to complete the interactive module called TILT (The Information Literacy Tutorial) that teaches students basic information literacy skills—how to access, select, evaluate, and use information accessible through the Brewer Library and LRC. TILT is Chapter 6 of the ORI Workbook. A WebCT Log In is required to access TILT.

Learning Resources Center, Huntsville Campus

The Learning Resources Center is located at the Huntsville, Research Park Campus. Books, eAudiobooks, eBooks, reference and reserve materials are available.

Computer workstations offer access to licensed, online databases available through the Alabama Virtual Library. These licensed databases with full-text articles are accessible to Calhoun students and faculty from networked computers on the Huntsville campus remotely (off campus) via a Username and Password. Information detailing remote access is found at <http://lib.calhoun.edu/Lib/elecdata.html> - help.

LRC borrowers can locate books at Brewer Library through the Library Catalog (also called HIP, or Horizon Information Portal). Books located at Brewer will be sent overnight to the LRC for checkout. The borrower must complete the online 'Request Item' feature for the title. Requesting an item to be sent to the LRC from Brewer Library requires that the user have a 'My Account' login which means the user must have a Library Card from either Brewer Library or the LRC.

LRC computer workstations also offer the Microsoft Office suite of application software (Word, Excel, PowerPoint, Access, and Publisher). Students can also access Tegrity, WebCT, SPACE and WebAdvisor from LRC workstations.

A collection of print magazines, journals, and newspapers is available for casual reading.

A Virtual Reference Desk accessible from the Library/LRC Web site

offers Web based reference sources such as dictionaries and directories as well as Web based resources by subject. Subjects are arranged by academic divisions of the college.

Librarians offer point-of-use instruction and personal assistance in conducting library research.

LRC librarians offer library instruction to English 101 classes upon request.

The LRC Multimedia Room offers Internet access and teleconferencing. It can be scheduled by instructors for classes or groups by calling x4771 or email gdj@calhoun.edu.

For more information, including hours, please access the Brewer Library/LRC Web site at <http://lib.calhoun.edu/lib/>.

Center for the Study of Southern Political Culture

The Center for the Study of Southern Political Culture (CSSPC) is an archive and exhibit of political literature and related items from national, state, and local campaigns and political activities such as the Civil Rights Movement. The collection is housed in the LRC at the Research Park Campus in Huntsville. It is open by appointment. Inquiries should be addressed to Dr. Waymon E. Burke, Project Director.

STUDENT AFFAIRS

PHILOSOPHY

The belief of each member of the Student Affairs staff at Calhoun Community College is that all people should have the opportunity to reach their maximum potential. Dedicated to this belief are the functions which comprise Student Affairs: Admissions and Records; Advising Services; Career Services; Counseling Services; Judicial Services; Services for Persons with Disabilities; Student Support Services; Minority Student Affairs; Upward Bound; Student Activities/Student Center; Student Orientation; Student Recruitment; and Testing Services.

The message from the Student Affairs Division to students and area residents is, "Calhoun cares about you." The following explain how Student Affairs programs work.

STUDENT SERVICES

ADVISING CENTERS

Academic advising for students at Calhoun Community College occurs in the Advising Centers. The Centers are located on the first floor of the Chasteen Student Center at the Decatur campus and at the Huntsville/Cummings Research Park campus. The Centers are staffed by counselors and academic advisors. Advisors receive training in all areas of academic advising including admissions and records, placement testing, computer training, interpersonal/communication skills, and program/scheduling.

Also available in the Advising Centers is access to the Alabama Articulation Program (also called STARS - Statewide Transfer and Articulation Reporting System). STARS is a computerized articulation and transfer planning system designed to inform students who attend Alabama community colleges about degree requirements, course equivalents, and other transfer information pertaining to specific majors at

each state funded four-year institution and ensures transfer of all two-year college credits if a prescribed course of study is followed. STARS is an efficient and effective way of providing students, counselors, advisors, and educators with accurate information upon which transfer decisions can be made. Students who are interested in receiving STARS information should log on to the STARS home page at <http://stars.troy.edu>. Students who do not have internet access need to visit one of the Advising Centers.

Incoming students meet with Advising Center personnel prior to or during their initial semester. Subsequently, students with declared academic programs may be advised within academic departments. Students who have not declared an academic program, who are changing academic programs, or who choose for personal reasons to do so, may continue to be advised through the Advising Center.

CAREER SERVICES

The Career Services Center, located on the first floor of the Chasteen Student Center, provides career information for all interested community residents as well as all Calhoun Community College students. This information includes career interest inventories, career guidance, career information, educational information, and job search skills information. Also available is ACT's Discover, a computerized system which provides information about career and educational opportunities. This can be accessed via the web by calling Calhoun's Career Services Office for a password. All of these services are provided free of charge to all interested persons. An appointment may be necessary.

The Career Services Center is available only for Calhoun students or alumni. Assistance is available for those seeking part-time, full-time, or summer employment. Many area businesses and industries contact the Career Services Center concerning their employment needs. Employers from other areas are invited to recruit on our campus to interview students in various disciplines. A Career Information Fair is held each year during the spring semester.

EMERGENCIES

In case of medical emergencies, the college's Security/Police Department will have the student, at his/her expense, transported by ambulance to a nearby emergency room for treatment.

SERVICE LEARNING CENTER

The Office of Student Affairs is responsible for the administration and implementation of Calhoun's Service Learning Program. The college has established partnerships with approximately 95 community agencies for the purpose of placing Calhoun students in service learning project assignments on a semester-by-semester basis. A listing of these agency agreements is maintained by the Dean for Student Affairs and is updated on a monthly basis. The Dean for Student Affairs serves as the liaison person between the college and all community agencies. The dean is the primary person responsible for developing and maintaining agency agreements, along with faculty participation in the service learning program.

Several courses now offer service learning as an option on the course syllabus.

Should you have questions about the program, please contact Dr. Kermit Carter, Dean for Student Affairs, at (256) 306-2613.

SERVICES FOR SPECIAL STUDENT POPULATIONS

Calhoun Community College has established a central office to coordinate matters pertaining specifically to the needs, problems, and/or con-

General Information

cerns of minority students including Black, Hispanic and international students, displaced homemakers, single parents and others desiring special attention. Persons desiring information or assistance are invited to contact this office. The office is located on the second floor of the Chasteen Student Center.

ORIENTATION TO COLLEGE - ORI 101

Orientation to College (ORI 101) is taught by Student Affairs personnel and serves to introduce the beginning student to college life. The student will become aware of college policies and procedures; be given a chance for objective introspection; and be provided assistance in the selection of a career and in the creation of an educational plan. Student Orientation is designed to benefit all students. This one credit hour course is required for all first term students enrolled in Associate of Arts, Associate of Science, and most Applied Science degrees and certificates.

PRE-ADMISSION SERVICES - STUDENT RECRUITMENT

The Pre-admission Services personnel's major function is the recruitment of students. Calhoun representatives provide information to prospective students through various off-campus visitation programs. In addition, the Pre-admission Services personnel arrange campus-wide tours and other recruiting activities. Contact the Coordinator of Enrollment Management for additional information.

SERVICES FOR PERSONS WITH DISABILITIES

Calhoun Community College provides environmental and programmatic access for persons with documented disabilities as defined in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Any student, who desires information about or assistance in arranging needed services for a disabling condition should contact the office of Services for Special Student Populations, located on the second floor of the Chasteen Student Center.

STUDENT ACTIVITIES

Student activities at Calhoun present various opportunities for students to participate in educational experiences not otherwise provided in the curriculum. The student activities program at Calhoun Community College is the responsibility of the students through the Student Government Association. The purpose of the Student Government Association is to represent every student as a direct line of communication to staff, faculty, and administration. The Student Government Association operates under the direction and supervision of the Student Activities Facilitator.

STUDENT SUPPORT SERVICES

Student Support Services, also called the TRIO Emerging Scholars Program, is one of the three original TRIO programs. The goal of the Emerging Scholars Program is to increase the postsecondary persistence and graduation rates of low-income, first generation college students and students with disabilities and to facilitate these students' transition from one level of higher education to the next. Activities and services offered by the Emerging Scholars Program include, but are not limited to, tutoring, academic advising, mentoring, financial aid, career and personal counseling, transfer counseling, cultural events, and grant aid. The program is housed in the Chasteen Student Center on the campus of Calhoun Community College in Decatur, Alabama. Services for the program are also provided at the Huntsville location.

STUDENT GOVERNMENT ASSOCIATION (SGA)

The SGA is active student self-government. Its purpose is to encourage mutual respect among students, faculty, and administrators; to promote the involvement of students in community programs and

projects; to provide social and recreational outlets for all students; and to function as an organized and realistic laboratory through which students may acquire and "try out" those skills necessary for living in and improving their communities. Calhoun Community College encourages student participation in institutional decision-making. The SGA represents student views to the college administration through representation on the Planning Council, Discipline Committee, and the Parking/Traffic Appeals Committee, as well as other special appointments. All students should take an active part in the SGA by (1) voting in every election; (2) taking the initiative to run for offices; and (3) conveying ideas and/or requests to elected student representatives.

The office of the SGA is located in the Chasteen Student Center, with regular hours maintained by the student government officials. All students are urged to meet with their representatives and to take an active part in the affairs of the student government.

Muse, an annual journal that highlights student poetry, prose, art, photography, and student opinions is a project of the Language Arts Department. The chairperson of the Humanities Division appoints a committee to oversee the product. Funding for Muse is provided through the Language Arts budget.

STUDENT ORGANIZATIONS AND CLUBS

Campus Organizations

Student Government Association
Warhawk Hosts and Hostesses
2CTV

Clubs

Allied Health Students Assn.
BACCHUS/SADD
Black Students' Alliance Club
Campus Ministries
Criminal Justice Club
Dental Assistants Club
Drama Club
I.A.A.P. (International Association of Administrative Professionals)
MENC (Music Club)
Native American Club
Nursing Club
Phi Theta Kappa
Photography Club
Practical Nursing Club
Psychology Club
Sigma Kappa Delta (English)
Student Art Club

INTRAMURAL SPORTS

An Intramural Sports Program is offered through the Physical Education Department during the fall and spring semesters. Students currently enrolled in the college are eligible to participate. Contact the Physical Education Department for more information.

WELLNESS CENTER

The Wellness Center offers a variety of cardiovascular machines: computerized treadmills, stairmaster, stationary bicycles, Nordic Track machine, and Reebok Body Trec elliptical machine. The center also offers a variety of strength training equipment: Nautilus equipment, Universal weight machine, and free weights. Full dressing rooms and shower facilities are available. Students have access to the Wellness Center by enrolling in a variety of Physical Education courses: Fundamentals of Fitness, General Conditioning, and Personal Fitness. If not enrolled in a physical education class, students may purchase a Wellness Center membership for \$25 per semester. Pay fee in the Calhoun Business Office and verify enrollment with receipt in the Wellness Center. Hours of operation vary each semester. Contact the Physical Education Department for additional information.

TESTING SERVICES

Testing is a Student Affairs function composed of the following:

Placement Testing

All students are required to complete a Placement Test in English and mathematics prior to registering for a course in these disciplines (see exemptions below). The placement test is administered by appointment throughout each semester at the Decatur campus, at the Huntsville/Research Park campus, and at Redstone Arsenal. No fee is charged for this test. Students should contact the Advising Center on the Decatur campus, the Huntsville/Research Park location or Redstone extension to schedule an appointment for the test.

NOTE: Students who score at or below 65 on the Compass Reading Test will be required to take RDG 085 during their first or second semester at Calhoun.

Exemptions

Any student who has taken the ACT/SAT within the last three years and has his/her SAT or ACT scores on file with Calhoun may be exempt from the placement testing requirement if the following minimum scores are met: 480 SAT writing, 480 SAT math or 20 ACT English or 20 ACT math.

TESTING AND ASSESSMENT CENTER

Calhoun Community College Testing and Assessment Center is open Monday-Thursday. For more information and hours of availability, please contact 256-306-2520. The assessment center provides WorkKeys assessments and assists academic faculty in providing academic credit testing. Student testing is available on a first come-first served basis. WorkKeys assessments are by appointment only.

UPWARD BOUND

Upward Bound is a federally-funded program designed to encourage high school students to complete their secondary education and pursue higher education. Approximately 85 high school students from Lawrence County are selected to participate in this program.

The Upward Bound Program provides free tutorial services, personal and academic counseling, cultural opportunities, college visitations, and enrichment classes throughout the school year and during a six week period in the summer. Seniors in the program may also attend regular summer school classes at Calhoun Community College free of charge

the summer immediately following graduation from high school.

Lawrence County students in grades 9-12 may be eligible to take advantage of opportunities available through Upward Bound. To be selected, students must have an interest in attending college, and/or be a first generation college student or exhibit economic need.

SPECIAL PROGRAMS

ADULT EDUCATION (AE)

This program offers adults who are 16 years of age and older the opportunity to prepare for the GED, Alternative High School Diploma, WorkKeys, High School Exit Exam, ASVAB or simply improve their academic skills. Persons who speak other languages also have the opportunity to learn to speak English as a second language through our ESL program. All of these services are provided free of charge.

Distance Learning is offered for Adult Education students who qualify and have the proper computer equipment.

Each participant begins by taking a diagnostic exam to determine qualifications and his/her individual need. Instruction is on an individualized basis. Based upon the results of the diagnostic exam, the student and instructor design a program to help reach the student's goal.

Persons who complete the WorkKeys Assessment tests and make a minimum score of 3 in Applied Mathematics, Reading for Information and Locating for Information will receive a Career Readiness Certificate from the State of Alabama. These certificates will be awarded according to the score achieved. A score of 3 will earn bronze, 4 a silver or 5 a gold certificate.

Upon completion of the program, students have the opportunity to "bridge" the gap between Adult Education and entering postsecondary education or entering the workplace through our Bridge Program or the Transition Program for ESL students.

Contact the Adult Education Office at 256-306-2830 in Decatur or 256-890-4729 in Huntsville to make an appointment for the diagnostic test.

General Education Development Testing Service

Calhoun Community College's General Education Development (GED) Testing Service is a program of the American Council on Education. Our primary mission is to provide a reliable process for certifying that adults possess the major and lasting outcomes of a traditional high school education. Calhoun Community College accepts the GED diploma as a component for admission.

- Pre-registration is mandatory.
- Alabama residency is required.
- Candidates must be eighteen (18) years of age; exceptions require approval.
- Test fees are applicable.
- Special accommodations are available upon approval.

The GED tests are administered at the Decatur and Huntsville campuses.

The GED Testing Center is located in the Business Center auditorium (Decatur campus). For more information call (256) 306-2610.

General Information

COMMUNITY EDUCATION CLASSES

Calhoun offers a variety of Community Education classes for all ages from “Ballroom Dancing”, “Manners are Magic”, and “How to Sell on eBay”, to “Digital Photography”, “Upholstery”, and “Buying Investment Property”. There’s something for everyone! Contact the Community Education Office for a complete schedule of our classes at 256-260-2462, or visit our website at www.calhoun.edu/BIS/CommunityEd.

On-line Learning is available in many topics. Calhoun operates an ACT Center with over 5,000 on-line, skill-based courses in Key Work Skills, Computer Basics, Industrial Technology and Safety, Information Technology, Management and Leadership, and Personal Development. These courses may be taken from any computer if one has access to the Internet. Additional on-line courses are offered through the Education 2 Go organization which provides designated start and end dates with an on-line instructor. For more information, please visit our website at www.ed2go.com/calhouncal.us.

COOPERATIVE EDUCATION

Calhoun Community College’s Cooperative Education Program affords students the opportunity to acquire on the job experience before graduation by combining studies at Calhoun with a related work experience in business/industry. The program offers two work plans, the Parallel Plan and the Alternating Plan. The Parallel Plan allows the student to work on a part-time basis (a minimum of 20 hours per week) in a job directly related to his/her academic major while attending school on a full-time basis. Under the Alternating Plan, students alternate semesters of study at Calhoun with semesters of full-time work in business/industry. Cooperative education is also available to students already working in a job that is related to their major.

Requirements

Participation in the Cooperative Education Program is open to students who maintain an overall 2.5 grade point average.

Application Procedures

Students who wish to be considered for the Cooperative Education Program should complete the following steps:

1. Submit an “Application for Cooperative Program” form, which may be obtained from the Cooperative Education Office;
2. Provide a Calhoun Community College transcript and current class schedule;
3. Be recommended in writing by an instructor in his/her major;
4. Contact the Cooperative Education office at 256-306-2938 for more information.

SERVICEMEMBERS’ OPPORTUNITY COLLEGE (SOC)

Due to efforts to serve the educational needs of servicemembers and their family members, Calhoun Community College has been designated a Servicemembers Opportunity Consortium College. As a member of the Servicemembers Opportunity Colleges Associate

Degree programs, Calhoun Community College has committed itself to fully support and comply with SOC Principles and Criteria. Through this commitment Calhoun Community College ensures that:

- Servicemembers and their family members share in the postsecondary education opportunities available to other citizens.
- Servicemembers and their family members are provided with appropriately accredited educational programs, courses and services.
- Flexibility of programs and procedures particularly in admissions, counseling, credit transfer, course articulations, recognition of non-traditional learning experiences, scheduling, course format and residency requirements are provided to enhance access of servicemembers and their family members to undergraduate education programs.

SERVICEMEMBERS OPPORTUNITY COLLEGES ASSOCIATE DEGREE

In addition to its SOC membership, Calhoun is one of approximately 50 institutions providing occupational and flexible SOCAD programs on over 200 Army installations worldwide. These programs lead to associate degrees, and most of them correspond to enlisted and warrant officer job specialties. Through prior agreement, students in SOCAD programs

- have a residency credit limited to 1/4 of total degree requirements taken at any time;
- are awarded credit for experience in their military occupational specialty (MOS) and service schools as appropriate to their program;
- have a SOCAD Student Agreement completed as their official evaluation stating remaining degree requirements and eliminating the need for reevaluating of previous credit; and
- are guaranteed that courses listed in transferability charts in the SOCAD Handbook will be accepted for degree requirements within each curriculum area.

Calhoun accepts eligible family members as SOCAD students.

TECH PREP

Tech Prep is a program of study designed to prepare students for today’s technologically demanding workplace. Tech Prep helps students identify career pathways that lead to an associate or baccalaureate degree or a post-secondary certificate in a specific career field. Calhoun Tech Prep works with area high schools to improve technical and academic preparation of students and provide a transition plan for those students seeking to enter a two-year college program in a technical field of study.

Calhoun Community College is a member of the “Advanced Technologies” Tech Prep consortium with Athens City Schools, Decatur City Schools, Hartselle City Schools, Limestone County Schools, Madison City Schools and Morgan County schools.

Articulation agreements, which award college credit for identified high school coursework completed under the Tech Prep program, have been established in the areas of technology, business, computer information systems, graphic arts, child development and medical terminology. The articulated high school courses contain the same course content as an equivalent college course and Calhoun has agreed to award college credit to those students who meet the requirements outlined in the course articulation agreement.

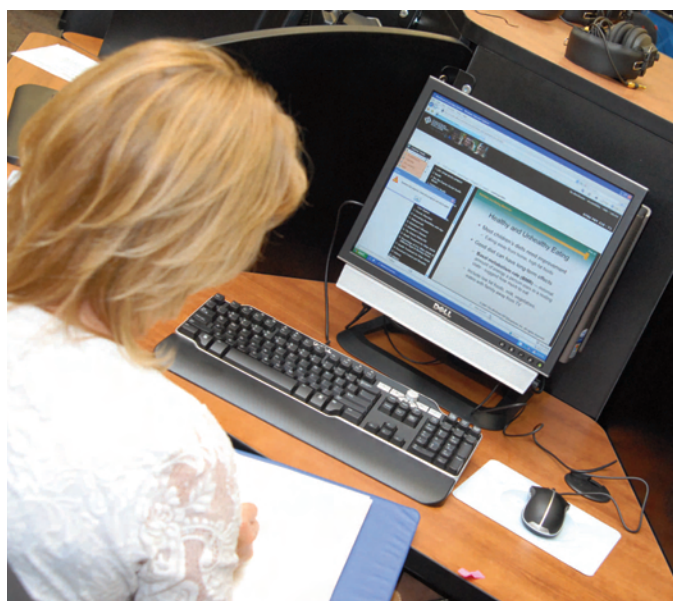
In 2006, Alabama began approving courses in career/technical areas for statewide articulation. This will allow students from across Alabama who meet the statewide articulation criteria to receive credit for work done in these courses while still in high school. In order to receive articulated credit from Calhoun, a student must be admitted to the College and must request articulated credit no later than 16 months following high school graduation.

The Tech Prep program also works with middle and high schools in the consortium to conduct numerous programs that promote Career/Technical Education including CHOICES, the annual Career & Workforce Expo and the High Tech Symposium series.

For more information on the Tech Prep program call 256/306-2665.

DISTANCE EDUCATION

Distance Education is the use of technology to provide instruction to students who desire to learn outside the regular classroom; it is a way of taking college credit courses in your home or community. Distance Education courses combine academic quality, rigorous challenge, and **convenience**. Calhoun offers a variety of courses for the distance learner. Distance Education at Calhoun includes multiple instructional technologies: telecourses in cassette, CD or DVD and on Calhoun television station (4CTV), Alabama Public Television, or internet. Students register for the course, obtain course information and receive instruction by one of the aforementioned technologies. Internet courses require that students access the World Wide Web from their home or work. Students needing more information about Distance Education should call (256) 306-2846.



WEEKEND COLLEGE

Weekend College is available at the Huntsville/Research Park location during Fall and Spring semesters. Classes meet on Saturdays. For more information regarding Weekend classes in Huntsville, call (256) 890-4701. The semester schedule includes all weekend course offerings.

CAMPUS/SITE INFORMATION

DECATUR CAMPUS

Calhoun's Decatur campus offers classes from 8:00 a.m. until 10:00 p.m., Monday through Thursday, and 8:00 a.m. - 4:00 p.m. Friday. Most student support offices are open from 7:45 a.m. until 6:30 p.m., Monday through Thursday, and 7:45 a.m. - 4:00 p.m. Friday. The Decatur campus includes classrooms; Brewer Library; labs for technologies, sciences, and allied health; physical education facilities and the Wellness Center. Directions and information are available 24 hours a day at the Security Building, located at the main entrance on the Decatur campus and on the Calhoun website at www.calhoun.edu.

Evening classes are available for students who have special scheduling needs or who prefer to attend classes in the late afternoon or evening. These working and motivated students are considered a vital part of Calhoun Community College. The evening program is governed by the same policies and procedures as day classes. Student services and academic requirements are also the same for all students at the college.

HUNTSVILLE/RESEARCH PARK

For students who wish to take Calhoun classes in the Huntsville area, Calhoun offers courses each semester at its Huntsville location in Cummings Research Park at 102 Wynn Dr. The Huntsville/Research Park location provides day and evening classes in most general education subjects. Weekend classes are also offered on Saturdays. Classes are offered on Monday-Wednesday, Tuesday-Thursday or one day a week schedules. Students wishing further information about classes available at the Huntsville/Research Park location should call (256) 890-4747. Huntsville offices are open Monday - Thursday, 7:45 a.m. - 9:45 p.m. and Friday, 8:00 a.m. - 4:15 p.m.

LIMESTONE CORRECTIONAL FACILITY

Calhoun Community College offers certain technical/vocational programs for inmates at the Limestone Correctional Facility at Capshaw. Available only to the incarcerated who have appropriate educational credentials, programs include Auto Body Repair, Auto Mechanics, Carpentry, Design Drafting, Horticulture, Masonry, Upholstery, and Welding. Adult literacy and Adult Basic Education classes are offered, which can lead to passage of the GED test. For further information about the Limestone Correctional Facility programs, contact the Director for LCF Calhoun, (256) 216-2207.

STATEWIDE TRANSFER AND ARTICULATION REPORTING SYSTEM (STARS)

In order to assist Calhoun Community College students with the transferring of courses to other institutions of higher education in the state, Calhoun is a full member in the Statewide Transfer and Articulation Reporting System (STARS).

The STARS computerized advising system has been created to inform students of the courses that they can take and transfer among public institutions within the State of Alabama without losing credit. Go to the STARS website at <http://stars.troy.edu>.

BUSINESS AND INDUSTRY SERVICES

Our mission is to provide accessible, quality educational opportunities, promote community and economic development, and enhance the quality of life for those we serve. To achieve this mission, we partner with companies to support and extend their training capabilities to meet increasingly complex job skill needs.

Our services are unique because they are low in cost, convenient, flexible and can be customized to meet the unique needs of business and industry.

A number of job-related services are provided, including ACT WorkKeys Job Profiling to determine the basic skills needed for specific jobs; individual assessments to determine the level of skills one can bring to a job; instructional programs that can be targeted to the specific skill development needs of individuals; and customized training to meet the specific needs of companies and organizations. The ACT Center provides workkeys assessments for businesses in the college service area by appointment. For more information, contact the ACT Center at (256) 306-2522.

Professional Development Training is available in several subjects such as ISO 9001:2000, basic statistics for quality engineering, leadership training, lean manufacturing, as well as personal development, computer usage, safety, technology, and business development courses.

Industrial Maintenance Training is offered in the following areas: millwright maintenance mechanic, electronics, instrumentation technicians, AVAC, plumbing, and welding for plate and pipe (construction and industrial).

Non-credit Healthcare Certification Programs include Medical Billing and Coding, Phlebotomy, and Pharmacy Technician.



Commercial Truck Driving Training (CDL)

There is a federal requirement that each state have standards for the licensing of commercial drivers. This class provides driver license testing information and training for unskilled drivers who wish to have a commercial driver license (CDL) and endorsements. To get a CDL, you must pass knowledge and skill tests. This class will help you prepare to pass the tests.

Course Code:	CDL 900
Course:	200 hours; 7:00 a.m. – 5:30 p.m. Monday – Thursday; Classes begin every five weeks
Cost:	Please contact the College's Business and Industry Office at 256-306-2584 for cost
Location:	Decatur Campus – Aerospace Training Center
Instructor:	Mary Smith

Corporate IT Training is offered in Microsoft Certified Systems Engineering, Microsoft Certified Database Administrator, Microsoft Certified Solutions Developer, Comp TIA, A+, and Networking+ as well as other programs.

Further details are available on the Business and Industry Services website: www.calhoun.edu then click on Business and Industry.

PROGRAMS OF STUDY



ACADEMIC PROGRAMS INDEX

I. Associate of Arts Degrees

English	53	24.0101
Law/Pre-Law	54	24.0101

II. Associate of Science Degrees

Accounting	49	24.0102
Agricultural Science	49	24.0102
Art	49	24.0102
Biological Science	50	24.0102
Biotechnology	50	24.0102
Business	50	24.0102
Chemistry	51	24.0102
Computer Information Systems	51	24.0102
Criminal Justice	52	24.0102
Child Development	52	24.0102
Elementary Teacher Education	52	24.0102
Family Financial Planning and Counseling	53	24.0102
Fire Services Management	53	24.0102
General Education	54	24.0102
Health & Physical Education	54	24.0102
Mathematics	55	24.0102
Medicine/Pre-Medicine or Pre-Dentistry	55	24.0102
Medicine/Pre-Veterinary Medicine	55	24.0102
Music Education	56	24.0102
Nursing/Pre-Nursing	56	24.0102
Pharmacy/Pre-Pharmacy	57	24.0102
Photography and Film Communications	57	24.0102
Pre-Engineering	57	24.0102
Secondary Teacher Education	58	24.0102
Theatre Arts	58	24.0102

III. Associate of Applied Science Degrees

Applied Technology	59	15.0613
Aerospace Technology	59	15.0613
Air Conditioning/Refrigeration	60	15.0613
Automation	66	15.0613
Design Drafting Technology	68	15.0613
Electrical Technology	69	15.0613
Industrial Maintenance/Air Conditioning & Refrigeration	74	15.0613
Industrial Maintenance/Electrical	73	15.0613
Industrial Maintenance/Instrumentation	76	15.0613
Industrial Maintenance/Mechanical	71	15.0613
Machine Tool Technology	77	15.0613
Process Technology	83	15.0613
Business Administration		
Option I-Accounting Technology	85	52.0201
Option II-Business Administration	85	52.0201
Option III-Entrepreneurship	85	52.0201
Option IV-Management	86	52.0201
Option V-Real Estate Sales and Management	87	52.0201
Child Development	87	19.0708
Child Development Assoc. (CDA)	87	19.0708

Clinical Laboratory Technology	88	51.1004
Computer Graphics		
Option I-Graphic Design	90	50.0401
Option II-Computer Graphics/Electronic Imaging	90	50.0401
Option III-Graphic Animation/Electronic Imaging	91	50.0401
Computer Information Systems		
Option I-Microcomputers	91	11.0101
Option II-Programming	92	11.0101
Option III-Networking Technology	92	11.0101
Dental Assisting	94	51.0601
Emergency Medical Services	97	51.0904
Paramedic	98	51.0904
Missile and Munitions Technology		
Basic	102	29.0101
Option I-Calibration Specialist	103	29.0101
Option II-Technical Management	103	29.0101
Option III-Military Technology	103	29.0101
Music Industry Communications	104	50.0999
Nursing/ADN: Basic	106	51.1601
Nursing/ADN: Career Mobility	112	51.1601
Paralegal Studies	118	22.0302

IV. Certificates

CIP CODE

Applied Technology	59	15.0613
Aerospace/Fundamentals	59	15.0613
Aerospace/Welding	59	15.0613
Aerospace/Structures & Assembly	60	15.0613
Air Conditioning & Refrigeration/ACR Fundamentals	61	15.0613
Air Conditioning & Refrigeration/Advanced	61	15.0613
Air Conditioning & Refrigeration/Indoor Air Quality	62	15.0613
Air Conditioning & Refrigeration/System Design	63	15.0613
Air Conditioning & Refrigeration/Commercial	63	15.0613
Air Conditioning & Refrigeration/Business	64	15.0613
Air Conditioning & Refrigeration/Controls	65	15.0613
Automation Fundamentals	66	15.0613
Automation/Robotics	67	15.0613
Design Drafting/Architectural	69	15.0613
Design Drafting/Mechanical	68	15.0613
Basic Electricity	70	15.0613
Electrical Technology – Entry-Level Electrician	70	15.0613
Electrical Technology – Residential/Commercial/Industrial Electrician	70	15.0613
Industrial Maintenance/Mechanical – Electro/Mechanical	72	15.0613
Industrial Maintenance/Electrical – Electro/Electronics	73	15.0613

Industrial Maintenance/Air Conditioning & Refrigeration	74	15.0613
Industrial Maintenance/Instrumentation	76	15.0613
Machine Tool/Machining Fundamentals	77	15.0613
Machine Tool/Manual Milling	78	15.0613
Machine Tool/Manual Turning	78	15.0613
Machine Tool/Precision Grinding	78	15.0613
Machine Tool/Precision Inspection	79	15.0613
Machine Tool/CNC Turning	80	15.0613
Machine Tool/CNC Milling	80	15.0613
Machine Tool/Manual Machining Concepts	81	15.0613
Machine Tool/CNC CAM	82	15.0613
Machine Tool/CNC EDM	82	15.0613
Multi-skilled Technical Core	83	15.0613
Process Technology	83	15.0613
Barbering	84	12.0402
Business Administration		
Entrepreneurship	86	52.0201
Child Development/CDA	87	19.0708
Child Development	88	19.0708
Computer Information Systems		
Software Applications	93	11.0101
Cosmetology	93	12.0401
Instructor Training	93	12.0499
Nail Technology	93	12.0410
Dental Assisting	95	51.0601
Emergency Medical Services		
EMT-Basic	97	51.0904
Emergency Medical Paramedic	97	51.0904
Fire Science	101	43.0202
Massage Therapy	101	51.3501
Music-Church Music	104	50.0902
Practical Nursing	113	51.1613
Security	118	43.0107
Surgical Technology	118	51.0909

SPECIAL PROGRAMS

CIP CODE

Certificates

Automotive Body Repair		
Basic Repair	120	47.0603
Advanced Repair	120	47.0603
Automotive Mechanics	121	
Basic Repair	121	47.0604
Advanced Repair	121	47.0604
Carpentry		
Finish	121	46.0201
Rough	121	46.0201
Design Drafting		
Basic Design	121	15.1301
Basic Architectural	122	15.1301
Advanced Computer Aided Drafting	122	15.1301
Electro-Mechanical	122	15.1301
Basic Civil-Structural	122	15.1301
Horticulture		
General	122	01.0601
Landscape Development	123	01.0601
Nursery & Greenhouse Management	123	01.0601
Masonry	123	46.0101
Upholstery		
Basic	123	48.0303
Automotive Interior & Trim	123	48.0303
Furniture Repair & Refinishing	124	48.0303
Welding		
Basic Structural	124	48.0508
Basic Pipe	124	48.0508

ELECTIVES

FOR PURPOSES OF FULFILLING PROGRAM REQUIREMENTS, CALHOUN PROVIDES THE FOLLOWING DEFINITIONS:

AREAS RECOMMENDED AS HUMANITIES AT CALHOUN

Courses in humanities ideally serve to give the student a broader understanding of the dimensions of man, the human condition, and human culture. The student may select courses from the following areas to satisfy Calhoun requirements (A=Fine Arts, H=Humanities):

Art (A)	Music (A)
Foreign Language (H)	Philosophy (H)
Library Science (H)	Religion (H)
Literature (H)	Theatre (A)

AREAS RECOMMENDED AS SOCIAL AND/OR BEHAVIORAL SCIENCES AT CALHOUN

Courses in the social sciences should give the student a broader understanding of social systems and the ways in which human beings relate to each other and to socio-economic-political conditions. At Calhoun, students may select courses from the following areas to satisfy Calhoun requirements:

Anthropology	Political Science
Economics	Psychology
Geography	Sociology
History	

AREAS RECOMMENDED AS NATURAL SCIENCES AT CALHOUN

Courses in the natural sciences are based on investigation of natural phenomena through the processes of reason based on systematic empirical observation. At Calhoun, the student may select courses from the following areas to satisfy Calhoun requirements:

Astronomy
Biology
Chemistry
Physical Geography
Physical Science
Physics

Each student should work closely with his/her advisor to determine the course preference for transfer to a specific program, college, or university.

Calhoun Community College has general educational outcomes expected of all graduates. All students graduating from Calhoun Community College will have competencies in critical thinking; communication; quantitative reasoning; scientific reasoning; cultural literacy; information and computer literacy and diversity. In each of the general education courses, students will cultivate these skills.

GENERAL EDUCATION REQUIREMENTS

ASSOCIATE IN ARTS OR ASSOCIATE IN SCIENCE DEGREE:

Area I: Written Composition I and II6 Credit Hours

Area II: Humanities and Fine Arts12 Credit Hours

- *Must complete 3 semester hours in Literature.
- Must complete 3 semester hours in the Arts.

Area III: Natural Science and Mathematics11 Credit Hours

- Must complete 3 semester hours in Mathematics at the Precalculus Algebra or Finite Math Level.
- Must complete 8 semester hours in the Natural Sciences which include Laboratory Experiences.

In addition to Mathematics, disciplines in the Natural Sciences include Biology, Chemistry, Physics and Physical Science.

Area IV: History, Social, and Behavioral Sciences12 Credit Hours

- *Must complete 3 semester hours in History.
- Must complete at least 6 semester hours from among other disciplines in the Social and Behavioral Sciences. Social and Behavioral Sciences include, but are not limited to, Economics, Geography, Political Science, Psychology, and Sociology.

Area I – IV: Minimum General Education Requirements41 Credit Hours

Area V: Pre-Professional, Pre-Major, and Elective Courses 19 – 23 Credit Hours**

- Courses appropriate to degree requirements and major of the individual student and electives.

Students completing courses that have been approved for the General Studies Curriculum and are appropriate to their major and/or degree program may transfer these courses with credit applicable to their degree program among two-year and four-year colleges and universities.

Area I – V: General Studies Curricula 60 – 64 Credit Hours**

- * Must complete a 6 semester hour sequence in either Literature or History. The sequence in Area II and Area IV in Literature or History needs to follow the sequence requirement according to the student's major and transfer plans.

- ** Respective program of study for baccalaureate degrees at Alabama public universities range from 120 to 128 semester credit hours in length.

Dependent upon the total hours allocated for the bachelor's degree, institutions in The Alabama Community College System will be authorized to provide only 50 percent of that total (60 – 64).

ASSOCIATE IN APPLIED SCIENCE DEGREE:

Area I: Written Composition I and II3 – 6 Credit Hours

Area II: Humanities and Fine Arts3 – 6 Credit Hours

In addition to Literature, disciplines include, but are not limited to, Art, Music, Philosophy, Religion, Spanish and Theater.

An additional three hours are required in Speech3 Credit Hours

Requirements Prescribe: Minimum of 9 hours in Area I and Area II which could include 6 hours in Written Composition I and II and 3 hours in Area II; or 3 hours in Written Composition I and 3 hours in Technical Writing and 3 hours in Area II; or 3 hours in Area I and 6 hours in Area II; or 3 hours in Area I and 3 hours in Speech in Area II, plus 3 additional hours in Area I or II.

Area III: Natural Science and Mathematics9 – 11 Credit Hours

In addition to Mathematics, disciplines in the Natural Sciences include Biology, Chemistry, Physics and Physical Science.

Requirements Prescribe: Distributed in Mathematics (100 or above) or Science or Computer Science. Minimum of 3 hours in Mathematics is required.

One Computer Science course is required.

Area IV: History, Social, and Behavioral Sciences3 – 6 Credit Hours

In addition to History, the Social and Behavioral Sciences include, but are not limited to, Economics, Geography, Political Science, Psychology, and Sociology.

Area I – IV: Minimum General Education Requirements18 – 29 Credit Hours

Area V: Maximum General Education Core, Technical Concentration, and Electives47 – 58 Credit Hours

Courses appropriate to degree requirements, occupational or technical specialty requirements, core courses, and electives.

Area I – V: General Studies Curricula76 Credit Hours

Semester Credit Hour Range of Award60 - 76

ACADEMIC PROGRAMS

ASSOCIATE OF ARTS/SCIENCE DEGREES

ACCOUNTING

Associate of Science Degree

Program Code: AS.ACCT

CIP Code: 24.0102

This program is designed for students who plan to transfer to senior institutions and pursue a B.S. degree in accounting.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Sequence	6
SPH 107 Fundamentals of Public Speaking.....	3
*MTH Elective (To be chosen from MTH 112 through 115 OR MTH 120 through 126)	3-4
Natural Science Electives.....	8
HIS Elective	3
ECO 231 Principles of Macroeconomics	3
ECO 232 Principles of Microeconomics	3
Arts Elective (To be selected from ART/MUSIC/DRAMA)	3
PSY 200 General Psychology OR SOC 200 Introduction to Sociology OR ANT 200 Introduction to Anthropology	3
Total	42-43

MAJOR COURSE REQUIREMENTS

BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
**BUS 246 Accounting on the Microcomputer OR BUS 272 Business Statistics	3
BUS 248 Managerial Accounting	3
BUS 263 The Legal and Social Environment of Business	3
BUS 271 Business Statistics I	3
CIS 146 Microcomputer Applications	3
Total	21

TOTAL CREDITS63-64

* Some universities such as UAH and Auburn require MTH 120 OR MTH 125. Other universities such as Athens State accept MTH 112. Please check with senior institution.

** Check with senior institution for program requirements.

AGRICULTURAL SCIENCE

Associate of Science Degree

Program Code: AS.AGR

CIP Code: 24.0102

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
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ENG 101 English Composition I	3
ENG 102 English Composition II	3
*Literature Electives	6
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
BIO 103 Principles of Biology I.....	4
BIO 104 Principles of Biology II	4
MTH 125 Calculus I.....	4
*HIS Electives	6
Social Science/Behavioral Science Electives.....	6

*Must complete a two course sequence in Literature and in History

Total43

MAJOR COURSE REQUIREMENTS

CIS Elective (CIS 146 or higher).....	3
CHM 111 College Chemistry I	4
CHM 112 College Chemistry II	4
CHM 221 Organic Chemistry I.....	4
CHM 222 Organic Chemistry II.....	4

Total19

TOTAL CREDITS62

ART

Associate of Science Degree

Program Code: AS.ART

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue a B.A. degree in art. Some courses are only offered once a year in the day program on the Decatur campus. Students should plan schedules with the advice of the art faculty. A formal review of a professional quality portfolio of the student's art work is required upon completion of the program of study.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College.....	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Elective.....	3
MTH Elective (MTH 110 or MTH 112)	3
ART 203 Art History I	3
ART 204 Art History II	3
Natural Science Elective	8
History Sequence	6
Behavioral or Social Science Electives.....	6
SPH 107 Fundamentals of Public Speaking.....	3

Total42

Some of the courses below are only offered once each year. See the course description section.

Programs of Study

MAJOR COURSE REQUIREMENTS

ART 113 Drawing I	3
ART 114 Drawing II	3
ART 121 Two Dimensional Composition I	3
ART 216 Printmaking I	3
ART 221 Computer Graphics I	3
ART Painting, 3D or Sculpture Elective	3
ART Painting Elective	3
ART 299 Portfolio	1
Total	22
TOTAL CREDITS	64

BIOLOGICAL SCIENCE

Associate of Science Degree

Program Code: AS.BIOL

CIP Code: 24.0102

Students using this as a guide toward a four-year program are strongly encouraged to contact the senior institution for transferability and satisfaction of prerequisites in the specific program. Two semesters of either trig-based or calculus-based physics are strongly recommended.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
*Literature Electives	6
SPH 107 Fundamentals of Public Speaking	3
Humanities/Fine Arts Elective	3
BIO 103 Principles of Biology I	4
BIO 104 Principles of Biology II	4
MTH 112 Pre-Calculus Algebra OR MTH 125 Calculus I	3-4
*HIS Electives	6
Social/Behavioral Science Electives	6

*Must complete a two course sequence in Literature and in History.

Total42-43

MAJOR COURSE REQUIREMENTS

BIO 220 General Microbiology	4
CHM 111 College Chemistry I	4
CHM 112 College Chemistry II	4
CHM 221 Organic Chemistry I	4
CHM 222 Organic Chemistry II	4
Total	20
TOTAL CREDITS	62-63

BIOTECHNOLOGY

Associate of Science Degree

Program Code: AS.BTC

CIP Code: 24.0102

Due to the newness of the field of Biotechnology Education, students using this as a guide toward a four-year program are strongly encouraged to contact senior institutions for transferability and satisfaction of prerequisites in the specific program.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Sequence	6
SPH 107 Fundamentals of Public Speaking	3
Humanities/Fine Arts Elective	3
BIO 103 Principles of Biology	4
CHM 111 College Chemistry I	4
MTH 112 PreCalculus Algebra OR MTH 125 Calculus I	3-4
HIS Sequence	6
Social/Behavioral Science Electives	6
Total	42-43

MAJOR COURSE REQUIREMENTS:

CHM 112 College Chemistry II	4
BIO 105 Introduction to Biotechnology	4
BIO 107 Cell Culture	4
BIO 203 Techniques in Molecular Biology	4
BIO 252 Directed Studies in Biotechnology	2
BIO 254 Advanced Topics in Biotechnology	2
BIO 256 Biotechnology Internship	2
Total	22

TOTAL CREDITS64-65

BUSINESS

Associate of Science Degree

Program Code: AS.BUS

CIP Code: 24.0102

This program is designed for students who plan to transfer to senior institutions and pursue a B.S. degree in business.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Sequence	6
SPH 107 Fundamentals of Public Speaking	3
MTH Elective (To be chosen from MTH 112 through 115 OR MTH 120 through 126)	3-4
Arts Elective (To be selected from ART/MUSIC/DRAMA)	3
Natural Science Electives	8

HIS Elective	3
ECO 231 Principles of Macroeconomics	3
ECO 232 Principles of Microeconomics	3
PSY 200 General Psychology OR SOC 200 Introduction to Sociology OR ANT 200 Introduction to Anthropology	3
Total	42-43

PROFESSIONAL CORE REQUIREMENTS

BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
BUS 263 The Legal and Social Environment of Business	3
BUS 271 Business Statistics I	3
BUS 272 Business Statistics II	3
CIS 146 Microcomputer Applications	3
*BUS or MTH Electives	3

*Some universities such as UAH and Auburn require MTH 120 OR 125. Other universities such as Athens State accept MTH 112. Please check with senior institution.

Total	21
TOTAL CREDITS	63-64

CHEMISTRY

Associate of Science Degree

Program Code: AS.CHEM

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue a B.S. degree in chemistry or chemical engineering. Students using this as a guide toward a four-year program are strongly encouraged to contact the senior institution for transferability and satisfaction of prerequisites in the specific program.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
*Literature Electives	6
SPH 107 Fundamentals of Public Speaking	3
Humanities/Fine Arts Elective	3
CHM 111 College Chemistry I	4
CHM 112 College Chemistry II	4
MTH 125 Calculus I	4
*HIS Electives	6
Social/Behavioral Science Electives	6

*Must complete a two course sequence in Literature and in History.
Total43

MAJOR COURSE REQUIREMENTS

CHM 220 Quantitative Analysis OR MTH 126 Calculus II	4
CHM 221 Organic Chemistry I	4
CHM 222 Organic Chemistry II	4
PHY 213 General Physics with Calculus I	4

Programs of Study

PHY 214 General Physics with Calculus II	4
Total	20
TOTAL CREDITS	63

COMPUTER INFORMATION SYSTEMS

Associate of Science Degree

Program Code: AS.CIS

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue B.S. degrees in computer information systems or related fields.

NOTE: Students should consult with a department advisor during their first semester in planning their academic schedule in order to complete degree requirements in an expedient manner. Required courses may not be available every semester. Due to limited course offerings, degree seeking students may find it necessary to extend completion time lines and attend both day and evening classes.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Sequence	6
SPH 107 Fundamentals of Public Speaking	3
MTH Elective (To be chosen from MTH 112 through 115 OR MTH 120 through 126)	3-4
Natural Science Electives	8
History Elective	3
ECO 231 Principles of Macroeconomics	3
ECO 232 Principles of Microeconomics	3
Arts Elective (To be selected from ART/MUSIC/DRAMA)	3
PSY 200 General Psychology OR SOC 200 Introduction to Sociology OR ANT 200 Introduction to Anthropology	3
Total	42-43

MAJOR COURSE REQUIREMENTS

BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
CIS 146 Microcomputer Applications	3
CIS Programming Electives	9
*CIS Electives (Higher than CIS 146)	4

*Check for transferability with senior institution.

Total	22
TOTAL CREDITS	64-65

Programs of Study

CRIMINAL JUSTICE

Associate of Science Degree

Program Code: AS.CRJ

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue a B.S. degree in criminal justice or related fields. It is also suitable for immediate employment in criminal justice careers requiring less than the bachelor's degree.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Elective	3
SPH 107 Fundamentals of Public Speaking	3
Fine Arts Elective	3
Foreign Language	3
*Math Elective (MTH 110 OR MTH 112)	3
Natural Sciences Electives	8
History Sequence (choose one of these sequences: HIS 101-102, HIS 121-122, OR HIS 201-202)	6
Social and Behavioral Sciences (Choose two of the following: PSY 200, SOC 200, POL 211)	6
Total	42

MAJOR COURSE REQUIREMENTS

CRJ 100 Introduction to Criminal Justice	3
Criminal Justice core elective (choose one of the following: CRJ 110, CRJ 150, CRJ 160)	3
CIS 146 Microcomputer Applications	3
Social/Behavioral Science elective	3
**Criminal Justice electives (Choose four of the following: CRJ 110, CRJ 130, CRJ 140, CRJ 146, CRJ 150, CRJ 157, CRJ 160, CRJ 208, CRJ 209, CRJ 216, CRJ 220, CRJ 230, CRJ 256, CRJ 280, CRJ 290)	10
Total	22

TOTAL CREDITS64

*Students intending to transfer should take MTH 112.

**Students intending to transfer should consult with their major advisor in selecting their CRJ electives.

CHILD DEVELOPMENT

Associate of Science Degree

Articulation with Athens State University
Bachelor of Science in Education
Early Childhood Education Major (P-3)

Program Code: AS.CHD

CIP Code: 24.0102

This program is intended for students who wish to transfer to Athens State University.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
Written Composition	6
Literature	3
Speech (106 or 107)	3
Arts Elective	3
Humanities or Fine Arts Elective	3
Mathematics (Pre-Cal. Algebra or higher)	6
Math 100 or above	6
Biology I and II (Natural Science with labs)	8
Physical Science	4
History	3
Social Science/Behavioral Science Electives	9
Total	55

MAJOR COURSE REQUIREMENTS

CHD 209 Infant & Toddler Programs	3
CHD 206 Children's Health, Safety & Nutrition	3
CHD 203, CHD 204, CHD 205, or CHD 215	3
Total	9

TOTAL CREDITS64

Students transferring to Athens State University must confer with the Early Childhood Education Department at the University concerning additional course requirements.

ELEMENTARY TEACHER EDUCATION

Associate of Science Degree

Program Code: AS.ELEM

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue B.S. degrees in teacher education programs for the elementary school level.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature	3
ART 100 Art Appreciation	3
SPH 107 Fundamentals of Public Speaking	3
PHL/REL/MUS/ FOREIGN LANGUAGE	3
MTH 110 Finite Math OR MTH 112 Precalculus Algebra	3
BIO 103 and 104 Principles of Biology I and II	8
*History sequence (Choose from HIS 101 and 102 OR HIS 121 and HIS 122 OR HIS 201 and HIS 202)	6
Social/Behavioral Sciences (ANT, ECO, GEO, POL, SOC)	6
Total	42

*Many 4-year schools recommend American History. Please consult your advisor.

MAJOR COURSE REQUIREMENTS

CIS 146 Microcomputer Applications.....	3
Natural Science (other than BIO).....	8
MTH 112 or higher.....	3-4
PSY 200 General Psychology.....	3
**General Electives.....	1
HED 221 Personal Health OR HED 222 Community Health.....	3
Total.....	21-22

TOTAL CREDITS63-64

*Check with 4-year school via STARS.

*Students transferring to Athens State should take a one semester hour PED activity course.

ENGLISH

Associate of Arts Degree

Program Code: AA.ENGL

CIP Code: 24.0101

This program is for those who plan to transfer to senior institutions and pursue B.A. degrees in English or other general liberal arts programs of study.

ORI 101 Orientation to College.....	1
ENG 101 English Composition I.....	3
ENG 102 English Composition II.....	3
Literature Sequence.....	6
Math elective (MTH 110 OR MTH 112).....	3
SPH 107 Fundamentals of Public Speaking.....	3
CIS elective.....	3
Foreign Language sequence.....	8
Natural Science electives.....	8
History Sequence.....	6
Social Science electives (other than history).....	6
General electives.....	14

TOTAL CREDITS.....64

FAMILY FINANCIAL PLANNING AND COUNSELING

Associate of Science Degree

(OFFERED IN PARTNERSHIP WITH THE UNIVERSITY OF ALABAMA)

Program Code: AS.FFPC

CIP Code: 24.0102

This Associate of Science degree program prepares the student to enter the baccalaureate Financial Planning program at The University of Alabama as a junior. Upon completion of the baccalaureate program, the student qualifies to sit for the Certified Financial Planning exam.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College.....	1
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ENG 101 English Composition I.....	3
ENG 102 English Composition II.....	3
*MTH Elective (To be chosen from MTH 112 through 115 OR MTH 120 through 126).....	3-4
History Elective.....	3
SPH 107 Fundamentals of Public Speaking.....	3
Literature Sequence.....	6
ECO 231 Macroeconomics.....	3
ECO 232 Microeconomics.....	3
Arts Elective (To be selected from ART/MUSIC/DRAMA).....	3
PSY 200 General Psychology OR SOC 200 Introduction to Sociology OR ANT 200 Introduction to Anthropology.....	3
Natural Science Electives.....	8

Total.....42-43

MAJOR COURSE REQUIREMENTS

BUS 241 Principles of Accounting I.....	3
BUS 242 Principles of Accounting II.....	3
BUS 271 Business Statistics I.....	3
BUS 272 Business Statistics II OR Elective.....	3
SOC 247 Marriage and the Family.....	3
CIS 146 Microcomputer Applications.....	3
Elective.....	1
**CSM 201 and CSM 204	

Total.....19

TOTAL CREDITS61-62

* MTH 120, Calculus and its Applications OR MTH 125, Calculus I required at the University of Alabama.

** Student MUST complete CSM 201 and CSM 204 prior to taking other CSM courses at The University of Alabama. Students register as University of Alabama students while taking these two courses. These courses DO NOT count as part of the 61 credits required for completion of the A.S. degree from Calhoun.

FIRE SERVICES MANAGEMENT

Associate of Science Degree

Program Code: AS.FSM

CIP Code: 24.0102

This program is designed for those students seeking immediate employment in the fire services, or for those intending to pursue a bachelor's degree in a related field at a senior institution.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College.....	1
ENG 101 English Composition I.....	3
ENG 102 English Composition II.....	3
Literature Elective.....	3
SPH 107 Fundamentals of Public Speaking.....	3
Fine Arts Elective.....	3
Foreign Language.....	3
*Math Elective (MTH 110 OR MTH 112).....	3
Natural Sciences (must take one class from two of the following areas: Biology, Chemistry, Physical Science, Astronomy, Physics).....	8

Programs of Study

History Sequence (choose from one of these sequences: HIS 101-102, HIS 121-122, OR HIS 201-202)	6
Social and Behavioral Sciences (Choose two of the following: PSY 200, SOC 200, POL 211)	6
Total	42

MAJOR COURSE REQUIREMENTS

BUS 241 Principles of Accounting I	3
CIS 146 Microcomputer Applications	3
FSC 101 Introduction to the Fire Service	3
FSC 200 Fire Combat Tactics and Strategy	3
FSC 210 Building Construction for the Fire Service	3
FSC 240 Fire Cause Determination	3
FSC 292 Elements of Supervision/FS Supervision	3
General Electives	1
Total	22

TOTAL CREDITS64

*Students intending to transfer should take MTH 112.

GENERAL EDUCATION

Associate of Science Degree

Program Code: AS.GENED **CIP Code: 24.0102**

This program is designed to include basic requirements for most four-year degrees while retaining maximum flexibility. The program allows students to coordinate programs at Calhoun with those of senior institutions. Consult an advisor for assistance in selecting electives.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Elective	3
MTH 110 Finite Math OR MTH 112 Precalculus Algebra	3
SPH 107 Fundamentals of Public Speaking	3
Humanities/Fine Arts Elective	6
Natural Science (Science must include lab)	8
History Sequence	6
PSY 200 General Psychology	3
Behavioral Sciences	3

MAJOR COURSE REQUIREMENTS

CIS Elective(s) (CIS 146 or higher)	3
Physical Education electives	2
General Electives	14-17
TOTAL CREDITS	61-64

HEALTH AND PHYSICAL EDUCATION

Associate of Science Degree

Program Code: AS.HPE **CIP Code: 24.0102**

This program is for those who plan to transfer to senior institutions and pursue a B.S. degree in physical education or related fields. Students using this as a guide toward a four-year program are strongly recommended to contact the senior institution for transferability and satisfaction of prerequisites in the specific program.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Sequence	6
Math 110 Finite Math OR MTH 112 Precalculus Algebra	3
SPH 107 Fundamentals of Public Speaking	3
Fine Arts Elective	3
Natural Science Elective	4
BIO 201 Human Anatomy and Physiology I	4
History Sequence	6
*Social & Behavioral Science Electives	6

*Recommend: Economics, Psychology and/or Sociology

Total42

MAJOR COURSE REQUIREMENTS

CIS Elective(s) (CIS 146 or higher)	3
HED 221 Personal Health	3
HED 222 Community Health	3
HED 226 Wellness OR PED 100 Fundamentals of Fitness	3
HED 230 Safety and First Aid OR HED 231 First Aid	3
PED 200 Foundations of Physical Education	3
PED 120 Techniques of Dual and Individual Sports	2
PED – Rhythms	1
PED – Fitness Activity (PED 105, 118, OR 119)	1

Total22

TOTAL CREDITS64

LAW/PRE-LAW

Associate of Arts Degree

Program Code: AA.LAW **CIP Code: 24.0101**

Students planning a career in law may pursue a wide variety of undergraduate programs of study. Many law schools specify a bachelor's degree from an accredited college or university and an acceptable score on the LSAT exam (Law School Admission Test) as general requirements.

Electives should be chosen from a major area of study based on

requirements of the institution from which the baccalaureate degree will be earned. Specific details for a pre-law program of study are a matter for each individual student to plan in consultation with advisors.

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature	3
MTH 110 Finite Math OR	
MTH 112 Precalculus Algebra	3
Humanities/Fine Arts Elective	6
SPH 107 Fundamentals of Public Speaking	3
Social Science	3
Natural Science Electives	8
History Sequence (Choose from HIS 101-102, HIS 121-122, HIS 201-202	6
Behavioral Science (Choose from ANT, ECO, GEO, POL, SOC)	3
CIS 146 Microcomputer Applications	3
PSY 200 General Psychology	3
General Electives	16
TOTAL CREDITS	64

MATHEMATICS

Associate of Science Degree

Program Code: AS.MATH

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue a B.S. degree in mathematics. Students who plan to pursue a bachelor's degree in engineering also may choose this program, but should check with the transfer institution regarding humanities requirements.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Sequence	6
Fine Arts Elective	3
SPH 107 Fundamentals of Public Speaking	3
MTH 125 Calculus I	4
PHY 213 General Physics with Calculus I	4
PHY 214 General Physics with Calculus II	4
History Sequence	6
Social Science Electives	6

Total43

MAJOR COURSE REQUIREMENTS

MTH 126 Calculus II	4
MTH 227 Calculus III	4
MTH 237 Linear Algebra	3
MTH 238 Applied Differential Equations I	3
MTH 265 Elementary Statistics	3
CIS 251 C++ Programming	3

Programs of Study

Total20

TOTAL CREDITS63

PRE-MEDICINE OR PRE-DENTISTRY

Associate of Science Degree

Program Code: AS.DENT

CIP Code: 24.0102

Students using this as a guide toward a four-year program are strongly encouraged to contact the senior institution for transferability and satisfaction of prerequisites in the specific program. Two semesters of either trig-based or calculus-based physics are strongly recommended.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
*Literature Electives	6
SPH 107 Fundamentals of Public Speaking	3
Humanities/Fine Arts Elective	3
BIO 103 Principles of Biology I	4
BIO 104 Principles of Biology II	4
MTH 125 Calculus I	4
*HIS Electives	6
Social/Behavioral Science Electives	6

*Must complete a two course sequence in Literature and in History.

Total43

MAJOR COURSE REQUIREMENTS

CHM 111 College Chemistry I	4
CHM 112 College Chemistry II	4
CHM 221 Organic Chemistry I	4
CHM 222 Organic Chemistry II	4
MTH 126 Calculus II	4

Total20

TOTAL CREDITS63

MEDICINE/PRE-VETERINARY MEDICINE

Associate of Science Degree

Program Code: AS.VET

CIP Code: 24.0102

Students using this as a guide toward a four-year program are strongly encouraged to contact the senior institution for transferability and satisfaction of prerequisites in the specific program.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3

Programs of Study

ENG 102 English Composition II	3
*Literature Electives	6
SPH 107 Fundamentals of Public Speaking.....	3
Humanities/Fine Arts Elective	3
BIO 103 Principles of Biology I.....	4
BIO 104 Principles of Biology II	4
MTH 125 Calculus I.....	4
*HIS Electives	6
Social/Behavioral Science Electives.....	6
Total	43

*Must complete a two-course sequence in Literature and History

MAJOR COURSE REQUIREMENTS

CHM 111 College Chemistry I	4
CHM 112 College Chemistry II	4
CHM 221 Organic Chemistry I.....	4
CHM 222 Organic Chemistry II.....	4
PHY 201 General Physics I – Trig Based OR	
PHY 213 General Physics with Cal I	4
Total	20
TOTAL CREDITS	63

MUSIC EDUCATION

Associate of Science Degree

Program Code: AS.MUED

CIP Code: 24.0102

This program is designed for those planning careers in music/music education. Voice or an instrument is elected by the student as an applied major. An audition will be held. Piano is required for all who are not keyboard majors. A recital in the applied major is required at the end of the sophomore year. Students are required to complete four credits of music performance electives and four credits of class piano and/or secondary applied voice or instrument. A faculty advisor should be consulted before these courses are scheduled. Students are strongly recommended to consult the STARS Transfer Guide and/or contact the senior institution for transferability and satisfaction of prerequisites in the specific program.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Elective.....	3
Math Elective (MTH 110 OR MTH 112)	3
Natural Science Electives (lab necessary)	8
History Sequence	6
Social/Behavioral Science Electives	6
*Humanities/Fine Arts Electives	6
SPH 107 Fundamentals of Public Speaking.....	3
Total	42

*Recommended Humanities/Fine Arts electives: ART 100, ART 203, ART 204, HUM 130, IDH 110, MUS 101, THR 120, OR THR 126.

Some of the following courses are only offered once each year. See the course description section.

MAJOR COURSE REQUIREMENTS

CIS Elective(s) (CIS 146 or higher)	3
MUS 111 Music Theory I*	3
MUS 113 Music Theory Lab I.....	1
MUS 112 Music Theory II	3
MUS 114 Music Theory Lab II.....	1
MUS 251 Introduction to Conducting**	3
MUP Electives in major instrument or voice.....	4
MUL Electives in ensembles.....	4
Class Piano required for non-keyboard majors	

Total 22

*Requires minimum grade of “C” in MUS 110 or acceptable score on placement test (75%)

**Verify transferability with senior institution

TOTAL CREDITS 64

NURSING/PRE-NURSING

Associate of Science Degree

Program Code: AS.PRENU

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue a B.S. degree in nursing.

NOTE: Four-year institutions offering a B.S. in nursing degree may vary as to requirements. Most institutions require a minimum grade point average of at least “C” in all natural science courses. It is advised that all pre-nursing students determine the entrance requirements at the four-year institution where he/she plans to transfer in order to ensure pre-requisite course requirements are met and the application process is complete. Upon successful completion of the curriculum shown below, the student will be awarded the Associate of Science degree.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature (Choose from American or English)	3
PHL 106 Introduction to Philosophy	3
Humanities Elective	3
Fine Arts Elective	3
HIS 121/122 World History I and World History II	6
MTH 112 Precalculus Algebra	3
BIO 103 Principles of Biology I.....	4
SOC 200 Introduction to Sociology	3
PSY 200 General Psychology	3
CHM 104 Introduction to Inorganic Chemistry.....	4
Total	42

MAJOR COURSE REQUIREMENTS

BIO 201 Human Anatomy and Physiology I.....	4
BIO 202 Human Anatomy and Physiology II	4
BIO 220 General Microbiology	4
MTH 265 Elementary Statistics	3
*Natural Science Elective	4
**Social Science Elective	3

Total22

TOTAL CREDITS.....64

*CHM 105 Introduction to Organic Chemistry is required by some four-year institutions.

**Suggested course: PSY 210 Human Growth and Development

PHARMACY/PRE-PHARMACY

Associate of Science Degree

Program Code: AS.PHARM

CIP Code: 24.0102

Students using this as a guide toward a four-year program are strongly encouraged to contact the senior institution for transferability and satisfaction of prerequisites in the specific program.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
*Literature Electives	6
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Natural Science Electives.....	8
MTH 125 Calculus I.....	4
*HIS Electives	6
Social/Behavioral Science Electives.....	6

*Must complete a two course sequence in Literature and History.

Total43

MAJOR COURSE REQUIREMENTS

CHM 111 College Chemistry I	4
CHM 112 College Chemistry II	4
CHM 221 Organic Chemistry I.....	4
CHM 222 Organic Chemistry II.....	4
PHY 201 General Physics I – Trig Based OR	
PHY 213 General Physics w/Cal I.....	4

Total20

TOTAL CREDITS.....63

Programs of Study

PHOTOGRAPHY AND FILM COMMUNICATIONS

Associate of Science Degree

Program Code: AS.PHOTO

CIP Code: 24.0102

This program is designed for those desiring skills in still photography, filmmaking, and photo-electronic media techniques and for those who plan to transfer to senior institutions and pursue a baccalaureate degree in photography. Some courses are only offered once a year in the day program on the Decatur campus. Students should plan schedules with the advice of the photography faculty. A formal review of a professional quality portfolio of the student's photographic art work is required upon completion of the program of study.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Elective	3
MTH Elective (MTH 110 or MTH 112).....	3
ART 173 Photography I	3
ART 174 Photography II	3
Natural Science Electives	8
History Sequence.....	6
Behavioral or Social Science Electives	6
SPH 107 Fundamentals of Public Speaking	3
Total.....	42

Some of the courses below are only offered once each year. See the course description section.

MAJOR COURSE REQUIREMENTS

ART 176 Filmmaking.....	3
ART 177 Color Photography.....	3
ART 178 Audio-Visual Techniques.....	3
ART 187 Photography Film and Media I	3
ART 188 Photography Film and Media II	3
ART 273 Studio Photography I	3
ART 274 Studio Photography II	3
ART 299 Portfolio	1
Total.....	22

TOTAL CREDITS64

PRE-ENGINEERING

Associate of Science Degree

Program Code: AS.PRE.EGR

CIP Code: 24.0102

This program is designed for students who plan to transfer to senior institutions and pursue a B.S. degree in engineering.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
*Literature Elective	3-6

Programs of Study

SPH 107 Fundamentals of Public Speaking	3
MTH 125 Calculus I	4
PHY 213 General Physics with Calculus I	4
PHY 214 General Physics with Calculus II	4
*HIS Elective.....	3
HIS/Social and Behavioral Science.....	6
Fine Arts Elective.....	3

*Students must complete a six semester hour sequence either in literature or in history.

MAJOR COURSE REQUIREMENTS

MTH 126 Calculus II	4
MTH 227 Calculus III	4
Total.....	8

Students must choose from the following courses based on the four-year requirements. It is strongly recommended that students refer to the STARS Transfer Guide. Failure to do so may result in courses not being transferable.

Student must select a minimum of 16 semester hours from the following courses:

MTH 237 Linear Algebra	3
MTH 238 Applied Differential Equations	3
CHM 111 College Chemistry I	4
CHM 112 College Chemistry II	4
CHM 221 Organic Chemistry I	4
CHM 222 Organic Chemistry II	4
CIS 251 C++ Programming	3
PHY 218 Modern Physics	4
Total.....	19

TOTAL CREDITS61-64

SECONDARY TEACHER EDUCATION

Associate of Science Degree

Program Code: AS.SECED

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue B.S. degrees in teacher education for the secondary level.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature	3
MTH 110 Finite Math OR MTH 112 Precalculus Algebra	3
Humanities/Fine Arts Elective	6
SPH 107 Fundamentals of Public Speaking.....	3
Social Science Elective	3
Natural Science Electives (Must be from two areas)	8
History Sequence (Choose from HIS 101 and HIS 102 OR HIS 121 and HIS 122 OR HIS 201 and HIS 202).....	6

Behavioral Sciences	3
Total	42

MAJOR COURSE REQUIREMENTS

CIS 146 Microcomputer Applications.....	3
BIO 103 Principles of Biology.....	4
HED 221 Personal Health OR HED 222 Community Health	3
General electives * **	12
Total	22

TOTAL CREDITS64

*Choose courses from intended teaching major. See Area V on STARS guide for transferable courses.

**Students transferring to Athens State should take a one semester hour PED activity course.

THEATRE ARTS

Associate of Science Degree

Program Code: AS.THEA

CIP Code: 24.0102

This program is for those who plan to transfer to senior institutions and pursue a B.S. degree in theatre or related studies. Acting skills for film, stage, and television are taught in this program.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College.....	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Sequence	6
Math elective (MTH 110 OR MTH 112)	3
THR 120 Theatre Appreciation	3
SPH 206 Oral Interpretation	3
Natural Science electives (Must include Lab Experiences)	8
Social/Behavioral Science electives.....	6
History Sequence	6
Total	42

MAJOR COURSE REQUIREMENTS

CIS Elective(s) (CIS 146 or higher)	3
THR 113 Theatre Workshop I	2
THR 114 Theatre Workshop II.....	2
THR 115 Theatre Workshop III.....	2
THR 131 Acting Techniques I.....	3
THR 132 Acting Techniques II.....	3
THR 213 Theatre Workshop IV.....	2
THR 214 Theatre Workshop V.....	2
THR 215 Theatre Workshop VI.....	1
THR 296 Directed Studies in Theatre	2
Total	22
TOTAL CREDITS64	

APPLIED DEGREES/CERTIFICATES

APPLIED TECHNOLOGY

The Associate of Applied Science Degree in Applied Technology will prepare graduates for employment in various technical career paths including aerospace technology, air conditioning & refrigeration, automation, design drafting, electrical technology, industrial maintenance (electrical, HVAC, instrumentation, and mechanical), machine tool technology, and process technology. Graduates will be prepared to work in a team-centered environment with demanding quality and safety standards. This program also provides enhancement training for individuals seeking skill advancement in their current positions. Graduates may also choose to pursue a baccalaureate degree in appropriate academic areas.

Note: The Associate of Applied Science Degree in Applied Technology is taking the place of the following stand-alone programs listed in Calhoun's 2007/2008 Catalog and Student Handbook: Aerospace Technology, Air Conditioning and Refrigeration, Design Drafting Technology, Electrical Technology, Machine Tool Technology, and Process Technology.

AEROSPACE TECHNOLOGY

With Concentration in Structures & Assembly or Welding

The Associate of Applied Science Degree in Applied Technology with a major in Aerospace Technology will prepare graduates for employment in aerospace and related industries through classroom and laboratory instruction in propulsion structure and assembly or welding.

AEROSPACE TECHNOLOGY MULTI-SKILLED TECHNICAL

Short Term Certificate

Program Code: CTS.ADM.ARS.MS CIP CODE: 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications	3

TOTAL24

AEROSPACE TECHNOLOGY/AEROSPACE FUNDAMENTALS

Short Term Certificate

Program Code: CTS.ADM.ARS.FUN CIP CODE: 15.0613

AEROSPACE FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Print Reading	3
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ARS 101 Fundamentals of Aerospace Manufacturing	3
ARS 151 Welding Principles/Theory/Symbols	3
ARS 176 Electrical/Electronic Assembly	3
ARS 178 Mechanical Assembly & Tube Welding	3
ARS 280 Surface Preparation & Coatings	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3

TOTAL24

AEROSPACE TECHNOLOGY/AEROSPACE FUNDAMENTALS

Long Term Certificate

Program Code: CTL.ADM.ARS.FUN CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AEROSPACE FUNDAMENTAL COURSE REQUIREMENTS:

MTT 121 Print Reading	3
ARS 101 Fundamentals of Aerospace Manufacturing	3
ARS 151 Welding Principles/Theory/Symbols	3
ARS 176 Electrical/Electronic Assembly	3
ARS 178 Mechanical Assembly & Tube Welding	3
ARS 280 Surface Preparation & Coatings	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3

TOTAL57

AEROSPACE TECHNOLOGY/WELDING

Short Term Certificate

Program Code: CTS.ADM.ARS.WDT CIP CODE: 15.0613

AEROSPACE/WELDING COURSE REQUIREMENTS:

ARS 153 Gas Tungsten Arc & Plasma Arc Welding	3
ARS 251 Specialized Welding Processes	3
ARS 253 Welding Certification Preparation	3

TOTAL9

Programs of Study

AEROSPACE TECHNOLOGY/WELDING

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.ARS.WDT

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AEROSPACE FUNDAMENTAL COURSE REQUIREMENTS:

MTT 121 Print Reading	3
ARS 101 Fundamentals of Aerospace Manufacturing	3
ARS 151 Welding Principles/Theory/Symbols	3
ARS 176 Electrical/Electronic Assembly	3
ARS 178 Mechanical Assembly & Tube Welding	3
ARS 280 Surface Preparation & Coatings	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3

AEROSPACE/WELDING COURSE REQUIREMENTS:

ARS 153 Gas Tungsten Arc & Plasma Arc Welding	3
ARS 251 Specialized Welding Processes	3
ARS 253 Welding Certification Preparation	3

TOTAL76

AEROSPACE TECHNOLOGY/STRUCTURES & ASSEMBLY

Short Term Certificate

Program Code: CTS.ADM.ARS.STR

CIP CODE: 15.0613

AEROSPACE/STRUCTURES & ASSEMBLY COURSE REQUIREMENTS:

ARS 276 Instrumentation Attachments & Adhesive Bonding Procedures	3
ARS 278 Composite Materials Assembly	3
ARS 284 Specialized Coating Processes	3

TOTAL9

AEROSPACE TECHNOLOGY/STRUCTURES & ASSEMBLY

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.ARS.STR

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AEROSPACE FUNDAMENTAL COURSE REQUIREMENTS:

MTT 121 Print Reading	3
ARS 101 Fundamentals of Aerospace Manufacturing	3
ARS 151 Welding Principles/Theory/Symbols	3
ARS 176 Electrical/Electronic Assembly	3
ARS 178 Mechanical Assembly & Tube Welding	3
ARS 280 Surface Preparation & Coatings	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3

AEROSPACE/STRUCTURES & ASSEMBLIES COURSE REQUIREMENTS:

ARS 276 Instrumentation Attachments & Adhesive Bonding Procedures	3
ARS 278 Composite Materials Assembly	3
ARS 284 Specialized Coating Processes	3

TOTAL76

AIR CONDITIONING & REFRIGERATION

**With Concentration in Advanced ACR OR,
Indoor Air Quality, OR System Design, OR ACR Commercial, OR
ACR Business, OR ACR Controls**

The purpose of this program of study is to train the student to become an air conditioning and refrigeration technician. The student in the program learns to install and repair air conditioning and refrigeration equipment in office buildings, factories, homes, food stores, restaurants, theaters, and other establishments. The practical experiences provide proficiency in cutting pipe and repair and maintenance of refrigeration and air conditioning equipment along with load and duct design.

**AIR CONDITIONING AND REFRIGERATION
MULTI-SKILLED TECHNICAL**

Short Term Certificate

Program Code: CTS.ADM.ACR.MS **CIP CODE:** 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications	3

TOTAL24

**AIR CONDITIONING AND REFRIGERATION/
ACR FUNDAMENTALS**

Short Term Certificate

Program Code: CTS.ADM.ACR.FUN **CIP CODE:** 15.0613

**AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE
REQUIREMENTS:**

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 121 Principles of Electricity for HVACR	3
ACR 122 HVACR Electrical Circuits	3

TOTAL15

**AIR CONDITIONING AND REFRIGERATION/
ACR FUNDAMENTALS**

Long Term Certificate

Program Code: CTL.ADM.ACR.FUN **CIP CODE:** 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

**AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE
REQUIREMENTS:**

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 121 Principles of Electricity for HVACR	3
ACR 122 HVACR Electrical Circuits	3

TOTAL48

AIR CONDITIONING AND REFRIGERATION/ADVANCED ACR

Short Term Certificate

Program Code: CTS.ADM.ACR.ADV **CIP CODE:** 15.0613

ADVANCED ACR COURSE REQUIREMENTS:

ACR 123 HVACR Electrical Components	3
ACR 132 Residential Air Conditioning	3
ACR 147 Refrigeration Transition & Recovery	3
ACR 148 Heat Pump Systems I	3
ACR 149 Heat Pump Systems II	3
ACR 205 System Sizing & Air Distribution	3

TOTAL18

AIR CONDITIONING AND REFRIGERATION/ADVANCED ACR

Long Term Certificate

Program Code: CTL.ADM.ACR.ADV **CIP CODE:** 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

**AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE
REQUIREMENTS:**

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 122 HVACR Electrical Circuits	3

ADVANCED ACR COURSE REQUIREMENTS:

ACR 132 Residential Air Conditioning	3
ACR 147 Refrigeration Transition & Recovery	3
ACR 148 Heat Pump Systems I	3
ACR 149 Heat Pump Systems II	3
ACR 205 System Sizing & Air Distribution	3

TOTAL60

Programs of Study

AIR CONDITIONING & REFRIGERATION/ADVANCED ACR

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.ACR.ADV

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 121 Principles of Electricity for HVACR	3
ACR 122 HVACR Electrical Circuits	3

ADVANCED ACR COURSE REQUIREMENTS:

ACR 123 HVACR Electrical Components	3
ACR 132 Residential Air Conditioning	3
ACR 147 Refrigeration Transition & Recovery	3
ACR 148 Heat Pump Systems I	3
ACR 149 Heat Pump Systems II	3
ACR 205 System Sizing & Air Distribution	3

TOTAL76

AIR CONDITIONING AND REFRIGERATION/INDOOR AIR QUALITY

Short Term Certificate

Program Code: CTS.ADM.ACR.IND

CIP CODE: 15.0613

ACR-INDOOR AIR QUALITY COURSE REQUIREMENTS:

ACR 130 Computer Aided HVAC Troubleshooting	1
ACR 135 Mechanical/Gas Safety Codes	3
ACR 138 Customer Relations in HVAC	3
ACR 181 Special Topics in ACR (Mold Testing & Remediation)	3
PHS 120 Environmental Science	4
BIO 103 Principles of Biology	3

TOTAL17

AIR CONDITIONING AND REFRIGERATION/INDOOR AIR QUALITY

Long Term Certificate

Program Code: CTL.ADM.ACR.IND

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
PHS 120 Environmental Science	4

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 122 HVACR Electrical Circuits	3

ACR-INDOOR AIR QUALITY COURSE REQUIREMENTS:

ACR 130 Computer Aided HVAC Troubleshooting	1
ACR 135 Mechanical/Gas Safety Codes	3
ACR 181 Special Topics in ACR (Mold Testing & Remediation)	3
BIO 103 Principles of Biology	3

TOTAL59

AIR CONDITIONING & REFRIGERATION/ INDOOR AIR QUALITY

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.ACR.IND

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
PHS 120 Environmental Science	4

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3

ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 121 Principles of Electricity for HVACR	3
ACR 122 HVACR Electrical Circuits	3

ACR-INDOOR AIR QUALITY COURSE REQUIREMENTS:

ACR 130 Computer Aided HVAC Troubleshooting	1
ACR 135 Mechanical/Gas Safety Codes	3
ACR 138 Customer Relations in HVAC	3
ACR 181 Special Topics in ACR (Mold Testing & Remediation)	3
BIO 103 Principles of Biology	3

TOTAL73

AIR CONDITIONING AND REFRIGERATION/SYSTEM DESIGN

Short Term Certificate

Program Code: CTS.ADM.ACR.SYS CIP CODE: 15.0613

ACR-SYSTEM DESIGN COURSE REQUIREMENTS:

ACR 128 Heat Load Calculations	3
ACR 135 Mechanical Gas Safety Codes	3
ACR 144 Basic Drawing & Blueprint Reading in HVAC	3
ACR 151 Duct Design & Fabrication	6
ACR 205 System Sizing & Air Distribution	3

TOTAL18

AIR CONDITIONING AND REFRIGERATION/SYSTEM DESIGN

Long Term Certificate

Program Code: CTL.ADM.ACR.SYS CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3

ACR 120 Fundamentals of Electric Heating Systems	3
ACR 122 HVACR Electrical Circuits	3

ACR-SYSTEM DESIGN COURSE REQUIREMENTS:

ACR 135 Mechanical Gas Safety Codes	3
ACR 144 Basic Drawing & Blueprint Reading in HVAC	3
ACR 151 Duct Design & Fabrication	6
ACR 205 System Sizing & Air Distribution	3

TOTAL60

AIR CONDITIONING & REFRIGERATION/SYSTEM DESIGN

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.ACR.SYS CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 121 Principles of Electricity for HVAC	3
ACR 122 HVACR Electrical Circuits	3

ACR-SYSTEM DESIGN COURSE REQUIREMENTS:

ACR 128 Heat Load Calculations	3
ACR 135 Mechanical Gas Safety Codes	3
ACR 144 Basic Drawing & Blueprint Reading in HVAC	3
ACR 151 Duct Design & Fabrication	6
ACR 205 System Sizing & Air Distribution	3

TOTAL76

AIR CONDITIONING AND REFRIGERATION/COMMERCIAL

Short Term Certificate

Program Code: CTS.ADM.ACR.COM CIP CODE: 15.0613

ACR-COMMERCIAL COURSE REQUIREMENTS:

ACR 126 Commercial Heating Systems	3
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Programs of Study

ACR 141 Environmental Systems.....	4
ACR 203 Commercial Refrigeration.....	3
ACR 209 Commercial Air Conditioning Systems.....	3
ELT 118 Commercial/Industrial Wiring.....	3
TOTAL	16

AIR CONDITIONING AND REFRIGERATION/COMMERCIAL

Long Term Certificate

Program Code: CTL.ADM.ACR.COM **CIP CODE:** 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....3	

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems.....	3
ACR 122 HVACR Electrical Circuits	3

ACR-COMMERCIAL COURSE REQUIREMENTS:

ACR 126 Commercial Heating Systems.....	3
ACR 141 Environmental Systems.....	4
ACR 203 Commercial Refrigeration.....	3
ACR 209 Commercial Air Conditioning Systems.....	3

TOTAL58

AIR CONDITIONING & REFRIGERATION/COMMERCIAL

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.ACR.COM **CIP CODE:** 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
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ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems.....	3
ACR 121 Principles of Electricity for HVAC	3
ACR 122 HVACR Electrical Circuits	3

ACR-COMMERCIAL COURSES REQUIREMENTS

ACR 126 Commercial Heating Systems.....	3
ACR 141 Environmental Systems.....	4
ACR 203 Commercial Refrigeration.....	3
ACR 209 Commercial Air Conditioning Systems	3
ELT 118 Commercial/Industrial Wiring.....	3

TOTAL74

AIR CONDITIONING AND REFRIGERATION/BUSINESS

Short Term Certificate

Program Code: CTS.ADM.ACR.BUS **CIP CODE:** 15.0613

ACR-BUSINESS COURSE REQUIREMENTS:

ACR 112 HVAC Service Procedures	3
ACR 123 HVACR Electrical Components	3
ACR 200 Review for Contractors.....	3
ACR 138 Customer Relations in HVAC	3
BUS 100 Introduction to Business	3
BUS 279 Small Business Management	3

TOTAL18

AIR CONDITIONING AND REFRIGERATION/BUSINESS

Long Term Certificate

Program Code: CTL.ADM.ACR.BUS **CIP CODE:** 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 122 HVACR Electrical Circuits	3

ACR-BUSINESS COURSE REQUIREMENTS:

ACR 112 HVAC Service Procedures	3
ACR 200 Review for Contractors	3
ACR 138 Customer Relations in HVAC	3
BUS 100 Introduction to Business	3
BUS 279 Small Business Management	3

TOTAL60

AIR CONDITIONING & REFRIGERATION/BUSINESS

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.ACR.BUS CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 121 Principles of Electricity for HVAC	3
ACR 122 HVACR Electrical Circuits	3

ACR-BUSINESS COURSE REQUIREMENTS:

ACR 112 HVAC Service Procedures	3
ACR 123 HVACR Electrical Components	3
ACR 200 Review for Contractors	3
ACR 138 Customer Relations in HVAC	3
BUS 100 Introduction to Business	3
BUS 279 Small Business Management	3

TOTAL76

AIR CONDITIONING AND REFRIGERATION/CONTROLS

Short Term Certificate

Program Code: CTS.ADM.ACR.CON CIP CODE: 15.0613

ACR-CONTROLS COURSE REQUIREMENTS:

ACR 123 HVACR Electrical Components	3
ACR 130 Computer Assisted HVAC Troubleshooting	3
ACR 147 Refrigeration Transition & Recovery	3
ACR 210 Troubleshooting HVACR Systems	3
ELT 209 Motor Controls I	3
ELT 231 Programmable Controls I	3

TOTAL18

AIR CONDITIONING AND REFRIGERATION/CONTROLS

Long Term Certificate

Program Code: CTL.ADM.ACR.CON CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems	3
ACR 122 HVACR Electrical Circuits	3

ACR-CONTROLS COURSE REQUIREMENTS:

ACR 123 HVACR Electrical Components	3
ACR 130 Computer Assisted HVAC Troubleshooting	3
ACR 147 Refrigeration Transition & Recovery	3
ACR 210 Troubleshooting HVACR Systems	3
ELT 231 Programmable Controls I	3

TOTAL60

AIR CONDITIONING & REFRIGERATION/CONTROLS

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.ACR.CON CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
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Programs of Study

MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

AIR CONDITIONING & REFRIGERATION FUNDAMENTALS COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems.....	3
ACR 121 Principles of Electricity for HVAC	3
ACR 122 HVACR Electrical Circuits	3

ACR-CONTROLS COURSE REQUIREMENTS:

ACR 130 Computer Assisted HVAC Troubleshooting	3
ACR 210 Troubleshooting HVACR Systems	3
ELT 209 Motor Controls I.....	3
ELT 231 Programmable Controls I.....	3
ACR 123 HVACR Electrical Components	3
ACR 147 Refrigeration Transition & Recovery	3

TOTAL76

AUTOMATION

The Associate of Applied Science Degree in Applied Technology with a Major in Automation will prepare graduates for entry-level employment in industrial automation. Concepts covered in the major include electronics for electricians; programmable logic controllers; digital fundamentals; interfacing microcomputers to electro-mechanical devices; and flexible manufacturing cells.

AUTOMATION MULTI-SKILLED TECHNICAL

Short Term Certificate

Program Code: CTS.ADM.AUT.MS **CIP CODE:** 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications.....	3

TOTAL24

AUTOMATION BASIC ELECTRICITY Short Term Certificate

Program Code: CTS.ADM.AUT.BAS

CIP CODE: 15.0613

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

TOTAL12

AUTOMATION BASIC ELECTRICITY Long Term Certificate

Program Code: CTL.ADM.AUT.BAS

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

TOTAL45

AUTOMATION AUTOMATION FUNDAMENTALS

Short Term Certificate

Program Code: CTS.ADM.AUT.FUN

CIP CODE: 15.0613

AUTOMATION FUNDAMENTALS COURSE REQUIREMENTS:

ELT 221 Electronics for Electricians	3
ELT 231 Programmable Controls I.....	3
ELT 232 Programmable Controls II	3
ILT 163 Digital Fundamentals.....	3

TOTAL12

**AUTOMATION
AUTOMATION FUNDAMENTALS**

Long Term Certificate

Program Code: CTL.ADM.AUT.FUN

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

AUTOMATION FUNDAMENTALS COURSE REQUIREMENTS:

ELT 221 Electronics for Electricians	3
ELT 231 Programmable Controls I.....	3
ELT 232 Programmable Controls II.....	3
ILT 163 Digital Fundamentals.....	3

TOTAL57

AUTOMATION/ROBOTICS

Short Term Certificate

Program Code: CTS.ADM.AUT.ROB

CIP CODE: 15.0613

AUTOMATION/ROBOTICS COURSE REQUIREMENTS:

ILT 216 Industrial Robotics.....	3
ILT 217 Industrial Robotics Lab	2
ADM 250 Introduction to Flexible Manufacturing Cells	4

TOTAL9

AUTOMATION/ROBOTICS

Long Term Certificate

Program Code: CTL.ADM.AUT.ROB

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

AUTOMATION FUNDAMENTALS COURSE REQUIREMENTS:

ELT 221 Electronics for Electricians	3
ELT 231 Programmable Controls I.....	3
ELT 232 Programmable Controls II.....	3

AUTOMATION/ROBOTICS COURSE REQUIREMENTS:

ILT 216 Industrial Robotics.....	3
ILT 217 Industrial Robotics Lab	2

TOTAL59

AUTOMATION/ROBOTICS

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.AUT.ROB

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

Programs of Study

AUTOMATION FUNDAMENTALS COURSE REQUIREMENTS:

ELT 221 Electronics for Electricians	3
ELT 231 Programmable Controls I	3
ELT 232 Programmable Controls II	3
ILT 163 Digital Fundamentals	3

AUTOMATION/ROBOTICS COURSE REQUIREMENTS:

ILT 216 Industrial Robotics	3
ILT 217 Industrial Robotics Lab	2
ADM 250 Introduction to Flexible Manufacturing Cells	4

TOTAL76

DESIGN DRAFTING TECHNOLOGY

With Concentration in Mechanical or Architectural Drafting

The Design Drafting Technology Program prepares students for employment as entry level drafters. The program is totally Computer Assisted Drafting (CAD). Students will receive training in fundamentals of CAD drafting with introductory courses in the fields of mechanical and architectural drafting.

DESIGN DRAFTING TECHNOLOGY MULTI-SKILLED TECHNICAL

Short Term Certificate

Program Code: CTS.ADM.DDT.MS CIP CODE: 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications	3

TOTAL24

DESIGN DRAFTING TECHNOLOGY/MECHANICAL

Short Term Certificate

Program Code: CTS.ADM.DDT.MEC CIP CODE: 15.0613

MECHANICAL DRAFTING COURSE REQUIREMENTS:

DDT 104 Introduction to CAD	3
DDT 111 Fundamentals of Drafting	3
DDT 122 Advanced Technical Drafting	3
DDT 124 Basic Technical Drafting	3
DDT 127 Intermediate CAD	3
DDT 128 Intermediate Technical Drafting	3
DDT 131 Basic Machine Drafting	3
DDT 233 Solids Modeling	3

TOTAL24

DESIGN DRAFTING TECHNOLOGY/MECHANICAL

Long Term Certificate

Program Code: CTL.ADM.DDT.MEC

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

MECHANICAL DRAFTING COURSE REQUIREMENTS:

DDT 104 Introduction to CAD	3
DDT 111 Fundamentals of Drafting	3
DDT 122 Advanced Technical Drafting	3
DDT 124 Basic Technical Drafting	3
DDT 127 Intermediate CAD	3
DDT 128 Intermediate Technical Drafting	3
DDT 131 Basic Machine Drafting	3
DDT 233 Solids Modeling	3

TOTAL57

DESIGN DRAFTING TECHNOLOGY/MECHANICAL

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.DDT.MEC

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

MECHANICAL DRAFTING COURSE REQUIREMENTS:

DDT 104 Introduction to CAD.....	3
DDT 111 Fundamentals of Drafting	3
DDT 122 Advanced Technical Drafting	3
DDT 124 Basic Technical Drafting	3
DDT 127 Intermediate CAD	3
DDT 128 Intermediate Technical Drafting.....	3
DDT 131 Basic Machine Drafting.....	3
DDT 233 Solids Modeling.....	3

TOTAL67

DESIGN DRAFTING TECHNOLOGY/ARCHITECTURAL

Short Term Certificate

Program Code: CTS.ADM.DDT.ARC

CIP CODE: 15.0613

ARCHITECTURAL DRAFTING COURSE REQUIREMENTS:

DDT 104 Introduction to CAD.....	3
DDT 111 Fundamentals of Drafting	3
DDT 127 Intermediate CAD	3
DDT 132 Architectural Drafting	3
DDT 150 Residential Drawing & Design	3
DDT 155 Residential Drawing.....	3
DDT 213 Civil Drafting.....	3
DDT 225 Structural Drafting.....	3

TOTAL24

DESIGN DRAFTING TECHNOLOGY/ARCHITECTURAL

Long Term Certificate

Program Code: CTL.ADM.DDT.ARC

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

ARCHITECTURAL DRAFTING COURSE REQUIREMENTS:

DDT 104 Introduction to CAD.....	3
DDT 111 Fundamentals of Drafting	3
DDT 127 Intermediate CAD	3
DDT 132 Architectural Drafting	3
DDT 150 Residential Drawing & Design	3
DDT 155 Residential Drawing.....	3
DDT 213 Civil Drafting.....	3
DDT 225 Structural Drafting.....	3

TOTAL57

DESIGN DRAFTING TECHNOLOGY/ARCHITECTURAL

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.DDT.ARC

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

ARCHITECTURAL DRAFTING COURSE REQUIREMENTS:

DDT 104 Introduction to CAD.....	3
DDT 111 Fundamentals of Drafting	3
DDT 127 Intermediate CAD	3
DDT 132 Architectural Drafting	3
DDT 150 Residential Drawing & Design	3
DDT 155 Residential Drawing.....	3
DDT 213 Civil Drafting.....	3
DDT 225 Structural Drafting.....	3

TOTAL67

ELECTRICAL TECHNOLOGY

The Associate of Applied Science Degree in Applied Technology with a major in Electrical Technology will prepare graduates to be an entry-level electrician/electrician's helper. Concepts covered in the major include AC/DC theory, wiring methods, conduit bending, NEC Codes, fundamentals of programmable logic controllers, and distribution systems.

**ELECTRICAL TECHNOLOGY
MULTI-SKILLED TECHNICAL**

Short Term Certificate

Program Code: CTS.ADM.ELT.MS

CIP CODE: 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3

Programs of Study

ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications	3
TOTAL	24

ELECTRICAL TECHNOLOGY BASIC ELECTRICITY

Short Term Certificate

Program Code: CTS.ADM.ELT.BAS CIP CODE: 15.0613

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3
TOTAL	12

ELECTRICAL TECHNOLOGY BASIC ELECTRICITY

Long Term Certificate

Program Code: CTL.ADM.ELT.BAS CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

TOTAL45

ELECTRICAL TECHNOLOGY ENTRY LEVEL ELECTRICIAN

Short Term Certificate

Program Code: CTS.ADM.ELT.ENT CIP CODE: 15.0613

ENTRY LEVEL ELECTRICIAN COURSE REQUIREMENTS:

ELT 110 Wiring Methods	3
ELT 231 Programmable Controls I	3

ELT 241 National Electric Code	3
TOTAL	9

ELECTRICAL TECHNOLOGY ENTRY LEVEL ELECTRICIAN

Long Term Certificate

Program Code: CTL.ADM.ELT.ENT CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

ENTRY LEVEL ELECTRICIAN COURSE REQUIREMENTS:

ELT 110 Wiring Methods	3
ELT 231 Programmable Controls I	3
ELT 241 National Electric Code	3

TOTAL54

ELECTRICAL TECHNOLOGY RESIDENTIAL/COMMERCIAL/INDUSTRIAL

Short Term Certificate

Program Code: CTS.ADM.ELT.RES CIP CODE: 15.0613

RESIDENTIAL/COMMERCIAL/INDUSTRIAL COURSE REQUIREMENTS:

ELT 104 Distribution Systems	3
ELT 116 Residential Wiring OR ELT 118 Commercial/Industrial Wiring	3
ELT 223 Cable Splices & Installation	3
ELT 244 Conduit Bending & Installation	3

TOTAL12

ELECTRICAL TECHNOLOGY RESIDENTIAL/COMMERCIAL/INDUSTRIAL

Long Term Certificate

Program Code: CTL.ADM.ELT.RES CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

ENTRY LEVEL ELECTRICIAN COURSE REQUIREMENTS:

ELT 110 Wiring Methods.....	3
ELT 231 Programmable Controls I.....	3
ELT 241 National Electric Code	3

RESIDENTIAL/COMMERCIAL/INDUSTRIAL COURSE REQUIREMENTS:

ELT 104 Distribution Systems	3
ELT 116 Residential Wiring OR ELT 118 Commercial/Industrial Wiring.....	3

TOTAL60

ELECTRICAL TECHNOLOGY

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.ELT

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation.....	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

ENTRY LEVEL ELECTRICIAN COURSE REQUIREMENTS:

ELT 110 Wiring Methods.....	3
ELT 231 Programmable Controls I.....	3
ELT 241 National Electric Code	3

RESIDENTIAL/COMMERCIAL/INDUSTRIAL COURSE REQUIREMENTS:

ELT 104 Distribution Systems	3
ELT 116 Residential Wiring OR ELT 118 Commercial/Industrial Wiring.....	3
ELT 223 Cable Splices & Installation	3
ELT 244 Conduit Bending & Installation.....	3

TOTAL76

INDUSTRIAL MAINTENANCE/MECHANICAL

The Associate of Applied Science Degree in Applied Technology with a major in Industrial Maintenance/Mechanical will prepare graduates for employment as entry level industrial mechanics and millwrights. Concepts covered in this program include pumps, motors, motor controls, mechanical drives, preventive/predictive maintenance concepts, hydraulics, pneumatics, prints and mechanical drawings, and related safety.

**INDUSTRIAL MAINTENANCE/MECHANICAL
MULTI-SKILLED TECHNICAL**

Short Term Certificate

Program Code: CTS.ADM.IMTM.MS

CIP CODE: 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications.....	3

TOTAL24

**INDUSTRIAL MAINTENANCE/MECHANICAL
BASIC ELECTRICITY**

Short Term Certificate

Program Code: CTS.ADM.IMTM.BA

CIP CODE: 15.0613

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
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Programs of Study

ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3
TOTAL	12

INDUSTRIAL MAINTENANCE/MECHANICAL BASIC ELECTRICITY

Long Term Certificate

Program Code: CTL.ADM.IMTM.BA CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

TOTAL45

INDUSTRIAL MAINTENANCE/MECHANICAL ELECTRO/MECHANICAL

Short Term Certificate

Program Code: CTS.ADM.IMTM.EL CIP CODE: 15.0613

ELECTRO/MECHANICAL COURSE REQUIREMENTS:

ELT 118 Commercial/Industrial Wiring	3
INT 117 Principles of Industrial Mechanics	3
INT 126 Preventive/Predictive Maintenance	3
INT 127 Principles of Pumps & Piping	3
INT 234 Industrial Maintenance Metal Welding & Cutting Techniques	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3

TOTAL21

INDUSTRIAL MAINTENANCE/MECHANICAL ELECTRO/MECHANICAL

Long Term Certificate

Program Code: CTL.ADM.IMTM.EL CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

ELECTRO/MECHANICAL COURSE REQUIREMENTS:

ELT 118 Commercial/Industrial Wiring	3
INT 117 Principles of Industrial Mechanics	3
INT 126 Preventive/Predictive Maintenance	3
INT 127 Principles of Pumps & Piping	3
INT 234 Industrial Maintenance Metal Welding & Cutting Techniques	3

TOTAL60

INDUSTRIAL MAINTENANCE/MECHANICAL

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.IMTM

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
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ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

ELECTRO/MECHANICAL COURSE REQUIREMENTS:

ELT 118 Commercial/Industrial Wiring	3
INT 117 Principles of Industrial Mechanics	3
INT 126 Preventive/Predictive Maintenance	3
INT 127 Principles of Pumps & Piping	3
INT 234 Industrial Maintenance Metal Welding & Cutting Techniques	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3

TOTAL76

INDUSTRIAL MAINTENANCE/ELECTRICAL

The Associate of Applied Science Degree in Applied Technology with a major in Industrial Maintenance/Electrical will prepare graduates for employment as entry level industrial electricians. Concepts covered in the major include basic electrical concepts, motor controls, programmable logic controllers, and basic instrumentation principles.

**INDUSTRIAL MAINTENANCE/ELECTRICAL
MULTI-SKILLED TECHNICAL**

Short Term Certificate

Program Code: CTS.ADM.IMTE.MS **CIP CODE:** 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications	3

TOTAL24

**INDUSTRIAL MAINTENANCE/ELECTRICAL
BASIC ELECTRICITY**

Short Term Certificate

Program Code: CTS.ADM.IMTE.BA **CIP CODE:** 15.0613

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

TOTAL12

**INDUSTRIAL MAINTENANCE/ELECTRICAL
BASIC ELECTRICITY**

Long Term Certificate

Program Code: CTL.ADM.IMTE.BA

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

TOTAL45

**INDUSTRIAL MAINTENANCE/ELECTRICAL
ELECTRO/ELECTRONICS**

Short Term Certificate

Program Code: CTS.ADM.IMTE.EL

CIP CODE: 15.0613

ELECTRO/ELECTRONICS COURSE REQUIREMENTS:

ELT 118 Commercial/Industrial Wiring	3
ELT 212 Motor Controls II	3
ELT 221 Electronics for Electricians	3
ELT 231 Programmable Controls I	3
ELT 232 Programmable Controls II	3
ILT 163 Digital Fundamentals	3
ILT 214 Introduction to Instrumentation	3

TOTAL21

**INDUSTRIAL MAINTENANCE/ELECTRICAL
ELECTRO/ELECTRONICS**

Long Term Certificate

Program Code: CTL.ADM.IMTE.EL

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

Programs of Study**APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:**

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

ELECTRO/ELECTRONICS COURSE REQUIREMENTS:

ELT 118 Commercial/Industrial Wiring	3
ELT 212 Motor Controls II	3
ELT 221 Electronics for Electricians	3
ELT 231 Programmable Controls I	3
ELT 232 Programmable Controls II	3

TOTAL60

INDUSTRIAL MAINTENANCE/ELECTRICAL

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.IMTE CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

ELECTRO/ELECTRONICS COURSE REQUIREMENTS:

ELT 118 Commercial/Industrial Wiring	3
ELT 212 Motor Controls II	3
ELT 221 Electronics for Electricians	3

ELT 231 Programmable Controls I	3
ELT 232 Programmable Controls II	3
ILT 163 Digital Fundamentals	3
ILT 214 Introduction to Instrumentation	3

TOTAL76

**INDUSTRIAL MAINTENANCE/
AIR CONDITIONING & REFRIGERATION**

The Associate of Applied Science Degree in Applied Technology with a major in Industrial Maintenance/Air Conditioning & Refrigeration will prepare graduates for employment as entry level HVAC technicians. Concepts covered in the major include fundamentals of electric and gas heating systems, refrigerant transition and recovery, commercial/industrial wiring, and NEC codes.

**INDUSTRIAL MAINTENANCE/
AIR CONDITIONING & REFRIGERATION
MULTI-SKILLED TECHNICAL**

Short Term Certificate

Program Code: CTS.ADM.IMTA.MS CIP CODE: 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications	3

TOTAL24

**INDUSTRIAL MAINTENANCE/
AIR CONDITIONING & REFRIGERATION
BASIC ELECTRICITY**

Short Term Certificate

Program Code: CTS.ADM.IMTA.BA CIP CODE: 15.0613

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

TOTAL12

**INDUSTRIAL MAINTENANCE/
AIR CONDITIONING & REFRIGERATION
BASIC ELECTRICITY**

Long Term Certificate

Program Code: CTL.ADM.IMTA.BA CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

TOTAL45

**INDUSTRIAL MAINTENANCE/
AIR CONDITIONING & REFRIGERATION
HVAC**

Short Term Certificate

Program Code: CTS.ADM.IMTA.HV CIP CODE: 15.0613

HVAC COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems.....	3
ACR 147 Refrigerant Transition & Recovery Theory	3
ACR 205 System Sizing & Air Distribution	3
ELT 118 Commercial/Industrial Wiring.....	3
ELT 241 National Electrical Code.....	3

TOTAL21

**INDUSTRIAL MAINTENANCE/
AIR CONDITIONING & REFRIGERATION
HVAC**

Long Term Certificate

Program Code: CTL.ADM.IMTA.HV CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer	

Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

HVAC COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems.....	3
ACR 147 Refrigerant Transition & Recovery Theory	3
ELT 118 Commercial/Industrial Wiring.....	3

TOTAL60

**INDUSTRIAL MAINTENANCE/
AIR CONDITIONING & REFRIGERATION
Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.IMTA

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

HVAC COURSE REQUIREMENTS:

ACR 113 Refrigeration Piping Practices	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 120 Fundamentals of Electric Heating Systems.....	3
ACR 147 Refrigerant Transition & Recovery Theory	3
ACR 205 System Sizing & Air Distribution	3
ELT 118 Commercial/Industrial Wiring.....	3

Programs of Study

ELT 241 National Electrical Code.....	3
TOTAL	76

INDUSTRIAL MAINTENANCE/INSTRUMENTATION

The Associate of Applied Science Degree in Applied Technology with a major in Industrial Maintenance/Instrumentation will prepare graduates for employment as entry level instrumentation technicians. Concepts covered in the major include electronics for electricians; instrumentation circuits and systems; transducers; detectors; actuators; control devices; and fundamentals of pressure, force, weight, motion, liquid level, and fluid flow.

INDUSTRIAL MAINTENANCE/INSTRUMENTATION MULTI-SKILLED TECHNICAL

Short Term Certificate

Program Code: CTS.ADM.IMTI.MS CIP CODE: 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
CIS 146 Microcomputer Applications.....	3
TOTAL	24

INDUSTRIAL MAINTENANCE/INSTRUMENTATION BASIC ELECTRICITY

Short Term Certificate

Program Code: CTS.ADM.IMTI.BA CIP CODE: 15.0613

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3
TOTAL	12

INDUSTRIAL MAINTENANCE/INSTRUMENTATION BASIC ELECTRICITY

Long Term Certificate

Program Code: CTL.ADM.IMTI.BA CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I.....	3

TOTAL 45

INDUSTRIAL MAINTENANCE/INSTRUMENTATION

Short Term Certificate

Program Code: CTS.ADM.IMTI.IN CIP CODE: 15.0613

INSTRUMENTATION COURSE REQUIREMENTS:

ILT 103 Introduction to Instrumentation Technology	3
ILT 104 Industrial Instrumentation.....	3
ILT 105 Industrial Instrumentation Lab.....	2
ILT 108 Introduction to Instrumentation & Process Control	3
ILT 216 Industrial Robotics.....	3
ILT 217 Industrial Robotics Lab	2
ELT 221 Electronics for Electricians	3

TOTAL 19

INDUSTRIAL MAINTENANCE/INSTRUMENTATION

Long Term Certificate

Program Code: CTL.ADM.IMTI.IN CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3

ELT 209 Motor Controls I	3
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INSTRUMENTATION COURSE REQUIREMENTS:

ILT 103 Introduction to Instrumentation Technology	3
ILT 104 Industrial Instrumentation	3
ILT 105 Industrial Instrumentation Lab	2
ILT 108 Introduction to Instrumentation & Process Control	3
ILT 216 Industrial Robotics	3
ILT 217 Industrial Robotics Lab	2

TOTAL	58
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INDUSTRIAL MAINTENANCE/INSTRUMENTATION

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.IMTI

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

BASIC ELECTRICITY COURSE REQUIREMENTS:

ELT 108 DC Fundamentals	3
ELT 109 AC Fundamentals	3
ELT 117 AD/CD Machines	3
ELT 209 Motor Controls I	3

INSTRUMENTATION COURSE REQUIREMENTS:

ILT 103 Introduction to Instrumentation Technology	3
ILT 104 Industrial Instrumentation	3
ILT 105 Industrial Instrumentation Lab	2
ILT 108 Introduction to Instrumentation & Process Control	3
ILT 216 Industrial Robotics	3
ILT 217 Industrial Robotics Lab	2
ELT 221 Electronics for Electricians	3

TOTAL	74
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MACHINE TOOL TECHNOLOGY

**With Concentration in Manual Machining, OR Precision Inspection,
OR CNC Turning, OR CNC Milling, OR CNC CAM, OR CNC EDM**

The Machine Tool Technology Program is a study of the process of using machine tools to manufacture useful products and parts. Students will acquire specialized knowledge and skills in many areas including mathematics, print reading, physics, measuring instruments, cutting tools, and machine tools. Graduates will have the ability to turn rough material into precision finished products and parts.

**MACHINE TOOL TECHNOLOGY
MULTI-SKILLED TECHNICAL**

Short Term Certificate

Program Code: CTS.ADM.MTT.MS

CIP CODE: 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
CIS 146 Microcomputer Applications	3

TOTAL	24
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MACHINE TOOL TECHNOLOGY/MACHINING FUNDAMENTALS

Short Term Certificate

Program Code: CTS.ADM.MTT.FUN

CIP CODE: 15.0613

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3
MTT 149 Introduction to Machine Shop II	3
MTT 150 Introduction to Machine Shop II Lab	3

TOTAL	15
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MACHINE TOOL TECHNOLOGY/MACHINING FUNDAMENTALS

Long Term Certificate

Program Code: CTL.ADM.MTT.FUN

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3

*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3

Programs of Study

ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3
MTT 149 Introduction to Machine Shop II.....	3
MTT 150 Introduction to Machine Shop II Lab.....	3
TOTAL	48

MACHINE TOOL TECHNOLOGY/MANUAL MILLING

Short Term Certificate

Program Code: CTS.ADM.MTT.MIL CIP CODE: 15.0613

MANUAL MILLING COURSE REQUIREMENTS:

MTT 137 Milling I.....	3
MTT 138 Milling I Lab.....	3
TOTAL	6

MACHINE TOOL TECHNOLOGY/MANUAL MILLING

Long Term Certificate

Program Code: CTL.ADM.MTT.MIL CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition.....	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective.....	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety.....	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3
MTT 149 Introduction to Machine Shop II.....	3
MTT 150 Introduction to Machine Shop II Lab.....	3

MANUAL MILLING COURSE REQUIREMENTS:

MTT 137 Milling I.....	3
MTT 138 Milling I Lab.....	3
TOTAL	54

MACHINE TOOL TECHNOLOGY/MANUAL TURNING

Short Term Certificate

Program Code: CTS.ADM.MTT.TUR CIP CODE: 15.0613

MANUAL TURNING COURSE REQUIREMENTS:

MTT 134 Engine Lathe I.....	3
MTT 135 Engine Lathe I Lab.....	3
TOTAL	6

MACHINE TOOL TECHNOLOGY/MANUAL MACHINING

Long Term Certificate

Program Code: CTL.ADM.MTT.TUR CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition.....	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective.....	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety.....	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3
MTT 149 Introduction to Machine Shop II.....	3
MTT 150 Introduction to Machine Shop II Lab.....	3

MANUAL MILLING COURSE REQUIREMENTS:

MTT 137 Milling I.....	3
MTT 138 Milling I Lab.....	3

MANUAL TURNING COURSE REQUIREMENTS:

MTT 134 Engine Lathe I.....	3
MTT 135 Engine Lathe I Lab.....	3

TOTAL60

MACHINE TOOL TECHNOLOGY/PRECISION GRINDING

Short Term Certificate

Program Code: CTS.ADM.MTT.GRI CIP CODE: 15.0613

PRECISION GRINDING COURSE REQUIREMENTS:

MTT 162 Precision Grinding.....	3
MTT 163 Precision Grinding Lab.....	3

TOTAL6

MACHINE TOOL TECHNOLOGY/MANUAL MACHINING

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.MTT.MAN CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3
MTT 149 Introduction to Machine Shop II.....	3
MTT 150 Introduction to Machine Shop II Lab.....	3

MANUAL MILLING COURSE REQUIREMENTS:

MTT 137 Milling I.....	3
MTT 138 Milling I Lab	3

MANUAL TURNING COURSE REQUIREMENTS:

MTT 134 Engine Lathe I	3
MTT 135 Engine Lathe I Lab.....	3

PRECISION GRINDING COURSE REQUIREMENTS:

MTT 162 Precision Grinding.....	3
MTT 163 Precision Grinding Lab.....	3

TOTAL76

MACHINE TOOL TECHNOLOGY/PRECISION INSPECTION

Short Term Certificate

Program Code: CTS.ADM.MTT.INS CIP CODE: 15.0613

PRECISION INSPECTION COURSE REQUIREMENTS:

MTT 107 Machining Calculations	3
MTT 108 Machinist Handbook Functions I.....	3
MTT 128 Geometric Dimensioning & Tolerancing.....	3
MTT 130 Machining Calculations II	3
MTT 281 Special Topics in Machine Tool Technology.....	3

TOTAL15

MACHINE TOOL TECHNOLOGY/PRECISION INSPECTION

Long Term Certificate

Program Code: CTL.ADM.MTT.INS CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3

PRECISION INSPECTION COURSE REQUIREMENTS:

MTT 107 Machining Calculations	3
MTT 108 Machinist Handbook Functions I.....	3
MTT 128 Geometric Dimensioning & Tolerancing.....	3
MTT 130 Machining Calculations II.....	3
MTT 281 Special Topics in Machine Tool Technology.....	3

TOTAL57

MACHINE TOOL TECHNOLOGY/PRECISION INSPECTION

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.MTT.INS CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts.....	3

Programs of Study

*CIS 146 Microcomputer Applications.....3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....3
MTT 147 Introduction to Machine Shop I.....3
MTT 148 Introduction to Machine Shop I Lab.....3
MTT 149 Introduction to Machine Shop II.....3
MTT 150 Introduction to Machine Shop II Lab.....3

PRECISION INSPECTION COURSE REQUIREMENTS:

MTT 107 Machining Calculations3
MTT 108 Machinist Handbook Functions I.....3
MTT 128 Geometric Dimensioning & Tolerancing.....3
MTT 130 Machining Calculations II3
MTT 281 Special Topics in Machine Tool Technology.....3

TOTAL73

MACHINE TOOL TECHNOLOGY/CNC TURNING

Short Term Certificate

Program Code: CTS.ADM.MTT.CTU

CIP CODE: 15.0613

CNC TURNING COURSE REQUIREMENTS:

MTT 140 Basic CNC Turning Programming I3
MTT 212 Advanced CNC Turning3
MTT 243 CNC Turning Lab I.....3
MTT 244 CNC Turning Lab II.....3

TOTAL12

MACHINE TOOL TECHNOLOGY/CNC TURNING

Long Term Certificate

Program Code: CTL.ADM.MTT.CTU

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition3
SPH 107 Fundamentals of Public Speaking.....3
Natural Science Elective3
*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety3
ADM 101 Precision Measurement.....3
ADM 102 Computer Aided Design.....3
ADM 103 Introduction to Computer
Integrated Manufacturing/Materials & Processes.....3
ADM 104 Introduction to Thermal/Electrical Principles.....3
ADM 105 Fluid Systems.....3
ADM 106 Quality Control Concepts3
*CIS 146 Microcomputer Applications.....3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....3
MTT 147 Introduction to Machine Shop I.....3
MTT 148 Introduction to Machine Shop I Lab.....3

MANUAL TURNING COURSE REQUIREMENTS:

MTT 134 Engine Lathe I3
MTT 135 Engine Lathe I Lab.....3

CNC TURNING COURSE REQUIREMENTS:

MTT 140 Basic CNC Turning Programming I3
MTT 212 Advanced CNC Turning3
MTT 243 CNC Turning Lab I.....3
MTT 244 CNC Turning Lab II.....3

TOTAL60

MACHINE TOOL TECHNOLOGY/CNC TURNING

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.MTT.CTU

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition3
MTH 103 Introduction to Technical Mathematics.....3
WKO 107/ORI 101 Work Skill Preparation/Orientation1
SPH 107 Fundamentals of Public Speaking.....3
Humanities Elective3
Social Science Electives3
Natural Science Elective3
*CIS Requirement is included in the Applied Technology Core

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety3
ADM 101 Precision Measurement.....3
ADM 102 Computer Aided Design.....3
ADM 103 Introduction to Computer
Integrated Manufacturing/Materials & Processes.....3
ADM 104 Introduction to Thermal/Electrical Principles.....3
ADM 105 Fluid Systems.....3
ADM 106 Quality Control Concepts3
*CIS 146 Microcomputer Applications.....3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....3
MTT 147 Introduction to Machine Shop I.....3
MTT 148 Introduction to Machine Shop I Lab.....3
MTT 149 Introduction to Machine Shop II.....3
MTT 150 Introduction to Machine Shop II Lab.....3

MANUAL TURNING COURSE REQUIREMENTS:

MTT 134 Engine Lathe I3
MTT 135 Engine Lathe I Lab.....3

CNC TURNING COURSE REQUIREMENTS:

MTT 140 Basic CNC Turning Programming I3
MTT 212 Advanced CNC Turning3
MTT 243 CNC Turning Lab I.....3
MTT 244 CNC Turning Lab II.....3

TOTAL76

MACHINE TOOL TECHNOLOGY/CNC MILLING

Short Term Certificate

Program Code: CTS.ADM.MTT.CMI

CIP CODE: 15.0613

CNC MILLING COURSE REQUIREMENTS:

MTT 141 Basic CNC Milling Programming I3

MTT 213 Advanced CNC Milling	3
MTT 241 CNC Milling Lab I	3
MTT 242 CNC Milling Lab II	3
TOTAL	12

MACHINE TOOL TECHNOLOGY/CNC MILLING

Long Term Certificate

Program Code: CTL.ADM.MTT.CMI CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3

MANUAL MILLING COURSE REQUIREMENTS:

MTT 137 Milling I	3
MTT 138 Milling I Lab	3

CNC MILLING COURSE REQUIREMENTS:

MTT 141 Basic CNC Milling Programming I	3
MTT 213 Advanced CNC Milling	3
MTT 241 CNC Milling Lab I	3
MTT 242 CNC Milling Lab II	3

TOTAL60

MACHINE TOOL TECHNOLOGY/CNC MILLING

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.MTT.CMI CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading	3
MTT 147 Introduction to Machine Shop I	3
MTT 148 Introduction to Machine Shop I Lab	3
MTT 149 Introduction to Machine Shop II	3
MTT 150 Introduction to Machine Shop II Lab	3

MANUAL MILLING COURSE REQUIREMENTS:

MTT 137 Milling I	3
MTT 138 Milling I Lab	3

CNC MILLING COURSE REQUIREMENTS:

MTT 141 Basic CNC Milling Programming I	3
MTT 213 Advanced CNC Milling	3
MTT 241 CNC Milling Lab I	3
MTT 242 CNC Milling Lab II	3

TOTAL76

**MACHINE TOOL TECHNOLOGY/
MANUAL MACHINING CONCEPTS**

Short Term Certificate

Program Code: CTS.ADM.MTT.CON CIP CODE: 15.0613

MANUAL MACHINING CONCEPTS COURSE REQUIREMENTS:

MTT 134 Engine Lathe I	3
MTT 137 Milling I	3

TOTAL6

**MACHINE TOOL TECHNOLOGY/
MANUAL MACHINING CONCEPTS**

Long Term Certificate

Program Code: CTL.ADM.MTT.CON CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3

Programs of Study

ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3
MTT 149 Introduction to Machine Shop II.....	3
MTT 150 Introduction to Machine Shop II Lab.....	3

MANUAL MACHINING CONCEPTS COURSE REQUIREMENTS:

MTT 134 Engine Lathe I	3
MTT 137 Milling I	3

TOTAL54

MACHINE TOOL TECHNOLOGY/CNC CAM

Short Term Certificate

Program Code: CTS.ADM.MTT.CAM CIP CODE: 15.0613

CNC CAM COURSE REQUIREMENTS:

MTT 109 Orientation to Computer Aided Manufacturing	3
MTT 218 Computer Integrated Machining (CIM).....	3
MTT 219 CNC Graphics: Turning.....	3
MTT 220 CNC Graphics: Milling	3

TOTAL12

MACHINE TOOL TECHNOLOGY/CNC CAM

Long Term Certificate

Program Code: CTL.ADM.MTT.CAM CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3

MANUAL MACHINING CONCEPTS COURSE REQUIREMENTS:

MTT 134 Engine Lathe I	3
MTT 137 Milling I	3

CNC CAM COURSE REQUIREMENTS:

MTT 109 Orientation to Computer Aided Manufacturing	3
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MTT 218 Computer Integrated Machining (CIM).....	3
MTT 219 CNC Graphics: Turning.....	3
MTT 220 CNC Graphics: Milling	3

TOTAL60

MACHINE TOOL TECHNOLOGY/CNC CAM

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.MTT.CAM CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3
MTT 149 Introduction to Machine Shop II.....	3
MTT 150 Introduction to Machine Shop II Lab.....	3

MANUAL MACHINING CONCEPTS COURSE REQUIREMENTS:

MTT 134 Engine Lathe I	3
MTT 137 Milling I	3

CNC CAM COURSE REQUIREMENTS:

MTT 109 Orientation to Computer Aided Manufacturing	3
MTT 218 Computer Integrated Machining (CIM).....	3
MTT 219 CNC Graphics: Turning.....	3
MTT 220 CNC Graphics: Milling	3

TOTAL76

MACHINE TOOL TECHNOLOGY/CNC EDM

Short Term Certificate

Program Code: CTS.ADM.MTT.EDM CIP CODE: 15.0613

CNC EDM COURSE REQUIREMENTS:

MTT 139 Introduction to CNC	3
MTT 140 Basic CNC Turning Programming I	3
MTT 141 Basic CNC Milling Programming I	3
MTT 144 Electrical Discharge Machining I	3

TOTAL12

MACHINE TOOL TECHNOLOGY/CNC EDM

Long Term Certificate

Program Code: CTL.ADM.MTT.EDM

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking.....	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems.....	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3

MANUAL MACHINING CONCEPTS COURSE REQUIREMENTS:

MTT 134 Engine Lathe I	3
MTT 137 Milling I	3

CNC EDM COURSE REQUIREMENTS:

MTT 139 Introduction to CNC	3
MTT 140 Basic CNC Turning Programming I	3
MTT 141 Basic CNC Milling Programming I.....	3
MTT 144 Electrical Discharge Machining I	3

TOTAL60

MACHINE TOOL TECHNOLOGY/CNC EDM

**Associate of Applied Science Degree
Applied Technology**

Program Code: AP.ADM.MTT.EDM

CIP CODE: 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics.....	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking.....	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3

ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts.....	3
*CIS 146 Microcomputer Applications.....	3

MACHINING FUNDAMENTALS COURSE REQUIREMENTS:

MTT 121 Blueprint Reading.....	3
MTT 147 Introduction to Machine Shop I.....	3
MTT 148 Introduction to Machine Shop I Lab.....	3
MTT 149 Introduction to Machine Shop II.....	3
MTT 150 Introduction to Machine Shop II Lab.....	3

MANUAL MACHINING CONCEPTS COURSE REQUIREMENTS:

MTT 134 Engine Lathe I	3
MTT 137 Milling I	3

CNC EDM COURSE REQUIREMENTS:

MTT 139 Introduction to CNC	3
MTT 140 Basic CNC Turning Programming I	3
MTT 141 Basic CNC Milling Programming I.....	3
MTT 144 Electrical Discharge Machining I	3

TOTAL76

PROCESS TECHNOLOGY

This program is designed for individuals seeking employment in the process industry as a Process Technician. The process industry plays a significant role in U. S. businesses and our economy, serving the pharmaceutical, food and beverage, textile, chemical and petroleum processing, power production, plastic, paint, cosmetic, and other sectors.

**PROCESS TECHNOLOGY
MULTI-SKILLED TECHNICAL**

Short Term Certificate

Program Code: CTS.ADM.PCT.MS

CIP CODE: 15.0613

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement.....	3
ADM 102 Computer Aided Design.....	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes.....	3
ADM 104 Introduction to Thermal/Electrical Principles.....	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts.....	3
CIS 146 Microcomputer Applications.....	3

TOTAL24

PROCESS TECHNOLOGY

Short Term Certificate

Program Code: CTS.ADM.PCT

CIP CODE: 15.0613

PROCESS TECHNOLOGY COURSE REQUIREMENTS:

PCT 100 Fundamentals of Process Technology	3
PCT 110 Process Tech I – Equipment	4

Programs of Study

PCT 115 Instrumentation I	3
PCT 215 Instrumentation II	4
PCT 220 Process Tech II – Systems	4
PCT 230 Process Tech III – Operations	4
PCT 240 Process Troubleshooting	4
Natural Science or Technical Elective	3
TOTAL	29

PROCESS TECHNOLOGY

Long Term Certificate

Program Code: CTL.ADM.PCT **CIP CODE:** 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3
ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

PROCESS TECHNOLOGY COURSE REQUIREMENTS:

PCT 100 Fundamentals of Process Technology	3
PCT 110 Process Tech I – Equipment	4
PCT 115 Instrumentation I	3
PCT 215 Instrumentation II	4
PCT 220 Process Tech II – Systems	4
PCT 230 Process Tech III – Operations	4
PCT 240 Process Troubleshooting	4

TOTAL 59

PROCESS TECHNOLOGY

Associate of Applied Science Degree Applied Technology

Program Code: AP.ADM.PCT **CIP CODE:** 15.0613

GENERAL EDUCATION CORE REQUIREMENTS:

ENG 101 English Composition	3
MTH 103 Introduction to Technical Mathematics	3
WKO 107/ORI 101 Work Skill Preparation/Orientation	1
SPH 107 Fundamentals of Public Speaking	3
Humanities Elective	3
Social Science Electives	3
Natural Science Elective	3
*CIS Requirement is included in the Applied Technology Core	

APPLIED TECHNOLOGY CORE COURSE REQUIREMENTS:

ADM 100 Industrial Safety	3
ADM 101 Precision Measurement	3

ADM 102 Computer Aided Design	3
ADM 103 Introduction to Computer Integrated Manufacturing/Materials & Processes	3
ADM 104 Introduction to Thermal/Electrical Principles	3
ADM 105 Fluid Systems	3
ADM 106 Quality Control Concepts	3
*CIS 146 Microcomputer Applications	3

PROCESS TECHNOLOGY COURSE REQUIREMENTS:

PCT 100 Fundamentals of Process Technology	3
PCT 110 Process Tech I – Equipment	4
PCT 115 Instrumentation I	3
PCT 215 Instrumentation II	4
PCT 220 Process Tech II – Systems	4
PCT 230 Process Tech III – Operations	4
PCT 240 Process Troubleshooting	4
Natural Science or Technical Elective	3

TOTAL 72

END OF APPLIED TECHNOLOGY PROGRAM OPTIONS

BARBERING

Basic Barbering Certificate

Program Code: CT.BARB **CIP Code:** 12.0402

This is a certificate program which prepares students for employment in the profession of barbering. Students must complete both certificates to qualify for a barbering license. This program will provide students with basic knowledge of barbering. Emphasis is placed on safety, sanitation and hygiene and the care and use of barbering tools. Students will gain “hands on” experience in basic barbering skills.

BAR 110 Orientation to Barbering	3
BAR 111 Science of Barbering	3
BAR 112 Bacteriology and Sanitation OR COS 111 Cosmetology Science	3
BAR 113 Barber-Styling Lab	3
BAR 114 Advanced Barber-Styling Lab	3
BAR 120 Properties of Chemistry OR COS 121 Colorimetry	3
BAR 121 Chemical Hair Processing OR COS 123 Cosmetology Salon Practices	3
BAR 122 Hair Coloring Chemistry OR COS 121 Colorimetry	3
BAR 124 Hair Coloring Methodology Lab OR COS 122 Colorimetry Applications	3

TOTAL CREDITS 27

BARBERING

Advanced Barbering Certificate

The advanced certificate in barbering is designed to allow the student to develop knowledge in barber shop management skills and employ-

ment skills. Coursework is designed to allow the student to gain advance skills in barbering and hair design and to prepare students to pass the state board license test for barbering

Program Code: CT.BARB.ADV

CIP Code: 12.0402

BAR 130 Marketing and Business Management OR	
COS 124 Introduction to Salon Management	3
BAR 131 Structure and Disorders of Nails OR	
COS 151 Nail Care	3
BAR 132 Hair Styling and Design OR	
COS 114 Chemical Methodology Lab	3
BAR 133 Hair Styling and Management Lab OR	
COS 112 Cosmetology Science and Art Lab	3
BAR 140 Practicum	2
BAR 141 Practicum	2

TOTAL CREDITS16

BUSINESS ADMINISTRATION Option I Accounting Technology

Associate of Applied Science Degree

Program Code: AP.BUS.ACCT

CIP Code: 52.0201

This program is designed primarily for students who plan to seek employment in financial or managerial accounting. This program is also appropriate for students who are employed and who wish to upgrade their understanding of accounting principles and practices. Although the program is not designed primarily for transfer, many of the courses are transferable to some senior institutions.

GENERAL EDUCATION CORE REQUIREMENTS:

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
BUS 215 Business Communications	3
MTH Elective (to be selected from MTH 110-115 OR	
MTH 120 through MTH 126)	3-4
ECO 231 Principles of Macroeconomics	3
SPH 107 Fundamentals of Public Speaking	3
CIS 146 Microcomputer Applications	3
CIS Computer Information Systems Elective	3
Humanities/Fine Arts Elective	3
Total	25-26

MAJOR COURSE REQUIREMENT:S

BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
BUS 246 Accounting on the Microcomputer	3
BUS 248 Managerial Accounting	3
*BUS 253 Individual Income Tax	3
BUS 263 The Legal and Social Environment of Business	3
BUS 271 Business Statistics I	3
BUS 275 Principles of Management	3
CIS 147 Advanced Microcomputer Applications	3
ECO 232 Principles of Microeconomics	3
CIS 197V Microsoft Word Expert or CIS 197Y Excel Expert	3
BUS Electives	6
Total	39

Programs of Study

TOTAL CREDITS64-65

*Course offered on Decatur Campus, Spring Semester.

BUSINESS ADMINISTRATION Option II Business Administration

Associate of Applied Science Degree

Program Code: AP.BUAD

CIP Code: 52.0201

This program is designed primarily for students who plan to seek employment in a business-related field. This program is also appropriate for students who are employed and wish to upgrade their business skills and knowledge. Although this program is not designed for transfer, many of the courses are transferable to some senior institutions.

GENERAL EDUCATION CORE REQUIREMENTS:

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
BUS 215 Business Communications	3
MTH Elective (to be selected from MTH 110-115 OR	
MTH 120-126)	3-4
ECO 231 Principles of Macroeconomics	3
SPH 107 Fundamentals of Public Speaking	3
CIS 146 Microcomputer Applications	3
CIS Computer Information Systems Elective	3
Humanities/Fine Arts Elective	3
Total	25-26

MAJOR COURSE REQUIREMENTS

BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
BUS 263 The Legal and Social Environment of Business	3
BUS 271 Business Statistics I	3
BUS 275 Principles of Management	3
BUS 285 Principles of Marketing	3
BUS Business Electives	6
BUS 190 Workshops	6
ECO 232 Principles of Microeconomics	3
Electives (To be selected from the following BUS, CIS,	
OAD, QCT, RLS, TRT)	6
Total	39

TOTAL CREDITS64-65

BUSINESS ADMINISTRATION Option III Entrepreneurship

Associate of Applied Science Degree

Program Code: AP.BUS.ENTREP

CIP Code: 52.0201

This program provides training for persons who are ready to become

Programs of Study

self-employed. It is particularly recommended for people who are currently operating or are employed in the small business sector. The program is not designed for transfer, although some of the courses may transfer to some senior institutions. NOTE: Required courses may not be at all sites every semester. Due to limited course offerings, degree seeking students may find it necessary to extend completion timelines and attend both day and evening classes at various campus sites.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
BUS 215 Business Communications	3
MTH elective (to be selected from MTH 110-115 OR MTH 120-126)	3-4
ECO 231 Principles of Macroeconomics	3
SPH 107 Fundamentals of Public Speaking	3
CIS 146 Microcomputer Applications	3
CIS Computer Information Systems Elective	3
Humanities/Fine Arts Elective	3
Total	25-26

MAJOR COURSE REQUIREMENTS

ECO 232 Principles of Microeconomics	3
BUS 190L Developing a Business Plan	1
BUS 190M Evaluating the Entrepreneurial Personality	1
BUS 193 Business Co-Op I	1
BUS 194 Business Co-Op II	1
BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
BUS 246 Accounting on the Microcomputer	3
BUS 248 Managerial Accounting	3
BUS 263 The Legal and Social Environment of Business	3
BUS 271 Business Statistics I	3
BUS 275 Principles of Management	3
BUS 279 Small Business Management	3
BUS 285 Principles of Marketing	3
*BUS 190 Management Workshop Electives	3
Total	40

TOTAL CREDITS62

BUSINESS ADMINISTRATION

Certificate

Entrepreneurship

Program Code: CT.ENTRE

CIP Code: 52.0201

This certificate program is designed to give individuals essential skills for developing and operating a small business.

ORI 101 Orientation to College	1
BUS 190F Organizational Communications	1
BUS 190G Interpersonal Relationships	1
BUS 190L Developing a Business Plan	1
BUS 190N Financing an Entrepreneurial Enterprise	1
BUS 190M Evaluating the Entrepreneurial Personality	1

BUS 190W Customer Service	1
BUS 190Y Leadership Skills	1
BUS 241 Principles of Accounting I	3
BUS 263 Legal and Social Environment of Business	3
BUS 279 Small Business Management	3

TOTAL CREDITS17

BUSINESS ADMINISTRATION

Option IV Management

Associate of Applied Science Degree

Program Code: AP.BUS.MGT

CIP Code: 52.0201

This program provides training and experience for persons who are currently operating a small business or who wish to become employed in the small business sector with management responsibilities. It also provides training for those who are employed or who are seeking employment in management positions. The program is not designed for transfer, although some of the courses may transfer to some senior institutions. NOTE: Required courses may not be at all sites every semester. Due to limited course offerings, degree seeking students may find it necessary to extend completion timelines and attend both day and evening classes at various campus sites.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
BUS 215 Business Communications	3
MTH Elective (to be selected from MTH 110-115 OR MTH 120-126)	3-4
ECO 231 Principles of Macroeconomics	3
SPH 107 Fundamentals of Public Speaking	3
CIS 146 Microcomputer Applications	3
CIS Computer Information Systems Elective	3
Humanities/Fine Arts Elective	3
Total	25-26

MAJOR COURSE REQUIREMENTS

BUS 190 Management Workshop Electives	5
ECO 232 Principles of Microeconomics	3
BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
BUS 248 Managerial Accounting	3
BUS 263 The Legal and Social Environment of Business	3
BUS 271 Business Statistics I	3
BUS 275 Principles of Management	3
BUS 279 Small Business Management	3
BUS 285 Principles of Marketing	3
CIS or BUS Elective	3
Total	38

TOTAL CREDITS60-61

BUSINESS ADMINISTRATION
Option V
Real Estate Sales and Management

Associate of Applied Science Degree

Program Code: AP.BUS.REAL.ESTATE

CIP Code: 52.0201

This program offers persons employed in the real estate field opportunities to pursue related course work. It provides basic information for those interested in entering the real estate professions as well. RLS 101 Real Estate Principles (as approved by the Alabama Real Estate Commission) is a pre-licensure course for those interested in selling.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
BUS 215 Business Communications	3
MTH Elective (to be selected from MTH 110-115 OR MTH 120-126)	3-4
ECO 231 Principles of Macroeconomics	3
SPH 107 Fundamentals of Public Speaking	3
CIS 146 Microcomputer Applications	3
CIS Computer Information Systems Elective	3
Humanities/Fine Arts Elective	3
Total	25-26

MAJOR COURSE REQUIREMENTS

BUS 241 Principles of Accounting I	3
BUS 263 The Legal and Social Environment of Business	3
BUS 271 Business Statistics I	3
BUS 275 Principles of Management	3
BUS 279 Small Business Management	3
BUS 285 Principles of Marketing	3
ECO 232 Principles of Microeconomics	3
RLS 101 Real Estate Principles	4
RLS 110 Real Estate Finance	3
RLS 125 Real Estate Law	4
RLS or BUS Electives	3
Total	37

TOTAL CREDITS60-61

CHILD DEVELOPMENT

Associate of Applied Science Degree

Program Code: AP.CHD

CIP Code: 19.0708

This program is designed primarily for students who plan to seek employment in preschool or school age programs. All students are required to complete the General Education Core Requirements and the Child Development Common Core courses.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Fine Arts Elective	3
MTH 116 Mathematical Applications <u>OR</u> MTH 112 Precalculus Algebra	3
BIO 103 Principles of Biology I	4
CIS 146 Microcomputer Applications	3
History Elective	3
PSY 200 General Psychology	3
SPH 107 Fundamentals of Public Speaking	3
Total General Credit Hours	29

MAJOR COURSE REQUIREMENTS

CHD 100 Introduction of Early Care and Education of Children	3
CHD 202 Children's Creative Experiences	3
CHD 203 Children's Literature and Language Development	3
CHD 204 Methods and Materials for Teaching Children	3
CHD 205 Program Planning for Educating Young Children	3
CHD 206 Children's Health and Safety	3
CHD 209 Infant and Toddler Education Programs	3
CHD 215 Supervised Practical Experiences in Child Development	3
PSY 211 Child Growth and Development Principles	3
Child Development Electives (Choose two of the following: CHD 210, CHD 214, CHD 220)	6
General Electives	6
Total Credit Hours	39

TOTAL CREDITS68

Students also have the option of completing the following specialty course requirements for additional professional training.

Administration

CHD 208 Administration of Child Development Programs	3
BUS 263 The Legal and Social Environment of Business	3
BUS 275 Principles of Management	3
BUS 279 Small Business Management	3
Total Administration Credit Hours	12

CHILD DEVELOPMENT

CDA Credential

This program meets the needs of those students interested in the 120 clock hours of formal training necessary for the nationally recognized CDA credential. This CDA Credential is awarded by the Council for Early Childhood Professional Recognition in Washington, D.C.

CHD 100 Introduction of Early Care and Education of Children	3
CHD 202 Children's Creative Experiences	3
CHD 204 Methods and Materials for Teaching Preschool Children	3

Programs of Study

CHILD DEVELOPMENT

Certificate

Program Code: CT.CHD

CIP Code: 19.0708

This program is designed to enrich the child care student/worker and serve as an intermediate step for those individuals continuing their work toward an associate degree in Child Development.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
*COM 100 Introductory Technical English OR	
ENG 101 English Composition I	3
MTH 116 Mathematical Applications OR	
MTH 112 Precalculus Algebra	3
*OAD 101 Beginning Keyboarding OR	
CIS 146 Microcomputer Applications	3

MAJOR COURSE REQUIREMENTS

CHD 100 Introduction of Early Care and Education of Children	3
CHD 201/PSY 211 Child Growth and Development Principles	3
CHD 202 Children's Creative Experiences	3
CHD 204 Methods and Materials for Teaching Children	3
CHD 205 Program Planning for Educating Young Children	3
Total Credits	25

*Students who may want to pursue the Child Development Associate of Applied Science degree should take ENG 101 and CIS 146 course options.

CLINICAL LABORATORY TECHNOLOGY (CLT)

Associate of Applied Science Degree

Program Code: AP.CLT

CIP Code: 51.1004

A clinical (or medical) laboratory technician is an integral part of the healthcare team. The responsibilities of a CLT (or MLT) include processing and analyzing blood, body fluid or other specimens in order to provide accurate and timely information to the ordering physician. The clinical information produced by the clinical laboratory technician is utilized to make diagnostic and treatment decisions. The program can be completed in five (5) semesters for a total of 73 semester hours.

The College is seeking accreditation from the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) for the clinical laboratory technology program. Graduates, upon successful completion of an accredited program, will be eligible to take a nationally-recognized certificate exam. The ASCP (American Society for Clinical Pathologists) Medical Laboratory Technician (MLT) certification exam is one example. Be advised that a criminal and/or drug history could result in denial of permission to take the credentialing examination.

Students may be required to submit to drug and alcohol testing or a criminal and credit history background check as a precondition to beginning a clinical site experience as stipulated by contracts between the health agencies and Calhoun Community College, Department of Allied Health. The fees for any required testing are the responsibility of the student. Written guidelines for the screening process will be provided to the student when required as a precondition for clinical training.

POLICIES AND CURRICULUM

Policies and Curriculum for the Associate Degree Clinical Laboratory Technology program are subject to change at any time. Written notice will be given to all students enrolled in CLT courses prior to implementation of change.

PROGRAM CURRICULUM

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II OR	
Humanities Elective	3
MTH 100 Intermediate College Algebra	3
BIO 201 Anatomy and Physiology I	4
BIO 202 Anatomy and Physiology II	4
Speech Elective (Choose from SPH 106 OR 107 OR 116)	3
PSY 200 General Psychology	3
TOTAL	24

MAJOR COURSE REQUIREMENTS

CLT 100 Phlebotomy OR	
CLT 106 Clinical Calculations & Statistics	2
CLT 111 Urinalysis & Body Fluids	3
CLT 121 Hematology	5
CLT 131 Laboratory Techniques	3
CLT 141 Microbiology I	5
CLT 142 Microbiology II	5
CLT 151 Clinical Chemistry	5
CLT 161 Integrated Laboratory Simulation	2
CLT 181 Immunology	2
CLT 191 Immunohematology	5
CLT 294 Practicum I (U/A & Heme)	3
CLT 295 Practicum II (Micro)	3
CLT 296 Practicum III (Blood Bank)	3
CLT 297 Practicum IV (Chemistry)	3

TOTAL

TOTAL CREDITS.....73

ADMISSION REQUIREMENTS

Applicants must meet the minimum admission standards to be considered for selection. After meeting all minimum requirements, applicants are rank-ordered using a 100-point system. Applicants not meeting minimum admission standards *will not be considered*. Minimum admission standards for the Associate Degree Clinical Laboratory Technology Program include:

1. Unconditional admission to the college.
2. Receipt of completed application for the Associate Degree Clinical Lab Technology Program by October 30th.
3. A minimum of 2.50 cumulative Grade Point Average (GPA) on college work attempted within the last two years.
4. A minimum of 2.50 high school Grade Point Average (GPA) for students without prior college work.
5. NOTE: GED is acceptable in lieu of high school transcript.
6. Eligibility for English 101 and Math 100 as determined by college policy.
7. Good standing with college.
8. Meeting the essential functions or technical standards required for CLT.
9. A score of 76 or higher on the COMPASS Reading Examination (or related ACT Reading Score of 17 or higher).
10. Keyboarding skill of at least 25 words per minute as determined by typing test.

SELECTION PROCESS

Since class size is limited, the Admission Committee will evaluate each applicant's academic performance and select applicants with the strongest academic record. A 100-point system is used to evaluate academic standing based on the following calculation of points for students meeting Minimum Admission Requirements:

1. **Points for grades in selected college or High School courses (maximum 90):** A = 30 points, B = 20 points, C = 10 points

College courses are:

MTH 100
BIO 103 or BIO 201 or BIO 202
CHM 104 or CHM 111

High school courses are:

Algebra II or higher-level math
Highest level Biology
Chemistry

2. **Additional Points (maximum 10 points)**

Students may be awarded up to 10 points as determined for:

Completion of Phlebotomy Course5 points
Transcript or certificate of completion must be provided

Calhoun Points – Credit hours completed at this college .up to 5 points
>11 hrs=5, 9-11 hrs=4, 6-8 hrs=3, <6 hrs=2
(At distance sites, use your local college points – Central Alabama or Southern Union. Points awarded only for credit hours completed – not currently enrolled)

ENROLLMENT REQUIREMENTS FOR CLT AAS DEGREE PROGRAM

Once enrolled in the CLT program and prior to being scheduled for any laboratory or clinical experience, the student must:

1. Provide a current Student Health Form (provided) that has been completed by a licensed physician or nurse practitioner which will include documentation of:
 - Two-step Mantoux skin test (PPD) or chest X-ray,
 - Immunity or vaccination for rubella, tetanus, and varicella-zoster, and
 - Ability to perform essential functions as listed on health

form.

2. Present proof that they have received the three (3) Hepatitis B vaccinations or proof of immunity to the Hepatitis B virus. If a student chooses not to receive the Hepatitis B vaccine, they must sign a form indicating their refusal (waiver form).
3. Provide proof of purchase of professional liability insurance through the College as required by CLT program.
4. In addition to the above College requirements, the contracts between Calhoun College and area healthcare providers may require proof of the following prior to students being scheduled for or attending a clinical experience:
 - Current cardiopulmonary resuscitation (CPR) course completion,
 - Drug and / or alcohol abuse testing, and
 - Criminal and / or credit background check.
5. Fees / costs for all of the above enrollment requirements will be the sole responsibility of the student.

ENROLLMENT REQUIREMENTS FOR CLT 100 – PHLEBOTOMY COURSE ONLY

Once enrolled in the CLT 100 - Phlebotomy course and prior to being scheduled for any laboratory or clinical experience, the student must:

1. Provide a current Student Health Form (provided) that has been completed by a licensed physician or nurse practitioner which will include documentation of:
 - Two-step Mantoux skin test (PPD) or chest X-ray,
 - Immunity or vaccination for rubella, tetanus, and varicella-zoster, and
 - Ability to perform essential functions as listed on health form.
2. Present proof that they have received the three (3) Hepatitis B vaccinations or proof of immunity to the Hepatitis B virus. If a student chooses not to receive the Hepatitis B vaccine, they must sign a form indicating their refusal (waiver form).
3. Provide proof of purchase of professional liability insurance through the College as required by CLT 100 - Phlebotomy course.
4. In addition to the above College requirements, the contracts between Calhoun College and area healthcare providers may require proof of the following prior to students being scheduled for or attending a clinical experience:
 - Current cardiopulmonary resuscitation (CPR) course completion,
 - Drug and / or alcohol abuse testing, and
 - Criminal and / or credit background check.
5. Fees / costs for all of the above course requirements will be the sole responsibility of the student.

ESSENTIAL FUNCTIONS

Requirements for students entering and participating in the Clinical Laboratory Technology Program include but are not limited to the ability to:

1. lift 40 pounds
2. hear high and low frequency sounds within normal range, with or without corrective devices.
3. see with 20/40 visual acuity, with or without corrective lenses.
4. feel veins and pulses.
5. smell body and environmental odors.
6. coordinate eye and hand movements.
7. coordinate motor movements.

Programs of Study

8. see different color spectrums.
9. read, comprehend and write legibly in the English language*.
10. send and receive verbal messages in the English language* and to respond appropriately.
11. perform correctly simple mathematical computations.
12. walk and transport equipment without assistance.
13. reach and position overhead equipment used in the laboratory.
14. be oriented to reality and not be mentally impaired by mind-altering substances.

PROGRESSION IN THE PROGRAM

Students are expected to meet co-requisite requirements to progress in the program. Students must maintain a 2.0 GPA in all courses taken and/or transferred to Calhoun to continue in the program. Once accepted in to the CLT program, all coursework requires a grade of C or better to continue.

COMPUTER GRAPHICS**Option I
Graphic Design****Associate of Applied Science Degree****Program Code: AP.CMP.GRAPHICS****CIP Code: 50.0401**

This program is for those interested in refining artistic talents and in preparing a professional quality portfolio in order to strengthen employment possibilities. Courses in graphic design, advertising, computer graphics and technical illustration are emphasized in this program. Some courses are offered only once a year in the day program on the Decatur campus. Students should plan schedules with the advice of the art faculty.

A formal review of a professional quality portfolio of the student's work is required upon completion of the program of study.

Year I (Fall)

ART 113 Drawing I	3
ART 121 Two Dimensional Composition I	3
ART 221 Computer Graphics I	3
VCM 180 Introduction to Graphic Design	3
ORI 101 Orientation to College	1
Choose one (1) General Education Course	3
Total	16

Year I (Spring)

ART 114 Drawing II	3
ART 253 Graphic Design I	3
VCM 150 Typography	3
VCM 232 Advanced Computer Graphics	3
ART 203 Art History I	3
Choose one (1) course from General Education Courses	3
Total	18

Year II (Fall)

VCM 250 Introduction to Technical Illustration	3
ART 254 Graphic Design II	3
ART 216 Printmaking I	3
VCM 145 Introduction to Digital Photography	2
ART 291 Supervised Study in Studio Art I	1

Choose two (2) General Education Courses	6
Total	18

Year II (Spring)

ART 204 Art History II	3
VCM 251 Technical Illustration	3
ART 126 Color	3
VCM 146 Digital Photography	2
ART 299 Portfolio	1
Choose two (2) General Education Courses	6
Total	18

General Education Core Requirements

ENG 101 English Composition I	3
MTH Elective (to be selected from MTH 110-116 OR MTH 120)	3
Humanities/Fine Arts Elective	3
SPH 107 Fundamentals of Public Speaking	3
Natural Science or Math or CIS Elective	3
Social Science elective	3

TOTAL CREDITS71**COMPUTER GRAPHICS****Option II
Computer Graphics/Electronic Imaging****Associate of Applied Science Degree****Program Code: AP.CMP.IMAGE****CIP Code: 50.0401**

This program is for those interested in refining artistic talents and in preparing a professional quality portfolio in order to strengthen employment possibilities. Courses in graphic design, advertising, computer graphics, technical illustration, and multimedia production are emphasized in this program. Some courses are offered only once a year in the day program on the Decatur campus. Students should plan schedules with the advice of the art faculty.

A formal review of a professional quality portfolio of the student's work is required upon completion of the program of study. Option II offers a greater emphasis on Computer Graphics/Electronic Imaging.

Year I (Fall)

ART 113 Drawing I	3
ART 121 Two Dimensional Composition I	3
ART 221 Computer Graphics I	3
VCM 180 Introduction to Graphic Design	3
ORI 101 Orientation to College	1
Choose one (1) General Education Course	3
Total	16

Year I (Spring)

ART 253 Graphic Design I	3
VCM 150 Typography	3
VCM 232 Advanced Computer Graphics	3
ART 203 Art History I	3
VCM 146 Digital Photography	2
Choose one (1) General Education Course	3
Total	17

Year II (Fall)

VCM 250 Introduction to Technical Illustration	3
VCM 145 Introduction to Digital Photography	2
VCM 281 Digital Design	2
VCM 285 Multimedia Production	2
ART 291 Supervised Study in Studio Art I	1
Choose two (2) General Education Courses	6
Total	16

Year II (Spring)

ART 204 Art History II	3
VCM 251 Technical Illustration	3
VCM 286 Advanced Multimedia Production	2
VCM 282 Advanced Digital Design	2
ART 254 Graphic Design II	3
ART 299 Portfolio	1
Choose two (2) General Education Courses	6
Total	20

General Education Course Requirements

ENG 101 English Composition I	3
MTH Elective (to be selected from MTH 110-116 OR MTH 120)	3
Humanities/Fine Arts Elective	3
SPH 107 Fundamentals of Public Speaking	3
Math or Natural Science or CIS elective	3
Social Science elective	3

TOTAL CREDITS69

**COMPUTER GRAPHICS
Option III
Graphic Animation/Electronic Imaging**

Associate of Applied Science Degree

Program Code: AP.CMP.ANIMA

CIP Code: 50.0401

Year I (Fall)

ART 113 Drawing I	3
ART 121 Two Dimensional Composition I	3
ART 221 Computer Graphics I	3
VCM 180 Introduction to Graphic Design	3
ORI 101 Orientation to College	1
Choose one (1) General Education Course	3
Total	16

Year I (Spring)

ART 253 Graphic Design I	3
CAT 182 3D (Graphics and Animation)	3
VCM 232 Advanced Computer Graphics	3
ART 203 Art History I	3
Choose one (2) course from General Education Courses	6
Total	18

Year II (Fall)

VCM 250 Introduction to Technical Illustration	3
VCM 145 Introduction to Digital Photography	2
VCM 281 Digital Design	2
VCM 285 Multimedia Production	2
ART 283 Graphic Animation I	3

Choose one (1) course from General Education Courses	3
Total	15

Year II (Spring)

VCM 251 Technical Illustration	3
VCM 286 Advanced Multimedia Production	2
VCM 282 Advanced Digital Design	2
ART 284 Graphic Animation II	3
ART 299 Portfolio	1
Choose one (2) course from General Education Courses	6
Total	17

General Education Core

ENG 101	3
MTH Elective: 110-115 or 120-126 (Choose one)	3-4
Humanities Elective (Take ART 204)	3
SPH 107 Fundamentals of Public Speaking	3
CIS or MTH, or Natural Science Elective	3
Social Science	3

TOTAL CREDITS67

**COMPUTER INFORMATION SYSTEMS
Option I
Microcomputers**

Associate of Applied Science Degree

Program Code: AP.CIS.MICRO

CIP Code: 11.0101

This program is designed for students seeking employment in the field of the technical concentration. The program is not designed for transfer, although many of the courses are transferable to some senior institutions. NOTE: Required courses may not be available every semester. Due to limited course offerings, degree seeking students may find it necessary to extend completion timelines and attend both day and evening classes.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
BUS 215 Business Communications	3
SPH 107 Fundamentals of Public Speaking	3
MTH Elective (to be selected from MTH 110 through 115 OR MTH 120 through 126)	3
CIS 146 Microcomputer Applications	3
CIS Elective	3
ECO 231 Principles of Macroeconomics	3
Humanities/Fine Arts Elective	3
Total	25

MAJOR COURSE REQUIREMENTS

BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
CIS 110 Introduction to Computer Logic and Programming	3
CIS 147 Advanced Microcomputer Applications	3
CIS 197V Microsoft Word Expert OR OAD 126 Advanced Word Processing	3

Programs of Study

CIS 197Y Microsoft Excel Expert	3
CIS 207 Introduction to Web Development.....	3
CIS 208 Intermediate Web Development OR CIS 197CC Dreamweaver	3
CIS 249 Microcomputer Operating Systems.....	3
CIS 268 Software Support	3
CIS 269 Hardware Support	3
CIS 273 Introduction to Networking Communications OR CIS 161 Cisco I	3
CIS Programming Electives (can include CIS 212, CIS 213, CIS 209, CIS 251, CIS 252, CIS 255)	6
Total.....	42
TOTAL CREDITS	67

COMPUTER INFORMATION SYSTEMS
Option II
Programming

Associate of Applied Science Degree

Program Code: AP.CIS.PROG

CIP Code: 11.0101

This program is designed for students seeking employment in the field of the technical concentration. The program is not designed for transfer, although many of the courses are transferable to some senior institutions. NOTE: Required courses may not be available every semester. Due to limited course offerings, degree seeking students may find it necessary to extend completion timelines and attend both day and evening classes.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
BUS 215 Business Communications.....	3
SPH 107 Fundamentals of Public Speaking	3
MTH Elective (to be selected from MTH 110 through 115 OR MTH 120 through 126)	3
CIS 146 Microcomputer Applications	3
ECO 231 Principles of Macroeconomics	3
Humanities/Fine Arts Elective.....	3
Total.....	22

MAJOR COURSE REQUIREMENTS

BUS 241 Principles of Accounting I	3
BUS 242 Principles of Accounting II	3
CIS 110 Introduction to Computer Logic and Programming.....	3
CIS 147 Advanced Microcomputer Applications	3
CIS 212 Visual Basic	3
CIS 213 Advanced Visual Basic.....	3
CIS 222 Database Management Systems	3
CIS 249 Microcomputer Operating Systems.....	3
CIS 251 C++ Programming.....	3
CIS 252 Advanced C++ Programming.....	3
CIS 268 Software Support	3

CIS 269 Hardware Support	3
CIS 273 Introduction to Networking Communications OR CIS 161 Cisco I	3
CIS 279 Network Infrastructure Design	3
CIS 280 Network Security	3
Total.....	45
TOTAL CREDITS	67

COMPUTER INFORMATION SYSTEMS
Option III
Networking Technology

Associate of Applied Science Degree

Program Code: AP.CIS.NET

CIP Code: 11.0101

This program is designed for students seeking employment in the field of the technical concentration. The program is not designed for transfer, although many of the courses are transferable to some senior institutions. NOTE: Required courses may not be available every semester. Due to limited course offerings, degree seeking students may find it necessary to extend completion timelines and attend both day and evening classes.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
BUS 215 Business Communications.....	3
SPH 107 Fundamentals of Public Speaking	3
MTH Elective (to be selected from MTH 110 through 115 OR MTH 120 through 126)	3
CIS 146 Microcomputer Applications	3
ECO 231 Principles of Macroeconomics	3
Humanities/Fine Arts Elective.....	3
Total.....	22

MAJOR COURSE REQUIREMENTS

CIS 110 Introduction to Computer Logic and Programming.....	3
CIS 212 Visual Basic	3
CIS 222 Database Management Systems	3
CIS 249 Microcomputer Operating Systems.....	3
CIS 268 Software Support	3
CIS 269 Hardware Support	3
CIS 279 Network Infrastructure Design	3
CIS 280 Network Security	3
Total.....	24

Option I – CISCO Specialist

This degree option provides courses preparing students for the CCNA (Cisco Certified Network Associate) exam series. CCNA certification is one of the most prestigious and in-demand IT certifications in the nation and is widely respected by network professionals. Completion of this degree indicates a foundation in and apprentice knowledge of Cisco networking.

CIS 161 CISCO I	3
CIS 162 CISCO II	3
CIS 163 CISCO III	3
CIS 164 CISCO IV	3
CIS 251 C++ Programming.....	3
CIS 252 Advanced C++ Programming.....	3
CIS Programming Elective	3

Total.....21

TOTAL CREDITS67

Option II - Web Technology

This degree option provides courses preparing students for the CIW (Certified Internet Webmaster) Program Associate exam. CIW is the industry-leading certification program, endorsed by both the Association of Internet Professionals and the International Webmasters Association. It is a vendor-neutral, standardized measurement of technical competency in the areas of Internet technologies.

CIS 147 Advanced Microcomputer Applications.....	3
CIS 151 Graphics for the World Wide Web OR	
CIS 197DD Flash OR	
CIS 197EE Fireworks.....	3
CIS 207 Introduction to Web Development.....	3
CIS 208 Intermediate Web Development OR	
CIS 197CC Dreamweaver OR	
OAD 233 Trends of Office Technology	3
CIS 209 Advanced Web Development.....	3
CIS 255 Java Programming	3
CIS 273 Introduction to Networking Communications OR	
CIS 161 Cisco I	3

Total21

TOTAL CREDITS67

COMPUTER INFORMATION SYSTEMS

Software Applications Certificate

Program Code: CT.CIS.SOFT

CIP Code: 11.0101

The Software Applications Certificate is designed for students seeking instruction in various types of Microsoft software in preparation for the Microsoft Office Specialist exams. Instruction is designed for those seeking to be more employable in the job market or to enhance current computer skills. While the certificate focuses on Microsoft Office Specialist objectives, vendor-sponsored testing is not a requirement for certificate completion.

ORI 101 Orientation to College.....	1
CIS 111 Word Processing Software Applications	3
CIS 113 Spreadsheet Software Applications	3
CIS 197V Microsoft Word Expert.....	3
CIS 197Y Microsoft Excel Expert	3
CIS 115 Presentation Graphics Software Applications.....	3
CIS 117 Database Management Software Applications.....	3

TOTAL CREDITS19

COSMETOLOGY

Certificate

Program Code: CT.COS

CIP Code: 12.0401

This program has been constructed to give the student knowledge and skills that are required to become a licensed cosmetologist. The length of the program is 1200 credit unit hours. Students entering cosmetology must have a high school diploma or hold an equivalency certificate, and have the approved health card. A Skin Test is required to meet State Cosmetology Board regulations.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College.....	1
COM 100 Introductory Technical English I OR	
ENG 101 English Composition I	3
SPH 107 Fundamentals of Public Speaking OR	
SPH 116 Introduction to Interpersonal Communication.....	3
MTH 100 Intermediate College Algebra OR	
MTH 116 Mathematical Applications.....	3
CIS Computer Information Systems Elective.....	3
Total	13

MAJOR COURSE REQUIREMENTS

BAR 114 Advanced Barber-Styling Lab OR	
BAR 132 Hairstyling and Design	3
COS 111 Cosmetology Science and Art.....	3
COS 112 Cosmetology Science and Art Lab	3
COS 113 Chemical Methodology	3
COS 114 Chemical Methodology Lab	3
COS 121 Colorimetry.....	3
COS 122 Colorimetry Applications	3
COS 123 Cosmetology Salon Practices	3
COS 124 Salon Management.....	3
COS 131 Esthetics.....	3
COS 132 Esthetics Applications	3
COS 143 Hair Designs.....	3
COS 151 Nail Care	3
COS 152 Nail Care Applications.....	3
COS 190 Internship in Cosmetology	3
COS 191 Co-op	3

Total48

TOTAL CREDITS61

COSMETOLOGY/INSTRUCTOR TRAINING

Certificate

Program Code: CT.COS.INSTRUCT

CIP Code: 12.0499

A teacher-training program for licensed cosmetologists. Upon completion of this program, the graduate is eligible to take the Alabama Instructor Examination.

CIT 211 Teaching and Curriculum Development	3
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Programs of Study

CIT 212 Teacher Mentorship	3
CIT 213 Lesson Plan Development.....	3
CIT 221 Lesson Plan Implementation.....	3
CIT 222 Instructional Materials and Methods.....	3
CIT 223 Instructional Materials and Methods Applications	3
TOTAL CREDITS	19

COSMETOLOGY/NAIL TECHNOLOGY

Certificate

Program Code: CT.COS.NAIL

CIP Code: 12.0410

This program of training is designed for the student who is preparing for a career in manicuring, pedicuring, and artificial nail application.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
SPH 107 Fundamentals of Public Speaking OR SPH 116 Introduction to Interpersonal Communication	3
MTH Elective (numbered 100 or higher)	3-4
CIS Computer Information Systems Elective	3
Total	10-11

MAJOR COURSE REQUIREMENTS

COS 151 Nail Care	3
COS 152 Nail Care Applications.....	3
COS 153 Nail Art	3
COS 154 Nail Art Applications	3
COS 190 Internship in Cosmetology	3
COS 191 Co-Op	3
Total	18

TOTAL CREDITS28-29

DENTAL ASSISTING

Associate of Applied Science Degree

Program Code: AP.DNT

CIP Code: 51.0601

Dental Assisting is a dental auxiliary field. As auxiliary team members, students in the Dental Assisting program are taught to be generalists. They perform a variety of functions in the dental office requiring communication skills, critical thinking and sound judgment. Dental Assistants may provide chairside assistance to the dentist, perform work in the dental laboratory, provide oral hygiene instruction, assist with radiological procedures and/or perform office managerial duties. Through evaluation techniques, Dental Assistants enhance the quality of care the patient receives.

The Associate of Applied Science degree is awarded to the student who completes the general education core requirements and major course requirements for dental assisting. This can be accomplished in four semesters. A three-semester certificate program is also available. Graduates of either program are eligible to apply to take the certification examination administered by the Dental Assisting National

Board.

The Dental Assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education. The Dental Assisting program is operated with the approval of the Board of Dental Examiners of Alabama.

PROGRAM OBJECTIVES

Program objectives, as defined by the Dental Assisting program, are utilized to prepare individuals in the program to become competent dental assisting practitioners. Upon successful completion of the Dental Assisting program, graduates will be able to:

1. Utilize effective communicative skills.
2. Participate as a member of the dental health team in the coordination and delivery of patient care.
3. Teach the patient adequate nutrition as it relates to health and the teeth.
4. Perform four-handed assisting skills to assist the dentist in general dentistry.
5. Perform common laboratory procedures.
6. Implement beginning skills for assisting in the dental specialties.
7. Expose, process and mount dental radiographs.
8. Demonstrate skills in organizing and maintaining the secretarial assistant position.
9. Assist the dentist during office emergencies.
10. Demonstrate acceptable behavior by practicing within the ethical and legal guidelines of the Dental Assistant.
11. Participate in continuing education by:
 - a. reading current literature.
 - b. attending continuing education programs through formal and/or informal educational experiences.
 - c. networking with members of the dental health team to impart knowledge.

Admission to the program: Applicants must meet the admission requirements of Calhoun Community College. Applicants must have a 2.5 grade point average, must be eligible to take English 101 and Math 100 OR Math 112 OR Math 116 or have permission of the Dental Assisting instructor and schedule an interview with the program director. Dental Assisting classes are admitted once a year, fall semester. For more information/appointment, contact the Dental Assisting Director, 256/306-2812 or the Allied Health Department, 306-2786.

Students enrolled in the Dental Assisting program fall semester will be required to:

1. Provide evidence of current cardiopulmonary resuscitation (CPR) course completion. CPR course completion must be maintained throughout the program.
2. Submit a current student Health Examination form completed appropriately by a licensed physician. Form furnished by Allied Health Department.
3. Provide medical verification of two-step Mantoux skin test (chest x-ray if positive) indicating he/she is free of tuberculosis.
4. Provide documentation of immunity for Rubella, Mumps, and Rubella (measles).
5. Provide verification of immunization for hepatitis B and/or show positive antibodies, or sign a waiver.

6. Purchase radiation badge.
7. Purchase professional liability insurance through the college by the first week of classes. (Forms available in the Allied Health Department)
8. Arrange reliable transportation to and from clinical facilities as required by the program.
9. Abide by the policies of the College and Dental Assisting Policy Manual.

Progression in the Program: Students are expected to meet pre-requisite/co-requisite requirements to progress in the program. Students must attain a minimum grade of “C” in theory for each Dental Assisting course and earn a grade of “Satisfactory” for Dental Assisting courses with that component.

Readmission to the Program: A student may be readmitted to a Dental Assisting Program one time following a failure of or withdrawal from a Dental Assisting course. Students who are currently returning following a failure are considered to be using their second and final opportunity to complete the Dental Assisting Program. Students may apply for readmittance within one year of original entry by submitting a letter of intent to the Program Director.

The readmission of a student is based on availability of space and the student-teacher ratio, provided the student is eligible to return. Any student requesting readmission must have a minimum Grade Point Average of 2.5 on all course work attempted. All requirements for students enrolling in the program will apply to students returning to the Dental Assisting Program. Students who re-enter the program may be subject to following the current curriculum.

To be readmitted to the Dental Assisting program, the student must contact the program director at 256-306-2812 to schedule an appointment to discuss readmission.

Policy/Curriculum Changes: Policies/Curriculum changes in the Dental Assisting program are subject to change at any given time. Written documentation will be provided to students currently enrolled in the program prior to change in policy/curriculum.

Fall	Cr. Hrs.
ORI 101 Orientation to College.....	1
DNT 100 Introduction to Dental Assisting.....	2
DNT 101 Preclinical Procedures I.....	3
DNT 102 Dental Materials.....	3
DNT 103 Anatomy and Physiology for Dental Assistants.....	3
DNT 104 Basic Sciences for Dental Assisting.....	2
*PSY 200 General Psychology.....	3

Spring	Cr. Hrs.
DNT 111 Clinical Practice I.....	5
DNT 112 Dental Radiology.....	3
DNT 113 Dental Health Education.....	2
DNT 116 Preclinical Procedures II.....	2
DNT 124 Clinically Applied Infection Control and OSHA Standards.....	1
*MTH Elective (May choose from the following).....	3
MTH 100 Intermediate College Algebra	
MTH 112 Precalculus Algebra	
MTH 116 Mathematical Applications	
*SPH 107 Fundamentals of Public Speaking.....	3

Summer	Cr. Hrs.
DNT 121 Dental Office Procedures.....	4
DNT 122 Clinical Practice II.....	4
DNT 123 Dental Assisting Seminar.....	4
*ENG 101 English Composition I.....	3
General Education Core Requirements in addition to courses listed above (required for AAS Degree):	
*Natural Science elective.....	4
*CIS elective.....	3
*Humanities/Fine Arts elective.....	3
*History or Social Science or Behavioral Science elective.....	3
TOTAL CREDITS.....	64

*General Education Core Courses may be completed prior to entering the program.

DENTAL ASSISTING

Certificate

Program Code: CT.DNT

CIP Code: 51.0601

Dental Assisting is a dental auxiliary field. As auxiliary team members, students in the Dental Assisting program are taught to be generalists. They perform a variety of functions in the dental office requiring communication skills, critical thinking and sound judgment. Dental Assistants may provide chairside assistance to the dentist, perform work in the dental laboratory, provide oral hygiene instruction, assist with radiological procedures and/or perform office managerial duties. Through evaluation techniques, Dental Assistants enhance the quality of care the patient receives.

Certificates are programs of study designed to give students specific skills in a technology. Should students later wish to pursue a degree program, all courses within the certificate will apply toward the degree.

The Dental Assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education. The Dental Assisting program is operated with the approval of the Board of Dental Examiners of Alabama.

PROGRAM OBJECTIVES

Program objectives, as defined by the Dental Assisting program, are utilized to prepare individuals in the program to become competent dental assistant practitioners. Upon successful completion of the Dental Assisting program graduates will be able to:

1. Utilize effective communicative skills.
2. Participate as a member of the dental health team in the coordination and delivery of patient care.
3. Teach the patient adequate nutrition as it relates to health and the teeth.
4. Perform four-handed assisting skills to assist the dentist in general dentistry.
5. Perform common laboratory procedures.

Programs of Study

6. Implement beginning skills for assisting in the dental specialties.
7. Expose, process and mount dental radiographs.
8. Demonstrate skills in organizing and maintaining the secretarial assistant position.
9. Assist the dentist during office emergencies.
10. Demonstrate acceptable behavior by practicing within the ethical and legal guidelines of the Dental Assistant.
11. Participate in continuing education by:
 - a. reading current literature.
 - b. attending continuing education programs through formal and/or informal educational experiences.
 - c. networking with members of the dental health team to impart knowledge.

Admission to the program: Applicants must meet the admission requirements of Calhoun Community College. Applicants must have a 2.5 grade point average, must be eligible to take English 101 and Math 100, OR Math 112 OR Math 116 or have permission of the Dental Assisting instructor and schedule an interview with the program director. Dental Assisting classes are admitted once a year, fall semester. For more information/appointment, contact the Dental Assisting Director, 256/306-2812 or the Allied Health Department, 306-2786.

Programs of Study

Students enrolled in the Dental Assisting program fall semester will be required to:

1. Provide evidence of current cardiopulmonary resuscitation (CPR) course completion. CPR course completion must be maintained throughout the program.
2. Submit a current student Health Examination form completed appropriately by licensed physician. Form furnished by Allied Health Department.
3. Provide medical verification of two-step Mantoux skin test (chest x-ray if positive) indicating he/she is free of tuberculosis.
4. Provide documentation of immunity for Rubella, Mumps, and Rubella (Measles).
5. Provide verification of immunization for hepatitis B and/or show positive antibodies, or sign a waiver.
6. Purchase radiation badge.
7. Purchase professional liability insurance through the college by the first week of class. (Forms available in the Allied Health Department)
8. Arrange reliable transportation to and from clinical facilities as required by the program.
9. Abide by the policies of the College and Dental Assisting Policy Manual.

When there is probable cause, the Allied Health Department reserves the right to require a prospective student, a student currently enrolled in the program, or a returning student to submit to psychological testing/counseling, a drug screening, and/or a physical examination by a licensed physician at the student's expense and to submit a report of the outcome to the Allied Health Department. The Allied Health Department will provide a specific form for this purpose when applicable. All reports will be reviewed by the Dental Assisting instructor/Allied Health Department to determine if a student may be admitted, readmitted, or retained in the dental program.

Progression in the Program: Students are expected to meet pre-requisite/co-requisite requirements to progress in the program.

Students must attain a minimum grade of "C" in theory for each Dental Assisting course and earn a grade of "Satisfactory" for Dental Assisting courses with that component.

Readmission to the Program: A student may be readmitted to a Dental Assisting Program one time following a failure of or withdrawal from a Dental Assisting course. Students who are currently returning following a failure are considered to be using their second and final opportunity to complete the Dental Assisting Program. Students may apply for readmittance within one year of original entry by submitting a letter of intent to the Program Director.

The readmission of a student is based on availability of space and the student-teacher ratio, provided the student is eligible to return. Any student requesting readmission must have a minimum Grade Point Average of 2.5 on all course work attempted. All requirements for students enrolling in the program will apply to students returning to the Dental Assisting Program. Students who re-enter the program may be subject to follow the current curriculum.

To be readmitted to the Dental Assisting program, the student must contact the program director at (256/306-2812) to schedule an appointment to discuss readmission.

Policy/Curriculum Changes: Policies/Curriculum changes in the Dental Assisting program are subject to change at any given time. Written documentation will be provided to students currently enrolled in the program prior to change in policy/curriculum.

Fall	Cr. Hrs.
ORI 101 Orientation to College.....	1
DNT 100 Introduction to Dental Assisting	2
DNT 101 Preclinical Procedures I.....	3
DNT 102 Dental Materials	3
DNT 103 Anatomy and Physiology for Dental Assistants	3
DNT 104 Basic Sciences for Dental Assisting.....	2
*PSY 200 General Psychology.....	3

Spring	Cr. Hrs.
DNT 111 Clinical Practice I.....	5
DNT 112 Dental Radiology	3
DNT 113 Dental Health Education	2
DNT 116 Preclinical Procedures II	2
DNT 124 Clinically Applied Infection Control and OSHA Standards	1
*MTH Elective (May choose from the following).....	3
MTH 100 Intermediate College Algebra	
MTH 112 Precalculus Algebra	
MTH 116 Mathematical Applications	
*SPH 107 Fundamentals of Public Speaking.....	3

Summer	Cr. Hrs.
DNT 121 Dental Office Procedures.....	4
DNT 122 Clinical Practice II.....	4
DNT 123 Dental Assisting Seminar	4
*ENG 101 English Composition I	3

TOTAL CREDITS.....51

* General Education Core Courses may be completed prior to entering the program.

EMERGENCY MEDICAL SERVICES (EMS)

Certificate Associate in Applied Science

The Emergency Medical Services (EMS) program, approved by the Alabama Department of Public Health, utilizes nationally-recognized standards to provide students not only knowledge about the critical differences between the physiology, the pathophysiology, and the clinical symptoms of infants, children, adolescents, adults, and the elderly as they relate to pre-hospital emergency patient care situations, but also skills in the emergency medical care of these patients. EMS education includes legal/ethical considerations and treatment modalities/protocols within the scope of practice of the Emergency Medical Technician (EMT).

Students enrolled in the Emergency Medical Services Program may choose to earn a certificate or to earn the Associate in Applied Science degree in Emergency Medical Services. The first certificate of completion is the EMT-Basic (EMT-B) and the second is Paramedic. Upon successful completion of each certificate, the student is eligible to apply to take the National Registry Examination at his/her respective level of training. Upon successful completion of the examination, the student will be eligible to apply for licensure to practice in the State of Alabama as an EMT-B or Paramedic.

To be granted an Associate in Applied Science degree, a student must successfully complete both levels of Emergency Medical Technician training and complete the general education course requirements as outlined for the program. The Emergency Medical Services Programs are fully approved by the Alabama State Department of Public Health, Emergency Medical Services Division.

As vital members of the Emergency Medical Services (EMS) team, EMTs provide prehospital emergency care to the ill and injured patient, continuing that care until the patient is under the care of a higher level of care.

Basic EMTs have the knowledge and skills to provide basic life support to all patients whether the problem is trauma, cardiac, or medical. EMTs can splint fractures, bandage wounds, and stabilize a patient for transport to a medical facility.

Paramedics are the highest level of prehospital care in the EMS system. Paramedics record and interpret EKG findings, treat cardiac arrests with defibrillation and cardioversion, reduce shock by intravenous fluid administration, provide ventilations and airway protection by endotracheal intubation and administer pharmacological therapy. Paramedics serve as team leaders on EMS units.

The EMS curriculum for EMT-Basic and Paramedic follows the National Standard Curriculum as developed by the U.S. Department of Transportation and meets the approval of the Alabama Department of Public Health, Emergency Medical Services Division. EMS courses are open to qualified students who meet the general admission and entry-level requirements. All students must complete the COMPASS or ASSET prior to admission into the EMS Program. All EMS students must be certified in CPR at the Health Care Provider level (or equivalent) and have completed OSHA Bloodborne Pathogens before entering the clinical areas. Passing score for all EMS courses is 75%. Graduates are eligible to apply for the National Registry Examination, passing of which is required for state licensure in Alabama.

Graduates of the EMS program find employment with ambulance services, hospitals, fire departments, rescue squads and industrial safety.

Other opportunities for employment include emergency clinics, insurance companies, fire service agencies and law enforcement agencies.

In order to be eligible to attend clinicals, each student must attend a clinical orientation session. Date, time and location for clinical orientation sessions will be published each semester.

It is recommended that all students enrolling in EMS courses and REQUIRED that students registering for EMP courses make an appointment with a member of the EMS faculty prior to enrollment for counseling.

For more information, visit www.calhoun.edu/ems or contact Ann Wagon, EMS secretary at 256-306-2786, e-mail aww@calhoun.edu or Mark Branon at (256) 306-2854, e-mail msb@calhoun.edu.

EMT-BASIC CERTIFICATE

Program Code: CT.EMT

CIP Code: 51.0904

The EMT-Basic portion of the program is one semester in length and consists of the following courses, which are taught concurrently three days/evenings per week and must be successfully completed for eligibility for NREMT exam.

EMS 116 EMS Basic Theory and Lab	9
EMS 117 EMS Basic Clinical Competencies	1
Total hours for EMT-Basic Certificate	10

Optional course for EMT-Basic students including 45 additional hours of clinical education:

*EMS 145 Emergency Department Preceptorship	2
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*Includes 45 hours of clinical education (Insurance, Completion of EMS 113, and CPR Verification Required).

EMERGENCY MEDICAL PARAMEDIC CERTIFICATE

Program Code: CT.EMT.PARA

CIP Code: 51.0904

The Emergency Medical Paramedic (EMP) certificate level consists of 15 courses. Each semester builds on the preceding semester. Students must successfully pass all courses to be eligible for the National Registry Examination for Paramedics. Students must have a grade of "C" or higher for a math and an English course - 100 level or above. Students are encouraged to complete ENG 101 to satisfy the English requirement and either MTH 100 OR MTH 112 OR MTH 116 to satisfy the mathematics requirement. Completion of these courses will also satisfy the English and mathematics requirements in the Paramedic Associate of Applied Science degree. The courses for the EMP certificate include the following:

Paramedic Semester One

EMP 189 Applied Anatomy and Physiology for the Paramedic	4
EMP 194 Paramedic Pharmacology	2
EMP 199 Cardiovascular Electrophysiology	3
EMP 203 Cardiovascular Patient Management	3

Paramedic Semester Two

EMP 192 Paramedic Operations	3
EMP 193 Patient Assessment and Management	3
EMP 195 Advanced Trauma Management	6

Programs of Study

Paramedic Semester Three

EMP 191 Paramedic Preparatory	2
*EMP 200 Medical Patient Management IIA	6
EMP 198 Medical Patient Management I	3

Paramedic Semester Four

EMP 204 Transition to Paramedic Practice	3
EMP 205 Paramedic Terminal Competencies	2
*EMP 206 Paramedic Field Preceptorship	6
*EMP 207 Paramedic Team Leadership Preceptorship	1

Total hours for Paramedic Certificate (excluding EMT-Basic certificate)

47

*Includes clinical education (Insurance, Completion of EMS 113, and CPR Verification Required)

EMERGENCY MEDICAL SERVICES

Paramedic Associate in Applied Science

Program Code: AP.EMS.PARA

CIP Code: 51.0904

EMS Course Requirements

EMT Basic (One Semester)	
EMS 116 EMS Basic Theory and Lab	9
EMS 117 EMS Basic Clinical Competencies	1
ENG 101 English Composition I	3
Math Elective (May choose from the following)	3
MTH 100 Intermediate College Algebra	
MTH 112 Precalculus Algebra	
MTH 116 Mathematical Applications	
Semester Total	16

EMT Paramedic

Paramedic Semester One:

EMP 194 Paramedic General Pharmacology	2
EMP 199 Cardiovascular Electrophysiology	3
EMP 203 Cardiovascular Patient Management	3
BIO 201 Anatomy and Physiology I	4
SPH 107 Fundamentals of Public Speaking	3
Semester Total	15

Paramedic Semester Two:

EMP 192 Paramedic Operations	3
EMP 193 Patient Assessment and Management	3
EMP 195 Advanced Trauma Management A	6
BIO 202 Anatomy and Physiology II	4
Semester Total	16

Paramedic Semester Three:

EMP 191 Paramedic Preparatory	2
*EMP 200 Medical Patient Management IIA	6
EMP 198 Medical Patient Management I	3
PSY 200 General Psychology	3
Semester Total	14

Paramedic Semester Four:

EMP 204 Transition to Paramedic Practice	3
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EMP 205 Paramedic Terminal Competencies	2
*EMP 206 Paramedic Field Preceptorship	6
EMP 207 Paramedic Team Leadership Preceptorship	1
Humanities Elective	3

Semester Total15

TOTAL CREDITS76

*Includes clinical education (Insurance Required).

EMT-Basic/EMT-Paramedic GENERAL ADMISSION REQUIREMENTS

There are Essential Functions required for students entering and participating in the EMT-Basic and EMT-Paramedic curricula. As a student, you must:

PHYSICAL DEMANDS

- (1) have the physical ability to walk, climb, crawl, bend, push, pull, or lift and balance over less than ideal terrain;
- (2) have good physical stamina and endurance, which would not be adversely affected by having to lift, carry, and balance at times, in excess of 125 pounds (250 pounds with assistance);
- (3) see different color spectrums;
- (4) have good eye-hand coordination and manual dexterity to manipulate equipment, instrumentation, and medications;

PROBLEM SOLVING ABILITIES (Data Collection, Judgment, Reasoning)

- (5) be able to send and receive verbal messages as well as operate appropriate communication equipment of current technology;
- (6) be able to collect facts and to organize data accurately, communicate clearly both orally and in writing in the English language at the ninth-grade reading level or higher;
- (7) be able to differentiate between normal and abnormal findings in human physical conditions by using visual, auditory, olfactory, and tactile observations;
- (8) be able to make good judgment decisions and exhibit problem-solving skills under stressful situations;
- (9) be attentive to detail and be aware of standards and rules that govern practice;
- (10) implement therapies based on mathematical calculations;
- (11) demonstrate competency in the use of computers;

WORKER CHARACTERISTICS

- (12) possess emotional stability to be able to perform duties in life-or-death situations and in potentially dangerous social situations, including responding to calls in districts known to have high crime rates;
- (13) be able to handle stress and work well as part of a team;
- (14) be oriented to reality and not be mentally impaired by mind-altering substances;
- (15) not be addicted to drugs or alcohol;
- (16) be able to work shifts of 12 hours in length;
- (17) be able to tolerate being exposed to extremes in the environment including variable aspects of weather, hazardous fumes, and noise;
- (18) possess eyesight of a minimum of one eye correctable to 20/20 vision and be able to determine directions according to a map;

- students who desire to drive an ambulance must possess approximately 180 degrees peripheral vision capacity, and
- (19) possess a valid driver's license, and be able to safely and competently operate a motor vehicle in accordance with State Law.

ENTRY LEVEL REQUIREMENTS

EMT-BASIC

Entry level requirements for students entering and participating in EMS education are as follows:

1. Possess a GED or high school diploma;
2. Complete the COMPASS or ASSET exam;
3. Meet all institutional admission requirements;
4. Successfully complete within the last 12 months Basic Cardiac Life Support for the Health Care Provider;
5. Comply with "Essential Functions" of the program or attach documentation to the program application form of those essential functions of which the student is not in compliance (for review by Calhoun's American Disabilities Coordinator);
6. Provide an acceptable physical examination by a licensed medical doctor or doctor of osteopathy to include:
 - a. Written documentation (on a form provided by the program) of the physician's opinion regarding the prospective student as follows:
 - have emotional and physical ability to carry out the normal activities of prehospital emergency care;
 - compliance with the "Essential Functions" for the program; and
 - health history.
 - b. Up-to-date immunizations to include:
 - Tetanus/D within the past 10 years;
 - MMR Vaccine prior to 1969 or Rubella Titer of 1:8 or above is sufficient in lieu of MMR;
 - RPR;
 - Two-step TB Skin test (Chest x-ray, if positive); and
 - Begin or have had the series of Hepatitis B vaccinations, or sign a waiver regarding the series of Hepatitis B vaccinations;

Health care workers who have direct patient contact or handle potentially infective materials have an increased risk for contracting Hepatitis B. A series of vaccinations for Hepatitis B is recommended by the Centers for Disease Control (CDC) and the Alabama Department of Public Health for persons who are at increased risk of infection from Hepatitis B. Cost of vaccinations is the student's responsibility.
 - c. Visual/auditory/verbal ability to include:
 - vision corrected in one eye to 20/20 (students who desire to drive an ambulance must also possess approximately 180 degrees peripheral vision capacity);
 - Color Perception; and
 - being able to send and receive verbal messages.
7. Each student enrolled in EMS education must have verification of the following:
 - a. current professional liability insurance offered through the college (due 1st day of class); and
 - b. current health/hospitalization/accident insurance and/or waiver of liability.

EMERGENCY MEDICAL PARAMEDIC

Requirements for students entering the courses at the Emergency Medical Paramedic level are:

1. Complete all EMT-Basic entry requirements.
2. Minimum cumulative GPA of 2.5 on a 4.0 scale.
3. Complete ENG 101 and MTH 100 or equivalent with a grade of "C" or higher prior to second semester.
4. Have a current Alabama license as an EMT-Basic or Intermediate or have completed an EMT-Basic course approved by the Alabama Department of Public Health within the past twelve months. Alabama licensure as an EMT-Basic or Intermediate is mandatory prior to beginning the second term of Paramedic courses.
5. Acceptance is granted to the most qualified applicants, with preference given to students progressing through Calhoun's EMS Program.
6. Complete a proficiency examination with a minimum score of 75% unless progressing from Calhoun's EMT Basic courses within the last 24 months.

The number of students admitted to each level of EMS education is limited according to the faculty and clinical facilities available. Priority is given to students progressing through Calhoun's program.

Licensure

Upon successful completion of the EMT-Basic/Paramedic courses, the student is eligible to apply for the respective National Registry examination administered by the State of Alabama, Department of Public Health. Licensure applicants must be at least 18 years of age.

All students entering EMS education courses may be required to comply with specific licensure requirements as set forth by the National Registry of EMTs and the Alabama Department of Public Health to become licensed as an EMT. Situations which may affect their licensure compliance include, but are not limited to:

1. Not being 18 years of age or older;
2. Convicted of any criminal act, including any DUI convictions;
3. Addicted to the use of intoxicating liquors or controlled substances at the present or in the past; and
4. Not possessing 180 degrees peripheral vision capacity or a valid driver's license (for licensure as an EMT Driver).

PROGRESSION BETWEEN LEVELS

To complete individual certificates in the EMS curriculum, students must:

1. Progress through the required courses of the EMS curriculum in the prescribed sequence;
2. Attain an average of 75% in all coursework to include didactic, laboratory, clinical, and/or field internship training;
3. Submit acceptable physical examinations at intervals not to exceed 12 months;
4. Maintain current professional liability, health, and hospitalization insurance while enrolled in the EMS courses;
5. Maintain annual Basic Cardiac Life Support Certification at the Health Care Provider level or equivalent;
6. Comply with the "Essential Functions" required for EMT-Basic and Paramedic courses;
7. Comply with all institutional and any cooperating health agency policies, procedures, and rules of behavior as published for the students.

Programs of Study

Readmission:

To be readmitted to the EMS program, the student must meet the criteria for readmission to the EMS program and college as stated in the catalog and must contact the Allied Health Department to schedule an appointment with EMS faculty to discuss options for successful academic achievement.

The readmission of a student is based on availability of space and student-teacher ratio provided the student is eligible to return. The student will be readmitted one time only when he/she fails to progress for academic reasons.

Any student requesting readmission must have a minimum Grade Point Average of 2.50 on all course work attempted.

An EMS Program Application Form will be required if the time and need indicated is evident as well as liability insurance renewal, tuberculin skin testing (PPD) and CPR course completion.

When there is probable cause, the Allied Health Department reserves the right to require a prospective student, a student currently enrolled in the program, or a returning student to submit to psychological testing/counseling, a drug screening and/or a physical examination by a licensed physician at the student's expense and to submit a report of the outcomes to the Allied Health Department. The Allied Health Department will provide a specific form for this purpose, when applicable. All reports will be reviewed by the Allied Health Department to determine if a student may be admitted, readmitted, or retained in the EMS/EMP courses.

EMERGENCY MEDICAL SERVICES (Special Course Offerings)

Calhoun's special EMS course offerings allow students in other programs to take advantage of the pre-EMS related courses to enhance their knowledge of emergency care. EMS graduates, as well as graduates of other health-care programs, may take courses for professional development, utilizing the program's "state of the art," high technology equipment. Listed below are the special courses offered through the EMS Program.

EMS 100 Cardiopulmonary Resuscitation I	1
EMS 101 Cardiopulmonary Resuscitation II	1
EMS 102 Medico-Legal Aspects of Emergency Care	1
EMS 103 First Aid	1
EMS 104 First Aid for Students of Health Related Professions	1
EMS 105 First Responder	3
EMS 106 Medical Terminology for Health Professions	2
EMS 107 Emergency Vehicle Operator Ambulance	1
EMS 108 Directed Studies in EMS I	1
EMS 109 Directed Studies in EMS II	1
EMS 110 Directed Studies in EMS III	1
EMS 111 Directed Studies in EMS IV	1
EMS 112 Directed Studies in EMS V	1
EMS 113 Infection Control for Health Professions	1
EMS 114 Infection Control Refresher	1
EMS 115 Special Skills for Health Related Professions	1
EMS 120 Vehicle Extrication	2
EMS 121 Vehicle Rescue	3
EMS 122 Structural Extrication	2
EMS 123 Structural Rescue	3

EMS 124 Search & Wilderness Rescue	3
EMS 125 High Angle Rescue I	2
EMS 126 High Angle Rescue II	3
EMS 127 High Angle Rescue III	3
EMS 128 Cave Rescue I	2
EMS 129 Cave Rescue II	3
EMS 130 Industrial Extrication	2
EMS 131 Industrial Rescue	3
EMS 132 Agricultural Extrication	2
EMS 133 Agricultural Rescue	3
EMS 134 Water Extrication	2
EMS 135 Surface Water Rescue	3
EMS 144 EMT Basic Specialized Experiences	1
EMS 145 Emergency Department Preceptorship	2
EMS 150 EMT Basic Refresher	2
EMS 151 Basic Trauma Management	1
EMS 152 Defibrillation	1
EMS 153 EMS Dispatcher	3
EMS 154 Basic Pediatric EMS Provider	1
EMS 170 Radiation Biology & Safety	1
EMS 171 Hazardous Materials Awareness and Operations	2
EMS 172 Hazardous Materials Technician I	2
EMS 173 Hazardous Materials Technician II	2
EMS 174 Incident Command and Emergency Response	2
EMS 175 Radiological Response	2
EMS 190 EMT-Intermediate Refresher	2
EMS 208 Dive Rescue Basic Scuba	2
EMS 209 Dive Rescue – Advanced Scuba	2
EMS 210 Dive Rescue	2
EMS 211 Dive Rescue Master Scuba	3
EMS 212 Dive Rescue Divemaster	3
EMS 213 Diver Rescue Assistant Instructor	3
EMS 214 Underwater Investigator	1
EMS 215 Enriched Air Diver	2
EMS 216 Hazardous Environment Diving	1
EMS 217 Dive Rescue Instructor	3
EMS 218 Supervised Studies in EMS I	1
EMS 219 Supervised Studies in EMS II	1
EMS 220 Diver Medical Technician I	2
EMS 230 Management in Emergency Medical Services	3
EMS 231 EMS Leadership Techniques	3
EMS 232 Computers in EMS	3
EMS 233 Media and EMS Marketing	3
EMS 234 Decision Making and Problem Solving in EMS	3
EMS 235 EMS Finance and Cost Accounting	3
EMS 236 Human Resource Management in EMS	3
EMS 237 Legal Requirements in EMS	3
EMS 238 Quality Assurance in EMS	3
EMS 239 Preceptorship in EMS Management	3
EMS 264 Paramedic Registry Review	3
EMS 265 Paramedic Refresher	3
EMS 266 Advanced CV Life Support Provider	1
EMS 267 Basic Trauma Life Support Provider	1
EMS 269 Pediatric Medical Life Support Provider	1
EMS 270 Advanced Neonatal Life Support Provider	1
EMS 274 Pre-Hospital 12 Lead EKG	1
EMS 277 Pediatric Trauma Management Provider	1
EMS 280 Basic Life Support Provider	1
EMS 281 Advanced CV Life Support Instructor	1
EMS 282 Basic Trauma Life Support Instructor	1
EMS 284 Pediatric Medical Life Support Instructor	1
EMS 285 Advanced Neonatal Life Support Provider	1

HPS 105 Medical Terminology	3
HPS 113 Spanish for Health Care Professionals	3

Continuing education courses may be offered by individual request. Those interested should contact the EMS office.

Policies for the EMS program are subject to change at any time. Written notice will be given to students enrolled in EMS courses prior to implementation of policy change.

FIRE SCIENCE

Certificate

Program Code: CT.FSM

CIP Code: 43.0202

The Certificate in Fire Science prepares students to enter the fields of fire protection and services, or may be used to improve the competencies of professionals already in the field.

ORI 101 Orientation to College	1
COM 100 Introductory Technical English I OR ENG 101 English Composition I	3
CIS 146 Microcomputer Applications	3
SPH 107 Fundamentals of Public Speaking	3
FSC 101 Introduction to the Fire Service	3
FSC 200 Fire Combat Tactics and Strategy	3
FSC 210 Building Construction for the Fire Service	3
FSC 240 Fire Cause Determination	3
FSC 292 Elements of Supervision/FS Supervision	3
General Electives	2
TOTAL CREDITS	27

MESSAGE THERAPY

Certificate

Program Code: CT.MSG

CIP Code: 51.3501

This program is designed to prepare individuals to work as massage therapists. Licensed massage therapists may be self-employed or employed at health clubs, medical clinics, chiropractic offices, athletic departments, spas, salons, and holistic health centers. Upon successful completion of the program, students may seek licensure from the Alabama Board of Massage Therapy.

Massage Therapy is a massage therapy auxiliary field. As auxiliary team members, students in the Massage Therapy program are taught to be generalists. They perform a variety of functions in the massage therapy office requiring communication skills, critical thinking and sound judgment. Massage Therapists may provide assistance to the therapist, perform work in the massage therapy laboratory, provide client instruction, and perform office managerial duties. Through evaluation techniques, Massage Therapists enhance the quality of care the patient receives.

PROGRAMS OF STUDY

Certificates are programs of study designed to give students specific skills in a technology. Should students later wish to pursue a degree program, many courses within the certificate will apply toward the degree.

The Massage Therapy program is recognized by the Council on

Postsecondary Accreditation and by the United States Department of Education. The Massage Therapy program is operated with the approval of the Alabama Board of Massage Therapists.

PROGRAM OBJECTIVES

Upon successful completion of the Massage Therapy program, the graduates will be able to:

1. Utilize effective communication skills;
2. Participate as a member of the massage therapy health team in the coordination and delivery of Massage Therapy.
3. Enter the work force as entry-level massage therapists.
4. Use the principles and techniques of massage to assess and appropriately treat disorders of the human body which may benefit from massage.
5. Have adequate information, demonstration and practice to perform massage procedures competently and safely.
6. Possess the necessary information and knowledge to understand the business, marketing, budgeting, insurance, advertising, ethical and legal principles, issues and concerns of the profession.
7. Communicate effectively with clients, other health care providers and the community at large as to the benefits and advisability of massage.
8. Have the knowledge and skills necessary to open and manage a private practice.

As a Calhoun Community College Therapeutic Massage Therapy student, you will be given the skills and knowledge required to succeed as a professional massage therapist, including proficiency in the major massage therapy techniques including Swedish, Trigger Point Therapy, Neuromuscular Therapy, Deep Tissue, and Myofascial Release.

- Knowledge of the basic principles of anatomy and physiology and their relationship to the theory and practice of Massage Therapy.
- Accurate palpation and description of the major muscles and anatomical landmarks of the human body.
- Ability to communicate effectively with your clients and other health care professionals.
- Skillful application of record-keeping and other business skills needed for a successful massage practice.
- Ability to apply basic hydrotherapy techniques in a Massage Therapy practice.
- A clear understanding of the benefits and limitations of Massage Therapy and willingness to refer clients to other health care providers when necessary.

This 665 hour program is designed to provide an excellent education in the fundamentals of therapeutic massage and bodywork, preparing the Calhoun Community College Therapeutic Massage student to obtain a massage therapy license and start a successful practice. Our program qualifies graduates for the national certification exam.

To enroll in the Massage Therapy program, students must:

- meet the admission requirements of Calhoun Community College and submit to the Department of Allied Health a completed Massage Therapy application for admission.
- be at least 18 years of age.
- provide proof of successful completion of high school or have a GED certificate.

Programs of Study

- provide official copies of transcripts for any high school, GED, or college work previously undertaken
- have a one-on-one interview with the Massage Therapy Program Director.

Students enrolled in the Massage Therapy program will be required to:

1. Submit a current student Health Examination form completed appropriately by a licensed physician or Family Nurse Practitioner. Form furnished by Allied Health Department.
2. Provide medical verification of two-step Mantoux skin test (chest x-ray if positive) indicating he/she is free of tuberculosis.
3. Provide documentation of immunity for Rubeola (Measles), Mumps, Rubella (German Measles) through one of the following:
 - a. History of having had the disease
 - b. Titer that demonstrates immunity
 - c. Immunization record
4. Purchase professional liability insurance through the College by the first week of class. (Forms available in the Allied Health Department)
5. Arrange transportation to and from clinical facilities as required by the program.
6. Abide by the policies of the College and Massage Therapy Policy Manual.

Massage Therapy classes are admitted once a year, Summer or Fall Semester. For more information/appointment, contact Ms. Carolyn Walls, Massage Therapy Director, 256/260-1437, or the Allied Health Department, 256/306-2786.

PROGRESSION IN PROGRAM

Students are expected to meet pre-requisite/co-requisite requirements to progress in the program. Students must attain a minimum grade of "C" in theory for each Massage Therapy course and earn a grade of "Satisfactory" for Massage Therapy courses with that component.

READMISSION TO PROGRAM

To be readmitted to the Massage Therapy program, the student must contact the Massage Therapy Program Director to schedule an appointment to discuss readmission. The student must be eligible for readmission by the College and must have an overall 2.50 grade point average. Students who re-enter the program may be subject to follow the current curriculum. All requirements for students enrolling in the program will apply to students re-entering the Massage Therapy program.

POLICY/CURRICULUM CHANGES

Policies/Curriculum changes in the Massage Therapy program are subject to change at any given time. Written documentation will be provided to students currently enrolled in the program prior to change in policy/curriculum.

When there is probable cause, the Allied Health Department reserves the right to require a prospective student, a student currently enrolled in the program, or a returning student to submit to psychological testing/counseling, a drug screening, and/or a physical examination by a licensed physician at the student's expense and to submit a report of the outcome to the Allied Health Department. The Allied Health Department will provide a specific form for this purpose when applicable. All reports will be reviewed by the Massage Therapy instructor/Allied Health Department to determine if a student may be

admitted, readmitted, or retained in the Massage Therapy program.

First Term

Course	Semester Hours
MSG 100 Massage History & Theory	1
MSG 101 Massage Therapy Lab I.....	4
MSG 111 Anatomy and Physiology	3
MSG 156 Career and Personal Development	2
Total	10

Second Term

MSG 112 Musculo-Skeletal and Kinesiology I	3
MSG 102 Massage Therapy Lab II	4
MSG 114 Pathology	3
MSG 120 Massage Therapy Supervised Clinical I	1
Total	11

Third Term

MSG 113 Musculo-Skeletal & Kinesiology II	3
MSG 121 Massage Therapy Supervised Clinical II	1
MSG 130 Special Populations	3
MSG 160 National Certification Exam Review	1
Total	8

TOTAL CREDITS29

MISSILE AND MUNITIONS TECHNOLOGY Basic

Associate of Applied Science Degree

Program Code: AP.MMT.BASIC

CIP Code: 29.0101

(U.S. Army Ordnance Missile and Munitions Center and School Only)

This is a joint program between the U.S. Army Ordnance Missile and Munitions Center and School and Calhoun Community College to afford career military personnel the opportunity to earn college credits through a combination of civilian and military education. Students may apply from 27 to 42 semester hours of USAOMMCS course credits toward the applied science degree. A minimum of 27 semester hours of OMMCS credits is required to qualify for this program.

College residence may be established through distance learning classes.

GENERAL EDUCATION CORE REQUIREMENTS

ENG 101 English Composition I	3
SPH 107 Fundamentals of Public Speaking OR SPH 228 Group Communications.....	3
*MTH 100, 103 or Higher.....	3
Humanities/Fine Arts Elective	3
Natural Science Elective	4
Social Science Elective	3
CIS Elective (CIS 146 or higher).....	3
Total	22

MAJOR COURSE REQUIREMENTS27-42**

*MTH 116 Mathematical Applications is not acceptable
 **If military credits are less than 42 hours, the deficiency must be made up with General Electives (100 level or above)
TOTAL CREDITS64

Note: Admission to the MMT degree program is limited to Active, Reserve, or National Guard Military personnel or those who have separated or retired from the military within seven years of the academic year of this catalog.

MISSILE AND MUNITIONS TECHNOLOGY Option I Calibration Specialist

Associate of Applied Science Degree

Program Code: AP.MMT.CALIBRA CIP Code: 29.0101

(U.S. Army Ordnance Missile and Munitions Center and School Only)

This is a joint program between the U.S. Army Ordnance Missile and Munitions Center and School and Calhoun Community College to afford career military personnel the opportunity to earn college credits through a combination of civilian and military education. Students may apply from 27 to 42 semester hours of USAOMMCS course credits toward the applied science degree. A minimum of 27 semester hours of OMMCS credits is required to qualify for this program.

College residence may be established through distance learning classes.

GENERAL EDUCATION CORE REQUIREMENTS

ENG 101 English Composition I3
 SPH 107 Fundamentals of Public Speaking OR
 SPH 228 Group Communications.....3
 *MTH 100, 103 or Higher.....3
 Humanities/Fine Arts Elective3
 Natural Science Elective4
 Social Science Elective3
 CIS 146 Microcomputer Applications or higher3
 Total22

MAJOR COURSE REQUIREMENTS

Total.....27-42**

*MTH 116 Mathematical Applications is not acceptable
 **Credits must be from calibration MOS, (i.e., 35H, 35Y, etc). If military credits are less than 42 hours, the deficiency must be made up with General Electives (100 level or above)

TOTAL CREDITS64

Note: Admission to the MMT degree program is limited to Active, Reserve, or National Guard Military personnel or those who have separated or retired from the military within seven years of the academic year of this catalog.

MISSILE AND MUNITIONS TECHNOLOGY Option II Technical Management

Associate of Applied Science Degree

Program Code: AP.MMT.TECH.MGT CIP Code: 29.0101

(U.S. Army Ordnance Missile and Munitions Center and School Only)

This is a joint program between the U.S. Army Ordnance Missile and Munitions Center and School and Calhoun Community College to afford career military personnel the opportunity to earn college credits through a combination of civilian and military education. Students may apply from 27 to 42 semester hours of USAOMMCS course credits toward the applied science degree. A minimum of 27 semester hours of OMMCS credits is required to qualify for this program.

College residence may be established through distance learning classes.

GENERAL EDUCATION CORE REQUIREMENTS

ENG 101 English Composition I3
 SPH 107 Fundamentals of Public Speaking OR
 SPH 228 Group Communications.....3
 *MTH 100, 103 or Higher.....3
 Humanities/Fine Arts Elective3
 Natural Science Elective4
 Social Science Elective3
 CIS 146 Microcomputer Applications or higher3
 Total22

MAJOR COURSE REQUIREMENTS

Total.....27-42**

*MTH 116 Mathematical Applications is not acceptable
 **For soldiers with skill levels 40 and above. If military credits are less than 42 hours, the deficiency must be made up with General Electives (100 level or above)

TOTAL CREDITS64

Note: Admission to the MMT degree program is limited to Active, Reserve, or National Guard Military personnel or those who have separated or retired from the military within seven years of the academic year of this catalog.

MISSILE AND MUNITIONS TECHNOLOGY Option III Military Technology

Associate of Applied Science Degree

Program Code: AP.MMT.MIL CIP Code: 29.0101

This degree is for active duty, reserve, national guard, or those who have retired or separated from the military within seven years of the

Programs of Study

date of this catalog. The degree is not restricted to Redstone Arsenal trained personnel, but is for students who have been trained in the U.S. Military.

GENERAL EDUCATION CORE REQUIREMENTS

ENG 101 English Composition I	3
SPH 107 Fundamentals of Public Speaking OR SPH 228 Group Communications.....	3
*MTH 100 or Higher.....	3
Humanities/Fine Arts Elective	3
Natural Science Elective	4
Social Science Elective	3
CIS 146 Microcomputer Applications or higher	3
Total	22

MAJOR COURSE REQUIREMENTS

Total.....	27-42**
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*MTH 116 Mathematical Applications is not acceptable

**A minimum of 27 hours of military credit is required for eligibility. A maximum of 42 hours of military credit may be used for the degree. If military and non-traditional credits do not total 42 hours, the remainder must be made up with General Electives (100 level or above).

One-fourth of the degree (16 hours) must be completed at Calhoun Community College for residency. Distance learning courses may be used to complete residency.

TOTAL CREDITS	64
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MUSIC – CHURCH MUSIC

Certificate

Program Code: CT.MUS.CHURCH

CIP Code: 50.0902

This program is designed for those interested in directing musical ensembles, organizing musical activities and serving in an administrative capacity as a music minister in a religious setting. Prior musical experience as well as proficiency on an instrument or voice is strongly recommended. Students will be required to be proficient sight-readers and performers as a part of their degree program.

MUS 110 Basic Musicianship.....	3
MUS 111 Music Theory I.....	3
MUS 113 Music Theory Lab I.....	1
MUS 112 Music Theory II	3
MUS 114 Music Theory Lab II.....	1
MUL 111 Class Voice I.....	1
MUP 111 Private Voice.....	1
MUL 101 Class Piano I.....	1
MUL Performance Ensemble Electives	4
MUP 101 Private Piano	1
MUS 251 Introduction to Conducting.....	3
MUS 270 Organization of the Church Music Program.....	3
MUS 271 Church Music Literature	3
TOTAL CREDITS	28

MUSIC INDUSTRY COMMUNICATIONS

Associate of Applied Science Degree

Program Code: AP.MUIC

CIP Code: 50.0999

This program is for those interested in specializing in coursework which has application to the recording and publishing industries as well as to contemporary performance. Students are required to complete six credits of music performance electives and should consult a faculty advisor about this requirement.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College.....	1
ENG 101 English Composition I	3
Math elective	3
SPH 107 Fundamentals of Public Speaking.....	3
MIC 253 Computer Lit. for Musician I	3
Humanities elective	3
Natural Science/Math elective	3
Social Science elective	3
Total	22

MAJOR COURSE REQUIREMENTS

MIC 100 Introduction to Mass Communications.....	3
MIC 153 Introduction to Recording Technology.....	3
MIC 201 Publishing for the Recording Industry	3
MIC 250 Mass Communications Practicum	3
MIC 251 Recording Studio Production.....	3
MIC 254 Computer Literacy for the Musician II.....	3
MIC 255 Digital Recording	3
MIC 293 Music Notation.....	3
MUS 101 Music Appreciation.....	3
MUS 103 Survey of Pop Music	2
MUS 110 Basic Musicianship.....	3
MUS 291 Musical Acoustics.....	3
MUS 292 Song Writing	3
MUP/MUL Electives.....	6

Total	45
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TOTAL CREDITS	66
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NURSING ASSISTANT

The Nursing Assistant course (NAS 100) will prepare a person to work under the supervision of an RN or LPN and give direct patient care in a variety of healthcare settings. Successful completion of the course allows eligibility to write the State Nursing Assistant Certification exam through **PROMISSOR**. The Nursing Assistant curriculum at Calhoun Community College is approved by the Alabama Department of Public Health.

Program Objectives

At the successful completion of the course, the learner will be able to:

1. Provide assistance with activities of daily living to clients/residents in long-term care facilities under the supervision of a licensed nurse.
2. Demonstrate effective communication techniques when dealing

with clients/residents, their families and other members of the health team.

3. Be an active and effective member of the healthcare team.

Admission Requirements

Unconditional admission to the College.

Enrollment Requirements

1. It is recommended that all Nursing Assistant students be immunized against Hepatitis B. On the first day of class, students will be required to sign a waiver that they have not had or completed immunization for Hepatitis B or present proof that they have received the three (3) Hepatitis B vaccinations or proof of immunity to the hepatitis virus. (The three immunizations take at least six months to complete).
2. Present documentation of two-step Mantoux skin test (PPD), or chest x-ray, if PPD is positive, indicating he/she is free of tuberculosis.
3. Purchase of professional liability insurance through the College. Approximate cost \$22.00.

Drug Testing/Background Checks

As stipulated by the health agencies with which the Department of Nursing contracts for clinical experience, each student enrolled in any nursing clinical experiences at Calhoun Community College will undergo drug, alcohol testing and/or background checks as a precondition to beginning a clinical rotation. The fee for testing/checks is the responsibility of the student. Written guidelines for the process will be provided to the student at the beginning of the course.

Program Costs

Student will be required to provide his/her own transportation to the assigned clinical facility.

Additional expenses include:

Textbooks	\$100.00
Uniforms & Supplies.....	70.00
Malpractice Insurance (per year)	22.00
Drug Testing	45.00
CPR Class	30.00
Certification Exam through PROMISSOR.....	95.00

Tuition (See Semester Class Schedule)

NURSING/ADN:

Please visit the website listed below for admission requirements, application process and downloading application form as well as for information regarding curriculum options in Nursing. <http://www.calhoun.edu/distance/internet/hped/nursing/prospective.html> or link from the homepage: www.calhoun.edu then click on Programs of Study, then click Nursing, on the right, click prospective students.

Associate of Applied Science Degree

Program Code: AP.NUR

CIP Code: 51.1601

This program is designed to educate individuals in providing nursing

care to patients of all ages in a variety of health care settings. Nursing is a collaborative and/or independent process in which the nurse interacts with individuals applying documented, scientific knowledge through the use of the nursing process. Nursing courses provide sequential nursing knowledge, experience and skills for the safe practice of nursing. Ethical and legal accountability are stressed. The program can be completed in five (5) semesters for a total of 72 semester hours. Nursing courses must be taken in sequence as offered. General education courses may be completed early, or otherwise must be taken as sequenced in the curriculum.

The Calhoun Nursing program has the full approval of the Alabama Board of Nursing and is accredited by the National League for Nursing Accrediting Commission (NLNAC). Accreditation information regarding the nursing program may be obtained from the National League for Nursing Accrediting Commission, 61 Broadway 33rd Floor, New York, NY 10006. Telephone 1-800-669-1656, ext. 153.

The Associate of Applied Science Degree is awarded by Calhoun Community College to the student who completes all requirements of the nursing program. The graduate will be eligible to apply to write the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Completion of the academic program in nursing in no way assures the student of licensure. Legal requirements for licensure may be found in the **Alabama Board of Nursing Administrative Code**. Applicants who have been found guilty of any offenses listed in the **Code** may be denied licensure by the Alabama Board of Nursing and any other state board of nursing. The Alabama Board of Nursing, as well as other state boards of nursing, has the power to deny eligibility for licensure to any candidate who is guilty of fraud or deceit in attempting to procure a licensure; has been convicted of a felony; is guilty of a crime involving moral turpitude or gross immorality that would tend to bring reproach upon the nursing profession; is unfit or incompetent due to the use of alcohol, or is addicted to the use of habit forming drugs to such an extent as to render him or her unsafe or unreliable as a licensee; has been convicted of any violation of a federal or state law relating to controlled substances; is mentally incompetent; is guilty of unprofessional conduct of a character likely to deceive, defraud or injure the public in matters pertaining to health or has willfully or repeatedly violated any of the provisions of this article as defined by board rules and regulations.

Upon application for licensure, the individual will be required to answer the following questions found on the application:

Have you ever been arrested or convicted of a criminal offense other than a minor moving traffic violation? YES_____ NO_____

Have you within the last 5 years abused drugs/alcohol or been treated for dependency to alcohol or illegal chemical substances? YES_____ NO_____

Have you ever been arrested or convicted for driving under the influence of drugs/alcohol? YES_____ NO_____

Have you within the last 5 years received inpatient or outpatient treatment or been recommended to seek treatment for mental illness? YES_____ NO_____

Have you ever had disciplinary action or is action pending against you by any state board of nursing? YES_____ NO_____

*Have you ever been placed on a state **AND/OR** federal abuse registry?*

Programs of Study

YES____ NO____

Have you ever been court-martialed/disciplined **OR** administratively discharged by the military? YES____ NO____

Any applicant who answers “**YES**” to the questions regarding criminal conviction, alcohol/drug abuse/treatment or mental illness **must** provide the Alabama Board of Nursing with a full explanation and the appropriate court/treatment records must accompany the application for examination and licensure. If the documents are not received along with the application, the applicant can expect to be delayed in taking the examination. By a full explanation, the Board expects more than a statement naming the crime for which the applicant was convicted. The explanation should contain a full recitation of who and why the crime occurred and the applicant's history since the crime. If the applicant has indicated a history of mental illness or chemical dependency, a full explanation including treatment records, urine screens, doctor's statements, etc., must be received with the application.

Applicants also should be aware that they must disclose arrests that did not result in convictions and attach those court records. Misdemeanors also must be disclosed. These include checks written on accounts with insufficient funds and DUI. Minor traffic violations are excluded. If the Board of Nursing later learns of arrests or convictions not originally disclosed, such will be considered to be fraud and deceit in procuring a license and disciplinary action will be forthcoming.

The Alabama Board of Nursing will determine whether or not the applicant may write the examination for licensure and be licensed as a registered nurse. Any questions regarding this matter should be directed to the Chairperson of the Nursing Department.

Be advised that a criminal and/or drug history could result in denial of permission to take the licensure examination. These same legal requirements or others may apply to taking the NCLEX-RN in other states.

DRUG TESTING/BACKGROUND CHECKS

As stipulated by the health agencies with which the Department of Nursing contracts for clinical experience, each student accepted in any nursing program at Calhoun Community College will undergo drug and alcohol testing and many undergo background checks as a precondition to beginning a clinical rotation. The fees for the above are the responsibility of the student. Written guidelines for the screening process will be provided to the student upon their acceptance into the program.

POLICIES AND CURRICULUM

Policies/Curriculum for the Associate Degree Nursing Program are subject to change at any time. Written notice will be given to all students enrolled in nursing courses prior to implementation of change.

**ASSOCIATE DEGREE NURSING
BASIC CURRICULUM****SEMESTER I (Fall)**

Course	Semester Hours
MTH 116* Mathematical Applications	3
BIO 201 Human Anatomy and Physiology I	4
NUR 102 Fundamentals of Nursing	6
NUR 103 Health Assessment	1
NUR 104 Introduction to Pharmacology	1
Total	15

***NOTE: A higher math may be accepted with approval**

***Prerequisite:** Satisfactory score on the COMPASS math placement or ACT/SAT tests or appropriate developmental coursework.

SEMESTER II (Spring)

ENG 101* English Composition I	3
BIO 202 Human Anatomy and Physiology II	4
NUR 105 Adult Nursing	8
NUR 106 Maternal and Child Nursing	5
Total	20

***Prerequisite:** Satisfactory score on the COMPASS English placement or ACT/SAT tests or appropriate developmental coursework.

SEMESTER III (Summer)

PSY 200 General Psychology	3
BIO 220 General Microbiology	4
NUR 201 Nursing Through the Lifespan I	5
Total	12

SEMESTER IV (Fall)

SPH 107 Fundamentals of Public Speaking OR	
SPH 116 Interpersonal Communication	3
PSY 210 Human Growth and Development	3
NUR 202 Nursing Through the Lifespan II	6
Total	12

SEMESTER V (Spring)

HUMANITIES ELECTIVE	
(Art, Music, Literature, Religion, Philosophy, Foreign Language, or Drama/Theatre Course)	3
NUR 203 Nursing Through the Lifespan III	6
NUR 204 Transition into Nursing Practice	4
Total	13

TOTAL CREDITS

Nursing courses are offered only on the Decatur campus.

**ASSOCIATE DEGREE NURSING
DELAYED PROGRESSION NURSING
(Alternative Scheduling)****SEMESTER I (Summer)**

NUR 103 Health Assessment	1
NUR 104 Introduction to Pharmacology	1
BIO 201 Human Anatomy & Physiology I	4
MTH 116 Mathematical Applications*	3
Total	9

***NOTE:** A higher math may be accepted with approval

***Prerequisite:** Satisfactory score on the COMPASS math placement or ACT/SAT tests or appropriate developmental coursework.

SEMESTER II (Fall)

NUR 102 Fundamentals of Nursing	6
BIO 202 Human Anatomy & Physiology I	4
Total	10

SEMESTER III (Spring)

NUR 105 Adult Nursing	8
BIO 220 General Microbiology	4
Total	12

SEMESTER IV (Summer)

NUR 106 Maternal & Child Nursing	5
ENG 101 *English Composition I	3
PSY 200 General Psychology	3
Total	11

***Prerequisite:** Satisfactory score on the COMPASS English placement or ACT/SAT test or appropriate development coursework.

SEMESTER V (Fall)

NUR 201 Nursing Through the Lifespan I	5
SPH 107 Fundamentals of Public Speaking OR SPH 116 Interpersonal Communication	3
PSY 210 Human Growth & Development	3
Total	11

SEMESTER VI (Spring)

NUR 202 Nursing Through the Lifespan II	6
HUMANITIES ELECTIVE (Art, Music, Literature, Religion, Philosophy, Foreign Language, or Drama/Theatre Course)	3
Total	9

SEMESTER VII (Summer)

NUR 203 Nursing Through the Lifespan III	6
NUR 204 Transition into Nursing Practice	4
Total	10

TOTAL CREDITS72

ASSOCIATE DEGREE NURSING

Information for Student Applicants:

Minimum admission standards for the Associate Degree Nursing program include:

1. Unconditional admission to the College.
2. Receipt of completed application for the Associate Degree nursing Program by May 30th for the BASIC curriculum and March 1st for the DELAYED PROGRESSION NURSING curriculum.
3. A minimum of 2.50 cumulative GPA for students with previous college work.
4. A minimum of 2.50 high school GPA for students without prior college work (GED acceptable in lieu of high school transcript).
5. Eligibility for:
 - a. English 101 and Math 116 as determined by college policy, and
 - b. BIO 201 during the first term of nursing courses.
6. Good standing with the College.
7. Meeting the essential functions or technical standards required for nursing.
8. A score of 76 or higher on the COMPASS Reading Examination (or related ACT Reading Score of 17 or higher).

Admission to the Associate Degree Nursing Program is competitive, and the number of students is limited by the number of faculty and clinical facilities available. **Meeting minimal requirements does not guarantee acceptance.**

Calculation of Points for Students Meeting Minimum Admission Standards:

After meeting all minimum requirements, applicants are ranked using a point system based on:

- (1) COMPASS Reading scores;
- (2) Points from selected college courses (i.e., BIO 201, BIO 202, BIO 220) or selected high school courses (i.e. Algebra II or higher level math, highest level Biology, Chemistry); and
- (3) Additional points for students currently enrolled or who have previously completed courses at the College (including dual enrollment and/or early college admission).

1. Compass Reading Score (Maximum of 99 points)

COMPASS and ACT scores must be within the past 3 years for consideration. Students not meeting the 76 minimum should seek advisement regarding retesting policies and/or remediation requirements. If student has taken the ACT, the ACT **Reading** score can be used to derive the related Compass score using the crosswalk scores provided by ACT.

**2. Points for Grades in Selected College Courses
Maximum points 90**

	A	B	C
BIO 201	30	20	10
BIO 202	30	20	10
BIO 220	30	20	10

OR

**Points for Grades in Selected High School Courses
Maximum points 90**

	A	B	C
Highest Level Biology (incl. A&P)	30	20	10
Algebra II or Higher Level Math	30	20	10
Chemistry	30	20	10

- 3. Additional points (Maximum 11)** – Students may be awarded up to 11 points as determined by individual college policy and procedures.

A TOTAL OF 200 POINTS ARE POSSIBLE WITH THESE SELECTION CRITERIA.

Nursing Application Process

Application forms may be obtained from the Nursing Department (256/306-2804 or 306-2794) or by writing to the Nursing Department, Calhoun Community College, P. O. Box 2216, Decatur, Alabama 35609-2216.

Prospective students can access Admission Requirements and Applications for the nursing programs by going to www.calhoun.edu. From the homepage, click on ACADEMICS. Under the Division of Health and Natural Sciences, click Nursing, on the left-side menu, click PROSPECTIVE STUDENTS.

- Application must be submitted by May 30th for consideration for fall class.
- Applicants may apply at any time during the year, provided admission criteria are met.
- Applications received after May 30th will be considered for fall enrollment **only as space is available.**
- Applications must be resubmitted annually. A waiting list is no longer maintained.

Programs of Study

SELECTION PROCESS

Since class size is limited, the Admission Committee will evaluate each applicant's academic performance and select applicants with the strongest academic record.

General education core courses are open to any student who meets Calhoun's admission requirements. A grade of "C" or above will be required for passing each course required for the AD Nursing Program. The applicant must maintain at least a "C" average (2.0 grade point average on a 4.0 scale) on all courses taken and/or transferred to Calhoun.

Once enrolled in the program, students must take courses sequentially as outlined. Students must successfully pass each nursing course (NUR Prefix) to progress in the program.

Transfer Students

Applicants desiring to transfer into Calhoun's Associate Degree Nursing Program who have taken nursing courses will be considered on an individual basis and will be required to meet requirements of the nursing program. The applicant must

1. Meet the entry and progression requirements of the institution and the nursing program.
2. Provide evidence that all required general education and nursing courses maintain a grade of C or better taken at another institution and maintain a 2.0 cumulative GPA.
 - a. Alabama Community College System Standardized Nursing Curriculum courses will be transferred without review of the course syllabus.
 - b. Nursing courses from any other institution are accepted only after review by the accepting institution to ensure content consistency.
3. Must be a student in good standing and eligible to return to the previous nursing program.
4. Provide a letter of recommendation from the Dean/Director of the previous program.
5. Complete at least 25% of the total program at the accepting institution.
6. Acceptance of transfer students into nursing programs is limited by the number of faculty and clinical facilities available. Meeting minimal requirements does not guarantee acceptance.
7. Validation of skills and knowledge may be required to determine program placement.

ENROLLMENT REQUIREMENTS

It is recommended that all nursing students be immunized against Hepatitis B prior to entering the first nursing course. At the time of registration for the first nursing course, students will be required to present proof that they have received the three (3) Hepatitis B vaccinations or proof of immunity to the hepatitis virus. (The three immunizations take at least six months to complete). Students who choose not to have these immunizations must sign a form indicating their refusal of the vaccinations prior to being allowed to register for nursing. Additionally, the student must have the following documentation at registration for Semester I to complete the enrollment process in the Associate Degree Nursing Program:

1. Documentation of current cardiopulmonary resuscitation (CPR) course completion.
2. A current Student Health Form that has been completed by a

licensed physician or nurse practitioner. (Form will be furnished when student is notified of admission into the Nursing Program.)

3. Documentation of two-step Mantoux skin test (PPD), or chest x-ray, if PPD is positive, indicating he/she is free of tuberculosis.
4. Verification of immunization for Hepatitis B and/or show positive antibodies, or sign a waiver.
5. Documentation of immunity to rubella (German measles), immunization record or titer level.
6. Proof of purchase of professional liability insurance through the College as outlined by the Nursing Department at Calhoun Community College.
7. As stipulated by the health agencies with which the Department of Nursing contracts for clinical experience, each student accepted into any nursing program at Calhoun Community College will undergo drug and alcohol testing as a precondition to beginning a clinical rotation. The fee for testing is the responsibility of the student. Written guidelines for the screening process will be provided to the student upon his/her acceptance into the program.
8. Students will be expected to perform the essential functions listed as follows.

The Alabama Community College System Nursing Programs Essential Functions

The Alabama Community College System endorses the American's with Disabilities Act. In accordance with College policy, when requested, reasonable accommodations may be provided for individuals with disabilities.

The essential functions delineated below are necessary for nursing program admission, progression and graduation and for the provision of safe and effective nursing care. The essential functions include but are not limited to the ability to:

- 1) Sensory Perception
 - a) Visual
 - i) Observe and discern subtle changes in physical conditions and the environment.
 - ii) Visualize different color spectrums and color changes
 - iii) Read fine print in varying levels of light
 - iv) Read for prolonged periods of time
 - v) Read cursive writing
 - vi) Read at varying distances
 - vii) Read data/information displayed on monitors/equipment
 - b) Auditory
 - i) Interpret monitoring devices
 - ii) Distinguish muffled sounds heard through a stethoscope.
 - iii) Hear and discriminate high and low frequency sounds produced by the body and the environment
 - iv) Effectively hear to communicate with others
 - c) Tactile
 - i) Discern tremors vibrations, pulses, textures, temperature, shapes, size, location and other physical characteristics.

- d) Olfactory
 - i) Detect body odors and odors in the environment
- 2) Communication/Interpersonal Relationships
 - a) Verbally and in writing, engage in a two-way communication and interact effectively with others, from variety of social, emotional, cultural and intellectual backgrounds
 - b) Work effectively in groups
 - c) Work effectively independently
 - d) Discern and interpret nonverbal communication
 - e) Express one's ideas and feelings clearly
 - f) Communicate with others accurately in a timely manner
 - g) Obtain communications from a computer
- 3) Cognitive/Critical Thinking
 - a) Effectively read, write and comprehend the English language
 - b) Consistently and dependably engage in the process of critical thinking in order to formulate and implement safe and ethical nursing decisions in a variety of health care settings
 - c) Demonstrate satisfactory performance on written examinations including mathematical computations without a calculator
 - d) Satisfactorily achieve the program objectives
- 4) Motor Function
 - a) Handle small delicate equipment/objects without extraneous movement, contamination or destruction
 - b) Move, position, turn, transfer, assist with lifting or lift and carry clients without injury to clients, self or others
 - c) Maintain balance from any position
 - d) Stand on both legs
 - e) Coordinate hand/eye movements
 - f) Push/pull heavy objects without injury to client, self or others
 - g) Stand, bend, walk and or sit for 6-12 hours in a clinical setting performing physical activities requiring energy without jeopardizing the safety of the client, self or others
 - h) Walk without a cane, walker or crutches
 - i) Function with hands free for nursing care and transporting items
 - j) Transport self and client without the use of electrical devices
 - k) Flex, abduct and rotate all joints freely
 - l) Respond rapidly to emergency situations
 - m) Maneuver in small areas
 - n) Perform daily care functions for the client
 - o) Coordinate fine and gross motor hand movements to provide safe effective nursing care
 - p) Calibrate/use equipment
 - q) Execute movement required to provide nursing care in all health care settings
 - r) Perform CPR and physical assessment
 - s) Operate a computer
- 5) Professional Behavior
 - a) Convey caring, respect, sensitivity, tact, compassion, empathy, tolerance and a healthy attitude toward others
 - b) Demonstrate a mentally healthy attitude that is age appropriate in relationship to the client
 - c) Handle multiple tasks concurrently
 - d) Perform safe, effective nursing care for clients in a caring context
 - e) Understand and follow the policies and procedures of the College and clinical agencies

- f) Understand the consequences of violating the student code of conduct
- g) Understand that posing a direct threat to others is unacceptable and subjects one to discipline
- h) Meet qualifications for licensure by examination as stipulated by the Alabama Board of Nursing
- i) Not to pose a threat to self or others
- j) Function effectively in situations of uncertainty and stress inherent in providing nursing care
- k) Adapt to changing environments and situations
- l) Remain free of chemical dependency
- m) Report promptly to clinicals and remain for 6-12 hours on the clinical unit
- n) Provide nursing care in an appropriate time frame
- o) Accept responsibility, accountability, and ownership of one's actions
- p) Seek supervision/consultation in a timely manner
- q) Examine and modify one's own behavior when it interferes with nursing care or learning

Transfer students must meet the same requirements for immunizations, student health examination, evidence of current CPR course completion, drug testing and professional liability insurance as other Calhoun Associate Degree Nursing students.

PROGRAM REQUIREMENTS

The following requirements apply to continued progression in the program.

Standards of Conduct

The nursing student shall comply with legal, moral, and legislative standards which determine acceptable behavior of the nurse and shall avoid those behaviors which may be cause for denial of license to practice as a registered nurse, in accordance with the Alabama Law Regulating Practice of Registered and Practical Nursing and the Alabama Board of Nursing Administrative Code.

When there is probable cause, the Nursing Department faculty reserve the right to require a prospective student, a student currently enrolled in the program, or a returning student to submit to psychological testing/counseling, drug screening, and/or a physical examination by a licensed physician at the student's expense and to submit a report of the outcome to the nursing faculty. The Nursing Department will provide a specific form for this purpose, when applicable. All reports may be reviewed by the Nursing Department faculty to determine if a student may be admitted, readmitted, or retained in the nursing program.

In addition, all students admitted to the program are expected to abide by the policies of the COLLEGE CATALOG and the POLICY MANUAL for Associate Degree Nursing students.

Academic Progression

The following standards must be maintained by each student in order for her/him to progress in the nursing program:

1. Maintain a grade of C or better in all required general education and nursing courses and maintain a 2.0 cumulative GPA.
2. Unless completed previously, students must complete all required general education courses according to The Alabama

Programs of Study

- Community College System Nursing Education curriculum. Any exceptions must be approved by the chairperson of the Nursing Department.
- Maintain ability to meet essential functions for nursing with or without reasonable accommodations.
 - Successfully complete the program within 48 months from initial semester for ADN students
 - Maintain current CPR at the health care provider level.
 - If a student withdraws or makes a D or an F in a nursing course, the student cannot progress in the nursing course sequence until the course is repeated successfully. Course repetition will be based on instructor availability and program resources.
 - Students whose progression through the nursing program is interrupted and who desire to be reinstated in the program must schedule an appointment with the chairperson of the Nursing Department to discuss reinstatement. In order to be reinstated, a student must:
 - Apply for readmission to the College if not currently enrolled;
 - Submit a letter to the nursing program Admissions and Progression Committee requesting reinstatement;
 - Submit letter of request in a timely manner so that reinstatement would occur within one year from the term of withdrawal or failure;
 - Demonstrate competency in all previous nursing courses successfully completed;
 - Adhere to nursing curriculum or program policies and procedures effective at the point of reinstatement.
 - Reinstatement to the nursing program is not guaranteed.
 - Reinstatement may be denied due to, but not limited to, any of the following circumstances:
 - Space unavailability of a course in which the student wishes to be reinstated. (Students in regular progression have enrollment priorities for clinical sites.)
 - Grade point average is less than 2.0 from courses completed at current institution.
 - Refusal by clinical agencies to accept the student for clinical experiences.
 - Failure to demonstrate competency in all previous nursing courses successfully completed.
 - Over twelve months have elapsed since the student was enrolled in a nursing course.
 - Student has been dismissed from the program.
 - A total of two unsuccessful attempts (D, F, or withdrawal) in nursing courses will result in dismissal from the nursing program. Withdrawal and/or a D or F in one or more courses in a term will be considered one attempt.
 - If a student has been dismissed from the associate degree nursing program, the student may apply for admission to the practical nursing program. If a student has been dismissed from the mobility program, the student may apply for admission to the generic program.
 - A student who has been dismissed from a specific program (ADN/PN/Mobility) can apply for admission as a new student to any nursing program within the Alabama Community College System, provided:
 - the student meets current entry requirements;
 - at least two years have elapsed since the student's dismissal from a specific program; and
 - the student was not dismissed from the previous program for disciplinary reasons or for unsafe/unsatisfactory client care in the clinical area.
 - Students dismissed from the previous program for disciplinary

reasons and/or unsafe/unsatisfactory client care in the clinical area will not be allowed reinstatement to the nursing program.

- Students receiving an "I" in a NUR course must complete all course requirements before the time to start clinical experience in the next semester. Any exceptions made must have the approval of the Department Chairperson.

A current Student Health Examination form on all students must be maintained on file throughout the program.

Evidence of annual cardiopulmonary resuscitation (CPR) course completion must be maintained by all students throughout the program.

Nursing students must have professional liability insurance coverage as outlined by the Nursing Department of Calhoun Community College.

Completion of the ADN Program must be within 48 months of admission to the first NUR nursing course. If the program is not completed within the 48 month time frame, the student must follow the procedure for admission policy. All previously taken NUR courses must be repeated. The date of the first NUR course will be considered to be the date the course that it is equivalent to was taken.

Grading

The grading scale for NUR courses is as follows:

Passing for nursing students

A = 90-100%

B = 80-89%

C = 75-79%

Failing for nursing students

D = 60-74%

F = 59% and below

A minimum letter grade of "C" is required in all nursing (NUR) courses for passing and progressing to the next nursing course. In order to receive a letter grade of "C," a grade of 75 or above will be required for any nursing course taken.

Readmission Requirements

Eligible students desiring to be readmitted to the nursing program must contact the secretary of the Nursing Department (256) 306-2794 to make an appointment with a nursing faculty advisor to discuss readmission plans. The student should obtain a current, unofficial copy of his/her transcript from the records office to bring with him/her to the meeting with the nursing faculty advisor. For readmission into the fall and summer semesters, the Request for Readmission form must be received in the Nursing Department office by April 15th prior to the fall semester to be readmitted. For readmission into the spring semester, the Request for Readmission form must be received in the Nursing Department office by October 15th prior to the spring semester to be readmitted. All readmitted students are accepted in the nursing program based on

- Fulfillment of admissions criteria.
- Availability of class space.
- Placement on a waiting list.

Effective fall semester 2003, students who have withdrawn from NUR 102, Fundamentals of Nursing, may re-enter the nursing program **ONE TIME** only following re-admission advising. If the student withdraws from NUR 102 a second time or does not enter after one (1) readmission advising conference, the student will be required to go through the application process to the nursing program as a beginning student.

A student who has been terminated from the nursing program due to disciplinary action and who wishes to be readmitted to the program must request in writing a hearing before a nursing faculty review committee. The outcome of this hearing will determine eligibility for readmission.

Program Costs

After entry into the program, the student will be required to

1. purchase Nurse Pacs (equipment/supplies) through the Calhoun College Bookstore.
2. provide his/her own transportation to area clinical facilities.

Additional expenses include:

Textbooks (Nursing)	\$700.00
Uniforms & Supplies	175.00
Malpractice Insurance (per year)	25.00
Drug Testing	45.00
Nurse Pacs	75.00
Total Testing	75.00 each semester
Graduation Pictures	35.00
National Council Licensure Examination	200.00
Licensing Fee	85.00
Alabama Temporary Licensing Fee (Optional)	50.00
Graduation Fees	35.00
CPR	35.00
Health Exams, PPD, and Immunizations (Cost Varies)	
Tuition (See General Information Section in this Catalog)	
Background testing	60.00

Graduation

To graduate, a student must successfully complete the prescribed program of study with a 2.00 overall Grade Point Average (GPA).

PHILOSOPHY AND OBJECTIVES

The philosophy of the nursing programs is consistent with the mission, goals and objectives of The Alabama Community College System. The programs provide curricula to develop the knowledge, skills, and abilities necessary for entry level employment in practical and professional nursing. The nursing faculty endorses the following beliefs:

Maslow's theory is the foundation for the program of learning. According to Maslow, all individuals have similar needs arranged in a hierarchy with higher needs emerging as basic physiological needs are met. Individuals are unique biological, psychosocial and spiritual beings who strive to meet holistic needs. Each individual has the right to make informed decisions about one's health in a technologically changing society. Society, a complex system that influences culture, values, and beliefs, provides direction and meaning to an individual's experiences throughout the lifespan.

Health, which is individually perceived, exists when needs are met. Ranging on a continuum from highest level wellness to death, health is a dynamic state. The goals of health care are to promote, maintain, and restore health.

Nursing is an art, as well as, a science in which the holistic needs of the individual are met through utilization of the nursing process in a variety of settings. The nursing process incorporates scientific principles, interpersonal and psychomotor skills. The practice of nursing takes place in an ever changing health care system and requires caring, critical thinking, competency, legal/ethical accountability, dedication to an evolving body of knowledge, life long learning and client advocacy.

The teaching-learning process is a shared responsibility between faculty and students where faculty serve as facilitators of learning. The successful teaching-learning process requires an environment that promotes learning, considers the needs of the individual, and provides opportunities for student participation and educational goal attainment. The learning process is based on principles of critical thinking and is enhanced by the presentation of information from simple to complex. Learning is achieved when there is evidence of a change in behavior within the cognitive, affective, and/or psychomotor domains. Individuals have the right to achieve self-actualization and society provides educational opportunities.

Nursing education is a learner-centered process which combines general education and nursing courses to prepare the individual for the practice of nursing. Incorporating a program of learning, a variety of instructional methodologies, and available resources, nursing education fosters competency, accountability and continued professional development. Learning is a life long process which promotes professionalism and is beneficial for the learner and society.

Threads Integrated Throughout Curriculum

1. Critical Thinking
2. Communication
3. Nutrition
4. Pharmacology
5. Cultural Diversity
6. Lifespan
7. Pathophysiology
8. Technology
9. Teaching / Learning
10. Legal / Ethical
11. Roles of the Nurse

PROGRAM OBJECTIVES

At completion of program, the associate degree nursing graduate will be able to:

1. Demonstrate proficiency in performing advanced nursing skills for individuals with health alterations in a variety of settings.
2. Apply therapeutic communication techniques in providing advanced nursing care for clients throughout the lifespan.
3. Apply foundational knowledge of the nursing process in providing advanced nursing care for clients throughout the lifespan.
4. Utilize critical thinking skills in providing collaborative care for clients with selected health alterations in a variety of settings.
5. Formulate a teaching/learning plan for culturally diverse clients with selected health alterations in a variety of settings.
6. Demonstrate competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process.
7. Examine relevant technology for client care and documentation.
8. Demonstrate professional behaviors and roles of a registered nurse upon entry into practice.

CAREER OPPORTUNITIES

Graduates of the Calhoun Associate Degree Nursing Program have been employed by hospitals, physicians' offices, industry, nursing homes, long-term health care facilities, and other community health care agencies. Over the past three years, 100% of the students graduating from the program who sought employment have secured employment as graduate nurses at the time of graduation. The starting base salary range for a new graduate Associate Degree nurse is approximately \$15.00-\$18.00 an hour. The starting base salary range for a new Practical Nurse is approximately \$11.00 - \$14.50 an hour. Additional information related to occupational outlook may be

Programs of Study

obtained from the Calhoun Career Planning and Job Placement Center, located in the Chasteen Student Center on the Decatur campus. References available include the following:

OCCUPATIONAL OUTLOOK HANDBOOK, updated annually

FINNEY COMPANY OCCUPATIONAL BRIEFS, updated as updates are available

DICTIONARY OF OCCUPATIONAL TITLES, updated as updates are available

CAREERS PLACEMENT COUNCIL SALARY SURVEYS, quarterly updates received

CAREER CLUSTER FILE, Careers, Inc., updated as updates are made available

COLLEGE PLACEMENT ANNUALS, provided yearly through College Placement Council membership

NURSING/ADN: CAREER MOBILITY

Associate of Applied Science Degree

Program Code: AP.NURCM

CIP Code: 51.1601

This nursing curriculum is designed for those persons who are graduates of a practical nursing program and who desire to pursue further study toward an Associate in Applied Science degree in nursing. The program is accredited by the National League for Nursing Accreditation Commission and has the full approval of the Alabama Board of Nursing.

Upon satisfactory completion of the requirements of the Nursing program, the graduate will be eligible to apply to write the National Council Licensure Examination and apply to a state Board of Nursing for licensure as a registered nurse. Legal requirements for licensure may be found in the Alabama Board of Nursing Administrative Code. Applicants who have been found guilty of any offenses listed in the Code may be denied licensure by the Alabama Board of Nursing. Any applicant who has had a criminal conviction, alcohol and/or drug abuse/treatment or mental illness must provide the Alabama Board of Nursing with a full explanation and the appropriate court/treatment records at the time of application for examination and licensure. The Alabama Board of Nursing will determine whether or not the applicant may write the examination for licensure and be licensed as a registered nurse.

General education and nursing courses must be taken in the sequence listed unless general education courses are taken prior to the semester in which they are required. All students must take the nursing courses as listed in this Catalog regardless of when they begin course work at this college.

Nursing courses are offered only on the Decatur campus.

POLICIES/CURRICULUM

Policies/curriculum for the Nursing Department are subject to change at any time. Written notice will be given to all students enrolled in NUR courses prior to implementation of policy/curriculum changes. Program objectives for the Career Mobility Program are the same as those listed under the Basic Program.

Prerequisite Courses (Prior to NUR 201):

- MTH 116 or Higher Level Mathematical Applications (3 credit hours)
- BIO 201 Human Anatomy and Physiology I (4 credit hours)
- BIO 202 Human Anatomy and Physiology II (4 credit hours)
- ENG 101 English Composition (3 credit hours)

Total Prerequisites:14 credit hours

FIRST TERM (SPRING)

NUR 200 Nursing Career Mobility Assessment6

SECOND TERM (SUMMER)

PSY 200 General Psychology3

BIO 220 General Microbiology4

NUR 201 Nursing Through the Lifespan I5

Total12

THIRD TERM (FALL)

SPH 107 Fundamentals of Public Speaking **OR**

SPH 116 Introduction to Interpersonal Communication3

PSY 210 Human Growth and Development3

NUR 202 Nursing Through the Lifespan II6

Total12

FOURTH TERM (SPRING)

Humanities Elective3

NUR 203 Nursing Through the Lifespan III6

NUR 204 Role Transition for the Registered Nurse4

Total13

TOTAL57

Non-traditional Credits15

TOTAL CREDITS72

ADMISSION POLICY

Minimum admission standards for the Associate Degree Nursing Program include:

1. Unconditional admission to the college.
2. Receipt of completed application for the Career Mobility Program by **October 15th**.
3. A minimum of **2.50** cumulative Grade Point Average (GPA) for students with previous college work.
4. Completion of prerequisite courses before taking NUR 201 (MTH 116 or higher math, BIO 201 & 202, ENG 101).
5. Good standing with college.
6. Meeting the essential functions or technical standards required for nursing.
7. A score of **76 or higher** on the **COMPASS** Reading Examination (or related ACT Reading Score of 17 or higher).

Admission to the Associate Degree Nursing Career Mobility Program is competitive, and the number of students is limited by the number of faculty and clinical facilities available. Meeting minimum requirements does not guarantee acceptance.

Calculation of Points for Students Meeting Minimum Admission Standards:

After meeting all minimum requirements, applicants are rank-ordered using a point system based on:

- (1) COMPASS Reading scores;
- (2) Points from selected college courses (i.e., BIO 201, BIO 202, BIO 220) or selected high school courses (i.e. Algebra II or higher level math, highest level Biology, Chemistry); and
- (3) Additional points for students currently enrolled or who have previously completed courses at Calhoun (including dual enrollment and/or early college admission).

1. Compass Reading Score (Maximum of 99 points)

COMPASS and ACT scores must be within the past 3 years for consideration. Students not meeting the 76 minimum should seek advisement regarding retesting policies and/or remediation requirements. If student has taken the ACT, the ACT Reading score can be used to derive the related Compass score using the crosswalk scores provided by ACT.

2. Points for Grades in Selected College Courses
Maximum points 90

	A	B	C
BIO 201	30	20	10
BIO 202	30	20	10
BIO 220	30	20	10

OR

Points for Grades in Selected High School Courses
Maximum points 90

	A	B	C
Highest Level Biology (incl. A&P)	30	20	10
Algebra II or Higher Level Math	30	20	10
Chemistry	30	20	10

3. Additional points (Maximum 11) – Students may be awarded up to 11 points for previously completed courses at Calhoun.

A TOTAL OF 200 POINTS ARE POSSIBLE WITH THESE SELECTION CRITERIA.

Please note the following additional Career Mobility requirements:

- Graduates of the approved Alabama Community College System PN standardized curriculum (Calhoun graduates of August 2005, and after) may be eligible to enter the ADN program during the third (3rd) semester without taking NUR 200 if graduation occurred within the previous two years. All other Licensed Practical Nurses must successfully complete NSG 200.
- For progression into NUR 201, students must have documentation of employment as an LPN for a minimum of 500 clock hours within the 12 months prior to admission. Employer verification will be required for this criteria.
- All students must have a valid unencumbered Alabama practical nurse license.

Students must satisfactorily pass knowledge assessments with-in two attempts before attempting skill validations. Students are given two attempts for all assessments. Students must pass both knowledge assessments and all skill validations to be considered for eligibility into the ADN program. Satisfactory completion of knowledge and skill validations is on a pass/fail stan-

dard set by the Alabama Community College System.

Students are expected to utilize relevant technology in preparing for assessments.

Students applying for admission to career mobility tracks will be assessed and placed in rank order prior to admission into NUR 200.

For students who completed the Standardized ACS Nursing curriculum more than 2 years prior to application for admission to Career Mobility or for students who have graduated from any other PN curriculum. There will be a limited number of available slots. The number of slots available in NUR 200 and NUR 201 will be at the discretion of the college.

For students completing the Standardized ACS Nursing curriculum within the previous 2 years. Students must meet progression criteria for NUR 201. The number of slots available will be at the discretion of the college. *If you have completed LPN curriculum in the last two years, NUR 200 will not be required. Each student will still be required to meet the 500 work hours.*

***Note: Refer to policies under Associate Degree Nursing.**

PRACTICAL NURSING

Certificate

Program Code: CT.LPN

CIP Code: 51.1613

Licensed Practical Nurses (LPNs) represent the second largest health care providing group in America, after RNs. LPNs provide direct patient care under the supervision of an RN, physician or dentist. They perform a variety of nursing functions requiring communication skills, critical thinking, decision making, and sound judgment. LPNs work in hospitals, long term care facilities, home health care, physician/dentist offices and other settings. Practical nurses have a vital role in affecting the quality and effectiveness of health care.

The Practical Nursing program at Calhoun is a Certificate program of study. It was established in 1953 to provide a program for the educational preparation of the Licensed Practical Nurse. The program has the full approval of the Alabama Board of Nursing. It is accredited by the National League for Nursing. Accreditation information regarding the nursing program may be obtained from the National League for Nursing Accrediting Commission, 61 Broadway 33rd Floor, New York, New York, 10006, 1-800-669-1656, ext. 153.

Graduates of this curriculum will be eligible to apply to take the licensing examination, NCLEX-PN, through which they achieve the designation of licensed practical nurse.

Completion of the practical nursing curriculum requires three (3) semesters of study for a total of 43 credit hours. Courses must be taken in sequential order as designated. Enrollment is limited.

The practical nursing curriculum revolves around technical excellence utilizing the nursing process as a means by which students relate theory to practice. It incorporates the knowledge, values, and skills required for safe, effective patient care in practical nursing practice.

Programs of Study

Ethical and legal accountability are stressed.

The practical nursing program at Calhoun is for those individuals who are service oriented, intellectually mature with a strong sense of self direction and motivation and who are able to work and interact with people of all ages and from various backgrounds.

PHILOSOPHY AND OBJECTIVES

The philosophy of the nursing programs is consistent with the mission, goals and objectives of The Alabama Community College System. The programs provide curricula to develop the knowledge, skills, and abilities necessary for entry level employment in practical and professional nursing. The nursing faculty endorses the following beliefs:

Maslow's theory is the foundation for the program of learning. According to Maslow, all individuals have similar needs arranged in a hierarchy with higher needs emerging as basic physiological needs are met. Individuals are unique biological, psychosocial and spiritual beings who strive to meet holistic needs. Each individual has the right to make informed decisions about one's health in a technologically changing society. Society, a complex system that influences culture, values, and beliefs, provides direction and meaning to an individual's experiences throughout the lifespan.

Health, which is individually perceived, exists when needs are met. Ranging on a continuum from highest level wellness to death, health is a dynamic state. The goals of health care are to promote, maintain, and restore health.

Nursing is an art as well as a science in which the holistic needs of the individual are met through utilization of the nursing process in a variety of settings. The nursing process incorporates scientific principles, interpersonal and psychomotor skills. The practice of nursing takes place in an ever changing health care system and requires caring, critical thinking, competency, legal/ethical accountability, dedication to an evolving body of knowledge, life long learning and client advocacy.

The teaching-learning process is a shared responsibility between faculty and students where faculty serve as facilitators of learning. The successful teaching-learning process requires an environment that promotes learning, considers the needs of the individual, and provides opportunities for student participation and educational goal attainment. The learning process is based on principles of critical thinking and is enhanced by the presentation of information from simple to complex. Learning is achieved when there is evidence of a change in behavior within the cognitive, affective, and/or psychomotor domains. Individuals have the right to achieve self-actualization and society provides educational opportunities.

Nursing education is a learner-centered process which combines general education and nursing courses to prepare the individual for the practice of nursing. Incorporating a program of learning, a variety of instructional methodologies, and available resources, nursing education fosters competency, accountability and continued professional development. Learning is a life long process which promotes professionalism and is beneficial for the learner and society.

Threads Integrated Throughout Curriculum

1. Critical Thinking
2. Communication
3. Nutrition
4. Pharmacology

5. Cultural Diversity
6. Lifespan
7. Pathophysiology
8. Technology
9. Teaching / Learning
10. Legal / Ethical
11. Roles of the Nurse

PRACTICAL NURSING Certificate

SEMESTER I (Fall)

Course	Semester Hours
MTH 116* Mathematical Applications	3
BIO 201 Human Anatomy and Physiology I.....	4
NUR 102 Fundamentals of Nursing	6
NUR 103 Health Assessment	1
NUR 104 Introduction to Pharmacology	1
Total	15

***NOTE: A higher math may be accepted with approval**

***Prerequisite:** Satisfactory score on the COMPASS math placement or ACT/SAT tests or appropriate developmental coursework.

SEMESTER II (Spring)

ENG 101* English Composition I	3
BIO 202 Human Anatomy and Physiology II	4
NUR 105 Adult Nursing.....	8
NUR 106 Maternal and Child Nursing.....	5
Total	20

***Prerequisite:** Satisfactory score on the COMPASS English placement or ACT/SAT tests or appropriate developmental coursework.

SEMESTER III (Summer)

NUR 107 Adult/Child Nursing.....	8
NUR 108 Psychosocial Nursing	3
NUR 109 Role Transition.....	3
Total	14

TOTAL CREDITS.....49

***Beginning Fall 2008, Practical Nursing students will be required to take BIO 201 and BIO 202, Anatomy and Physiology I and II.**

ADMISSION POLICY PRACTICAL NURSING

Prospective students can access Admission Requirements and Applications for the nursing programs by going to www.calhoun.edu. From the homepage, click on ACADEMICS. Under the Division of Health and Natural Sciences, click Nursing, on the left-side menu, click PROSPECTIVE STUDENTS.

Information for Student Applicants:

Minimum admission standards for the Practical Nursing Program include:

1. Unconditional admission to the college.
2. Receipt of completed application for the Practical Nursing by May 30th.
3. A minimum of 2.50 cumulative GPA for students with previous college work.

4. A minimum of 2.50 high school GPA for student without prior college work (GED acceptable to lieu of high school transcript).
5. Eligibility for English 101 and Math 116 as determined by college policy.
6. Good standing with the college.
7. Meeting the essential functions or technical standards required for nursing.
8. A score of 76 or higher on the COMPASS Reading Examination (or related ACT Reading Score of 17 or higher).

Admission to the Practical Nursing Program is competitive, and the number of students is limited by the number of faculty and clinical facilities available. **Meeting minimal requirements does not guarantee acceptance.**

Calculation of Points for Students Meeting Minimum Admission Standards:

After meeting all minimum requirements, applicants are rank-ordered using a point system based on:

- (1) COMPASS Reading scores;
- (2) Points from selected college courses (i.e., ENG 101, MTH 116) or selected high school courses (i.e. Algebra II or higher level math, highest level Biology, Chemistry); and
- (3) Additional points for students currently enrolled or who have previously completed courses at the college (including dual enrollment and/or early college admission).

1. Compass Reading Score (Maximum of 99 points)

COMPASS and ACT scores must be within the past 3 years for consideration. Students not meeting the 76 minimum should seek advisement regarding retesting policies and/or remediation requirements. If student has taken the ACT, the ACT Reading score can be used to derive the related Compass score using the crosswalk scores provided by ACT.

**2. Points for Grades in Selected College Courses
Maximum points 90**

	A	B	C
ENG 101	30	20	10
MTH 116 or higher level Math	30	20	10

OR

**Points for Grades in Selected High School Courses
Maximum points 90**

	A	B	C
Highest Level Biology (incl. A&P)	30	20	10
Algebra II or Higher Level Math	30	20	10

- 3. Additional points (Maximum 11)** – Students may be awarded up to 11 points as determined by individual college policy and procedures.

A TOTAL OF 170 POINTS ARE POSSIBLE WITH THESE SELECTION CRITERIA.

PRACTICAL NURSING ENROLLMENT REQUIREMENTS

It is recommended that all nursing students be immunized against Hepatitis B prior to entering the first nursing course. At the time of registration for the first nursing course, students will be required to

present proof that they have received the three (3) Hepatitis B vaccinations or proof of immunity to the hepatitis virus. (The three immunizations take at least six months to complete). Students who choose not to have these immunizations must sign a form indicating their refusal of the vaccinations prior to being allowed to register for nursing. Additionally, the student must have the following documentation at registration for Semester I to complete the enrollment process in the Practical Nursing Program:

1. Documentation of current cardiopulmonary resuscitation (CPR) course completion.
2. A current Student Health Form that has been completed by a licensed physician or nurse practitioner. (form will be furnished when student is notified of admission into the Nursing Program)
3. Documentation of two-step Mantoux skin test (PPD), or chest x-ray, if PPD is positive, indicating he/she is free of tuberculosis.
4. Verification of immunization for Hepatitis B and/or show positive antibodies, or sign a waiver.
5. Documentation of immunity to rubella (German Measles), immunization record or titer level.
6. Proof of purchase of professional liability insurance through the College as outlined by the Nursing Department at Calhoun Community College.
7. As stipulated by the health agencies with which the Nursing Department contracts for clinical experience, each student accepted in any nursing program at Calhoun Community College will undergo drug and alcohol testing as a precondition to beginning a clinical rotation. The fee for testing is the responsibility of the student. Written guidelines for the screening process will be provided to the student upon his/her acceptance into the program.

PROGRAM REQUIREMENTS

The following requirements apply to continued progression in the program.

Standards of Conduct

The nursing student shall comply with legal, moral, and legislative standards which determine acceptable behavior of the nurse and shall avoid those behaviors which may be cause for denial of license to practice as a practical nurse, in accordance with the Alabama Law Regulating Practice of Registered and Practical Nursing and the Alabama Board of Nursing Administrative Code.

When there is a probable cause, the Nursing Department faculty reserves the right to require a prospective student, a student currently enrolled in the program, or a returning student to submit to psychological testing/counseling, drug screening, and/or a physical examination by a licensed physical at the student's expense and to submit a report of the outcome to the nursing faculty. The Nursing Department will provide a specific form for this purpose, when applicable. All reports may be reviewed by the Nursing Department faculty to determine if a student may be admitted, readmitted, or retained in the nursing program.

In addition, all students admitted to the program are expected to abide by the policies of the COLLEGE CATALOG and the POLICY MANUAL for Practical Nursing students.

Academic Progression

The following standards must be maintained by each student in order

Programs of Study

for her/him to progress in the nursing program:

1. Maintain a grade of C or better in all required general education and nursing courses and maintain a 2.0 cumulative GPA.
2. Unless completed previously, students must complete all required general education courses according to The Alabama Community College System Nursing Education curriculum. Any exceptions must be approved by the nursing program director.
3. Maintain ability to meet essential functions for nursing with or without reasonable accommodations.
4. Students must successfully complete the program within 24 months from initial semester for PN and Mobility students
5. Maintain current CPR at the health care provider level.
6. If a student withdraws or makes a D or an F in a nursing course, the student cannot progress in the nursing course sequence until the course is repeated successfully. Course repetition will be based on instructor availability and program resources.
7. Students whose progression through the nursing program is interrupted and who desire to be reinstated in the program must schedule an appointment with a nursing faculty advisor to discuss reinstatement. In order to be reinstated, a student must:
 - a. Apply for readmission to the college if not currently enrolled;
 - b. Submit a letter requesting reinstatement to the nursing program Admissions and Progression Committee;
 - c. Submit letter of request in a timely manner so that reinstatement would occur within one year from the term of withdrawal or failure;
 - d. Demonstrate competency in all previous nursing courses successfully completed;
 - e. Adhere to nursing curriculum or program policies and procedures effective at the point of reinstatement.
8. Reinstatement to the nursing program is not guaranteed.
9. Reinstatement may be denied due to, but not limited to, any of the following circumstances:
 - a. Space unavailability of a course in which the student wishes to be reinstated. (Students in regular progression have enrollment priorities for clinical sites.)
 - b. Grade point average is less than 2.0 from courses completed at current institution.
 - c. Refusal by clinical agencies to accept the student for clinical experiences.
 - d. Failure to demonstrate competency in all previous nursing courses successfully completed.
 - e. Over twelve months have elapsed since the student was enrolled in a nursing course.
 - f. Student has been dismissed from the program.
10. A total of two unsuccessful attempts (D, F, or withdrawal) in nursing courses will result in dismissal from the nursing program. Withdrawal and/or a D or F in one or more courses in a term will be considered one attempt.
11. If a student has been dismissed from the associate degree nursing program, the student may apply for admission to the practical nursing program. If a student has been dismissed from the mobility program, the student may apply for admission to the generic program.
12. A student who has been dismissed from a specific program (ADN/PN/Mobility) can apply for admission as a new student to any nursing program within the Alabama Community College System, provided:
 - a. the student meets current entry requirements;
 - b. at least two years have elapsed since the student's dismissal from a specific program; and
 - c. the student was not dismissed from the previous program

for disciplinary reasons or for unsafe/unsatisfactory client care in the clinical area.

13. Students dismissed from the previous program for disciplinary reasons and/or unsafe/unsatisfactory client care in the clinical area will not be allowed reinstatement to the nursing program.

A current Student Health Examination form on all students must be maintained on file throughout the program.

Nursing students must have professional liability insurance coverage as outlined by the Nursing Department at Calhoun Community College.

POLICIES/CURRICULUM

Policies/curriculum for Practical Nursing is subject to change at any time. Written notice will be given to all students enrolled in the LPN program prior to implementation of change.

Readmission:

The readmission of a student is based on availability of space and student-teacher ratio, provided the student is eligible to return. The student will be readmitted one time only following failure of a nursing course with a clinical lab component. The student must complete the program within 24 months of initial admission date.

After two years have lapsed since a student has attended the Practical Nursing Program, the student has an option of reentering the program as a new student. The student will take all required NUR courses listed in the curriculum at the time of admission. The student will be required to meet all program requirements.

Any student requesting readmission must have a minimum Grade Point Average of 2.00 on all course work attempted.

A Student Health Examination Form will be required as well as liability insurance renewal, tuberculin skin testing (PPD) and CPR course completion.

TRANSFER STUDENTS

Applicants desiring to transfer into Calhoun's Practical Nursing Program who have taken nursing courses will be considered on an individual basis and will be required to meet requirements of the nursing program. The applicant must

1. Meet the entry and progression requirements of the institution and the nursing program.
2. Provide evidence that all required general education and nursing courses maintain a grade of C or better taken at another institution and maintain a 2.0 cumulative GPA.
 - a. Alabama Community College System Standardized Nursing Curriculum courses will be transferred without review of the course syllabus.
 - b. Nursing courses from any other institution are accepted only after review by the accepting institution to ensure content consistency.
3. Must be a student in good standing and eligible to return to the previous nursing program.
4. Provide a letter of recommendation from the Dean/Director of the previous program.

5. Complete at least 25% of the total program at the accepting institution.
6. Acceptance of transfer students into nursing programs is limited by the number of faculty and clinical facilities available. Meeting minimal requirements does not guarantee acceptance.
7. Validation of skills and knowledge may be required to determine program placement.

AUDIT

Students auditing a Practical Nursing course will not be allowed to attend any clinical labs nor to take or review any course exams. They will not be required to have the mandatory Student Health Examination nor the PPD skin testing and hepatitis vaccinations. They will not be required to complete a cardiopulmonary resuscitation course or pay liability insurance.

GRADING STANDARD

The grading scale for practical nursing courses (LPN prefixes) is as follows (Note: 75% or above is passing.):

Passing for PN students

A = 90 - 100%
B = 80 - 89%
C = 75 - 79%

Failing for PN students

D = 60 - 74%
F = 59% and below

PRACTICAL NURSING PROGRAM ESTIMATED COSTS

Tuition: See College Catalog under Financial Information

Malpractice Insurance (per year).....	\$ 25.00
Total Testing	75.00 per semester
Graduation Fees	35.00
NCLEX Fee.....	200.00
Licensure Fee	75.00
Temporary License (optional)	50.00
Textbooks (approximate)	\$540.00
Nurse Pacs	75.00
Uniforms (approximate)	124.00
Health Exams, PPD, Immunizations	Cost Varies
CPR Course.....	35.00
Drug Testing.....	45.00
Graduation Pictures.....	35.00
Background testing	50.00

GRADUATION

To graduate, a student must successfully complete the prescribed program of study with a 2.0 overall Grade Point Average (GPA).

CAREER MOBILITY

Graduates of the Practical Nursing program who pass the NCLEX-PN examination and want to continue nursing education are referred to in the section on Career Mobility, Associate Degree Nursing program.

LICENSURE

Upon satisfactory completion of the requirements of the Nursing pro-

gram, the graduate will be eligible to apply to take the National Council Licensure Examination and apply to a state Board of Nursing for licensure as a practical nurse. Legal requirements for licensure may be found in the Alabama Board of Nursing Administrative Code 1982 (Reprinted 1992).

Grounds for denial of an RN or LPN license by examination include but are not limited to:

1. conviction of a felony.
2. conviction of a misdemeanor or felony involving moral turpitude or gross immorality.
3. conviction of a state or federal law related to controlled substances (may be either a misdemeanor or a felony).
4. failure to show good moral character as pertaining to nursing.
5. abuse of, or addiction to, alcohol or other drugs.
6. being mentally incompetent.
7. unprofessional conduct.
8. false representation of facts on application for licensure.

(Code of Alabama, 1975, Section 34-21-25; Alabama Board of Nursing Administrative Code 610-X-8-.01 and 610-X-8-.05)

Upon application for licensure, the individual will be required to answer the following questions found on the application:

Have you ever been arrested or convicted of a criminal offense other than a minor moving traffic violation? YES_____ NO_____

Have you within the last 5 years abused drugs/alcohol or been treated for dependency to alcohol or illegal chemical substances? YES_____ NO_____

Have you ever been arrested or convicted for driving under the influence of drugs/alcohol? YES_____ NO_____

Have you within the last 5 years received inpatient or outpatient treatment or been recommended to seek treatment for mental illness? YES_____ NO_____

Have you ever had disciplinary action or is action pending against you by any state board of nursing? YES_____ NO_____

*Have you ever been placed on a state **AND/OR** federal abuse registry? YES_____ NO_____*

*Have you ever been court-martialed/disciplined **OR** administratively discharged by the military? YES_____ NO_____*

Any applicant who answers "YES" to the questions regarding criminal conviction, alcohol/drug abuse/treatment or mental illness must provide the Alabama Board of Nursing with a full explanation and the appropriate court/treatment records must accompany the application for examination and licensure. If the documents are not received along with the application, the applicant can expect to be delayed in taking the examination. By a full explanation, the Board expects more than a statement naming the crime for which the applicant was convicted. The explanation should contain a full recitation of who and why the crime occurred and the applicant's history since the crime. If the applicant has indicated a history of mental illness or chemical dependency, a full explanation including treatment records, urine screens, doctor's statements, etc., must be received with the application.

Programs of Study

Applicants also should be aware that they must disclose arrests that did not result in convictions and attach those court records. Misdemeanors also must be disclosed. These include checks written on accounts with insufficient funds and DUI. Minor traffic violations are excluded. If the Board of Nursing later learns of arrests or convictions not originally disclosed, such will be considered to be fraud and deceit in procuring a license and disciplinary action will be forthcoming.

The Alabama Board of Nursing will determine whether or not the applicant may write the examination for licensure and be licensed as a practical nurse. Any questions regarding this matter should be directed to the Chairperson of the Nursing Department.

Be advised that a criminal and/or drug history could result in denial of permission to take the licensure examination.

These same legal requirements or others may apply to taking the NCLEX-PN in other states.

Drug Testing

As stipulated by the health agencies with which the Department of Nursing contracts for clinical experience, each student accepted in any nursing program at Calhoun Community College will undergo drug and alcohol testing as a precondition to beginning a clinical rotation. The fee for testing is the responsibility of the student. Written guidelines for the screening process will be provided to the student upon their acceptance into the program.

PARALEGAL STUDIES

Associate of Applied Science Degree

Program Code: AP.PRL

CIP Code: 22.0302

This program prepares students for entry level paralegal positions with such law-related employers as law firms, government agencies, financial institutions, and real estate firms.

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Math Elective (MTH 100 or higher)	3
SPH 107 Fundamentals of Public Speaking	3
CIS 146 Microcomputer Applications	3
Natural Science Elective	4
Humanities Elective	3
Social Science Electives (HIS 101 & 102, or PSY 200 or SOC 200 and POL 200, 211 or 220)	6
TOTAL	29

MAJOR COURSE REQUIREMENTS

BUS 215 Business Communications	3
*PRL 101 Introduction or Paralegal Study	3
*PRL 102 Basic legal Research & Writing	3
PRL 150 Commercial Law or BUS 263 Legal & Social Environment of Business	3

PRL 160 Criminal Law and Procedure or CRJ 140 Criminal Law and Procedure	3
PRL 210 Introduction to Real Property Law or RLS 125 Real Estate Law	3
PRL 230 Domestic Law	3
PRL 240 Wills, Trusts & Estates	3
PRL 262 Civil Law & Procedures	3
PRL 282 Law Office Management & Procedure	3
CIS 147 Advanced Microcomputer Applications or **PRL 291 Paralegal Internship	3
TOTAL	33

TOTAL CREDITS62

* PRL 101 and PRL 102 must be taken before any other courses with the PRL prefix, except that PRL 101 and 102 may be taken concurrently

**Prerequisites are PRL 101, PRL 102, PRL 262, and permission of the program director.

SECURITY

Certificate

Program Code: CT.SECURITY

CIP Code: 43.0107

The Certificate in Security prepares students to enter many of the varied fields of private security, or may be used to improve the competencies of professionals already employed in the field.

ORI 101 Orientation to College	1
COM 100 Introductory Technical English I OR ENG 101 English Composition I	3
CIS 146 Microcomputer Applications	3
CRJ 160 Introduction to Security	3
CRJ 166 Private and Retail Security	3
CRJ 168 International Security	3
CRJ 169 Security Management	3
CRJ 170 Introduction to Physical Security	3
CRJ 171 Security Risk Management	3
CRJ 290 Special Topics	2

TOTAL CREDITS27

SURGICAL TECHNOLOGY

Certificate

Program Code: CT.SURGICAL

CIP Code: 51.0909

This program is designed to prepare graduates for employment and careers in this rapidly growing technical field. The Surgical Technology program is directed towards men and women who have the capability and interest to become surgical technologists. The program provides the student with knowledge and skills to function as an integral part of a team providing surgical care to patients in a variety of settings. Under medical supervision, the surgical technologist will assist with safe and effective delivery of invasive surgical procedures.

Completion of this program requires three semesters of classroom/laboratory instruction and clinical experience for a total of 1050 contact hours.

Upon successful completion of the Surgical Technology program, the student will demonstrate the following objectives:

1. Comprehension, application and evaluation of clinical information relevant to his or her role as a surgical technologist (Cognitive Domain).
2. Technical proficiency in all skills necessary to fulfill the role as a surgical technologist (Psychomotor Domain).
3. Personal behaviors consistent with professional and employer expectations for the surgical technologist (Affective Domain).

NOTE: The Surgical Technology curriculum, admission requirements, and selection process are currently under revision by the Department of Postsecondary Education. Please contact the Surgical Technology department for the most current information.

**SURGICAL TECHNOLOGY
CERTIFICATE = 29 SEMESTER HOURS
PROGRAM OUTLINE**

SEMESTER 1

SUR 100 Principles of Surgical Technology	5 credits
SUR 102 Applied Surgical Techniques	4 credits
SUR 107 Surgical Anatomy and Pathophysiology	3 credits
HPS 114 Basic Pharmacology	2 credits
	16 credits

SEMESTER 2

SUR 103 Surgical Procedures	5 credits
SUR 104 Surgical Practicum I	4 credits
	9 credits

SEMESTER 3

SUR 105 Surgical Practicum II	5 credits
SUR 106 Special Topics in Surgical Technology	1 credits
	6 credits

TOTAL CREDITS29 credits

Admissions Requirements

Acceptance into Calhoun Community College is granted to most applicants, but this does NOT constitute nor guarantee admission to the SUR program. Students interested in admission to the SUR program should complete an application through the Allied Health Department office in the Health Sciences Center, Room 308 or through Grant Wilson, Program Director, in the Health Sciences Center, Room 352.

The minimum requirements for admission into the SUR program include:

- Submit a completed application form to the Admission & Registrar's Office at Calhoun Community College and be accepted for enrollment by the College.
- Attend an information session.
- Submit a completed Surgical Technology Application Form to the Department of Allied Health (Forms are made available at information sessions).
- Possess a high school diploma or equivalent.

- Completion of, concurrent enrollment in, or eligibility to enroll (ACT English score of 20 or better, SAT verbal score of 480 or better, or appropriate entrance exam score) in ENG 101.
- A cumulative GPA of 2.5 or higher on any college coursework completed.
- Completed Medical Terminology (EMS 106 OR HPS 105) with a grade of C or better.
- Complete Math 100, 112, OR 116 with a grade of "C" or better.

Selection Process

Meeting minimum requirements above does NOT guarantee admission into the SUR program. Students meeting the minimum requirements will be presented to the SUR Admission Committee with a score of "10". Additional points are added to the application by the committee when students have:

- Completed EMS 106 OR HPS 105 with a grade of
 - "A" = 4 points added
 - "B" = 3 points added
 - "C" = 2 points added
- Work experience in a patient care setting - up to 4 points added
- Completed a handwritten statement (on the application) and an interview with the Program Director
 - Statement = up to 4 points added
 - Interview = up to 4 points added
- One year or more of work experience in surgery- 1 point added

Admission is granted to a maximum of 22 students with the highest application scores. In situations where two or more students have tie scores for the final position, the date the application was submitted will determine the student awarded the seat.

Upon enrollment in the program:

1. Submit to the Allied Health Department a satisfactory Student Health Form completed by a licensed physician or nurse practitioner (form will be furnished when student is accepted for admission). Health form is due by **first day of class**. Form is valid for one year. Evidence of good health is required for placement in the program.
2. Provide evidence of vaccination for Hepatitis B and/or positive antibodies or sign a waiver.
3. Provide documentation of two-step Mantoux skin test (PPD), or chest x-ray, if positive, indicating he/she is free of tuberculosis.
4. Provide documentation of Immunity for Rubeola (Measles), Mumps, Rubella (German Measles) through one of the following:
 - a. History of having had the disease
 - b. Titer that shows immunity
 - c. Immunization record
5. Provide evidence of current certification in BCLS/Healthcare

Programs of Study

Provider cardiopulmonary resuscitation (CPR) prior to clinical experience. Students are responsible for obtaining and maintaining current CPR Certification while enrolled in the program.

- Purchase professional liability insurance through the College by the **first day of class** (forms available in the Allied Health Department).

PROGRESSION IN THE PROGRAM

- Students must fulfill all course requirements as stated in each SUR syllabus
- Achieve a minimum grade of "C" (75%) in each SUR course.
- Successfully complete all lab, practical, and clinical components of each SUR course.
- Successfully complete Program Assessment Exam
- Complete the Certified Surgical Technologist Exam.

Specific questions concerning the program can be answered by calling the Surgical Technology program (Monday-Thursday at 256/306-2786/306-2950).

SURGICAL TECHNOLOGY PROGRAM ESTIMATED COSTS

Tuition: See college catalog section covering financial information.

Malpractice Insurance (per year).....	\$21.75
Standardized Exams	\$60.00
Graduation Fee	\$35.00
Certification Exam	\$245.00
Textbooks.....	\$400.00
Health Exams, PPD, Immunizations	Cost Varies
CPR Course.....	\$45.00

READMISSION POLICY

A student may be readmitted to a SUR course ONE TIME following a failure of or withdrawal from an SUR course. Students who are currently returning following a failure are considered to be using their second and final opportunity to complete the Surgical Technology program.

Following withdrawal:

If a student withdraws from a SUR course or is temporarily ineligible to progress (see progression requirements), readmission to the SUR program requires:

- written notification at least three months in advance to the SUR Program Director that the student desires to reenter the SUR program.
- a minimum cumulative grade point average of 2.5.
- no longer than twelve (12) months may elapse between completion of a SUR course and enrollment in the subsequent course for successful completion of a series of advanced courses.

All students who withdraw from or are temporarily ineligible to progress through a program of study in the Allied Health Department will be readmitted under the College Catalog in effect the year of readmission.

SPECIAL PROGRAMS

These programs are available only to special audiences and generally are not taught to the typical Calhoun student clientele. All courses at the Limestone Correctional Facility Extension, with the exception of Horticulture, are taught on a self-paced basis.

AUTOMOTIVE BODY REPAIR/ BASIC REPAIR

Certificate

Program Code: CT.ABR.BASIC

CIP Code: 47.0603

Limestone Correctional Facility Only

This program is designed to acquaint the beginning auto body repair student with basic knowledge of shop safety and auto body repair equipment and to provide the student with "hands on" applications of basic automotive body repair.

MAJOR COURSE REQUIREMENTS

ABR 111 Non-Structural Repair	3
ABR 114 Non-Structural Panel Replacement.....	3
ABR 122 Surface Preparation	3
ABR 123 Paint Preparation and Equipment	3
ABR 151 Safety and Environmental Practices	3
ABR 154 Automotive Glass and Trim	3
ABR 156 Automotive Cutting and Welding	3
ABR 157 Automotive Plastic Repairs.....	3

TOTAL CREDITS.....24

AUTOMOTIVE BODY REPAIR/ ADVANCED REPAIR

Certificate

Program Code: CT.ABR.ADVANCED

CIP Code: 47.0603

Limestone Correctional Facility Only

This certificate option will provide the student with in-depth applications of auto body repair. Emphasis will be placed on job quality and performance standards as accepted by business. Coursework or skills and knowledge equivalent to those given in the Basic Auto Body Repair certificate program are a prerequisite for entering this curriculum.

MAJOR COURSE REQUIREMENTS

ABR 213 Automotive Structural Analysis	3
ABR 214 Automotive Structural Repairs	3
ABR 223 Automotive Mechanical Components	3
ABR 224 Automotive Electrical Components.....	3
ABR 255 Steering and Suspension.....	3
ABR 258 Heating and Airconditioning in Collision Repair.....	3
ABR 265 Paint Defects and Final Repairs	3
ABR 266 Aluminum Welding in Collision Repair	3

TOTAL CREDITS.....24

**AUTOMOTIVE MECHANICS/
BASIC REPAIR**

Certificate

Program Code: CT.AMT.BASIC

CIP Code: 47.0604

Limestone Correctional Facility Only

The Basic Repair Certificate program in Automotive Mechanics is designed to allow the student to develop knowledge of the principles of operation of all the major components of today's passenger cars. It allows the student to develop technical and manipulative skills in diagnosing and repairing automobiles.

MAJOR COURSE REQUIREMENTS

AUM 101 Fundamentals of Automotive Technology.....	3
AUM 110 Electrical and Electronic Systems I.....	3
AUM 121 Braking Systems.....	3
AUM 124 Engine Repair I.....	3
AUM 130 Drive Train and Axles.....	3
AUM 181 Special Topics	3
AUM 239 Engine Performance I.....	3
AUM 246 Automotive Emissions I.....	3

TOTAL CREDITS.....24

**AUTOMOTIVE MECHANICS/
ADVANCED REPAIR**

Certificate

Program Code: CT.AMT.ADVANCED

CIP Code: 47.0604

Limestone Correctional Facility Only

The Advanced Repair Certificate program in Automotive Mechanics is designed to allow the student to develop knowledge of the principles of operation of all the major components of today's passenger cars. It allows the student to develop technical and manipulative skills in diagnosing and repairing automobiles. Coursework or skills and knowledge equivalent to those given in the Automotive Mechanics/Basic Repair certificate program are a prerequisite for entering this curriculum.

MAJOR COURSE REQUIREMENTS

AUM 122 Steering and Suspension.....	3
AUM 133 Motor Vehicle Air Conditioning.....	3
AUM 210 Electrical & Electronic Systems II.....	3
AUM 220 Engine Repair II.....	3
AUM 224 Manual Transmission and Transaxle	3
AUM 230 Auto Transmission and Transaxle.....	3
AUM 244 Engine Performance II.....	3
AUM 281 Special Topics	3

TOTAL CREDITS.....24

CARPENTRY/ROUGH

Certificate

Program Code: CT.CARPENTRY.RG

CIP Code: 46.0201

Limestone Correctional Facility Only

This program equips the student with basic skills and knowledge in rough carpentry. All phases of construction are covered from site preparation and blueprint reading to framing.

MAJOR COURSE REQUIREMENTS

CAR 111 Construction Basics.....	3
CAR 112 Floors, Walls, Site Prep	3
CAR 113 Floors, Walls, Site Prep Lab	3
CAR 114 Construction Basics Lab.....	3
CAR 121 Introduction to Blue Print Reading	3
CAR 131 Roof and Ceiling Systems	3
CAR 133 Roof and Ceiling Systems Lab.....	3
CAR 230 Residential Repair and Remodeling.....	3

TOTAL CREDITS.....24

CARPENTRY/FINISH

Certificate

Program Code: CT.CARPENTRY.FINISH

CIP Code: 46.0201

Limestone Correctional Facility Only

This program prepares the student for employment in the field of finish carpentry. The course will cover such topics as interior wall and ceiling finishing, painting and staining, trim work, and concrete slabs and sidewalks.

MAJOR COURSE REQUIREMENTS

CAR 122 Concrete and Forming.....	3
CAR 123 Concrete and Forming Lab	3
CAR 226 Metal Framing	3
CAR 132 Interior and Exterior Finishing	3
CAR 228 Stairs, Molding and Trim.....	3
CAR 214 Introduction to Cabinetry.....	3
CAR 224 Floor, Wall - Ceiling Specialties	3
CAR 232 Construction Management	3

TOTAL CREDITS.....24

DESIGN DRAFTING/BASIC DESIGN

Certificate

Program Code: CT.DDT.BASIC

CIP Code: 15.1301

Limestone Correctional Facility Only

The Design Drafting/Basic Design Certificate program is designed to offer students the opportunity to gain entry-level skills. An introduction to DOS and CAD design is included.

Programs of Study**MAJOR COURSE REQUIREMENTS**

DDT 104 Introduction to Computer Aided Drafting and Design.....	3
DDT 111 Fundamentals of Drafting and Design Technology	3
DDT 124 Technical Drawing I.....	3
DDT 125 Surface Development	3
DDT 128 Technical Drawing II.....	3
DDT 122 Advanced Technical Drawing.....	3
DDT 131 Basic Machine Drafting	3
DDT 134 Descriptive Geometry	3

TOTAL CREDITS24

**DESIGN DRAFTING / BASIC
ARCHITECTURAL****Certificate**

Program Code: CT.DDT.ARCH

CIP Code: 15.1301

Limestone Correctional Facility Only

The Architectural Drafting Certificate program offers the advanced drafting student concentrated studies in the specialty areas of house and design drafting. Coursework or skills and knowledge equivalent to those given in the Basic Design Drafting certificate program will be built on to this more advanced level of skill.

MAJOR COURSE REQUIREMENTS

DDT 116 Blueprint Reading for Construction	3
DDT 128 Technical Drawing II.....	3
DDT 132 Basic Architectural Drafting	3
DDT 150 Theory of Residential Drawings & Design	3
DDT 155 Drawing for Residential Construction.....	4
DDT 222 Advanced Architectural Drafting	3
DDT 227 Strength of Materials	4

TOTAL CREDITS23

**DESIGN DRAFTING/ADVANCED
COMPUTER AIDED DRAFTING****Certificate**

Program Code: CT.DDT.ADV.CAD

CIP Code: 15.1301

Limestone Correctional Facility Only

This certificate offers computer aided drafting to those persons who have manual drafting skills. Departmental approval is required before registration.

MAJOR COURSE REQUIREMENTS

DDT 104 Introduction to Computer Aided Drafting and Design.....	3
DDT 127 Intermediate Computer Aided Drafting and Design	3
DDT 231 Advanced CAD.....	4
DDT 232 CAD Customization.....	3

TOTAL CREDITS13

**DESIGN DRAFTING /
ELECTRO-MECHANICAL****Certificate**

Program Code: CT.DDT.ELECT.MECH

CIP Code: 15.1301

Limestone Correctional Facility Only

The Electro-Mechanical Drafting Certificate program offers the advanced drafting student concentrated studies in the specialty areas of mechanical design drafting, electronic drafting, and piping drafting. Coursework or skills and knowledge equivalent to those given in the Basic Design Drafting certificate program will be built on to this more advanced level of skill.

MAJOR COURSE REQUIREMENTS

DDT 115 Blueprint Reading for Machinists	3
DDT 117 Manufacturing Processes	3
DDT 118 Basic Electrical Drafting.....	3
DDT 119 Advanced Electronic Drafting	3
DDT 211 Intermediate Machine Drafting	3
DDT 214 Pipe Drafting	4
DDT 215 Geometric Dimensioning and Tolerancing.....	3
DDT 221 Advanced Machine Drafting.....	3

TOTAL CREDITS25

**DESIGN DRAFTING / BASIC
CIVIL-STRUCTURAL****Certificate**

Program Code: CT.DDT.BS.CIVIL

CIP Code: 15.1301

Limestone Correctional Facility Only

The Civil-Structural Basic Drafting Certificate program offers the advanced drafting student concentrated coursework and applications in the specialty areas of civil-structural drafting. Coursework or skills and knowledge equivalent to those given in the Basic Design Drafting certificate program will be built on to this more advanced level of skill.

MAJOR COURSE REQUIREMENTS

DDT 133 Basic Surveying.....	3
DDT 213 Civil Drafting, Plat Maps.....	3
DDT 223 Advanced Civil Drafting	3
DDT 224 Structural Concrete Drafting.....	3
DDT 225 Structural Steel Drafting.....	3
DDT 235 Specialized CAD.....	3
DDT 236 Design Project	3
DDT 240 Public Utility Drafting	3

TOTAL CREDITS24

HORTICULTURE/GENERAL**Certificate**

Program Code: CT.HORL

CIP Code: 01.0601

Limestone Correctional Facility Only

This program provides the student with a foundation in general horticulture including plant identification, propagating techniques, safe use and care of equipment, and other applications.

MAJOR COURSE REQUIREMENTS

HOC 111 Horticulture Business Management	3
HOC 115 Soils and Fertilizers	3
HOC 135 Ornamental Plant Identification and Culture	3
HOC 140 Ornamental Plant Pest Management	3
HOC 151 Irrigation Systems	3
HOC 230 Vegetable and Orchard Crops	3

TOTAL CREDITS18

**HORTICULTURE/LANDSCAPE
DEVELOPMENT**

Certificate

Program Code: CT.HORT.LNDSCAPE CIP Code: 01.0601

Limestone Correctional Facility Only

This certificate includes instruction in landscape design, installation, maintenance, and irrigation systems. The student will learn proper landscape theory, techniques, plant materials and their use, and should be able to pass state certification for employment in these areas. Coursework or skills and knowledge equivalent to those given in the General Horticulture certificate program are a prerequisite for entering this curriculum.

MAJOR COURSE REQUIREMENTS

HOC 125 Turfgrass Management	3
HOC 136 Residential Landscape Design	3
HOC 137 Commercial Landscape Design	3
HOC 167 Golf Course Maintenance	3
HOC 216 Landscape Maintenance	3
HOC 218 Landscape Construction	3

TOTAL CREDITS18

**HORTICULTURE/NURSERY AND
GREENHOUSE MANAGEMENT**

Certificate

Program Code: CT.HORT.NR.GREEN.MGT CIP Code: 01.0601

Limestone Correctional Facility Only

Topics included in this certificate include site analysis, types of greenhouses, crops and their culture, heating and cooling, fertilization, and watering. Coursework or skills and knowledge equivalent to those given in the General Horticulture certificate program are a prerequisite for entering this curriculum.

MAJOR COURSE REQUIREMENTS

HOC 120 Plant Propagation	3
HOC 130 Nursery Production	3
HOC 134 Introduction to Floriculture	2
HOC 175 Seminar in Horticulture	1
HOC 176 Advanced Studies in Horticulture	2
HOC 210 Greenhouse Management	3
HOC 211 Greenhouse Crop Production	3

TOTAL CREDITS17

MASONRY

Certificate

Program Code: CT.MAS

CIP Code: 46.0101

Limestone Correctional Facility Only

This program prepares the student for employment in the field of masonry. Included in this course are block and brick construction and blueprint reading.

MAJOR COURSE REQUIREMENTS

MAS 111 Masonry Fundamentals	3
MAS 121 Brick/Block Masonry	3
MAS 131 Residential/Commercial	3
MAS 151 Masonry Fundamentals Lab	3
MAS 152 Masonry Fundamentals Lab	3
MAS 161 Concrete Block Masonry	3
MAS 162 Brick Masonry Lab	3
MAS 171 Residential Commercial	3

TOTAL CREDITS24

UPHOLSTERY/BASIC

Certificate

Program Code: CT.UPH.BASIC

CIP Code: 48.0303

Limestone Correctional Facility Only

This program will cover basic techniques and information necessary for those students entering the field of upholstery.

MAJOR COURSE REQUIREMENTS

UPH 111 Upholstery Fundamentals and Design	3
UPH 112 Upholstery Design Furniture Lab	3
UPH 114 Upholstery Design Experimental Lab	3
UPH 121 Correlating Decorative Elements	3
UPH 131 Wood Repair and Refinishing	3
UPH 132 History of Furniture Styles	3
UPH 215 Shop Management and Layout	3
UPH 222 Interior Materials-Furniture	3

TOTAL CREDITS24

**UPHOLSTERY/AUTOMOTIVE
INTERIOR AND TRIM**

Certificate

Program Code: CT.UPH.AUTO.TRIM

CIP Code: 48.0303

Limestone Correctional Facility Only

This program gives the advanced upholstery student concentrated

Programs of Study

coursework in automotive upholstery. Coursework or skills and knowledge equivalent to those given in the Basic Upholstery certificate program are a prerequisite for entering this curriculum.

MAJOR COURSE REQUIREMENTS

UPH 113 Upholstery Design Auto Lab.....	3
UPH 123 Decorative Elements Auto Lab.....	3
UPH 211 Design Interiors Furniture and Auto	3
UPH 213 Design Interiors Auto Lab	3
UPH 221 Automotive Upholstery & Design	3
UPH 223 Interior Materials-Auto	3
UPH 224 Auto Upholstery Design Experimental Lab	3
UPH 226 Advanced Automotive Techniques	3

TOTAL CREDITS24

UPHOLSTERY/FURNITURE REPAIR AND REFINISHING

Certificate

Program Code: CT.UPH.FURN.REP

CIP Code: 48.0303

Limestone Correctional Facility Only

The Furniture Repair and Refinishing certificate program covers advanced furniture covering techniques, general repairs, touch-up work, and job estimates. Coursework or skills and knowledge equivalent to those given in the Basic Upholstery certificate program are a prerequisite for entering this curriculum.

MAJOR COURSE REQUIREMENTS

UPH 122 Decorative Elements Furniture Lab.....	3
UPH 124 Decorative Elements Experimental Lab	3
UPH 212 Design Interiors Furniture Lab.....	3
UPH 214 Design Interiors Experimental Lab	3
UPH 216 Draperies, Cornices, Bedding	3
UPH 217 Upholstery Crafts and Accessories.....	3
UPH 225 Advanced Furniture Techniques	3
UPH 227 Quilting Techniques and Design.....	3

TOTAL CREDITS24

WELDING/BASIC STRUCTURAL

Certificate

Program Code: CT. WDT.BS.STRUCT

CIP Code: 48.0508

Limestone Correctional Facility Only

The purpose of this program is to prepare students for employment in the welding industry, or to provide supplemental training for persons previously employed in this occupation.

MAJOR COURSE REQUIREMENTS

WDT 108 Shield Metal Arc/OFC Theory	3
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WDT 110 Industrial Blueprint Reading	3
WDT 119 Gas Metal Arc/Flux Cored Arc Welding	3
WDT 120 Shield Metal Arc Welding Groove Theory	3
WDT 122 Shield Metal Arc Welding/OFC Lab	3
WDT 123 Shield Metal Arc Welding/PAC/CAC Lab	3
WDT 124 Gas Metal Arc/Flux Cored Arc Welding Lab	3
WDT 125 Shield Metal Arc Welding Groove Lab	3

TOTAL CREDITS24

WELDING TECHNOLOGY/BASIC PIPE

Certificate

Program Code: CT.WDT.PIPE

CIP Code: 48.0508

Limestone Correctional Facility Only

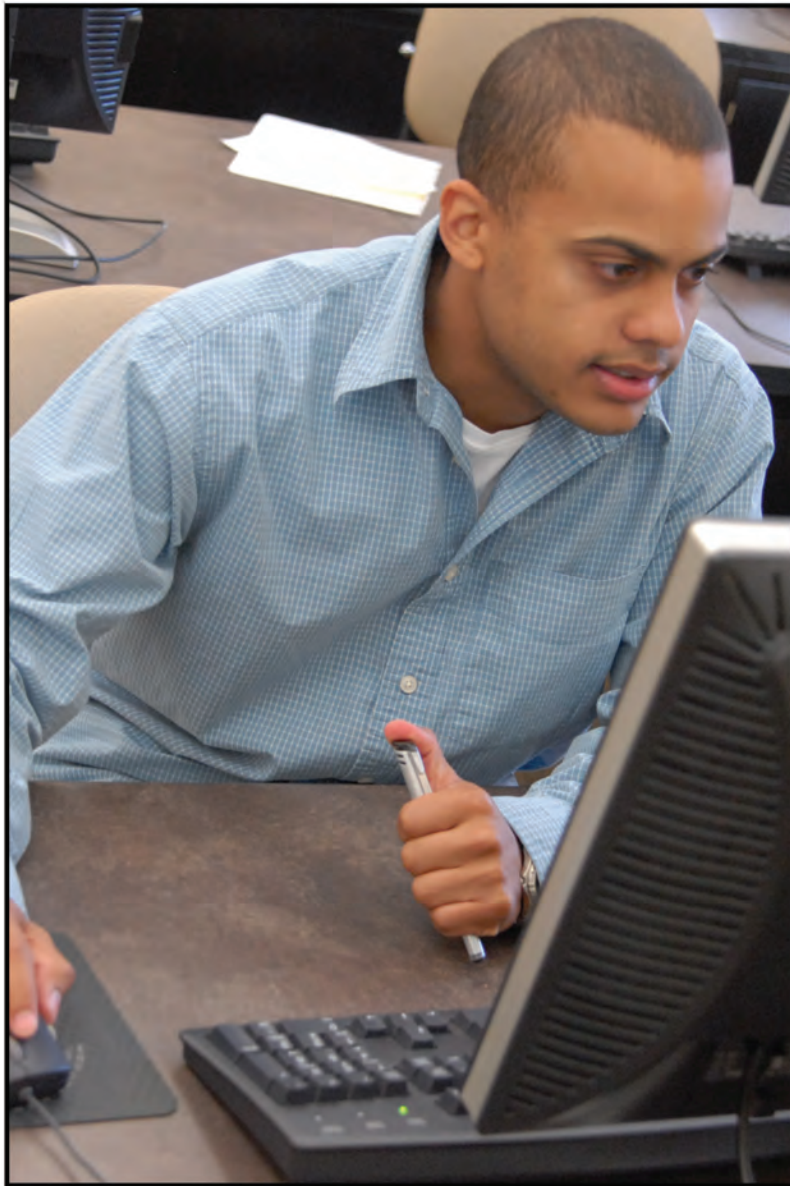
The purpose of this program is to prepare students for employment in the welding industry or to provide supplemental training for persons previously employed in this occupation. Coursework or skills and knowledge equivalent to those given in the Welding Technology/Basic Structural certificate program are a prerequisite for entering this curriculum.

MAJOR COURSE REQUIREMENTS

WDT 155 Gas Tungsten Arc Welding Carbon Pipe Lab	3
WDT 217 SMAW Carbon Pipe Theory	3
WDT 218 Certification Theory	3
WDT 228 Gas Tungsten Arc Welding Theory	3
WDT 257 SMAW Carbon Pipe Lab	3
WDT 258 Certification Lab	3
WDT 268 Gas Tungsten Arc Fillet Lab	3
WDT 269 Boiler Tube Lab	3

TOTAL CREDITS24

COURSE DESCRIPTIONS



COURSE DESCRIPTIONS

126

CREDIT HOUR EQUIVALENCIES

CREDIT HOUR EQUIVALENCIES – The ratio of weekly contact hours to credit hours varies with the type of instruction being used. The College will recognize the following methods or types of instruction:

THEORY. (T) One hour of theory instruction under the supervision of an instructor plus an average of two hours of out-of-class study per week. 1:1

EXPERIMENTAL LABORATORY. (E) Two hours of experimental laboratory under the supervision of an instructor plus an average of one hour of out-of-class assignments per week. 2:1

PED ACTIVITY. (A) Two hours of physical education class activity/practice under the supervision of an instructor with out-of-class assignments per week. 2:1

MANIPULATIVE LABORATORY. (M) – Three hours of practice/manipulative laboratory under the supervision of an instructor with no out-of-class assignments per week. 3:1

SKILLS LABORATORY/CLINICAL PRACTICE. (S or C) - Three hours of skills laboratory or clinical practice under the supervision of an instructor. 3:1

Skills Laboratory/Clinical Practice is the term for skills laboratory (S) and clinical experiences (C) which are under the direct supervision of faculty. There may be out-of-class assignments per week, but they are not required. For example, skills laboratory and clinical experiences may have out-of-class assignments whereas a computer laboratory may not require an out-of-class assignment.



PRECEPTORSHIP. (P3 or P5) - Three or five hours of clinical experience per week under the supervision of a health care professional who is currently licensed, has expertise in the selected clinical area, and serves as a facilitator of learning. 3:1 or 5:1.

Preceptorship is the term used for clinical experiences which are supervised by currently licensed health care professionals who have expertise in a selected clinical area. Preceptors are employees of a clinical agency who are approved by faculty of the program and the administration of the clinical agency. Objectives for the preceptorship are specified. A designated faculty member is readily available (by telecommunication devices, for example) to the preceptor and student during the *preceptorship* experiences. Students enrolled in fields of study for which programmatic accreditation and/or licensing bodies require an 8:1 preceptorship ratio must comply with discipline-specific time-to-credit criteria.

As the contact hours for courses using preceptorship clinical experiences are entered, specify in the column for “clinical” the actual number of contact hours per week followed by a bold (P3) or (P5).

INTERNSHIP (I) - Five hours of experimental internship per week under the control and supervision of the employer on the job with coordinated employer/college representative planning. 5:1

Internship is the term used to include cooperative education, practicums, and sponsored work instruction. *Internship* involves the development of job skills by providing the student with a structured employment situation that is directly related to, and coordinated with, the educational program. Student activity in “internship” is planned and coordinated jointly by an institutional representative and the employer, with the employer having the responsibility for control and supervision of the student on the job. Students enrolled in fields of study for which programmatic accreditation and/or licensing bodies require a 10:1 internship ratio, must comply with field-specific time-to-credit criteria.

The number of clock hours of each type of instruction is stated in each course description. Types of instruction may be mixed within one course. In that event, the number of contact hours for each type of instruction is spelled out in the following order: Theory (T), Experimental Laboratory (E), PED Activity (A), Manipulative Laboratory (M), Skills Laboratory/Clinical Practice (S or C), Preceptorship (P3 or P5), and Internship (I). On the right side of the column, the number of credit hours for the entire course is given.

Course Descriptions

ADVANCED MANUFACTURING (ADM)

ADM 100 INDUSTRIAL SAFETY (3T)

3 credits

PREREQUISITE: Permission of instructor

This course is an introduction to general issues, concepts, procedures, hazards, and safety standards found in an industrial environment. This safety course is to make technicians aware of safety issues associated with their changing work environment and attempt to eliminate industrial accidents. This supports CIP code 15.0613. This is a CORE course.

ADM 101 PRECISION MEASUREMENT (2T,2E)

3 credits

PREREQUISITE: Permission of instructor

This course covers the use of precision measuring instruments and an introduction to basic geometric dimensioning and tolerancing (GD&T) concepts. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion students should be able to demonstrate correct use of measuring instruments. This supports CIP code 15.0613. This is a CORE course and is aligned with NIMS certification standards.

ADM 102 COMPUTER AIDED DESIGN (1T,4E)

3 credits

PREREQUISITE: Permission of instructor

This course provides an introduction to basic Computer Aided Drafting and Design (CADD) functions and techniques, using "hands-on" applications. Topics include terminology, hardware, basic CADD and operating system functions, file manipulation, and basic CADD software applications in producing softcopy and hardcopy. This is a CORE course. This course supports CIP code 15.0613.

ADM 103 INTRODUCTION TO COMPUTER INTEGRATED MANUFACTURING (CIM)/MATERIALS & PROCESSES (2T,2E)

3 credits

PREREQUISITE: Permission of instructor

This course is a basic introduction to concepts related to the computer integrated manufacturing (CIM) process and provides a basic overview of the materials and processes used in the industrial manufacturing of products. In addition, this course covers basic computer numeric control (CNC) principles including fundamental CNC programming concepts and the components and capabilities of machines commonly used for CNC applications. Emphasis is placed on process evaluation techniques that can be extrapolated to other system areas such as new products and new technology. Students cover the design requirements associated with a CIM cell (center), how a center is integrated into the full system, and the technician's role in the process improvement of not only the cell but the full CIM system. Related safety and inspection and process adjustment are also covered. This is a CORE course.

ADM 104 INTRODUCTION TO THERMAL/ELECTRICAL PRINCIPLES (1T,4E)

3 credits

PREREQUISITE: Permission of instructor

This course emphasizes the fundamental principles for air conditioning and refrigeration. Instruction is provided in the theory and principles of refrigeration and heat transfer, HVAC/R system components, common, and specialty tools

for HVAC/R, and application of the concepts of basic compression refrigeration. In addition, this course covers electrical/electronic fundamentals and principles. Emphasis is placed on electrical theory and science, semiconductor devices, motors, transformers, digital concepts, programmable logic controllers, and circuit analysis of resistive, capacitive, resonant, and tuned circuits. Upon completion, students will have knowledge of basic electricity and electronics and be able to identify system components and understand their functions, identify and use common and specialty HVAC/R tools, and maintain components of a basic compression refrigeration system. This supports CIP code 15.0613. This is a CORE course.

ADM 105 FLUID SYSTEMS (1T,4E)

3 credits

PREREQUISITE: Permission of instructor

This course includes the fundamental concepts and theories for the safe operation of hydraulic and pneumatic systems used with industrial production equipment. Topics include the physical concepts, theories, laws, air flow characteristics, actuators, valves, accumulators, symbols, circuitry, filters, servicing safety, and preventive maintenance and the application of these concepts to perform work. Upon completion, students should be able to service and perform preventive maintenance functions on hydraulic and pneumatic systems. This is a CORE course. This course supports CIP code 15.0613.

ADM 106 QUALITY CONTROL CONCEPTS (3T)

3 credits

PREREQUISITE: Permission of instructor

This course covers quality assurance principles including the history of the quality movement, group problem solving, data collection, control charts, and statistical methods such as statistical process control (SPC), process capability studies, and the concepts associated with lean manufacturing. This supports CIP code 15.0613. This is a CORE course.

ADM 150 TECHNICAL CO-OPERATIVE EDUCATION (1I) 1 credit (each)

-155 PREREQUISITE: Permission of instructor

Students work on a part-time basis in a job directly related to applied technologies. The employer and supervising instructor evaluate students' progress. Upon course completion, students will be able to apply skills and knowledge in an employment setting.

ADM 250 INTRODUCTION TO FLEXIBLE MANUFACTURING CELLS (2T,2E)

4 credits

PREREQUISITE: Permission of instructor

This course covers techniques involved when grouping related machines for the purpose of completing a series of manufacturing processes in a flexible manufacturing cell. The student will be involved with the computerized integration of programmable control systems such as robotics, machine tools, and other peripheral equipment to emulate real-world manufacturing concepts employed in flexible manufacturing cells.

AIR CONDITIONING AND REFRIGERATION (ACR)

ACR 112 HVAC SERVICE PROCEDURES 3 credits

PREREQUISITE: Permission of instructor

This course covers system performance checks and refrigerant cycle diagnosis. Emphasis is placed on the use of refrigerant recovery/recycle units, industry codes, refrigerant coils and correct methods of charging and recovering refrigerants. Upon completion, students should be able to properly recover/recycle refrigerants and demonstrate safe, correct service procedures which comply with the no-venting laws.

ACR 113 REFRIGERATION PIPING PRACTICES (1T, 4E) 3 credits

The course introduces students to the proper installation procedures of refrigerant piping and tubing for the heating, ventilation, air conditioning and refrigeration industry. This course includes various methods of working with and joining tubing. Upon completion, students should comprehend related terminology, and be able to fabricate pipe, tubing, and pipe fittings.

ACR 119 FUNDAMENTALS OF GAS HEATING SYSTEMS FORMERLY ACR 115 (1T, 4E) 3 credits

This course provides instruction on general service and installation for common gas furnace system components. Upon completion, students will be able to install and service gas furnaces in wide range of applications.

ACR 120 FUNDAMENTALS OF ELECTRIC HEATING SYSTEMS FORMERLY ACR 115 (1T, 4E) 3 credits

This course covers the fundamentals of electric furnace systems. Emphasis is placed on components, general service procedures, and basic installation. Upon completion, students should be able to install and service electric furnaces, heat pumps, and solar and hydronics systems.

ACR 121 PRINCIPLES OF ELECTRICITY FOR HVACR (1T, 4E) 3 credits

This course is designed to provide the student with the basic knowledge of electrical theory and circuitry as it pertains to air conditioning and refrigeration. This course emphasizes safety, definitions, symbols, laws, circuits, and electrical test instruments. Upon completion, students should understand and be able to apply the basic principles of HVACR circuits and circuit components.

ACR 122 HVACR ELECTRICAL CIRCUITS (1T, 4E) 3 credits

This course introduces the student to electrical circuits and diagrams. Electrical symbols and basic wiring diagrams are constructed in this course. Upon completion, students should understand standard wiring diagrams and symbols.

ACR 123 HVACR ELECTRICAL COMPONENTS (1T, 4E) 3 credits

PREREQUISITE: ACR 121

This course introduces students to electrical components and controls. Emphasis is placed on the operations of motors, relays, contractors, starters, and other HVAC controls. Upon completion, students should be able to understand motor theory and control functions in HVACR equipment.

ACR 126 COMMERCIAL HEATING SYSTEMS (1T, 4E) 3 credits

PREREQUISITES: ACR 119, ACR 120

This course covers the theory and application of larger heating systems. Emphasis is placed on larger heating systems associated with commercial applications such as gas heaters, boilers, unit heaters, and duct heaters. Upon completion, students should be able to troubleshoot and perform general maintenance on commercial heating systems.

ACR 128 HEAT LOAD CALCULATIONS (3T) 3 credits

PREREQUISITE: Permission of instructor

This course focuses on heat flow into and out of building structures. Emphasis is placed on determining heat gain/heat loss of a given structure. Upon completion, students should be able to calculate heat load and determine HVAC equipment size requirements.

ACR 130 COMPUTER ASSISTED HVAC TROUBLESHOOTING (2E) 1 credit

PREREQUISITE: Permission of instructor

This course focuses on troubleshooting procedures. Emphasis is placed on the proper use of test equipment and machine/electrical malfunctions. Upon completion, student should be able to diagnosis and repair service problems in HVAC equipment.

ACR 132 RESIDENTIAL AIR CONDITIONING (1T, 4E) 3 credits

PREREQUISITE: ACR 111

This course introduces students to residential air conditioning systems. Emphasis is placed on the operation, service, and repair of residential air conditioning systems. Upon completion, students should be able to service and repair residential air conditioning systems.

ACR 135 MECHANICAL GAS SAFETY CODES (3T) 3 credits

PREREQUISITE: Permission of instructor

This course is to enhance the student knowledge of the Southern Mechanical and Gas Code as well as fire and job safety requirements. Emphasis is placed on code book content and compliance with installation requirements. Upon completion, students should be able to apply code requirements to all work.

ACR 138 CUSTOMER RELATIONS IN HVAC (3T) 3 credits

This course covers the basic aspects of customer relations needed by the HVAC technician. Topics include employability skills associated with job performance, record keeping, service invoices, certification requirements, local ordinances, and business ethics.

Course Descriptions

ACR 141 ENVIRONMENTAL SYSTEMS (2T,4E) 4 credits

PREREQUISITE: Permission of instructor

This course provides students with knowledge and skills of environmental chambers. Topics include theory of the refrigerant components and refrigerant circuits, programmable controllers, electrical pressure and calibration instruments and places emphasis on safety. Upon course completion, students should be able to apply environmentally-safe practices.

ACR 144 BASIC DRAWING & BLUEPRINT READING IN HVAC (3T) 3 credits

PREREQUISITE: Permission of instructor

This course covers basic drawing and blueprint reading as applied to the HVAC industry. Emphasis is on three-view drawings, basic duct systems, and isometric piping. Upon course completion, students should be able to perform basic drawings related to HVAC systems and read pertinent blueprints.

ACR 147 REFRIGERATION TRANSITION AND RECOVERY (3T) 3 credits

This course is EPA-approved and covers material relating to the requirements necessary for types I, II, III and universal certification. Upon completion, students should be able to take the EPA/608 refrigerant certification exam. (Taught on Demand)

ACR 148 HEAT PUMP SYSTEMS I (1T, 4E) 3 credits FORMERLY ACR 125

Instruction received in this course centers around the basic theory and application of heat pump systems and components. Upon completion students will be able to install and service heat pumps in a wide variety of applications.

ACR 149 HEAT PUMP SYSTEMS II (1T,4E) 3 credits FORMERLY ACR 125

This is a continuation course of the basic theory and application of heat pump systems. Topics include the electrical components of heat pumps and their function. Upon completion, students should be able to install and service heat pumps.

ACR 151 DUCT DESIGN & FABRICATION (2T,8E) 6 credits

PREREQUISITE: Permission of instructor

This course provides instruction related to blueprints, layouts, and design ducts. Topics include all aspects of fabrication including straight duct, offsets and various other fittings needed to perform a certain task.

ACR 181 SPECIAL TOPICS IN AIR CONDITIONING AND REFRIGERATION (3T) 3 credits

This course provides specialized instruction in various areas related to the air conditioning and refrigeration industry. Emphasis is placed on meeting the students' needs.

ACR 200 REVIEW FOR CONTRACTORS EXAM (3T) 3 credits

This course prepares students to take the State Certification Examination. Emphasis is placed on all pertinent codes, piping procedures, duct design, load calculation, psychometrics, installation procedures, and air distribution. Upon completion, students should be prepared to take the contractors exam. (Taught on Demand)

ACR 203 COMMERCIAL REFRIGERATION (1T, 4E) 3 credits

PREREQUISITE: ACR 111

This course focuses on commercial refrigeration systems. Emphasis is placed on evaporators, condensers, compressors, expansion devices, special refrigeration components and application of refrigeration systems. Upon completion, students should be able to service and repair commercial refrigeration systems.

ACR 205 SYSTEM SIZING AND AIR DISTRIBUTION (1T, 4E) 3 credits

This course provides instruction in the load calculation of a structure and system sizing. Topics of instruction include heat loss, heat gain, equipment and air distribution sizing, and factors making acceptable indoor air quality. Upon course completion, students should be able to calculate system requirements.

ACR 209 COMMERCIAL AIR CONDITIONING SYSTEMS (1T, 4E) 3 credits

This course focuses on servicing and maintaining commercial and residential HVAC/R systems. Topics include system component installation and removal and service techniques. Upon completion, the student should be able to troubleshoot and perform general maintenance on commercial and residential HVAC/R systems.

ACR 210 TROUBLESHOOTING HVACR SYSTEMS (1T,4E) 3 credits

PREREQUISITE: Permission of instructor

This course provides instruction in the use of various meters and gauges used in the HVAC/R industry. Emphasis is placed on general service procedures, system diagnosis, and corrective measure, methods of leak detection, and system evacuation, charging and performance checks. Upon completion students should be able to perform basic troubleshooting of mechanical and electrical components of HVAC/R systems.

AEROSPACE TECHNOLOGY (ARS)

ARS 101 FUNDAMENTALS OF AEROSPACE MANUFACTURING (3T) 3 credits

This course provides an overview of the materials and processes used in manufacturing high performance, light weight, and reliable structures for aerospace products. Emphasis is placed on process evaluation techniques that can be extrapolated to other system areas such as new products and new technology. (This course should be taken during the first or second semester of enrollment in the program.)

ARS 151 WELDING PRINCIPLES, THEORY AND SYMBOLS
(1T, 4E) **3 credits**
PREREQUISITE: ARS 101

This is a theory and skill-based course in basic welding (gas and arc), plasma arc, brazing, soldering, and cutting processes used in maintenance and manufacturing. Other theory topics include forge, submerged arc, electroslag, stud arc, resistance, ultrasonic, electron beam, and laser beam welding. Students use welding symbols, joint designs, and weld positions to prepare specimens. The course also covers terminology, standards for welding acceptable and unacceptable welds, safety, and qualification tests.

ARS 153 GAS TUNGSTEN ARC AND PLASMA ARC WELDING
(2T, 2E) **3 credits**
PREREQUISITE: ARS 151

This course describes processes, methods, and skills required to produce acceptable welds with gas tungsten arc welding (GTAW) and plasma arc welding (PAW) equipment for aerospace hardware; the standard of acceptability is AWS D17.1:2001 (or latest revision). Topics include equipment, tooling, shielding gases, arc characteristics, welding techniques, non-consumable electrodes, filler metals, base materials, and related safety. Instruction covers manual, semi-automatic, and automatic welding procedures.

ARS 176 ELECTRICAL/ELECTRONIC ASSEMBLY
(2T, 2E) **3 credits**

This mechanics of electrical/electronics assembly course covers materials and wire configurations, tools for wire preparation and assembly, wire stripping, connection requirements, terminal assembly, solder connections, crimp connections, solder splices, shield terminations, tying and lacing, hardware installation, inspection, testing, safety, and industry specifications/standards. Worker proficiency certification in IPC/WHMA-A-620, "Requirements for Acceptance for Cable and Wire Harness Assemblies," is covered but certification testing is not a requirement to receive credit for the class.

ARS 178 AEROSPACE MECHANICAL ASSEMBLY
(2T, 2E) **3 credits**
PREREQUISITE: ARS 101

This course is a study of mechanical assembly processes applied in aerospace and related manufacturing industries. Topics include drilling techniques, torquing techniques, fastener installation, related attachments, and safety.

ARS 251 SPECIALIZED WELDING PROCESSES
(2T, 2E) **3 credits**
PREREQUISITE: ARS 153

This course is an overview of the basics of metals joining using processes other than electric arc. Topics include safety; brazing; soldering; diffusion bonding; and welding processes such as resistance, laser, electron beam, ultrasonic, friction, inertia, explosion, upset, thermite, and forge.

ARS 253 WELDING CERTIFICATION PREPARATION
(1T, 4E) **3 credits**
COREQUISITE: ARS 251

This course details the requirements for welder/welding operator certification in the aerospace industry. Training includes gas tungsten arc welding (GTAW) and plasma arc welding (PAW) processes and equipment and related safety. Emphasis is on materials in Groups I, II, III, and IV as defined in AWS D17.1:2001.

ARS 276 INSTRUMENTATION ATTACHMENTS AND ADHESIVE BONDING PROCEDURES
(2T, 2E) **3 credits**

This course covers the use and installation techniques of instruments such as thermocouples, temperature sensors, and strain gages on different types of aircraft and structures. Topics include bonding materials, soldering techniques, electrical testing of temperature sensors and strain gages, mixing and applying adhesives for pressure, the effects of corrosion and weather, fuel tank sealing, adhesive selection, and safety.

ARS 278 COMPOSITE MATERIALS FABRICATION AND ASSEMBLY (2T, 2E) **3 credits**
PREREQUISITE: ARS 178

This is a course in composite materials manufacturing. Topics include design and manufacturing techniques such as wet layups, prepregs, vacuum bagging, and filament winding. The course also covers the history of composite manufacturing, types of materials used in composite component fabrication, drilling and repair techniques, and related safety.

ARS 280 SURFACE PREPARATION AND COATINGS
(2T, 2E) **3 credits**

This course is a study of component surface preparation for various coating and painting applications. The content includes color development, paint booth operation (electrical and air system), wet and dry coating thickness measurement, manual and automated coating techniques, and general and hazardous material handling safety.

ARS 284 SPECIALIZED COATING PROCESSES
(2T, 2E) **3 credits**
PREREQUISITE: ARS 280

This course is a study in special coatings for aerospace structures. Topics include mixing, applying, and curing of coating materials, environmental effects on coating materials, and general and hazardous material handling safety. The course also covers equipment used in these processes.

ANTHROPOLOGY (ANT)

ANT 200 INTRODUCTION TO ANTHROPOLOGY (3T) **3 credits**
This course is a survey of physical, social, and cultural development and behavior of human beings.

ANT 210 PHYSICAL ANTHROPOLOGY (3T) **3 credits**
This course is a study of the human evolution based upon fossil and archaeological records as well as analysis of the

Course Descriptions

variation and distribution of contemporary human populations.

ANT 220 CULTURAL ANTHROPOLOGY (3T) 3 credits
PREREQUISITE: ANT 200

This course is the application of the concept of culture to the study of both primitive and modern society.

ANT 226 CULTURE AND PERSONALITY (3T) 3 credits
PREREQUISITE: ANT 200

This course explores the relationship between personality development and culture from a cross cultural perspective.

ANT 230 INTRODUCTION TO ARCHAEOLOGY (3T) 3 credits

This course is an introduction to archaeological excavation techniques and post-excavation laboratory procedures.

ANT 236 FIELD SURVEY IN ARCHAEOLOGY (6E) 3 credits
PREREQUISITE: ANT 230

This course permits students to apply archaeological techniques to field research projects.

ANT 237 ARCHAEOLOGICAL LAB PROCEDURES (6E) 3 credits
PREREQUISITE: ANT 230

This course specializes in artifact conservation, cataloging, sorting, storage, and general post-excavation cultural material administration. Learning methodology and understanding the deterioration-susceptibility of objects.

ANT 246 PRESERVATION LAB PROCEDURES (6E) 3 credits
PREREQUISITE: ANT 230

This course is primarily intended for students interested in pursuing museum science and archaeological laboratory procedures. It reviews technical information on curation, preservation, and conservation of physical and cultural objects.

ANT 260 INDIANS OF NORTH AMERICA (3T) 3 credits
PREREQUISITE: ANT 200

This course surveys the history, development, and culture of North American Indian tribes in Alabama.

ART (ART)

ART 100 ART APPRECIATION (3T) 3 credits

This course is designed to help the student find personal meaning in works of art and develop a better understanding of the nature and validity of art. Emphasis is on the diversity of form and content in original artwork. Upon completion, students should understand the fundamentals of art, the materials used and have a basic overview of the history of art.

ART 101 ART WORKSHOP I (6E) 3 credits
PREREQUISITE: Permission of instructor

This course provides an art experience for both non-art and art majors who are interested in a variety of art projects concerned with community or college related activities. Emphasis is placed on the organization of ideas in advancing their creative process. Upon completion, students should be able to present visual evidence of the activities involved and explain how the experience advanced their artistic skills.

ART 102 ART WORKSHOP II (6E) 3 credits

PREREQUISITE: Art Workshop I, Permission of instructor

This course provides an art experience for both non-art and art majors who are interested in a variety of art projects concerned with community or college related activities. Emphasis is placed on the organization of ideas in advancing their creative process. Upon completion, students should be able to present visual evidence of the activities involved and explain how the experience advanced their artistic skills.

ART 109 ART MUSEUM SURVEY (3T) 3 credits

This course covers the art experience through supervised visits to museums and art galleries. Emphasis is placed on learning through critical study. Upon completion, students should be able to write a critical analysis of the artwork experienced that demonstrates an understanding of aesthetics.

ART 113 DRAWING I (6E) 3 credits

This course provides the opportunity to develop perceptual and technical skills in a variety of media. Emphasis is placed on communication through experimenting with composition, subject matter and technique. Upon completion, students should demonstrate and apply the fundamentals of art to various creative-drawing projects.

ART 114 DRAWING II (6E) 3 credits
PREREQUISITE: ART 113

This course advances the student's drawing skills in various art media. Emphasis is placed on communication through experimentation, composition, technique and personal expression. Upon completion, students should demonstrate creative drawing skills, the application of the fundamentals of art, and the communication of personal thoughts and feelings.

ART 121 TWO-DIMENSIONAL COMPOSITION I (6E) 3 credits

This course introduces the basic concepts of two-dimensional design. Topics include the elements and principles of design with emphasis on the arrangements and relationships among them. Upon completion, students should demonstrate an effective use of these elements and principles of design in creating two-dimensional compositions.

ART 122 TWO-DIMENSIONAL COMPOSITION II (6E) 3 credits

PREREQUISITE: ART 121

This course covers the theory and practice of composing two-dimensional images. Emphasis is placed on the relation between the basic elements and principles of design and their impact on the visual message. Upon completion, students should, through personal expression, demonstrate an effective use of these elements and principles of design in creating two-dimensional compositions.

ART 126 COLOR (6E) 3 credits

This course introduces the student to fundamentals of color and color uses. Topics include various color theories, technical skills in mixing color, types of pigment and the expressive uses of color. Upon completion, students should be able to explain and demonstrate a fundamental understanding of color as it is used in the development of

assigned color problems.

**ART 127 THREE-DIMENSIONAL
COMPOSITION (6E)**

3 credits

PREREQUISITE: ART 113 or ART 121

This course introduces art materials and principles of design that acquaint the beginner with the fundamentals of three-dimensional art. Emphasis is placed on the use of art fundamentals and the creative exploration of materials in constructing three-dimensional artworks. Upon completion, students should demonstrate basic technical skills and a personal awareness of the creative potential inherent in three-dimensional art forms.

ART 133 CERAMICS I (6E)

3 credits

This course introduces methods of clay forming as a means of expression. Topics may include hand building, wheel throwing, glazing, construction, design, and the functional and aesthetic aspects of pottery. Upon completion, students should demonstrate through their work a knowledge of their methods, as well as an understanding of the craftsmanship and aesthetics involved in ceramics.

ART 134 CERAMICS II (6E)

3 credits

PREREQUISITE: ART 133

This course develops the methods of clay forming as a means of expression. Topics may include hand building, glazing, design, and the functional and aesthetic aspects of pottery, although emphasis will be placed on the wheel throwing method. Upon completion, students should demonstrate improved craftsmanship and aesthetic quality in the production of pottery.

ART 173 PHOTOGRAPHY I (6E)

3 credits

This course is an introduction to the art of photography. Emphasis is placed on the technical and aesthetic aspects of photography with detailed instruction in darkroom techniques. Upon completion, students should understand the camera as a creative tool, understand the films, chemicals and papers, and have a knowledge of composition and history.

ART 174 PHOTOGRAPHY II (6E)

3 credits

PREREQUISITE: Permission of instructor

This is a sequence to Photography I and serves as an introductory photography course. Emphasis is placed on aesthetic as well as technical aspects of photography. Upon completion, the student will be able to produce well composed photographs.

ART 176 FILMMAKING (6E)

3 credits

This course provides a knowledge of the basics of filmmaking. Emphasis is placed on procedure, equipment, editing and sound. Upon completion, students should demonstrate a basic knowledge of filmmaking through critical analysis and film projects.

ART 177 COLOR PHOTOGRAPHY (6E)

3 credits

PREREQUISITE: ART 173 or ART 176 or Permission of instructor

This course covers the primary materials and processes of color photography. Emphasis is placed on the correct exposure, processing, creative color usage, and printing of both positive/negative color materials through exploration

of films, filters, processes, and color temperature. Upon completion, students should be able to correctly execute the technical controls of color materials and explore the creative possibilities of color photography.

ART 178 AUDIO-VISUAL TECHNIQUES (6E)

3 credits

This course is an exploration of the area of linkage between the visual and auditory senses. Work with sound and recording equipment, projected images and multimedia hardware and software is included. Students will produce finished multimedia pieces.

**ART 187 PHOTOGRAPHY, FILM, AND MEDIA I
(6E)**

3 credits

PREREQUISITE: ART 173 or PFC 177 or Permission of instructor

This course is designed to help the student explore creative approaches to photography, film, and related media. Problems in darkroom techniques, laboratory techniques, and special effects are included. Upon completion, the student should be able to apply these techniques to professional quality finished pieces.

ART 188 PHOTOGRAPHY, FILM, AND MEDIA II (6E)

3 credits

PREREQUISITE: PFC 187 or Permission of instructor

This course is designed to help the student explore creative approaches to photography, film, and related media in greater depth. Problems in darkroom techniques, laboratory techniques, and special effects are included. Upon completion, the student should be able to apply these techniques to professional quality finished pieces.

**ART 190 ART: LEGAL AND FINANCIAL
MANAGEMENT (3T)**

3 credits

This course is designed to acquaint the student with funding sources, business procedures, and project planning for the visual artist. Topics may include grants, budgeting, legal contracts, and self-promotion. Upon completion, students should demonstrate a knowledge of the basics of managing an art related business.

ART 203 ART HISTORY I (3T)

3 credits

This course covers the chronological development of different forms of art, such as sculpture, painting and architecture. Emphasis is placed on history from the ancient period through the Renaissance. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles, and of the impact of society on the arts.

ART 204 ART HISTORY II (3T)

3 credits

This course covers the chronological development of different forms of art, such as sculpture, painting and architecture. Emphasis is placed on history from the Baroque to the present. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles and of the impact of society on the arts.

ART 216 PRINTMAKING I (6E)

3 credits

This course introduces various printmaking processes. Topics include relief, intaglio, serigraphy, or lithography and the creative process. Upon completion, students should have a basic understanding of the creative and tech-

Course Descriptions

nical problems associated with printmaking.

ART 217 PRINTMAKING II (6E) 3 credits
PREREQUISITE: ART 216 or Permission of Instructor

This course provides the opportunity for the student to study a printmaking process beyond the introductory level. Emphasis is placed on creativity, composition, and technique in the communication of ideas through printmaking. Upon completion, students should demonstrate an understanding of the printmaking process as a creative tool for the expression of ideas.

ART 221 COMPUTER GRAPHICS I (6E) 3 credits

This course is designed to enhance the student's ability to produce computer generated graphics. Emphasis is on the application of original design to practical problems using a variety of hardware and software. Upon completion, students should have an understanding of professional computer graphics.

ART 231 WATERCOLOR PAINTING I (6E) 3 credits

This course introduces materials and techniques appropriate to painting on paper with water-based medium. Emphasis is placed on developing the technical skills and the expressive qualities of watercolor painting. Upon completion, students should be able to demonstrate a basic proficiency in handling the techniques of watercolor and how it can be used for personal expression.

ART 232 WATERCOLOR II (6E) 3 credits
PREREQUISITE: ART 231

This course advances the skills and techniques of painting on paper using water-based medium. Emphasis is placed on exploring the creative uses of watercolor and developing professional skills. Upon completion, students should demonstrate and compile a body of original paintings that reflects a personal awareness of the media's potential.

ART 233 PAINTING I (6E) 3 credits

This course is designed to introduce the student to fundamental painting processes and materials. Topics include art fundamentals, color theory, and composition. Upon completion, students should be able to demonstrate the fundamentals of art and discuss various approaches to the media and the creative processes associated with painting.

ART 234 PAINTING II (6E) 3 credits
PREREQUISITE: ART 233

This course is designed to develop the student's knowledge of the materials and procedures of painting beyond the introductory level. Emphasis is placed on the creative and technical problems associated with communicating through composition and style. Upon completion, students should be able to demonstrate the application of the fundamentals of painting and the creative process to the communication of ideas.

ART 243 SCULPTURE I (6E) 3 credits

This course provides a study of three-dimensional form by familiarizing students with sculpting media and techniques. Topics include the fundamentals of art and sculpting media with emphasis on the creative process. Upon completion, students should understand the fundamentals of art and three-dimensional form, as well as the various media and

processes associated with sculpture.

ART 244 SCULPTURE II (6E) 3 credits
PREREQUISITE: ART 243

This course is designed to sharpen skills in the media and processes of sculpture. Emphasis is placed on personal expression through three-dimensional form. Upon completion, students should be able to apply the fundamentals of art, their knowledge of form, and the sculptural processes to communicating ideas.

ART 253 GRAPHIC DESIGN I (6E) 3 credits
PREREQUISITE: VCM 180 or Permission of instructor

This course is designed to introduce the study of visual communication through design. Emphasis is placed on the application of design principles to projects involving such skills as illustration, layout, typography, and production technology. Upon completion, students should demonstrate a knowledge of the fundamentals of art and understanding of the relationship between materials, tools and visual communication.

ART 254 GRAPHIC DESIGN II (6E) 3 credits
PREREQUISITE: VCM 180 or ART 253

This course further explores the art of visual communication through design. Emphasis is placed on the application of design principles to projects involving such skills as illustration, layout, typography, and production technology. Upon completion, students should be able to apply the knowledge of the fundamentals of art, material and tools to the communication of ideas.

ART 258 PHOTOGRAPHIC AND MEDIA PROBLEMS (6E) 3 credits

This course deals with special problems in the student's area of interest. Emphasis is placed on design, technique and results. Upon completion, the student will be able to produce professional quality photographs in one particular area of photography.

ART 263 MUSEUM PRACTICE I (2-8E) 1-4 credits
PREREQUISITE: Permission of instructor

This course provides an introduction to a variety of museum works, with practical training supervised by museum staff. Topics may include promotion, shipping, labeling and hanging of a museum exhibit as well as the study of the work itself. Upon completion, students should understand the activities surrounding a museum exhibit and be able to explain how the experience advanced their knowledge of communicating through art.

ART 264 MUSEUM PRACTICE II (2-8E) 1-4 credits
PREREQUISITE: ART 263 or Permission of instructor

This course provides further study of museum artworks, with practical training supervised by museum staff. Topics may include promotion, shipping, labeling and hanging of a museum exhibit as well as the study of the work itself. Upon completion, students should understand the activities surrounding a museum exhibit and be able to explain how the experience advanced their knowledge of communicating through art.

ART 273 STUDIO PHOTOGRAPHY I (6E) 3 credits

This course stresses image-making problems requiring

studio or other controlled environment solutions. Lights, props, and related equipment and techniques are utilized. The student will produce quality photographs using studio techniques.

ART 274 STUDIO PHOTOGRAPHY II (6E) 3 credits
PREREQUISITE: PFC 273 or Permission of instructor

This course deals with advanced problems requiring studio or other controlled environment solutions. Lights, props, and related equipment and techniques are utilized. The student will produce quality photographs using studio techniques.

ART 283 GRAPHIC ANIMATION I (6E) 3 credits
PREREQUISITE: ART 221

This course is designed to teach the art of animation as a continuation of the study of visual communication. Topics include story development, drawing, layout story boarding, directing, motion control, sound synchronization, lighting and camera operation. Upon completion, students should understand the creative process as it relates to animation and demonstrate this knowledge through various projects.

ART 284 GRAPHIC ANIMATION II (6E) 3 credits
PREREQUISITE: ART 283

This course advances the students' technical and aesthetic knowledge of animation beyond the introductory level. Topics include story development, drawing, layout, story boarding, directing, motion control, sound synchronizing, lighting and camera operation. Upon completion, students should advance his or her understanding of the creative process as it relates to animation and demonstrate this knowledge through various projects.

ART 291 SUPERVISED STUDY IN STUDIO ART I (2-8E) 1-4 credits

This course is designed to enable the student to continue studio experiences in greater depth. Topics are to be chosen by the student with the approval of the instructor. Upon completion, the student should have a greater expertise in a particular area of art.

ART 292 SUPERVISED STUDY IN STUDIO ART II (2-8E) 1-4 credits

This course is designed to enable the student to continue studio experiences in greater depth. Topics are chosen by the student with the approval of the instructor. Upon completion, the student should have greater expertise in a particular area of art.

ART 293 DIRECTED READINGS IN ART I (3T) 3 credits

This course offers supervised readings in the literature of visual art. Emphasis is placed on in-depth analysis of the chosen area of study. Upon completion, students should have an extensive knowledge of an advanced area in art and evidence of their work in the form of research.

ART 294 DIRECTED READINGS IN ART II (3T) 3 credits
PREREQUISITE: ART 293

This course offers supervised readings in the literature of visual art. Emphasis is placed on an in-depth analysis of the chosen area of study. Upon completion, students

should have an extensive knowledge of an advanced area in art and evidence of their work in the form of research.

ART 299 ART PORTFOLIO (2-8E) 1-4 credits

This course is designed to help the art major in the preparation and presentation of an art portfolio. Emphasis is placed on representing the student's potential as an artist in order to interest employers, clients or schools. Upon completion, students should be able to make a professional presentation of their design and communication skills.

ASTRONOMY (AST)

AST 220 INTRODUCTION TO ASTRONOMY (3T, 2E) 4 credits

This course covers the history of astronomy and the development of astronomical thought leading to the birth of modern astronomy and its most recent development. Emphasis is placed on the coverage of astronomical instruments and measuring technologies, the solar system, the Milky Way galaxy, important extra-galactic objects, and cosmology. Laboratory is required.

BARBERING (BAR)

BAR 110 ORIENTATION TO BARBERING (3T) 3 credits

This course provides an orientation to professional barber-styling. Topics include professional image, basic fundamentals, and the history of barber-styling. Upon completion, the student should be able to identify the core concepts of the profession.

BAR 111 SCIENCE OF BARBERING (1T, 2E, 3M) 3 credits

This course introduces the student to the basic science of barber-styling. Topics include anatomy/physiology, disorders, and treatments of the skin, scalp, and hair, and theory of facial and scalp massage. Upon completion, the student should be familiar with the anatomical structures, as well as disorders and treatments of the skin, scalp, and hair.

BAR 112 BACTERIOLOGY AND SANITATION (3T) 3 credits

This course provides the theory of bacteriology and sanitation. Topics include the types of bacteria and sanitation procedures. Upon completion, the student should be able to identify types of bacteria and methods of sanitation.

BAR 113 BARBER-STYLING LAB (9M) 3 credits

This course provides practical application of barber-styling fundamentals. Emphasis is placed on the care of implements, shampooing, and haircutting. Upon completion, the student should be able to care for his/her implements properly and demonstrate the basic techniques of shampooing and haircutting with only minimal supervision.

BAR 114 ADVANCED BARBER-STYLING LAB (9M) 3 credits

This course provides the student with practical experience in haircutting and facial massage. Emphasis is placed on hands-on experience. Upon completion, the student should be able to demonstrate on a model the correct procedures for a facial massage and basic haircut.

Course Descriptions

BAR 120 PROPERTIES OF CHEMISTRY (3T) 3 credits

This course provides the student with a basic knowledge of chemicals used in barber-styling. Topics include the changes produced in the hair and skin through exposure to chemicals, electricity and special light spectrums. Upon completion, the student should understand the proper use of implements and chemicals to treat hair and skin.

BAR 121 CHEMICAL HAIR PROCESSING (9M) 3 credits

This course provides the student with knowledge and hands-on experience using chemicals to alter the appearance of hair. Emphasis is placed on the use of chemicals to relax, wave, and soft curl the hair. Upon completion, the student should be competent in the use of chemicals to produce desired structure changes to the hair.

BAR 122 HAIR COLORING CHEMISTRY (3T) 3 credits

This course provides the student with a basic knowledge of hair color alteration. Topics include temporary, semi-permanent, and permanent changes. Upon completion, the student should be able to identify and explain the procedures for each classification of hair color alteration.

BAR 124 HAIR COLORING METHODOLOGY LAB (9M) 3 credits

This course provides the student an opportunity for practical application of all classifications of chemical hair coloring and processing products in a supervised environment. Emphasis is placed on experience in all classifications of hair coloring and processing procedures.

BAR 130 MARKETING AND BUSINESS MANAGEMENT (3T) 3 credits

This course provides the student with marketing and management skills that are essential for successful salon management. Topics include first aid, job search, bookkeeping, selling techniques, shop floor plans, shop locations, and legal regulations. Upon completion, the student should be aware of marketing and business management requirements for a successful salon.

BAR 131 STRUCTURE AND DISORDERS OF NAILS (1.5T, 4.5M) 3 credits

This course provides the student with the knowledge of nail structure and experience in identifying nail disorders. Emphasis is placed on identifying disorders and on using the correct implements and supplies for healthy nail care and manicures. Upon completion, the student should be capable of providing professional nail care.

BAR 132 HAIR STYLING AND DESIGN (3T) 3 credits

This course introduces the student to the art of hair style and design. Topics include the selection of styles to create a mood or complement facial features as well as hair replacement and hair pieces. Upon completion, the student should know the principles of style and design.

BAR 133 HAIR STYLING AND MANAGEMENT LAB (9M) 3 credits

This course includes hair styling and management procedures. Emphasis is placed on styling, management, marketing, and legal regulations. Upon completion, the student should be able to integrate a variety of skills and be ready to begin an internship in a salon setting.

BAR 140 PRACTICUM (10M) 2 credits

This course provides the student an opportunity to combine knowledge and skill covering all aspects of barber-styling in a professional setting or school lab with minimal supervision. Emphasis is placed on utilization of the knowledge and technical skills covered in the barbering/styling curriculum. Upon completion, the student should be able to function in a professional setting with very little assistance.

BAR 141 PRACTICUM (10M) 2 credits

This course provides the student an additional opportunity to combine knowledge and skill covering all aspects of barber-styling in a professional setting or school lab with minimal supervision. Emphasis is placed on utilization of the knowledge and technical skills covered in the barbering-styling curriculum. Upon completion, the student should function in a professional setting as a productive employee or manager.

BIOLOGY (BIO)

BIO 101 INTRODUCTION TO BIOLOGY I (3T, 2E) 4 credits

Introduction to Biology I is the first of a two-course sequence designed for non-science majors. It covers historical studies illustrating the scientific method, cellular structure, bioenergetics, Mendelian and molecular genetics and a survey of human organ systems. Special attention is paid to biological information that will allow each student to live a healthier life and be better prepared to understand human activity. Laboratory is required.

BIO 102 INTRODUCTION TO BIOLOGY II (3T, 2E) 4 credits
PREREQUISITE: BIO 101

Introduction to Biology II is the second of a two-course sequence for non-science majors. It covers the theory of evolution, evolutionary principles and relationships, environmental and ecological topics, classification, and a survey of biodiversity. Each student will be prepared to make informed decisions on environmental and ecological issues. Laboratory is required.

BIO 103 PRINCIPLES OF BIOLOGY I (3T, 2E) 4 credits
COREQUISITE: ENG 093; or equivalent ACT, SAT score, or BSR placement score of 67 or higher.

This is an introductory course for both science and non-science majors. It covers physical, chemical, and biological principles common to all organisms. These principles are explained through a study of cell structure and function, cellular reproduction, basic biochemistry, cell energetics, the process of photosynthesis, and Mendelian and molecular genetics. Also included are the scientific method, basic principles of evolution, and an overview of the diversity of life with emphasis on viruses, prokaryotes, and protists. Laboratory is required.

BIO 104 PRINCIPLES OF BIOLOGY II (3T, 2E) 4 credits
PREREQUISITE: BIO 103

This course is an introduction to basic ecological and evolutionary relationships of plants and animals and a survey of plant and animal diversity including classification, morphology, physiology, and reproduction. Laboratory is required.

BIO 105 INTRODUCTION TO BIOTECHNOLOGY (3T, 2E) 4 credits
CO-REQUISITE: BIO 103

This course is an introduction to biotechnology, including career exploration, historical development and current applications in the areas of medicine, forensics, agriculture, and the environment. Students will learn laboratory safety and documentation while acquiring skills in the maintenance and calibration of basic lab equipment, calculation, and preparation of lab solutions and media.

BIO 107 CELL CULTURE (2T, 4E) 4 credits

The overall objective of this course is to provide a basic understanding of the growth requirements and methodologies associated with the propagation of organisms important to the field of biotechnology. Instruction will focus on growing techniques and long-term maintenance of various cell cultures, including both attached and suspension cell lines. Microbial life cycle and cell culture will be emphasized, including discussion of pathogenic aspects and utilization of microbial transformation and protein production for use in biotechnological processes.

BIO 201 HUMAN ANATOMY AND PHYSIOLOGY I (3T, 2E) 4 credits

Human Anatomy and Physiology I covers the structure and function of the human body. Included is an orientation of the human body; basic principles of chemistry; a study of cells and tissues; metabolism; joints; the integumentary, skeletal, muscular, and nervous systems; and the senses. Dissection, histological studies, gross anatomy, and physiology are featured in the laboratory experience. Laboratory is required.

BIO 202 HUMAN ANATOMY AND PHYSIOLOGY II (3T, 2E) 4 credits
PREREQUISITE: BIO 201

Human Anatomy and Physiology II covers the structure and function of the human body. Included is a study of basic nutrition; basic principles of water; electrolyte; acid-base balance; and the endocrine, respiratory, digestive, excretory, cardiovascular, lymphatic and reproductive systems. Dissection, histological studies, gross anatomy, and physiology are featured in the laboratory experience. Laboratory is required.

BIO 203 TECHNIQUES IN MOLECULAR BIOLOGY (2T, 4E) 4 credits
PREREQUISITE: BIO 105

This course is an introduction to the major topics in biochemistry and molecular biology. Topics include the major classes of biological molecules, an overview of the major metabolic pathways, advancing technologies, and bioethical issues. The laboratory will provide experience in the isolation and manipulation of DNA and RNA, DNA and protein electrophoresis, and enzymatic and immunological assays.

BIO 220 GENERAL MICROBIOLOGY (2T, 4E) 4 credits

This course includes historical perspectives, cell structure and function, microbial genetics, infectious diseases, immunology, distribution, physiology, culture, identification, classification, and control of microorganisms. The laboratory experience includes micro-techniques, distribution, culture, identification, and control. Laboratories are required.

BIO 240 FIELD BIOLOGY (3T, 2E) 4 credits
PREREQUISITE: BIO 103

This course covers basic principles of taxonomy, classification, and selected ecological concepts. Animal and plant diversity is emphasized through collection, identification, and museum preparation of local flora and fauna. Laboratory is required.

BIO 250 DIRECTED STUDIES IN BIOLOGY (2-8E) 1-4 credits
PREREQUISITE: Permission of instructor

This course is designed for independent study in specific areas of biology chosen by the student in consultation with a faculty member and carried out under faculty supervision.

BIO 251 DIRECTED STUDIES IN BIOLOGY (2-8E) 1-4 credits
PREREQUISITE: BIO 250 and Permission of instructor

This course is designed for independent study in specific areas of biology chosen by the student in consultation with a faculty member and carried out under faculty supervision.

BIO 252 DIRECTED STUDIES IN BIOTECHNOLOGY (1T, 2E) 2 credits
PREREQUISITE/CO-REQUISITE: BIO 203

This course allows independent study under the direction of an instructor. Topics to be included in the course material will be approved by the instructor prior to or at the beginning of the class. Typical projects will expose the student to the industry and provide practical application of laboratory procedures. Upon completion, the student will be able to demonstrate knowledge of the topics as specified by the instructor.

BIO 254 ADVANCED TOPICS IN BIOTECHNOLOGY (1T, 2E) 2-3 credits
PREREQUISITE: BIO 252

In this advanced course, the student will design and implement an independent study that utilizes biotechnological methods relevant to local industry or to expand the scope of previous laboratory experience. The projects will include an expansion of previous experiences to design and implement an application as found in local biotechnology industries.

BIO 256 BIOTECHNOLOGY INTERNSHIP (10E) 2 credits
PREREQUISITE/CO-REQUISITE: BIO 254

The internship will provide advanced students the opportunity to develop job and career-related skills while in a work setting. Upon successful completion of this course, the student should be able to apply classroom knowledge to an actual work situation. The work will be developed cooperatively with academic, industrial, and private institutional biotechnology laboratories.

BIO 286, 287 FIELD STUDIES IN PLANT ECOLOGY I and II (1-2T, 2-4E) 2-4 credits each
PREREQUISITE: Permission of instructor

These courses introduce a strong field component into our Biology program and expose students to unique ecosystems like the Great Smoky Mountains National Park and the Chihuahuan Desert of Big Bend National Park in western Texas. These laboratory intensive courses introduce plants

Course Descriptions

in selected communities and emphasize identification, sampling and collecting techniques in the field.

BIO 288, 289 FIELD STUDIES IN MARINE BIOLOGY I and II (1-2T, 2-4E) 2-4 credits each

PREREQUISITE: Permission of instructor

These laboratory intensive courses introduce salt water and marsh environments with emphasis on vertebrates. Pertinent ecological concepts are introduced using sampling, collecting, preserving, and identification techniques. These courses are offered for students to obtain first hand field experience in marine ecosystems especially on the Gulf Coast. In the past, students have studied Marine Biology at the Dauphin Island Sea Lab, the Florida State University Marine Laboratory, Dog Island Sound, St. George Island, taken sampling excursions in the Gulf of Mexico aboard research vessels, and studied ornithology and salt water marshes on the Mississippi Sound coastline.

BASIC SKILLS READING (RDG)

RDG 085 DEVELOPMENTAL READING (3T) 3 credits

This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level material.

NOTE: Students who score at or below 66 on the Compass Reading Test will be required to take RDG 085 during their first or second semester at Calhoun.

BASIC STUDY SKILLS (BSS)

BSS 100 STUDY SKILLS (1T) 1 credit

This course is intended for those who placed into credit-level course work but who are not maintaining satisfactory academic progress toward meeting program goals. Topics include study skills, note taking, learning styles and strategies, test taking, goal setting, and self-assessment skills. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

BSS 118 STUDY SKILLS (1T) 1 credit

This course covers skills and strategies designed to improve study behaviors. Topics include time management, note taking, test taking, memory techniques, active reading strategies, critical thinking, communication skills, learning styles, and other strategies for effective learning. Upon completion, students should be able to apply appropriate study strategies and techniques to the development of an effective study plan.

BUSINESS (BUS)

BUS 100 INTRODUCTION TO BUSINESS (3T) 3 credits

This is a survey course designed to acquaint the student with American business as a dynamic process in a global setting. Topics include the private enterprise system, forms of business ownership, marketing, factors of production, personnel, labor, finance, and taxation.

BUS 147 INTRODUCTION TO FINANCE (3T) 3 credits

This course is a survey of monetary and credit systems. Topics include the role of the Federal Reserve System, sources of capital including forms of long-term corporate financing, and consumer credit in the financial structure of our economy.

BUS 150 BUSINESS MATH (3T) 3 credits

This course is a study of practical business mathematics. Topics include fundamental processes of arithmetic with emphasis on decimals and percentages, markup, discounts, bank reconciliation, simple and compound interest, discounting notes, depreciation methods, and present value.

BUS 190 MANAGEMENT WORKSHOP (1-3T) 1 - 3 credits

This course is a part of a series of workshops wherein current topics of interest are presented. They are offered upon demand and can be tailored to the needs of individuals, business and industry.

BUS 190B PROBLEM SOLVING (1T) 1 credit

The goal of this course is to help students improve problem-solving skills. Emphasis is placed on developing the five-step process for problem solving: Defining the Situation, Stating the Goal, Identifying a Solution, Preparing a Plan, and Taking Action.

BUS 190C TEAMBUILDING (1T) 1 credit

The goal of this course is to help students identify factors and develop the skills necessary for becoming part of a successful team. Emphasis is placed on developing skills in communication, shared leadership, and conflict resolution.

BUS 190D SELF-MANAGEMENT (1T) 1 credit

The goal of this course is to help students build skills necessary to take responsibility and adjust to the changing demands of the workplace. Emphasis is placed on developing abilities to adjust to new technologies or processes, upgrading skills, career planning, and personal transitions.

BUS 190E EMPLOYABILITY SKILLS (1T) 1 credit

The goal of this course is to help students develop skills to make them more employable. Emphasis is placed on developing a professional resume and cover letter, organizing a job search campaign, interviewing, resigning from a position, and accepting new positions.

BUS 190F ORGANIZATIONAL COMMUNICATIONS (1T) 1 credit

The goal of this course is to help students build personal skills that allow them to communicate effectively in

the workplace. Emphasis is placed on verbal, nonverbal, and written communications as they relate to professional work habits.

BUS 190G INTERPERSONAL RELATIONS FOR MANAGEMENT (1T) 1 credit

The goal of this course is to help students achieve better interpersonal relationships on the job. Emphasis is placed on the concepts of professional treatment of customers, managing diversity, commitment to quality, managing office politics, developing positive attitudes, and self-discipline.

BUS 190H TIME/PROJECT MANAGEMENT (1T) 1 credit

The goal of this course is to assist students in developing effective time management skills. Emphasis is placed on learning to set priorities, making decisions, delegating, concentrating on specific tasks, and increasing personal productivity.

BUS 190I DIRECTED READINGS IN MANAGEMENT (1T) 1 credit

The goal of this course is to allow students to research a current topic of interest. Topics chosen should benefit the student's professional development or allow for gathering beneficial research for the student's place of work.

BUS 190J ETHICS IN THE WORKPLACE (1T) 1 credit

The goal of this course is to allow students to explore the arena of ethics in the workplace. Emphasis is placed on ethics case studies.

BUS 190K STRESS MANAGEMENT (1T) 1 credit

This course is designed to help students develop skills in managing stress associated with careers in business. Emphasis is placed on developing coping skills such as conflict resolution, delegation, and identifying problems early to avoid unnecessary stress.

BUS 190L DEVELOPING A BUSINESS PLAN (1T) 1 credit

This course is designed to give students the opportunity to develop a personal business plan. The course focuses on the following areas: purpose of a business plan, mechanics of writing a business plan, components of a business plan, and research techniques.

BUS 190M EVALUATING THE ENTREPRENEURIAL PERSONALITY (1T) 1 credit

This course is designed to allow students to identify in themselves and others characteristics that are favorable for the successful entrepreneur. Self-analysis and a study of entrepreneurial traits are included.

BUS 190N FINANCING AN ENTREPRENEURIAL ENTERPRISE (1T) 1 credit

This course is designed to inform students about the options available for financing an entrepreneurial enterprise. The course allows students to investigate possible sources of financing and to study topics such as break-even analysis, fixed and variable costs, and financial statements.

BUS 190P PLANNING FOR SUPERVISING HUMAN RESOURCES (1T) 1 credit

This course is designed to offer insight into the employee relation side of conducting business. Emphasis is placed on identifying employment needs, training, supervising, and motivating employees.

BUS 190Q PLANNING MARKET STRATEGY (1T) 1 credit

This course is designed to allow owners of businesses to develop a market strategy. Included is a discussion of market analysis, competition, sales and distribution, and pricing strategies.

BUS 190R PROMOTIONAL STRATEGIES (1T) 1 credit

This course allows students to look specifically at two kinds of promotional strategies: Advertising and Public Relations. Students explore how each of these strategies strongly affects the success of a business.

BUS 190S CHOOSING A LOCATION FOR A BUSINESS (1T) 1 credit

This course is designed to help students planning to start their own business to choose a suitable location and facility. Course content focuses on site location, purchasing or leasing an existing facility, and arranging layout.

BUS 190T STATISTICAL PROCESS CONTROL (SPC) - VARIABLE DATA (1T) 1 credit

This course covers descriptive statistics, types of data, and how to calculate, plot, and analyze various variable charts such as average and range, median and range, and standard deviations. Variable charts are used with measurable data.

BUS 190U STATISTICAL PROCESS CONTROL (SPC) - ATTRIBUTE DATA (1T) 1 credit

This course addresses the development of non-measurable data into attribute charts for analysis of a process capability. Type of charts covered are P, NP, C and U with emphasis given to development of P-type charts.

BUS 190V MANAGEMENT FOR ENTREPRENEURS (1T) 1 credit

This course is an overview of the principles of management as they relate to small and self-owned businesses. Emphasis is placed on planning, organizing, and controlling.

BUS 190W CUSTOMER SERVICE STRATEGIES (1T) 1 credit

This course is an overview of the principles of customer service. Emphasis is placed on determining elements of customer satisfaction, creating a customer-focused culture, soliciting and using customer feedback, and building a "relationship" with the customer.

BUS 190X WORKPLACE READINESS (1-3T) 1-3 credits

This course is designed to assess students' workplace skills and help them identify areas of weakness. Skills assessment tools such as WorkKeys will be utilized. Other components of workplace readiness will be included as needed.

Course Descriptions

COURSE DESCRIPTIONS

BUS 190Y LEADERSHIP SKILLS (1T) 1 credit
This course is an overview of the characteristics of leadership. Emphasis is placed on what effective leaders do, leadership styles, and the differences between leadership and management.

BUS 193 BUSINESS CO-OP I (1T) 1 credit
PREREQUISITE: Successful completion of two (2) business courses
This course is part of a series wherein the student works in a degree/program related job. Emphasis is placed on student's work experience as it integrates academic knowledge with practical application through exposure to business and related practices in the working environment. The grade is based on the employer's evaluation of each student's productivity, content of a descriptive report submitted by the student, and student development and assessment of a learning contract.

BUS 194 BUSINESS CO-OP II (1T) 1 credit
PREREQUISITE: BUS 193
This course is a part of a series wherein the student works in a degree/program related job. Emphasis is placed on student's work experience as it integrates academic knowledge with practical application through exposure to business and related practices in the working environment. The grade is based on the employer's evaluation of each student's productivity, content of a descriptive report submitted by the student, and student development and assessment of a learning contract.

BUS 195 BUSINESS CO-OP III (1T) 1 credit
PREREQUISITE: BUS 194
This course is a part of a series wherein the student works in a degree/program related job. Emphasis is placed on student's work experience as it integrates academic knowledge with practical application through exposure to business and related practices in the working environment. The grade is based on the employer's evaluation of each student's productivity, content of a descriptive report submitted by the student, and student development and assessment of a learning contract.

BUS 196 BUSINESS CO-OP IV (1T) 1 credit
PREREQUISITE: BUS 195
This course is a part of a series wherein the student works in a degree/program related job. Emphasis is placed on student's work experience as it integrates academic knowledge with practical application through exposure to business and related practices in the working environment. The grade is based on the employer's evaluation of each student's productivity, content of a descriptive report submitted by the student, and student development and assessment of a learning contract.

BUS 197 BUSINESS CO-OP V (1T) 1 credit
PREREQUISITE: BUS 196
This course is a part of a series wherein the student works in a degree/program related job. Emphasis is placed on student's work experience as it integrates academic knowledge with practical application through exposure to business and related practices in the working environment. The grade is based on the employer's

evaluation of each student's productivity, content of a descriptive report submitted by the student, and student development and assessment of a learning contract.

BUS 215 BUSINESS COMMUNICATIONS (3T) 3 credits
PREREQUISITE: ENG 101

This course covers written, oral, and nonverbal communications. Topics include the application of communication principles to the production of clear, correct, and logically organized faxes, e-mail, memos, letters, resumes, reports and other business communications.

BUS 241 PRINCIPLES OF ACCOUNTING I (3T) 3 credits
This course is designed to provide a basic theory of accounting principles and practices used by service and merchandising enterprises. Emphasis is placed on financial accounting, including the accounting cycle, and financial statement preparation and analysis.

BUS 242 PRINCIPLES OF ACCOUNTING II (3T) 3 credits
PREREQUISITE: BUS 241
This course is a continuation of BUS 241. In addition to a study of financial accounting, this course also places emphasis upon managerial accounting, with coverage of corporations, statement analysis, introductory cost accounting, and use of information for planning, control, and decision making.

BUS 246 ACCOUNTING ON THE MICROCOMPUTER (3T) 3 credits
PREREQUISITE: BUS 241
This course utilizes the microcomputer in a study of accounting principles and practices. Emphasis is on the preparation and analysis of financial statements, measuring business activity, and making rational business decisions.

BUS 248 MANAGERIAL ACCOUNTING (3T) 3 credits
PREREQUISITE: BUS 241
(Course offered only in Spring and Summer Semesters)
This course is designed to familiarize the student with management concepts and techniques of industrial accounting procedures. Emphasis is placed on cost behavior, contribution approach to decision-making, budgeting, overhead analysis, cost-volume-profit analysis, and cost accounting systems.

BUS 253 INDIVIDUAL INCOME TAX (3T) 3 credits
This course is intended to familiarize the student with the fundamentals of the federal income tax laws with primary emphasis on those affecting the individual. Emphasis is placed on gross income determination, adjustments to income, business expenses, itemized deductions, exemptions, capital gains/losses, depreciation, and tax credits. Upon completion of this course, the student will be able to apply the fundamentals of the federal income tax laws affecting the individual. Course offered on Decatur Campus Spring Semester.

BUS 261 BUSINESS LAW I (3T) 3 credits
This course provides an overview of legal principles affecting businesses. Topics include contracts, agency and employment, negotiable instruments, bailments,

and sale of goods.

BUS 262 BUSINESS LAW II (3T) 3 credits
This course is a continuation of BUS 261. Topics include legal principles related to partnerships, corporations, real property and leases, insurance, security devices, bankruptcy, trust and estates; government regulations of business and labor; civil and criminal liability; and business security.

BUS 263 THE LEGAL AND SOCIAL ENVIRONMENT OF BUSINESS (3T) 3 credits
This course provides an overview of the legal and social environment for business operations with emphasis on contemporary issues and their subsequent impact on business. Topics include the Constitution, the Bill of Rights, the legislative process, civil and criminal law, administrative agencies, trade regulations, consumer protection, contracts, employment and personal property.

BUS 271 BUSINESS STATISTICS I (3T) 3 credits
PREREQUISITE: MTH 110 or MTH 112 or appropriate score on math placement test
This is an introductory study of basic statistical concepts applied to economic and business problems. Topics include the collection, classification, and presentation of data, statistical description and analysis of data, measures of central tendency and dispersion, elementary probability, sampling, estimating and introduction to hypothesis testing.

BUS 272 BUSINESS STATISTICS II (3T) 3 credits
PREREQUISITE: BUS 271
This course is a continuation of BUS 271. Topics include sampling theory, statistical inference, regression and correlation, chi square, analysis of variance, time series index numbers, and decision theory.

BUS 275 PRINCIPLES OF MANAGEMENT (3T) 3 credits
This course provides a basic study of the principles of management. Topics include planning, organizing, staffing, directing, and controlling with emphasis on practical business applications.

BUS 279 SMALL BUSINESS MANAGEMENT (3M) 3 credits
This course provides an overview of the creation and operation of a small business. Topics include buying a franchise, starting a business, identifying capital resources, understanding markets, managing customer credit, managing accounting systems, budgeting systems, inventory systems, purchasing insurance, and the importance of appropriate legal counsel.

BUS 280 INDUSTRIAL MANAGEMENT (3T) 3 credits
This course provides an overview of management in an industrial setting. Topics include operations analysis, research and development, physical facilities, production planning, productivity improvement, product flow, quality control, jobs and wages, and employee motivation.

BUS 285 PRINCIPLES OF MARKETING (3T) 3 credits
This course provides a general overview of the field of marketing. Topics include marketing strategies, channels of distribution, marketing research, and consumer behavior.

BUS 291 ALTERNATING BUSINESS CO-OP I (1-3T) 1-3 credits
PREREQUISITE: Permission of instructor
This two-course sequence allows students to alternate semesters of full-time work in a job closely related to the student's academic major with semesters of full-time academic work. Emphasis is placed on a student's work experience as it integrates academic knowledge with practical applications in the business environment. The grade is based on the employer's evaluation of student productivity, evaluative reports submitted by the student, and the development and assessment by the student of a learning contract.

BUS 292 ALTERNATING BUSINESS CO-OP II (1-3T) 1-3 credits
PREREQUISITE: Permission of instructor
This two-course sequence allows students to alternate semesters of full-time work in a job closely related to the student's academic major with semesters of full-time academic work. Emphasis is placed on a student's work experience as it integrates academic knowledge with practical applications in the business environment. The grade is based on the employer's evaluation of student productivity, evaluative reports submitted by the student, and the development and assessment by the student of a learning contract.

BUS 296 BUSINESS INTERNSHIP I (3T) 3 credits
PREREQUISITE: Minimum 6 semester hours completed. Minimum GPA 2.0 (C)
This two-course sequence allows the student to work part-time on a job closely related to his or her academic major while attending classes on a full-time basis. Emphasis is placed on a student's work experience as it integrates academic knowledge with practical applications in the business environment. The grade is based on a term paper, job-site visits by the instructor, the employer's evaluation of the student, and the development and assessment by the student of a learning contract.

BUS 297 BUSINESS INTERNSHIP II (3T) 3 credits
PREREQUISITE: Minimum 6 semester hours completed. Minimum GPA 2.0 (C)
This two-course sequence allows the student to work part-time on a job closely related to his or her academic major while attending classes on a full-time basis. Emphasis is placed on a student's work experience as it integrates academic knowledge with practical applications in the business environment. The grade is based on a term paper, job-site visits by the instructor, the employer's evaluation of the student, and the development and assessment by the student of a learning contract.

Course Descriptions

CHEMISTRY (CHM)

CHM 104 INTRODUCTION TO INORGANIC

CHEMISTRY (3T, 2E) 4 credits
PREREQUISITE: MTH 098 Elementary Algebra or equivalent math placement score.

This is a survey course of general chemistry for students who do not intend to major in science or engineering and may not be substituted for CHM 111. Lecture will emphasize the facts, principles, and theories of general chemistry including math operations, matter and energy, atomic structure, symbols and formulas, nomenclature, the periodic table, bonding concepts, equations, reactions, stoichiometry, gas laws, phases of matter, solutions, pH, and equilibrium reactions. Laboratory is required.

CHM 105 INTRODUCTION TO ORGANIC

CHEMISTRY (3T, 2E) 4 credits
PREREQUISITE: CHM 104
(Course taught in Spring Semester of even numbered years only)

This is a survey course of organic chemistry and biochemistry for students who do not intend to major in science or engineering. Topics will include basic nomenclature, classification of organic compounds, typical organic reactions, reactions involved in life processes, function of biomolecules, and the handling and disposal of organic compounds. Laboratory is required.

CHM 111 COLLEGE CHEMISTRY I (3T, 2E)

4 credits
PREREQUISITE: MTH 112, Precalculus Algebra or CHM 099

This is the first course in a two-semester sequence designed for the science or engineering major who is expected to have a strong background in mathematics. Topics in this course include measurements, nomenclature, stoichiometry, atomic structure, equations and reactions, basic concepts of thermochemistry, chemical and physical properties, bonding, molecular structure, gas laws, kinetic-molecular theory, condensed matter, solutions, colloids, and some descriptive chemistry topics. Laboratory is required.

CHM 112 COLLEGE CHEMISTRY II (3T, 2E)

4 credits
PREREQUISITE: CHM 111

This is the second course in a two-semester sequence designed primarily for the science and engineering student who is expected to have a strong background in mathematics. Topics in this course include chemical kinetics, chemical equilibria, acids and bases, ionic equilibria of weak electrolytes, solubility product principle, chemical thermodynamics, electrochemistry, oxidation-reduction, nuclear chemistry, an introduction to organic chemistry and biochemistry, atmospheric chemistry, and selected topics in descriptive chemistry including the metals, nonmetals, semi-metals, coordination compounds, transition compounds, and post-transition compounds. Laboratory is required.

CHM 220 QUANTITATIVE ANALYSIS (3T, 2E)

4 credits

PREREQUISITE: CHM 112

(Course Taught infrequently, only as enrollment demands)

This course covers the theories, principles, and practices in standard gravimetric, volumetric, calorimetric, and electro-metric analysis with special emphasis on equilibrium in acid-base and oxidation-reduction reactions and stoichiometry of chemical equations. Laboratory is required and will include classical techniques in chemical analysis, modern methods of chemical separation, and basic instrumental techniques.

CHM 221 ORGANIC CHEMISTRY I (3T, 2E)

4 credits

PREREQUISITE: CHM 112

This is the first course in a two-semester sequence. Topics in this course include nomenclature, structure, physical and chemical properties, synthesis, and typical reactions for aliphatic, alicyclic, and aromatic compounds with special emphasis on reaction mechanisms, spectroscopy, and stereochemistry. Laboratory is required and will include the synthesis and confirmation of representative organic compounds with emphasis on basic techniques.

CHM 222 ORGANIC CHEMISTRY II (3T, 2E)

4 credits

PREREQUISITE: CHM 221

This is the second course in a two-semester sequence. Topics in this course include nomenclature, structure, physical and chemical properties, synthesis, and typical reactions for aliphatic, alicyclic, aromatic, and biological compounds, polymers and their derivatives, with special emphasis on reaction mechanisms, spectroscopy, and stereochemistry. Laboratory is required and will include the synthesis and confirmation of representative organic compounds with emphasis on basic techniques.

CHM 250 DIRECTED STUDIES IN CHEMISTRY (1T)

1 credit

PREREQUISITE: Permission of the instructor.

This course is designed for independent study in specific areas of chemistry chosen in consultation with a faculty member and carried out under faculty supervision. This course may be repeated three (3) times for credit.

CHILD DEVELOPMENT (CHD)

*CHD 100 INTRODUCTION OF EARLY CARE AND EDUCATION OF CHILDREN (3T)

3 credits

This course introduces students to the child education and care profession. It is designed to increase understanding of the basic concepts of child development and the developmental characteristics of children from birth through age 8/9 years. This course is the foundation for planning appropriate activities for children and establishing appropriate expectations of young children. This class also offers an opportunity to study the developmental domains (social, emotional, cognitive/language and physical). Course includes observations of the young child in early childhood settings.

CHD 201 CHILD GROWTH AND DEVELOPMENT

PRINCIPLES (3T)

3 credits

This course is a systematic study of child growth and development from conception through early childhood. Emphasis is on principles underlying physical, mental, emotional, and social development, and on methods of child study, and practical implications. Upon completion, students will be able to use knowledge of how young children differ in development and approaches to learning to provide opportunities that support the physical, social, emotional, language, cognitive, and aesthetic development. PSY 210 or PSY 211 may be used as a suitable substitute for this course for the AAS degree program.

***CHD 202 CHILDREN'S CREATIVE EXPERIENCES**

(2T, 1E)

3 credits

This course focuses on fostering creativity in preschool children and developing a creative attitude in teachers. Topics include selecting and developing creative experiences in language arts, music, art, science, math and movement with observation and participation with young children required. On completion, students will be able to select and implement creative and age-appropriate experiences for young children.

CHD 203 CHILDREN'S LITERATURE AND

LANGUAGE DEVELOPMENT (2T, 1E)

3 credits

This course surveys appropriate literature and language arts activities designed to enhance young children's speaking, listening, pre-reading, and writing skills. Emphasis is placed on developmental appropriateness as related to language. Upon completion, students should be able to create, evaluate and demonstrate activities which support a language-rich environment for young children.

***CHD 204 METHODS AND MATERIALS FOR TEACHING**

CHILDREN (2T, 1E)

3 credits

This course introduces basic methods and materials used in teaching young children. Emphasis is placed on student's compiling a professional resource file of activities used for teaching math, language arts, and science and social studies concepts. Upon completion, students will be able to demonstrate basic methods of creating learning experiences using developmental appropriate techniques, materials and realistic expectations. Course includes observations of young children in a variety of childcare environments.

CHD 205 PROGRAM PLANNING FOR EDUCATING

YOUNG CHILDREN (3T)

3 credits

This course provides students with knowledge to develop programs for early child development. Specific content includes a review of child development concepts and program contents. Upon completion, students will be able to develop and evaluate effective programs for the education of young children.

CHD 206 CHILDREN'S HEALTH AND SAFETY (3T)

3 credits

This course introduces basic health, nutrition and safety management practices for young children. Emphasis is placed on how to set up and maintain safe, healthy environments for young children including specific procedures for infants and toddlers and procedures regarding childhood illnesses and communicable diseases.

CHD 208 ADMINISTRATION OF CHILD DEVELOPMENT

PROGRAMS (3T)

3 credits

This course includes appropriate administrative policies and procedures relevant to preschool programs. Topics include local, state and federal regulations; budget planning; record keeping; personnel policies and parent involvement. Upon completion, students should be able to identify elements of a sound business plan, develop familiarity with basic record-keeping techniques, and identify elements of a developmentally appropriate program.

CHD 209 INFANT AND TODDLER EDUCATION

PROGRAMS (3T)

3 credits

This course focuses on child development from infancy to thirty-five months of age with emphasis on planning programs using developmentally appropriate material. Emphasis is placed on positive ways to support an infant or toddler's social, emotional, physical and intellectual development. Upon completion, students should be able to plan an infant-toddler program and environment, that is appropriate and supportive of the families and the children.

CHD 210 EDUCATING EXCEPTIONAL CHILDREN (3T)

3 credits

This course explores the many different types of exceptionalities found in young children. Topics include speech, language, hearing and visual impairments; gifted and talented children; mental retardation; emotional, behavioral, and neurological handicaps. Upon completion, students should be able to identify appropriate strategies for working with children.

CHD 214 FAMILIES AND COMMUNITIES IN EARLY

CHILDCARE AND EDUCATION PROGRAMS (3T)

3 credits

This course provides students with information about working with diverse families and communities. Students will be introduced to family and community settings, the importance of relationships with children, and the pressing needs of today's society. Students will study and practice techniques for developing these important relationships and effective communication skills.

**CHD 215 SUPERVISED PRACTICAL EXPERIENCES IN
CHILD DEVELOPMENT (3E)**

3 credits

PREREQUISITE: Permission of instructor

This course provides a minimum of 90 hours of hands-on, supervised experience in an approved program for young children. Students will develop a portfolio documenting experiences gained during this course.

CHD 220 PARENTING SKILLS (3T)

3 credits

This course introduces childcare providers to important issues in parenting education, beginning with prenatal concerns and continuing through childhood years. Emphasis is placed on using effective parenting and childrearing practices including appropriate guidance methods. Students learn to apply parenting skills for diverse families. Upon completion, students will be more effective in working with families and young children.

***Courses required in the Child Development Associate (CDA) Certification for employees currently employed within the industries.**

Course Descriptions

COMPUTER INFORMATION SYSTEMS (CIS)

- CIS 110 INTRODUCTION TO COMPUTER LOGIC AND PROGRAMMING (3T) 3 credits**
This course includes logic, design and problem solving techniques used by programmers and analysts in addressing and solving common programming and computing problems. The most commonly used techniques of flowcharts, structure charts, and pseudo code will be covered and students will be expected to apply the techniques to designated situations and problems. (Formerly CIS 150)
- CIS 111 WORD PROCESSING SOFTWARE APPLICATIONS (3T) 3 credits**
This course provides students with hands-on experience using word processing software. Students will develop skills common to most word processing software by developing a wide variety of documents. Emphasis is on planning, developing, and editing functions associated with word processing. Formerly CIS 197U
- CIS 113 SPREADSHEET SOFTWARE APPLICATIONS (3T) 3 credits**
This course provides students with hands-on experience using spreadsheet software. Students will develop skills common to most spreadsheet software by developing a wide variety of spreadsheets. Emphasis is on planning, developing, and editing functions associated with spreadsheets. (Formerly CIS 197X)
- CIS 115 PRESENTATION GRAPHICS SOFTWARE APPLICATIONS (3T) 3 credits**
This course provides students with hands-on experience using presentation graphics software. Students will develop skills common to most presentation graphics software by developing a wide variety of presentations. Emphasis is on planning, developing, and editing functions associated with presentations. (Formerly CIS 197Z)
- CIS 117 DATABASE MANAGEMENT SOFTWARE APPLICATIONS (3T) 3 credits**
This course provides students with hands-on experience using database management software. Students will develop skills common to most database management software by developing a wide variety of databases. Emphasis is on planning, developing, and editing functions associated with database management. (Formerly CIS 197W)
- CIS 130 INTRODUCTION TO INFORMATION SYSTEMS (3T) 3 credits**
This course is an introduction to computers that reviews computer hardware and software concepts such as equipment, operations, communications, programming and their past, present and future impact on society. Topics include computer hardware, various types of computer software, communication technologies and program development using computers to execute software packages and/or to write simple programs. Upon completion, students should be able to describe and use the major components of selected computer software and hardware.
- CIS 146 MICROCOMPUTER APPLICATIONS (3T) 3 credits**
This course is an introduction to the most common microcomputer software applications. These software packages should include typical features of applications, such as word processing, spreadsheets, database management, and presentation software. Upon completion, students will be able to utilize selected features of these packages. This course will help prepare students for the MOS and IC3 certification.
- CIS 147 ADVANCED MICROCOMPUTER APPLICATIONS (3T) 3 credits**
Prerequisite: CIS 146
This course is a continuation of CIS 146 in which students utilize the advanced features of topics covered in CIS 146. Advanced functions and integration of word processing, spreadsheets, database, and presentation packages among other topics are generally incorporated into the course and are to be applied to situations found in society and business. Upon completion, the student should be able to apply the advanced features of selected software appropriately to typical problems found in society and business. This course will help prepare students for the MOS certification.
- CIS 151 GRAPHICS FOR THE WORLD WIDE WEB (3T) 3 credits**
This course will provide an overview to the theory, tools and techniques necessary for creating high-quality graphics using design software tools.
- CIS 158 FUNDAMENTALS OF WIRELESS LANs (3T) 3 credits**
This course provides an introduction to the design, planning, implementation, operation, and troubleshooting of wireless networks. The goal of Fundamentals of Wireless LANs is to offer students the most current knowledge of complex networking concepts as well as real-world experience that the future demands.
- CIS 160 MULTIMEDIA FOR THE WORLD WIDE WEB (3T) 3 credits**
This course covers contemporary, interactive multimedia technology systems, focusing on types, applications, and theories of operation. In addition to the theoretical understanding of the multimedia technologies, students will learn how to digitize and manipulate images, voice, and video materials, including authoring a web page utilizing multimedia.
- CIS 161 CISCO I (3T) 3 credits**
This course is the first part of a four part curriculum leading to Cisco Certified Network Associate (CCNA) certification. This course concentrates on the physical part of networking including basic electronics, computer basics, network basics, addressing, number conversions, cabling, and planning. After completing this course, the student will be able to: identify the functions of each layer of the OSI reference model; describe data link and network addresses; define and describe the function of the MAC address; explain the five conversion steps of data

encapsulation; describe the different classes of IP addresses and subnetting; identify the functions of the TCP/IP network-layer protocols.

CIS 162 CISCO II (3T) 3 credits
Prerequisite: CIS 161

This course is the second part of a four part curriculum leading to Cisco Certified Network Associate (CCNA) certification. This course concentrates on router configuration. After completing this course the student will be able to: prepare the initial configuration of a router and enable IP; control router passwords and identification; configure IP addresses; add the RIP and IGRP routing protocols to a configuration.

CIS 163 CISCO III (3T) 3 credits
PREREQUISITE: CIS 162

This course is the third part of a four part curriculum leading to Cisco Certified Network Associate (CCNA) certification. This course concentrates on LAN design, routing, switching, and network administration. After completing this course the student will be able to: describe LAN segmentation using bridges, routers, and switches; distinguish between cut-through and store and forward LAN switching; describe the operation of the Spanning Tree Protocol and its benefits; describe the benefits of virtual LANs.

CIS 164 CISCO IV (3T) 3 credits
PREREQUISITE: CIS 163

This course is the fourth part of a four part curriculum leading to Cisco Certified Network Associate (CCNA) certification. This course concentrates on WANs and WAN design. After completing this course, the student will be able to: differentiate between LAPB, Frame Relay, ISDN, HDLC, PPP, and DDR; list commands to configure Frame Relay LMI, maps, and sub interfaces; identify PPP operations to encapsulate WAN data on Cisco routers; identify ISDN protocols, function groups, reference points, and channels; describe Cisco's implementation of ISDN BRI.

CIS 196U COMPUTER LITERACY FOR SENIOR ADULTS (3T) 3 credits

This course introduces such basic computer literacy topics as hardware, software, operating system, Internet research, microcomputer security, e-mail, and file and folder management. Although it is open to all students, the focus is on the learning style and interests of the senior population.

CIS 196V ADVANCED COMPUTER LITERACY FOR SENIOR ADULTS (3T) 3 credits

This course introduces such topics as word processing, spreadsheet, presentation software, graphics, desktop management, and database. Although it is open to all students, the focus is on the learning style and interests of the senior population

CIS 197V MICROSOFT WORD EXPERT (3T) 3 credits

This course is designed to prepare students to take the Microsoft Office Specialist certification exam in Microsoft Word (expert level). Topics emphasized are

Microsoft Office Specialist exam objectives and test-taking skills. The student will demonstrate mastery of expert level word processing skills through hands-on, performance-based lab exercises. Practice test software will provide immediate feedback on areas where additional practice is needed. Calhoun is an authorized Microsoft testing center.

CIS 197Y MICROSOFT EXCEL EXPERT (3T) 3 credits

This course is designed to prepare students to take the Microsoft Office Specialist certification exam in Microsoft Excel (expert level). Topics emphasized are Microsoft Office Specialist exam objectives and test-taking skills. The students will demonstrate mastery of expert level spreadsheet skills through hands-on, performance-based lab exercises. Practice test software will provide immediate feedback on areas where additional practice is needed. Calhoun is an authorized Microsoft testing center.

CIS 197A MICROSOFT OUTLOOK (3T) 3 credits

This course is designed to prepare students to take the Microsoft Office Specialist certification exam in Microsoft Outlook. Topics emphasized are Microsoft Office Specialist exam objectives and test-taking skills. The students will demonstrate mastery of Outlook's integrated mail and scheduling skills through hands-on, performance-based lab exercise. Practice test software will provide immediate feedback on areas where additional practice is needed. Calhoun is an authorized Microsoft testing center.

CIS 197B MICROSOFT PROJECT (3T) 3 credits

This course teaches the concepts of and the technical skills of Microsoft Project. Students will gain hands-on experience in managing production and other types of schedules. Topics include resource allocation, budgeting, adjusting time and scope, tracking cost, reporting, and balancing resource workloads.

CIS 197C DREAMWEAVER (3T) 3 credits

This course introduces Macromedia Dreamweaver, a web authoring tool. Topics include developing and publishing a basic web page, working with text and graphics, building links and tables, collecting data, using layers, adding multimedia elements, and managing library items and style sheets.

CIS 197D FLASH (3T) 3 credits

This course introduces Macromedia Flash, a software tool used in designing web pages. Topics include creating animation, drawing, creating special effects, preparing and publishing movies, importing graphics, adding sounds, and using basic ActionScript. Students will build and publish web pages.

CIS 197E FIREWORKS (3T) 3 credits

This course introduces Macromedia Fireworks, a software tool that is tightly integrated with Flash and Dreamweaver. Using Fireworks, students will learn to produce web graphics and to build complex interactivity into web pages. Topics include designing graphics, working with vector objects and bitmaps, using text,

Course Descriptions

	managing images by using layers, exporting graphics, and designing interactive web graphics.		
CIS 197F	FREEHAND (3T) This course introduces Macromedia Freehand, a software tool used with other Macromedia Suite products to enhance web page drawings. Topics include creating images, using drawing tools, working with colors, applying fills and strokes, and inserting and formatting text.	3 credits	
CIS 197G	WEB PAGE SCRIPTING (Perl) (3T) PREREQUISITE: Previous CIS Course This course introduces Perl, a popular and widely used cross-platform programming language. Topics include fundamentals of Perl, including data types, control structures, I/O operations, regular expressions, arrays, and functions. The course also explores the use of Perl in developing CGI (Common Gateway Interface) programs. (Formerly CIS 282)	3 credits	
CIS 207	INTRODUCTION TO WEB DEVELOPMENT (3T) PREREQUISITE: CIS 146 This course is an introduction to Web page development techniques. Topics in this course include techniques and strategies for creating good Web pages. Upon completion, the student will be able to demonstrate knowledge of the topics through Web page development projects and appropriate tests. (Formerly CIS 198)	3 credits	
CIS 208	INTERMEDIATE WEB DEVELOPMENT (3T) This course introduces students to basics of navigating the World Wide Web and coding simple web pages using an authoring tool such as Front Page. (Formerly CIS 197T)	3 credits	
CIS 209	ADVANCED WEB DEVELOPMENT (3T) PREREQUISITE: CIS 207 and CIS 255 This course will introduce students to a scripting language. Topics include objects, arrays, methods, and functions. Students will use a scripting language to add interactivity to HTML pages. Upon completion, the student will demonstrate knowledge of the topics through projects and appropriate tests. (Formerly CIS 244)	3 credits	
CIS 212	VISUAL BASIC PROGRAMMING (3T) PREREQUISITE: CIS 110 This course emphasizes Basic programming using a graphical user interface. The course will introduce such topics as advanced file handling techniques, simulation, and other selected areas. Upon completion, the student will be able to demonstrate knowledge of the topics through programming projects and appropriate tests.	3 credits	
CIS 213	ADVANCED VISUAL BASIC PROGRAMMING (3T) PREREQUISITE: CIS 212 This course is a continuation of CIS 212, Visual Basic. It is designed to enhance student skills in Visual Basic, with an emphasis on understanding techniques and procedures for developing projects using an object oriented language.	3 credits	
CIS 222	DATABASE MANAGEMENT SYSTEMS (3T) This course will discuss database system architectures. It will teach students how to design, normalize and use a database, and link these to the Web. Students will design and build a database-enabled Web site. Upon completion, the student will be able to demonstrate knowledge of the topics through projects and appropriate tests.	3 credits	
CIS 223	THREE DIMENSIONAL COMPUTER MODELING (3T) PREREQUISITE: Previous CIS Course This course is a study in 3D computer modeling and 3D painting beginning with primitive shapes and creating compelling 3D objects for use in model libraries, games, print material, web sites, visual simulation, and architectural applications. Powerful operations for modeling and 3D painting are incorporated into an interface that is simple and intuitive to use.	3 credits	
CIS 224	THREE DIMENSIONAL COMPUTER ANIMATION (3T) PREREQUISITE: Previous CIS Course This course is a study in 3D computer animation. Course contents include a review of 3D modeling, rendering the 3D animations, compositing and special effects for both video and film recording, storyboarding and sound design, technical testing and production estimates and scheduling.	3 credits	
CIS 249	MICROCOMPUTER OPERATING SYSTEMS (3T) PREREQUISITE: Previous CIS Course This course provides an introduction to microcomputer operating systems. Topics include a description of the operating system, system commands, and effective and efficient use of the microcomputer with the aid of its system programs. Upon completion, students should understand the function and role of the operating system, its operational characteristics, its configuration, how to execute programs, and efficient disk and file management. (Formerly CIS 278)	3 credits	
CIS 251	C++ PROGRAMMING (3T) PREREQUISITE: CIS 110 This course is an introduction to the C++ programming language. This course is intended as a first course in problem-solving and program design. Topics covered include program style, algorithm and data structuring and modularization. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests.	3 credits	
CIS 252	ADVANCED C++ PROGRAMMING (3T) PREREQUISITE: CIS 251 This course is an advanced object-oriented programming course and covers advanced program development techniques and concepts in the context of an object-oriented language. Subject matter includes object-oriented analysis, encapsulation, inheritance, polymorphism (operator and function overloading), information hiding, abstract data types, reuse, dynamic memory allocation, and file manipulation. Upon com-	3 credits	

pletion, students should be able to develop a hierarchical class structure necessary to the implementation of an object-oriented software system.

CIS 255 JAVA PROGRAMMING (3T) 3 credits
PREREQUISITE: CIS 110

This course is a first course sequence in program design and implementation in the Java programming language using hands-on programming assignments, class demonstrations, and lectures. Topics include basic features of Java program structures, Java's built-in class libraries, data types, programming control structures, and object-oriented programming concepts.

CIS 256 ADVANCED JAVA (3T) 3 credits
PREREQUISITE: CIS 255

This course is a second course of a sequence using the Java programming language. Topics include: Sun's Swing GUI components, JDBC, JavaBeans, RMI, servlets, and Java media framework. Upon completion, the student will be able to demonstrate knowledge of the topics through programming projects and appropriate exams. (Formerly CIS 293)

CIS 268 SOFTWARE SUPPORT (3T) 3 credits
PREREQUISITE: Previous CIS Course

This course provides students with hands-on practical experience in installing computer software, operating systems, and trouble-shooting. The class will help to prepare participants for the A+ Certification sponsored by CompTIA. (Formerly CIS 266)

CIS 269 HARDWARE SUPPORT (3T) 3 credits
PREREQUISITE: Previous CIS Course

This course provides students with hands-on practical experience in installation and troubleshooting computer hardware. The class will help to prepare participants for the A+ Certification sponsored by CompTIA. (Formerly CIS 267)

CIS 273 INTRODUCTION TO NETWORKING COMMUNICATIONS (3T) 3 credits
PREREQUISITE: Previous CIS Course

This course is designed to introduce students to basic concepts of computer networks. Emphasis is placed on terminology and technology involved in implementing selected networked systems. The course covers various network models, topologies, communications protocols, transmission media, networking hardware and software, and network troubleshooting. Students gain hands-on experience in basic networking. This course further helps prepare students for certification. (Formerly CIS 288)

CIS 279 NETWORK INFRASTRUCTURE DESIGN (3T) 3 credits
PREREQUISITE: Previous CIS Course

This course provides a study of network infrastructure design. Topics included in this course are strategies for planning, implementing, and maintaining server availability and security, client addressing schemes, name resolution, routing, remote access, and network security. Students gain experience by designing plans for implementing common network infrastructure and protocols.

CIS 280 NETWORK SECURITY (3T) 3 credits

This course provides a study of threats to network security and methods of securing a computer network from such threats. Topics included in this course are security risks, intrusion detection, methods of securing authentication, network access, remote access, Web access, and wired and wireless network communications. Upon completion, students will be able to identify security risks and describe appropriate counter measures.

CIS 299 DIRECTED STUDIES IN COMPUTER SCIENCE (3T) 3 credits
PREREQUISITE: Permission of Instructor

This course allows independent study under the direction of an instructor. Topics to be included in the course material will be approved by the instructor prior to or at the beginning of the class. Upon completion, the student will be able to demonstrate knowledge of the topics as specified by the instructor.

CLINICAL LABORATORY TECHNOLOGY (CLT)

CLT 100 PHLEBOTOMY (1T, 3C) 2 credits

This course covers the basic techniques used in the collection of blood specimens. Presentation includes equipment and additives, basic anatomy, and techniques for safe and effective venipuncture. Upon completion, students should be able to correctly perform venipuncture. (See specific enrollment requirements listed under CLT – AAS Degree Program of Study)

CLT 106 CLINICAL CALCULATIONS AND STATISTICS (2T) 2 credits
PREREQUISITE: Required admission to the CLT program

This course incorporates practical application of mathematical concepts in the clinical laboratory. Instruction includes the metric system, solution preparation, dilutions, and other laboratory calculations. Upon completion, students should be able to make determinations of precision and accuracy using statistical data for various laboratory departments.

CLT 111 URINALYSIS & BODY FLUIDS (2T, 2E) 3 credits
PREREQUISITE: Required admission to the CLT program

This course focuses on the theory and techniques in the examination of urine and other body fluids. The student is introduced to the physical and chemical properties of these fluids as well as microscopic examination of sediment and the identification of cells and crystals. Upon completion, students should be able to perform basic urinalysis and correlate laboratory results to renal disorders and other disease states.

CLT 121 CLT HEMATOLOGY (3T, 4E) 5 credits
PREREQUISITE: Required admission to the CLT program

In this course, the theory and techniques of hematology are covered. The student is presented with blood components, normal and abnormal cell morphology, hemostasis, and selected automated methods. Upon completion, students should be able to perform various procedures including preparation and examination of hematologic slides and relate results to specific disorders.

Course Descriptions

COURSE DESCRIPTIONS

- CLT 131 LABORATORY TECHNIQUES (2T, 2E) 3 credits**
PREREQUISITE: Required admission to the CLT program
This course covers the basic principles and techniques used in the clinical laboratory. Emphasis is placed on terminology, basic microscopy, safety, and computations. Upon completion, students should be able to perform various basic laboratory analyses and utilize basic theories of laboratory principles.
- CLT 141 CLT MICROBIOLOGY I (3T, 4E) 5 credits**
PREREQUISITE: Required admission to the CLT program
The student is presented with the theories, techniques, and methods used in basic bacteriology. Focus is on bacterial isolation, identification, and susceptibility testing. Upon completion, students should be able to select media, isolate and identify microorganisms, and discuss modern concepts of epidemiology. CORE
- CLT 142 CLT MICROBIOLOGY II (3T, 4E) 5 credits**
PREREQUISITE: Required admission to the CLT program
The student is presented with the theories, techniques, and methods used in basic parasitology, mycology, and virology. Emphasis is placed on special bacteria, identification, life cycles, culture growth, and pathological states of infection and infestation. Upon completion, students should be able to identify certain parasites, demonstrate various staining and culture procedures, and discuss the correlation of certain microorganisms to pathological conditions. CORE
- CLT 151 CLT CLINICAL CHEMISTRY (3T, 4E) 5 credits**
PREREQUISITE: Required admission to the CLT program
This course emphasizes theories and techniques in basic and advanced clinical chemistry. Coverage includes various methods of performing biochemical analyses on clinical specimens. Upon completion, students should be able to apply the principles of clinical chemistry, evaluate quality control, and associate abnormal test results to clinical significance. CORE
- CLT 161 CLT INTEGRATED LABORATORY SIMULATION (4E) 2 credits**
PREREQUISITE: Required admission to the CLT program
This course provides an opportunity for the student to perform clinical laboratory procedures in all phases of laboratory testing as a review of previous laboratory courses. Emphasis is placed on case studies, organization of tasks, timing, accuracy, and simulation of routine operations in a clinical laboratory. Upon completion, students should be able to organize tasks and perform various basic laboratory analyses with accuracy and precision. CORE
- CLT 181 CLT IMMUNOLOGY (1T, 2E) 2 credits**
PREREQUISITE: Required admission to the CLT program
Theory and techniques in immunology are presented to the student. Emphasis is placed on the basic principles of the immune system, serologic testing, the production of specific antibodies and their use in the identification of infectious organisms. Upon completion, students should be able to relate basic principles of immunology, describe techniques for analytical methods utilizing immunological concepts, and correlate results of analyses to certain disease states.
- CLT 191 CLT IMMUNOHEMATOLOGY (3T, 4E) 5 credits**
PREREQUISITE: Required admission to the CLT program
Theory and techniques in immunohematology are presented to the student. In this course coverage includes antigen and antibody reactions including blood typing, antibody detection and identification, and compatibility testing. Upon completion, students should be able to apply theories and principles of immunohematology to procedures for transfusion and donor services and correlate blood banking practices to certain disease states and disorders. CORE
- CLT 294 CLINICAL LABORATORY PRACTICUM I (9C) 3 credits**
PREREQUISITE: Required admission to the CLT program
This supervised practicum is within the clinical setting and provides laboratory practice in hematology and urinalysis. Emphasis is placed on clinical skills and performance in areas such as specimen preparation and examination, instrumentation, reporting of results, management of data and quality control. Upon completion, students should be able to process specimens, perform analyses utilizing various methods including instrumentation, report results, manage data and quality control using information systems. CORE
- CLT 295 CLINICAL LABORATORY PRACTICUM II (9C) 3 credits**
PREREQUISITE: Required admission to the CLT program
This supervised practicum is within the clinical setting and provides laboratory practice in microbiology. Emphasis is placed on clinical skills and performance in areas such as recovery, isolation, culturing and identification of microorganisms. Upon completion, students should be able to isolate, culture, analyze microorganisms utilizing various methods, report results, manage data and quality control using information systems.
- CLT 296 CLINICAL LABORATORY PRACTICUM III (9C) 3 credits**
PREREQUISITE: Required admission to the CLT program
This supervised practicum is within the clinical setting and provides laboratory practice in serology and immunohematology. Emphasis is placed on clinical skills and performance in areas such as the detection and identification of antibodies, the typing of blood, and compatibility testing of blood and blood components. Upon completion, students should be able to perform the screening for and identification of antibodies, compatibility testing, record and manage data and quality control using information systems. CORE
- CLT 297 CLINICAL LABORATORY PRACTICUM IV (9C) 3 credits**
PREREQUISITE: Required admission to the CLT program
This supervised practicum is within the clinical setting and provides laboratory practice in clinical chemistry. Emphasis is placed on clinical skills and performance in areas such as computerized instrumentation and the ability to recognize technical problems. Upon completion, students should be able to perform biochemical analyses by various methods, including testing utilizing computer-oriented instrumentation, report test results, manage patient data and quality control statistics using information systems. CORE

COSMETOLOGY INSTRUCTOR TRAINING (CIT)

CIT 211 TEACHING & CURRICULUM DEVELOPMENT (3T) 3 credits
PREREQUISITE: Licensed managing cosmetologist; 1 year experience

This course focuses on the principles of teaching, teaching maturity, personality conduct, and the development of a cosmetology curriculum. Emphasis is placed on teacher roles, teaching styles, teacher challenges, aspects of curriculum development, and designing individual courses. Upon completion, the student should be able to describe the role of teacher, identify means of motivating students, develop a course outline, and develop lesson plans.

CIT 212 TEACHER MENTORSHIP (9M) 3 credits
COREQUISITE: CIT 211 or Permission of Instructor
PREREQUISITE: Licensed managing cosmetologist; 1 year experience

This course is designed to provide the practice through working with a cosmetology instructor in a mentoring relationship. Emphasis is placed on communication, student assessment, and assisting students in the lab. Upon completion, the student should be able to communicate with students, develop a course of study, and apply appropriate teaching methods.

CIT 213 LESSON PLAN DEVELOPMENT (3T) 3 credits
COREQUISITE: CIT 211, 212, or Permission of instructor
PREREQUISITE: Licensed managing cosmetologist; 1 year experience

The course introduces students to methods for developing lesson plans. Emphasis is placed on writing lesson plans and on the four-step teaching plan. Upon completion, students should be able to write daily lesson plans and demonstrate the four-step teaching method.

CIT 221 LESSON PLAN IMPLEMENTATION (9M) 3 credits
PREREQUISITE: Licensed managing cosmetologist; 1 year experience

This course is designed to provide practice in preparing and using lesson plans. Emphasis is placed on organizing, writing and presenting lesson plans using the four-step teaching method. Upon completion, students should be able to prepare and present a lesson using the four-step teaching method.

CIT 222 INSTRUCTIONAL MATERIALS AND METHODS (3T) 3 credits
COREQUISITE: CIT 223 or Permission of instructor
PREREQUISITE: Licensed managing cosmetologist; 1 year experience

This course focuses on visual and audio aids and materials. Emphasis is placed on the use and characteristics of instructional aids. Upon completion, the student should be able to prepare teaching aids and determine their most effective use.

CIT 223 INSTRUCTIONAL MATERIALS AND METHODS APPLICATIONS (9M) 3 credits
COREQUISITE: CIT 222 or Permission of instructor
PREREQUISITE: Licensed managing cosmetologist; 1 year experience

This course is designed to provide practice in preparing and using visual and audio aids and materials. Emphasis is placed on the preparation and use of different categories of instructional aids. Upon completion, the student should be able to prepare and effectively present different types of aids for use with a four-step lesson plan.

COSMETOLOGY (COS)

COS 111 COSMETOLOGY SCIENCE AND ART (3T) 3 credits
COREQUISITE: COS 112 or Permission of instructor

In this course, students are provided a study of personal and professional image, ethical conduct, sanitation, hair-styling, and nail care. Topics include personal and professional development, bacteriology, decontamination, infection control, draping, shampooing, conditioning, hair shaping, and hair styling. Upon completion, students should be able to apply safety rules and regulations and write procedures for skills identified in this course.

COS 112 COSMETOLOGY SCIENCE AND ART LAB (9M) 3 credits
COREQUISITE: COS 111 or Permission of instructor

In this course, students are provided the practical experience for sanitation, shampooing, hair shaping, hairstyling, and nail care. Emphasis is placed on sterilization, shampooing, hair shaping, hairstyling, manicuring, and pedicuring. Upon completion, the student should be able to perform safety and sanitary precautions, shampooing, hair shaping, hairstyling, and nail care procedures.

COS 113 CHEMICAL METHODOLOGY (1T, 2E, 3M) 3 credits
COREQUISITE: COS 114 or COS 115, or Permission of instructor

This course focuses on the theory of hair and scalp disorders, permanent waving, chemical relaxers, and the composition of the hair. Topics include disorders and analysis of the scalp and hair, permanent waving, chemical hair relaxing, and soft curling. Upon completion, the student should be able to write procedures for permanent waving and chemical relaxing, identify the composition of the hair, safety and sanitary precautions and steps for scalp and hair analysis as well as the disorders.

COS 114 CHEMICAL METHODOLOGY LAB (9M) 3 credits
COREQUISITE: COS 113 or Permission of instructor

In this course, students are provided the practical experience of permanent waving, chemical relaxing, and hair analysis. Topics include permanent waving, chemical relaxing, soft curl, and scalp and hair analysis. Upon completion, the students should be able to analyze the scalp and hair and perform these chemical services using safety and sanitary precautions.

COS 121 COLORIMETRY (3T) 3 credits
COREQUISITE: COS 122 or Permission of instructor

In this course, students learn the techniques of hair color-

Course Descriptions

ing and hair lightening. Emphasis is placed on color application, laws, levels and classifications of color and problem solving. Upon completion, the student should be able to identify all phases of hair coloring and the effects of the hair.

COS 122 COLORIMETRY APPLICATIONS (9M) 3 credits
COREQUISITE: COS 121 or Permission of instructor

In this course, students apply hair coloring and hair lightening techniques. Topics include consultation, hair analysis, skin test and procedures and applications of all phases of hair coloring and lightening. Upon completion, the student should be able to perform procedures for hair coloring and hair lightening.

COS 123 COSMETOLOGY SALON PRACTICES (9M) 3 credits

This course is designed to allow students to practice all phases of cosmetology in a salon setting. Emphasis is placed on professionalism, receptionist duties, hairstyling, hair shaping, chemical, and nail and skin services for clients. Upon completion, the student should be able to demonstrate professionalism and the procedures of cosmetology in a salon setting.

COS 124 INTRODUCTION TO SALON MANAGEMENT (3T) 3 credits

This course is designed to develop job-seeking and entry-level management skills for the beauty industry. Topics include job-seeking, leader and entrepreneurship development, business principles, business laws, insurance, marketing, and technology issues in the workplace. Upon completion, the student should be able to list job-seeking and management skills and the technology that is available for use in the salon.

COS 131 ESTHETICS (3T) 3 credits
COREQUISITE: COS 132 or Permission of instructor

This course is the study of cosmetic products, massage, skin care, and hair removal, as well as identifying the structure and function of various systems of the body. Topics include massage, skin analysis, skin structure, disease and disorder, light therapy, facials, facial cosmetics, anatomy, and hair removal. Upon completion, the student should be able to state procedures for analysis, light therapy, facials, hair removal, and identify the structures, functions and disorders of the skin.

COS 132 ESTHETICS APPLICATIONS (9M) 3 credits
COREQUISITE: COS 131 or Permission of instructor

This course provides practical applications related to the care of the skin and related structure. Emphasis is placed on facial treatments, product application, skin analysis, massage techniques, facial make-up, and hair removal. Upon completion, the student should be able to prepare clients, assemble sanitized materials, follow procedures for product application, recognize skin disorders, demonstrate facial massage movement, cosmetic application, and hair removal using safety and sanitary precautions.

COS 143 HAIR DESIGNS (1T, 2E, 3M) 3 credits

This course focuses on the theory and practice of hair design. Topics include creating styles using basic and advanced techniques of back combing, up sweeps, and

braiding. Upon completion, the student should be able to demonstrate the techniques and procedures for hair designing.

COS 146 HAIR ADDITIONS (2T, 2E, 3M) 4 credits

This course focuses on the practice of adding artificial hair. Topics include hair extensions, weaving, and braiding. Upon completion, the student should be able to demonstrate the techniques and procedures for attaching human hair and synthetic hair.

COS 151 NAIL CARE (3T) 3 credits
COREQUISITE: COS 152 or Permission of instructor

This course focuses on all aspects of nail care. Topics include salon conduct, professional ethics, sanitation, nail structure, manicuring, pedicuring, nail disorders, and anatomy and physiology of the arm and hand. Upon completion, the student should be able to demonstrate professional conduct, recognize nail disorders and diseases, and identify the procedures for sanitation and nail care services.

COS 152 NAIL CARE APPLICATIONS (9M) 3 credits
COREQUISITE: COS 151 or Permission of instructor

This course provides practice in all aspects of nail care. Topics include salon conduct, professional ethics, bacteriology, sanitation and safety, manicuring and pedicuring. Upon completion, the student should be able to perform nail care procedures.

COS 153 NAIL ART (3T) 3 credits
COREQUISITE: COS 154 or Permission of instructor

This course focuses on advanced nail techniques. Topics include acrylic, gel, fiberglass nails, and nail art. Upon completion, the student should be able to identify the different types of sculptured nails and recognize the different techniques of nail art.

COS 154 NAIL ART APPLICATIONS (9M) 3 credits
COREQUISITE: COS 153 or Permission of instructor

This course provides practice in advanced nail techniques. Topics include acrylic, gel, fiberglass nails, and nail art. Upon completion, the student should be able to perform the procedures for nail sculpturing and nail art.

The following labs are designed for students in need of additional lab hours or services in preparation for licensure exams. The labs will be directed by instructors according to the student's area of specialty and may be taken during the course of the program as needed.

COS 161 SPECIAL TOPICS IN COSMETOLOGY (1T) 1 credit
PREREQUISITE: Permission of instructor

This course is designed to survey current trends and developing technology for the cosmetology profession. Emphasis is placed on, but is not limited to, dependability, attitude, professional judgment, emerging trends, new styling techniques, and practical cosmetology skills. Upon completion, students should have developed new skills in areas of specialization for the cosmetology profession.

COS 162 SPECIAL TOPICS IN COSMETOLOGY (2T) 2 credits
PREREQUISITE: Permission of instructor

This course is designed to survey current trends and devel-

oping technology for the cosmetology profession. Emphasis is placed on, but is not limited to, dependability, attitude, professional judgment, emerging trends, new styling techniques, and practical cosmetology skills. Upon completion, students should have developed new skills in areas of specialization for the cosmetology profession.

COS 168 BACTERIOLOGY AND SANITATION (3T) 3 credits

In this skin care course, emphasis is placed on the decontamination, infection control and safety practiced in the esthetics facility. Topics covered include demonstration of sanitation, sterilization methods and bacterial prevention. Upon completion, the student will be able to properly sanitize facial implements and identify non-reusable items.

COS 190 INTERNSHIP IN COSMETOLOGY (5-15M) 1-3 credits

PREREQUISITE: Permission of instructor

This course is designed to provide exposure to cosmetology practices in non-employment situations. Emphasis is on dependability, attitude, professional judgment, and practical cosmetology skills. Upon completion, the student should have gained skills necessary for entry-level employment.

COS 191 CO-OP (5-15M) 1-3 credits

PREREQUISITE: Permission of instructor

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

CRIMINAL JUSTICE (CRJ)

CRJ 100 INTRODUCTION TO CRIMINAL JUSTICE (3T) 3 credits

This course surveys the entire criminal justice process from law enforcement to the administration of justice through corrections. It discusses the history and philosophy of the system and introduces various career opportunities.

CRJ 110 INTRODUCTION TO LAW ENFORCEMENT (3T) 3 credits

This course examines the history and philosophy of law enforcement, as well as the organization and jurisdiction of local, state, and federal agencies. It includes the duties and functions of law enforcement officers.

CRJ 130 INTRODUCTION TO LAW AND JUDICIAL PROCESS (3T) 3 credits

This course provides an introduction to the basic elements of substantive and procedural law and the stages in the judicial process. It includes an overview of state and federal court structure.

CRJ 140 CRIMINAL LAW AND PROCEDURE (3T) 3 credits

This course examines both substantive and procedural law. The legal elements of various crimes are discussed, with emphasis placed on the contents of the Alabama Code. Areas of criminal procedure essential to the criminal justice profession are covered.

CRJ 146 CRIMINAL EVIDENCE (3T) 3 credits

This course considers the origins of the law of evidence and current rules of evidence. Types of evidence, their definitions and uses are covered, as well as the functions of the court regarding evidence.

CRJ 150 INTRODUCTION TO CORRECTIONS (3T) 3 credits

This course provides an introduction to the philosophical and historical foundations of corrections in America. Incarceration and some of its alternatives are considered.

CRJ 157 COMMUNITY BASED CORRECTIONS (3T) 3 credits

This course examines various forms of community corrections and alternative sentences. Probation, parole, halfway houses, work release, community service, electronic monitoring and camps are among the programs considered.

CRJ 160 INTRODUCTION TO SECURITY (3T) 3 credits

This course surveys the operation, organization and problems in providing safety and security to business enterprises. Private, retail and industrial security are covered.

CRJ 166 PRIVATE AND RETAIL SECURITY (3T) 3 credits

This course surveys the legal foundations, regulations, training, and other issues in private security. Typical offenses, laws, and law enforcement strategies common in the field are covered. Methods of loss prevention are examined.

CRJ 168 INTERNATIONAL SECURITY (3T) 3 credits

This course provides an understanding of the security implications of international programs, commercial sales, the interrelationship of the information disclosure and technology transfer, the International Traffic in Arms Regulations, and the Export Administration Regulations.

CRJ 169 SECURITY MANAGEMENT (3T) 3 credits

This course introduces the student to sound security management theories, principles, budgeting, communications, and education.

CRJ 170 INTRODUCTION TO PHYSICAL SECURITY (3T) 3 credits

This course provides an overview of the protection of people, property, and facilities through the use of security forces, systems, and procedures.

CRJ 171 SECURITY RISK MANAGEMENT (3T) 3 credits

This course deals with the identification of assets, threats, and vulnerabilities, and the development of countermeasures.

CRJ 208 INTRODUCTION TO CRIMINOLOGY (3T) 3 credits

This course delves into the nature and extent of crime in the United States as well as criminal delinquent behavior and

Course Descriptions

theories of causation. The study includes criminal personalities, principles of prevention, control and treatment.

CRJ 209 JUVENILE DELINQUENCY (3T) 3 credits
This course examines the causes of delinquency. It also reviews programs of prevention and control of juvenile delinquency as well as the role of the courts.

CRJ 216 POLICE ORGANIZATION AND ADMINISTRATION (3T) 3 credits
This course examines the principles of organization and administration of law enforcement agencies. Theories of management, budgeting, and various personnel issues are covered.

CRJ 220 CRIMINAL INVESTIGATION (3T) 3 credits
This course explores the theory and scope of criminal investigation. The duties and responsibilities of the investigator are included. The techniques and strategies used in investigation are emphasized.

CRJ 230 CRIMINALISTICS (3T) 3 credits
This course surveys the different techniques of scientific investigation. Emphasis is given to ballistics, photography, fingerprints, DNA, trace evidence, body fluids, casts and the like.

CRJ 256 CORRECTIONAL REHABILITATION (3T) 3 credits
This course surveys the different methods used in the rehabilitation of public offenders. Topics include individual and group counseling, education, recreation, religion, drug treatment, and vocational programs.

CRJ 280 INTERNSHIP IN CRIMINAL JUSTICE (1-3T) 1-3 credits
PREREQUISITE: Permission of instructor
This course involves practical experience with a criminal justice agency under faculty supervision. Permission of the instructor is required. This course may be repeated with the approval of the department head.

CRJ 290 SELECTED TOPICS - SEMINAR IN CRIMINAL JUSTICE (1-3T) 1-3 credits
This course involves reading, research, writing, and discussion of selected subjects relating to criminal justice. Various contemporary problems in criminal justice are analyzed. This course may be repeated with approval of the department head.

DENTAL ASSISTING (DNT)

DNT 100 INTRODUCTION TO DENTAL ASSISTING (2T) 2 credits
PREREQUISITE: Admission to the Dental Assisting Program and Permission of instructor
COREQUISITE: DNT 101, DNT 102, DNT 103, DNT 104, PSY 200

This course is designed to provide an introduction to dentistry and the history of dentistry, dental equipment, dental auxiliaries, psychology application to dentistry, personal and certification requirements, legal and ethical considerations, and work ethics and communication skills.

Emphasis is placed on the Alabama Dental Practice Act and OSHA Standards. Upon completion, students should be able to discuss basic aspects of dentistry.

DNT 101 PRE-CLINICAL PROCEDURES I (2T, 3S) 3 credits
PREREQUISITE: Admission to the Dental Assisting Program and Permission of instructor
COREQUISITES: DNT 100, DNT 102, DNT 103, DNT 104, PSY 200

This course is designed to introduce chairside assisting including concepts of four-handed dentistry, sterilization techniques, dental instruments, anesthesia, and operative dentistry. Emphasis will be placed on preparation of the student for clinical dental assisting. Upon completion, the student should be able to perform dental assisting skills in a clinical setting.

DNT 102 DENTAL MATERIALS (2T, 3S) 3 credits
PREREQUISITE: Admission to the Dental Assisting Program and Permission of instructor
COREQUISITES: DNT 100, DNT 101, DNT 103, DNT 104, PSY 200

This course is designed to study the characteristics, manipulation, and application of dental materials ordinarily used in the dental office. Students will be given intra and extra-oral technical tasks to perform. Upon completion, students should be able to take and pour alginate impressions, trim study models, construct custom trays and temporary crowns, prepare and place restorative material, and manipulate cements and impression materials.

DNT 103 ANATOMY AND PHYSIOLOGY FOR DENTAL ASSISTING (3T) 3 credits
PREREQUISITE: Admission to Dental Assisting Program and Permission of instructor
COREQUISITE: DNT 100, DNT 101, DNT 102, DNT 104, PSY 200

This course is designed to study dental anatomy and the structure of the head and neck with a basic understanding of body structure and function. Emphasis will be placed on tooth and root morphology, and embryological and histological correlations will provide a foundation essential to an understanding of dental health. Upon completion, students should be able to discuss and identify the basic structure and function of the human body specifically the head, neck, and dentition.

DNT 104 BASIC SCIENCES FOR DENTAL ASSISTING (2T) 2 credits
PREREQUISITE: Admission to Dental Assisting Program and Permission of instructor
COREQUISITE: DNT 100, DNT 101, DNT 102, DNT 103, PSY 200

This course is designed to study basic microbiology, pathology, pharmacology, and medical emergencies. Emphasis is placed on the correlation of these sciences to the practice of dentistry. Upon completion, students should be able to apply basic science to the dental field.

DNT 111 CLINICAL PRACTICE I (1T, 12C) 5 credits
PREREQUISITE: Admission to Dental Assisting Program or Permission of instructor
COREQUISITE: DNT 112, DNT 113, DNT 116, DNT 124,

MTH 100 or 112 or 116, SPH 107

This course is designed to allow the student the opportunity for clinical observation and practical work experience in clinical settings under the supervision of a licensed dentist. Emphasis will be placed on the basic skills of chairside assisting. Upon completion, students should be able to demonstrate basic skills in the area of chairside assisting.

DNT 112 DENTAL RADIOLOGY (2T, 3S) 3 credits
PREREQUISITE: Admission to Dental Assisting Program or Permission of instructor
COREQUISITE: DNT 111, DNT 113, DNT 116, DNT 124, MTH 100 or 112 or 116, SPH 107

This course is designed to cover the essential knowledge of radiographic technique for the practice of dentistry. Students will be taught to produce diagnostically acceptable intra and extra-oral radiographs with emphasis being placed on x-ray properties, generation of x-rays, film processing, infection control, quality assurance, intraoral radiographic technique and image characteristics. Upon completion, students should be able to expose, process, and mount radiographs for diagnostic purposes under the direct supervision of a licensed dentist.

DNT 113 DENTAL HEALTH EDUCATION (2T) 2 credits
PREREQUISITE: Admission to Dental Assisting Program and Permission of instructor
COREQUISITE: DNT 111, DNT 112, DNT 116, DNT 124, MTH 100 or MTH 112 or MTH 116, SPH 107

This course is designed to introduce the student to the basic principles of nutrition, preventive dentistry, and dental health education. Emphasis will be placed on philosophy of preventive dentistry including: oral hygiene, patient motivation and management, and methods of oral health education. Upon completion, students should be able to apply the basic principles of nutrition and preventive dentistry.

DNT 116 PRECLINICAL PROCEDURES II (2T) 2 credits
PREREQUISITE: DNT 101 Pre-Clinical Procedures I and Permission of the instructor
COREQUISITE: DNT 111, DNT 112, DNT 113, DNT 124, SPH 107 and MTH 100 or MTH 112 or MTH 116

This course is a continuation of Pre-Clinical Procedures I. Emphasis is placed on dental specialties. Upon completion, the student should be able to discuss and identify dental specialty procedures and instrumentation.

DNT 121 DENTAL OFFICE PROCEDURES (4T) 4 credits
PREREQUISITE: Admission to Dental Assisting Program and Permission of instructor
COREQUISITE: DNT 122, DNT 123, ENG 101

This course is designed to address basic dental office procedures including appointment and recall systems, financial records, accounting procedures, insurance claims, filing systems, purchasing and inventory of supplies and equipment, and the utilization of computers to perform business office procedures. Emphasis is placed on the duties of a dental receptionist. Upon completion, students should be able to demonstrate efficiently in practice management.

DNT 122 CLINICAL PRACTICE II (12C) 4 credits
PREREQUISITE: Admission to Dental Assisting Program and Permission of instructor
COREQUISITE: DNT 121, DNT 123, ENG 101

This course is designed to provide the student the opportunity to develop advanced dental assisting skills in chairside dental assisting procedures, radiology, receptionist duties, team work, and communication skills. Emphasis will be placed on clinical procedures. Upon completion, students should be able to demonstrate proficiency in the area of chairside assisting.

DNT 123 DENTAL ASSISTING SEMINAR (4T) 4 credits
PREREQUISITE: Admission to Dental Assisting Program and Permission of instructor
COREQUISITE: DNT 121 and DNT 122, ENG 101

This course is designed to discuss and evaluate the students' clinical experiences and the resume and interview process. Emphasis will be placed on new technology in dental practices as related to dental assisting and the certification exam review. Upon completion, students should be able to successfully complete the Dental Assisting National Board Examination to become a Certified Dental Assistant.

DNT 124 CLINICALLY APPLIED INFECTION CONTROL AND OSHA STANDARDS (3C) 1 credit
PREREQUISITE: DNT 100 or Permission of instructor
COREQUISITE: DNT 111, DNT 112, DNT 113, DNT 116, SPH 107, MTH 100 or 112 or 116

This course is designed for the integration of previously acquired knowledge of OSHA Standards and Infection Control in a clinical setting. Emphasis will be placed on clinical application of Infection Control and Compliance of OSHA Standards as it relates to dental chairside assisting. Upon completion, students should be able to demonstrate skills in the area of Infection Control and OSHA Guidelines.

DNT 134 CLINICAL/CO-OP (5 I) 1 credit
PREREQUISITE: DNT 122 or Permission of instructor

This course is designed to enable the student who has completed the Certificate Program to gain hands-on experience at a work-site or by performing job-related activities. Emphasis will be placed on chairside assisting skills. Successful completion of student cognitive, psychomotor or affective domain competencies are required in this course.

DNT 135 CLINICAL/CO-OP (10 I) 2 credits
PREREQUISITE: DNT 122 or Permission of instructor

This course is designed to enable the student who has completed the Certificate Program to gain hands-on experience at a work-site or by performing job-related activities. Successful completion of student cognitive, psychomotor or affective domain competencies are required in this course.

DNT 136 CLINICAL/CO-OP (15 I) 3 credits
PREREQUISITE: DNT 122 or Permission of instructor

This course is designed to enable the student who has completed the Certificate Program to gain hands-on experience at a work-site or by performing job-related activities. Successful completion of student cognitive, psychomotor

Course Descriptions

or affective domain competencies are required in this course.

DNT 137 CLINICAL/CO-OP (20 I) 4 credits

PREREQUISITE: DNT 122 or Permission of instructor

This course is designed to enable the student who has completed the Certificate Program to gain hands-on experience at a work-site or by performing job-related activities. Successful completion of student cognitive, psychomotor or affective domain competencies are required in this course.

DNT 139 DIRECTED STUDIES IN DENTAL ASSISTING (1T) 1 credit

PREREQUISITE: Permission of instructor

This course is designed to study specific areas of dentistry as chosen by the student and faculty member. Emphasis will be placed on the research and critique of a specific dental topic. Upon completion, students should be able to deliver a written and oral presentation on the chosen topic.

DNT 140 DIRECTED STUDIES IN DENTAL ASSISTING (2T) 2 credits

PREREQUISITE: Permission of instructor

This course is designed to study specific areas of dentistry as chosen by the student and faculty member. Emphasis will be placed on the research and critique of a specific dental topic. Upon completion, students should be able to deliver a written and oral presentation on the chosen topic.

DNT 141 DIRECTED STUDIES IN DENTAL ASSISTING (3T) 3 credits

PREREQUISITE: Permission of instructor

This course is designed to study specific areas of dentistry as chosen by the student and faculty member. Emphasis will be placed on the research and critique of a specific dental topic. Upon completion, students should be able to deliver a written and oral presentation on the chosen topic.

DNT 296 SPECIAL TOPICS IN DENTISTRY (1T) 1 credit

PREREQUISITE: Permission of instructor

This course is designed to address special topics in dentistry according to the criteria approved for continuing education by the code of Alabama. Emphasis is placed on chairside dental assisting, Infection Control/OSHA, treatment of special needs/medically compromised patients, oral pathology basic sciences, dental materials, medical emergencies, and ethics and jurisprudence. Upon completion, the student should be able to discuss the special topic addressed in the symposium as it relates to dentistry.

DNT 297 SPECIAL TOPICS IN DENTISTRY (2T) 2 credits

PREREQUISITE: Permission of instructor

This course is designed to address special topics in dentistry according to the criteria approved for continuing education by the code of Alabama. Emphasis is placed on chairside dental assisting, Infection Control/OSHA, treatment of special needs/medically compromised patients, oral pathology basic sciences, dental materials, medical emergencies, and ethics and jurisprudence. Upon completion, the student should be able to discuss the special topic addressed in the symposium as it relates to dentistry.

DNT 298 SPECIAL TOPICS IN DENTISTRY (3T) 3 credits

PREREQUISITE: Permission of instructor

This course is designed to address special topics in dentistry according to the criteria approved for continuing education by the code of Alabama. Emphasis is placed on chairside dental assisting, Infection Control/OSHA, treatment of special needs/medically compromised patients, oral pathology basic sciences, dental materials, medical emergencies, and ethics and jurisprudence. Upon completion, the student should be able to discuss the special topic addressed in the symposium as it relates to dentistry.

DESIGN DRAFTING TECHNOLOGY (DDT)

DDT 104 BASIC COMPUTER AIDED DRAFTING (1T,4E) 3 credits

This course provides an introduction to basic Computer Aided Drafting and Design (CADD) functions and techniques, using "hands-on" applications. Topics include terminology, hardware, basic CADD and operating system functions, file manipulation, and basic CADD software applications in producing softcopy and hardcopy.

DDT 111 FUNDAMENTALS OF DRAFTING AND DESIGN TECHNOLOGY (1T, 4E) 3 credits

PREREQUISITE: DDT 104

COREQUISITE: DDT 104

This course serves as an introduction to the field of drafting and design and provides a foundation for the entire curriculum. Topics include safety, lettering, tools and equipment, geometric constructions, orthographic sketching, and drawing.

DDT 122 ADVANCED TECHNICAL DRAWING (1T, 4E) 3 credits

PREREQUISITE: DDT 111 AND DDT 127

This course covers the methods of providing size description and manufacturing information for production drawings. Emphasis will be placed on accepted dimensioning and tolerancing practices including Geometric Dimensioning and Tolerancing for both the Customary English System and the ISO System. Upon completion, students should be able to apply dimensions, tolerances, and notes to drawings to acceptable standards, including Geometric Dimensioning and Tolerancing, and produce drawings using and specifying common threads and various fasteners, including welding methods.

DDT 124 BASIC TECHNICAL DRAWING (1T,4E) 3 credits

PREREQUISITE: DDT 104, DDT 111

This course covers sections, auxiliary views, and basic space geometry. Emphasis will be placed on the theory as well as the mechanics of applying sections, basic dimensioning, auxiliary views, and basic space geometry.

DDT 127 INTERMEDIATE COMPUTER AIDED DRAFTING AND DESIGN (1T, 4E) 3 credits

PREREQUISITE: DDT 104

This course covers intermediate-level concepts and applications of CADD. Emphasis will be placed on intermediate-level features, commands, and applications of CADD software.

DDT 128 INTERMEDIATE TECHNICAL DRAWING (1T, 4E) 3 credits
PREREQUISITE: DDT 111, DDT 127
 This course is designed to develop a strong foundation in common drafting and design practices and procedures. Topics include dimensioning concepts and pictorial drawings.

DDT 131 BASIC MACHINE DRAFTING (1T, 4E) 3 credits
PREREQUISITE: DDT 127, DDT 111
 This course in machine drafting and design provides instruction in the largest specialty area of drafting in the United States in terms of scope and job opportunities. Emphasis will be placed on the applications of multi-view drawings, including drawing organization and content, title blocks and parts lists, assembly drawings, detail drawings, dimensioning and application of engineering controls in producing industrial-type working drawings. Upon completion, students should be able to organize, layout, and produce industrial-type working drawings, including the application of title blocks, parts lists, assemblies, details, dimensions, and engineering controls.

DDT 132 ARCHITECTURAL DRAFTING (1T, 4E) 3 credits
PREREQUISITES: DDT 127 AND DDT 150
 This course in architectural design and drafting introduces basic terminology, concepts and principles of architectural design and drawing. Topics include design considerations, lettering, terminology; site plans, and construction drawings. Upon completion, students should be able to draw, dimension, and specify basic residential architectural construction drawings.

DDT 150 THEORY OF RESIDENTIAL DRAWING AND DESIGN (3T) 3 credits
 This course provides the theory of residential drawing and design. Topics include architectural styles, house design, site and space planning, climate, drawing requirements, construction materials and process, terminology, and specific types of drawings required to complete a full set of construction documents. Introductory, intermediate, and advanced topics are covered. Emphasis is placed on an understanding of the various requirements essential to the field of residential drawing and design.

DDT 155 DRAWING FOR RESIDENTIAL CONSTRUCTION (8E) 4 credits
PREREQUISITE: DDT 127, DDT 150
 This course is a direct applications lab to the topics covered within DDT 150. Emphasis is placed upon the production of quality construction documents.

DDT 213 CIVIL DRAFTING, PLAT MAPS (1T, 4E) 3 credits
PREREQUISITE: DDT 127
 This course introduces the drafting practices, symbols, conventions, and standards utilized in civil engineering contract documents. Topics include site planning, land surveying, topographic surveys, along with civil terminology. Upon completion, students should be able to draw accurate plat maps giving legal descriptions of land parcels, draw simple site plans, and identify and use proper symbols and conventions on civil engineering drawings.

DDT 225 STRUCTURAL STEEL DRAFTING (1T, 4E) 3 credits
PREREQUISITE: DDT 127
 This course covers the theory and practical applications necessary to understand the basic design and terminology of structural steel components used in light commercial buildings. Emphasis is placed on structural steel drafting techniques, bolted and welded connections, framing plans, sections, fabrication and connection details, and bills of material. Upon completion, students should be able to produce engineering and shop drawings incorporating standard shapes, sizes, and details using the A.I.S.C. Manual and incorporating safety practices.

DDT 233 SOLIDS MODELING (2T, 2E) 3 credits
PREREQUISITE: DDT 104
 This course provides instruction in 3D capabilities of CAD software. Emphasis is placed on 3D wire-frame, surface and solids modeling along with the development of 2D detail drawings from 3D models. Upon completion, students should be able to generate 3D surface and solid models and 2D orthographic production drawings from created solid models.

ECONOMICS (ECO)

ECO 130 CONSUMER ELECTRONICS (3T) 3 credits
 This course explores the application of general economic principles and practices concerning personal consuming, saving, and investing. It also stresses the relationship of sound personal financial management with successful career goals. Topics covered will include: consumerism, income and family financial planning, insurance, and investments.

ECO 231 PRINCIPLES OF MACROECONOMICS (3T) 3 credits
 This course is an introduction to macroeconomic theory, analysis, and policy applications. Topics include the following: scarcity, demand and supply, national income analysis, major economic theories concerning monetary and fiscal policies as stabilization measures, the banking system, and other economic issues or problems including international trade.

ECO 232 PRINCIPLES OF MICROECONOMICS (3T) 3 credits
PREREQUISITE: ECO 231
 This course is an introduction of the microeconomic theory, analysis, and applications. Topics include scarcity, the theories of consumer behavior, production and cost, markets, output and resource pricing, and international aspects of microeconomics.

EDUCATION

EDU 100 EXPLORING TEACHING AS A PROFESSION (1T, 2E) 2 credits
 This course provides students with an opportunity to explore teaching as a career. The role of the teacher, the benefits of teaching, and the steps to becoming a teacher

Course Descriptions

are some of the topics that will be explored. Students will be exposed to examples of good teaching and self-assess their personal and professional qualities.

ELECTRICAL TECHNOLOGY (ELT)

ELT 104 DISTRIBUTION SYSTEMS **3 credits**
FORMERLY: ELT 217
(2T, 2E)

PREREQUISITE: ELT 108 and ELT 109

This course involves the theory, applications, calculations, and connections associated with transformers and power distribution systems commonly used in the electrical field.

ELT 108 DC FUNDAMENTALS (1T, 4E) **3 credits**
PREREQUISITE: MTH 092 OR MTH 098
COREQUISITE: ELT 109

This course provides a study of atomic theory, direct current (DC), properties of conductors and insulators, direct current characteristics of series, parallel, and series parallel circuits. Inductors and capacitors are introduced and their effects on DC circuits are examined. Students are prepared to analyze complex DC circuits, solve for unknown circuits variables and to use basic electronic test equipment. This is a CORE course.

ELT 109 AC FUNDAMENTALS (1T, 4E) **3 credits**
PREREQUISITE: MTH 092 or MTH 098
COREQUISITE: ELT 108

This course provides a study of the theory of alternating current (AC). Students are prepared to analyze complex AC circuit configurations with resistor, capacitors, and inductors in series and parallel combinations. Upon completion, students should be able to design AC circuits and explain the function of alternating circuits such as RLC, impedance, phase relationships and power factor. This is a CORE course.

ELT 110 WIRING METHODS (1T, 4E) **3 credits**

This course is a study of various tasks, wiring methods, materials, and associated NEC (National Electric Code) requirements that students will be required to work with in residential and commercial wiring courses.

ELT 116 RESIDENTIAL WIRING (4T, 4E) **6 credits**
PREREQUISITES: ELT 108 AND ELT 109

This course is a study of residential wiring practices and methods, the NEC requirements and residential blueprint interpretations.

ELT 117 AC/DC MACHINES (1T, 4E) **3 credits**
PREREQUISITES: ELT 108 AND ELT 109

This course covers the theory and operation of DC motors single and three phase AC motors and the labs will reinforce this knowledge. Emphasis is placed on the various types of single and three phase motors, wiring diagrams, starting devices, and practical application in lab. This is a CORE course.

ELT 118 COMMERCIAL/INDUSTRIAL WIRING I **3 credits**
(1T, 4E)
PREREQUISITE: ELT 110

This course focuses on principles and applications of com-

mercial and industrial wiring. Topics include electrical safety practices, an overview of National Electric Code requirements as applied to commercial and industrial wiring, conduit bending, circuit design, pulling cables, transformers, switch gear, and generation principles.

ELT 192 PRACTICUM/INTERN/CO-OP (5I) **1 credit**
PREREQUISITE: Permission of Instructor

This course provides practical experience in the field early in the student's training as an electrician's helper on the job, working a special project or conducting research in a directed area of the field. Emphasis is placed on gaining hands on experience with tools of the trade as well as a better understanding of NEC directives. Upon completion, students should possess a higher state of proficiency in the basic skills of connecting electrical wiring and conduit; this course may be repeated with the instructor's permission.

ELT 193 PRACTICUM/INTERN/CO-OP (10I) **2 credits**
PREREQUISITE: Permission of Instructor

This course provides practical experience in the electrical craft as an electrician's helper on the job, working a special project or conducting research in a directed area of the field. Emphasis is placed on gaining hands on experience with tools of the trade as well as better understanding of NEC directives. Upon completion, students should possess a higher state of proficiency in the basic skills of connecting electrical wiring and conduit; this course may be repeated with the instructor's permission.

ELT 195 PRACTICUM/INTERN/CO-OP (15I) **3 credits**
PREREQUISITE: Permission of Instructor

This course provides additional practical experience in the electrical craft as an apprentice electrician or higher level working advanced projects or research in a directed area of the field. Emphasis is placed on gaining more hands on experience with tools of the trade as well as NEC directives while studying in the classroom two hours per week. Upon completion, students should possess a higher state of proficiency in all electrician skills and a better knowledge of testing for Electrical Journeyman's Block Test.

ELT 209 MOTOR CONTROLS 1 (1T, 4E) **3 credits**
PREREQUISITE: ELT 108 AND ELT 109

This course covers the use of motor control symbols, magnetic motor starters, running overload protection, push-button stations, sizing of magnetic motor starters and overload protection, and complex ladder diagrams of motor control circuits. Topics include sizing magnetic starters and overload protection, the use of push-button stations, ladder diagrams, and magnetic motor starters in control of electric motors, wye-delta starting, part start winding, resistor starting and electric starting devices. Upon completion, students should be able to understand the operation of motor starters, overload protection, interpret ladder diagrams using push-button stations and understand complex motor control diagrams.

ELT 212 MOTOR CONTROLS II (1T, 4E) **3 credits**
PREREQUISITE: ELT 209

This course covers complex ladder diagrams of motor control circuits and the uses of different motor starting techniques. Topics include wye-delta starting, part start winding, resistor starting and electronic starting devices. Upon

completion, the students should be able to understand and interpret the more complex motor control diagrams and understand the different starting techniques of electrical motors.

ELT 221 ELECTRONICS FOR ELECTRICIANS I (2T, 2E) 3 credits
PREREQUISITE: ELT 108 and ELT 109 or Permission of instructor

This course introduces students to the basic principles of solid state electronic equipment as found in many electrical and motor control circuits. Emphasis is placed on fundamental concepts of diodes, transistors, FET's and MOSFETs as they are used in electrical control circuits. Upon completion, students should understand the basic operation of solid state components and be able to perform basic troubleshooting tasks.

ELT 223 CABLE SPLICES & INSTALLATION (2T, 3M) 3 credits
PREREQUISITE: Permission of instructor

This course provides instruction in splicing and installing low and medium voltage power cable, hi -voltage cable, fiber optic cable, communication and voltage wiring systems. Emphasis is placed on sizes conductors and use of proper connectors and materials used in splicing and connecting. Upon completion, students should be able to properly size, splice, connect and insulate all types of cables.

ELT 231 PROGRAMMABLE CONTROLS I (2T, 2E) 3 credits
PREREQUISITE: ELT 108 AND ELT 109

This state-of-the art course includes the fundamental principals of programmable logic controls (PLCs) including hardware and programming. Emphasis is placed on but not limited to the following: hardwiring associated with the PLC, different options available with most PLCs and basic ladder logic programming. Upon completion, students must demonstrate their ability by developing programs, loading programs into real world PLCs and troubleshooting the system if necessary.

ELT 232 PROGRAMMABLE CONTROLS II (2T, 2E) 3 credits
PREREQUISITES: ELT 108, ELT 109

This state-of-the-art course includes the principals of PLC's including hardware, programming and program design. Emphasis is placed on, but not limited to the following: developing working programs, timers, counters, different special functions, and designing programs from existing hardwired systems. Upon completion, students must demonstrate their ability by developing programs, loading programs into real world PLCs and troubleshooting the system if necessary.

ELT 241 NATIONAL ELECTRIC CODE (3T) 3 credits
PREREQUISITE: ELT 108 and ELT 109 or Permission of instructor

This course introduces students to the National Electric Code. Emphasis is placed on locating and interpreting needed information within the NEC code manual. Upon completion, students should be able to locate code requirements for a specific electrical installation.

ELT 244 CONDUIT BENDING AND INSTALLATION (2T,2E) 3 credits

This course provides students the knowledge to properly bend electrical metallic tubing, rigid galvanized and intermediate metal conduit, and PVC conduit. Emphasis is placed on the theory and practical application of conduit bending methods. Upon completion, students should be able to get measurements, layout, and successfully bend conduit using hand type, mechanical, and hydraulic benders.

EMERGENCY MEDICAL PARAMEDIC (EMP)

EMP 189 APPLIED ANATOMY AND PHYSIOLOGY FOR THE PARAMEDIC (4T) 4 credits
PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

This course introduces human anatomy and physiology and includes concepts related to basic chemistry; fluid, electrolyte, and acid-base balance; functions of cells, tissues, organs, and systems; pathophysiology; and associated medical terminology. Emphasis is placed on applying content to signs, symptoms, and treatments; and situations commonly seen by paramedics. Upon course completion, students should be able to demonstrate a basic understanding of the structure and function of the human body.

EMP 191 PARAMEDIC PREPARATORY (2T) 2 credits
PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.
COREQUISITE: Approved anatomy and physiology course(s).
NOTE: HPS-110, Introduction to Health Care may be substituted for this course.

This course introduces issues related to the practice of pre-hospital advanced life support as a career, with a focus on issues common to all health care professions. Content areas include: paramedic roles and responsibilities, well-being of the paramedic, illness and injury prevention, medical-legal-ethical issues, therapeutic communications, and medical terminology. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 192 PARAMEDIC OPERATIONS (2T, 2E) 3 credits
PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.
COREQUISITE: Approved anatomy and physiology course(s).

This course focuses on the operational knowledge and skills needed for safe and effective patient care within the paramedic's scope of practice. Content areas include: pathophysiology, life span development, ambulance operations, medical incident command, rescue awareness and operations, hazardous materials incidents, crime scene awareness, and Alabama EMS laws and rules. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

Course Descriptions

COURSE DESCRIPTIONS

EMP 193 PATIENT ASSESSMENT AND MANAGEMENT

(2T, 2E)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s).

This course provides the knowledge and skills needed to perform a comprehensive patient assessment, make initial management decisions, and to communicate assessment findings and patient care verbally and in writing. Content areas include: airway management, history taking, techniques of the physical examination, patient assessment, clinical decision making, communications, documentation, and assessment based management. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 194 PARAMEDIC GENERAL PHARMACOLOGY

(1T, 2E)

2 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s).

NOTE: HPS-104, General Pharmacology for the Health Sciences may be substituted for this course.

This course introduces basic pharmacological agents and concepts, with an emphasis on drug classifications and the knowledge and skills required for safe, effective medication administration. Content areas include: general principles of pharmacology and pharmacologic pathophysiology; venous and intraosseous access techniques, the metric and apothecary system; computation of dosage and solution problems, administration of pharmacologic agents; and nasogastric tube placement. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 195 ADVANCED TRAUMA

MANAGEMENT A (2T, 2E, 9P3)

6 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s), approved for clinical studies.

NOTE: The combination of EMP-196, Advanced Trauma Management-B, and EMP-197, Clinical Competencies-I will substitute for this course.

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for trauma patients. Content areas include the pathophysiology, assessment, and management of trauma as related to: trauma systems; mechanisms of injury; hemorrhage and shock; soft tissue injuries; burns; and head, facial, spinal, thoracic, abdominal, and musculoskeletal trauma. Theory and skills are applied to a variety of patient situations in the clinical setting, with a focus on patient assessment, trauma management, advanced airway management, I.V./I.O. initiation and medication administration. Upon course completion, students will have demonstrated competency in those respective

components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 196 ADVANCED TRAUMA MANAGEMENT B

(2T, 2E)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s).

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for trauma patients. Content areas include the pathophysiology, assessment, and management of trauma as related to: trauma systems; mechanisms of injury; hemorrhage and shock; soft tissue injuries; burns; and head, facial, spinal, thoracic, abdominal, and musculoskeletal trauma. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 197 PARAMEDIC CLINICAL

COMPETENCIES I (9P3)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s), approved for clinical studies, EMS 113, and CPR verification.

This course is directed toward the application of knowledge and skills developed in didactic and skills laboratory experiences to the clinical setting. Theory and skills are applied to a variety of patient situations in the clinical setting, with a focus on patient assessment, trauma management, advanced airway management, I.V./I.O. initiation and medication administration. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 198 MEDICAL PATIENT MANAGEMENT I (2T, 2E)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s).

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation treatment plans for specific medical conditions. Content areas include: pulmonology, neurology, gastroenterology, renal/urology, toxicology, hematology, environmental conditions, infectious and communicable diseases, abuse and assault, patients with special challenges, and acute interventions for the chronic care patient. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 199 CARDIOVASCULAR ELECTROPHYSIOLOGY

(2T, 2E)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s).

This course introduces the cardiovascular system, cardiovascular electrophysiology, and electrocardiographic monitoring. Content areas include: cardiovascular anatomy and physiology, cardiovascular electrophysiology, electrocardiographic monitoring, rhythm analysis, and prehospital 12-lead electrocardiogram monitoring and interpretation. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 200 MEDICAL PATIENT MANAGEMENT IIA

(2T, 2E, 9P3)

6 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s), approved for clinical studies.

NOTE: The combination of EMP-201, Medical Patient Management-IIB, and EMP-202, Clinical Competencies-II will substitute for this course.

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for specific medical conditions. Content areas include: endocrinology, allergies and anaphylaxis, behavioral/psychiatric conditions, gynecology, obstetrics, neonatology, pediatrics, and geriatrics. In the clinical setting, theory and skills are applied to a variety of medical situations across the life span of the patient, with a focus on communication with and management of cardiac, acute care, psychiatric/behavioral, obstetrical, newborn, pediatric, geriatric, and acute interventions for chronic care patients, and patients with special challenges. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 201 MEDICAL PATIENT MANAGEMENT IIB

(2T, 2E)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s).

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for specific medical conditions. Content areas include: endocrinology, allergies and anaphylaxis, behavioral/psychiatric conditions, gynecology, obstetrics, neonatology, pediatrics, and geriatrics. Students integrate and reinforce the didactic and skills laboratory components of their education by performing basic and advanced life support assessments and skills on a variety of patient presentations and complaints in the clinical setting. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and require-

ments set forth by the Alabama Department of Public Health.

EMP 202 PARAMEDIC CLINICAL COMPETENCIES II

(9P3)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s), approved for clinical studies, EMS 113, and CPR verification.

This course is directed toward the application of knowledge and skills developed in didactic and skills laboratory experiences to the clinical setting. Theory and skills are applied to a variety of medical situations across the life span of the patient, with a focus on communication with and management of cardiac, acute care, psychiatric/behavioral, obstetrical, newborn, pediatric, geriatric, and acute interventions for chronic care patients, and patients with special challenges. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 203 CARDIOVASCULAR PATIENT MANAGEMENT

(2T, 2E)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program, EMP-199 and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s).

This course relates pathophysiology and assessment findings to the formulation of field impressions and implementation of treatment plans for specific cardiovascular conditions. Content areas include: assessment of the cardiovascular patient, pathophysiology of cardiovascular disease and techniques of management including appropriate pharmacologic agents and electrical therapy. Upon course completion, students will have demonstrated competency in those respective components of the National Standard Curriculum for the EMT-Paramedic and requirements set forth by the Alabama Department of Public Health.

EMP 204 TRANSITION TO PARAMEDIC PRACTICE

(2T, 2E)

3 credits

PREREQUISITE: Admission to the EMT-Paramedic Program and Permission of instructor.

COREQUISITE: Approved anatomy and physiology course(s).

This course is designed to meet additional state and local educational requirements for paramedic practice. Content may include: prehospital protocols, transfer medications, topics in critical care and transport, systems presentation, and/or national standard certification courses as dictated by local needs or state requirement. Upon course completion, students should have met all ancillary educational requirements set forth by the Alabama Department of Public Health and local employers.

Course Descriptions

COURSE DESCRIPTIONS

EMP 205 PARAMEDIC TERMINAL COMPETENCIES

(1T, 2E)

2 credits

PREREQUISITE: Admission to the EMT-Paramedic Program, approved anatomy and physiology course(s) and Permission of instructor.

This course is designed to review the National Standard Curriculum for the EMT-Paramedic and to assist students in preparation for the paramedic licensure examination. Emphasis is placed on validation of knowledge and skills through didactic review, skills lab performance, computer simulation and practice testing. Upon course completion, students should be sufficiently prepared to sit for the paramedic licensure examination.

EMP 206 PARAMEDIC FIELD PRECEPTORSHIP

(1T, 15P3)

6 credits

PREREQUISITE: Admission to the EMT-Paramedic Program, approved anatomy and physiology course(s), approved for clinical studies, Permission of instructor, EMS 113, and CPR verification.

This course provides field experiences in the prehospital setting with advanced life support EMS units. Under the direct supervision of a field preceptor, students synthesize cognitive knowledge and skills developed in the skills laboratory and hospital clinical to provide safe and effective patient care in the prehospital environment. Upon course completion, students should have refined and validated their patient care practices to provide safe and effective patient care over a broad spectrum of patient situations and complaints.

EMP 207 PARAMEDIC TEAM LEADER PRECEPTORSHIP

(3P3)

1 credit

PREREQUISITE: Admission to the EMT-Paramedic Program, approved anatomy and physiology course(s), approved for clinical studies, Permission of instructor, EMS 113, and CPR verification.

This course is designed to evaluate students' ability to integrate didactic, psychomotor skills, clinical, and field internship instruction to serve as a competent entry-level paramedic. This final evaluative (rather than instructional) course focuses on students' professional attributes and integrative competence in clinical decision-making and team leadership in the prehospital setting. Upon course completion, students should have demonstrated adequate knowledge and skills, professional attitudes and attributes, clinical decision-making and team leadership abilities to effectively function as a competent entry-level paramedic.

EMERGENCY MEDICAL SERVICES (EMS)

EMS 100 CARDIOPULMONARY RESUSCITATION I

(1T)

1 credit

PREREQUISITE: As required by program.

This course provides students with concepts as related to areas of basic life support to include coronary artery disease, prudent heart living, symptoms of heart attack, adult one-and-two rescuer CPR, first aid for choking, pediatric basic life support, airway adjuncts, EMS system entry access, automated external defibrillation (AED), and special situations for CPR. Upon course completion, students should be able to identify situations requiring action related

to heart or breathing conditions and effectively implement appropriate management for each condition. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 101 CARDIOPULMONARY RESUSCITATION II

(1T)

1 credit

PREREQUISITE: EMS 100 and/or as required by program.

This course provides students with a review of concepts learned in EMS-100. In addition, the course provides the student with theory and application of airway adjuncts as utilized with airway obstruction and maintenance as well as respiratory and cardiac arrest. Assessment and management of acute ischemic stroke will also be included. Upon course completion, students should be able to identify situations requiring action related to heart or breathing conditions and effectively implement appropriate management for these conditions. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 102 MEDICO-LEGAL ASPECTS OF EMERGENCY

CARE (1T)

1 credit

PREREQUISITE: As required by program.

This course is designed for students planning to enter a health sciences profession. The course introduces students to classification of laws, the Alabama Medical Practice Act, the Alabama Good Samaritan Act, state legislation affecting health related professionals, the concept of "standard of care", medical liability, and areas of potential medical liability and protection. Upon course completion, students should have an understanding of laws relating to patient care, areas of potential liability, and medical liability protection for health professionals.

EMS 103 FIRST AID (1T)

1 credit

PREREQUISITE: Current training in CPR and/or as required by program.

This course introduces students to initial first aid care. Topics include scene safety, universal precautions, activation of the EMS system, assessment, airway/breathing/circulation, shock/injuries/bleeding, medical emergencies, and altered level of consciousness. Upon course completion, students should have knowledge to manage various emergencies requiring first aid techniques.

EMS 104 FIRST AID FOR STUDENTS OF HEALTH RELATED

PROFESSIONS (1T)

1 credit

PREREQUISITE: Current training in CPR and/or as required by program.

This course is designed for students who plan to enter a health related profession and provides educational concepts related to first aid for various health disciplines. The course includes instruction in the emergency administration of oxygen, use of airway adjuncts, medication administration techniques, equipment for mechanical breathing, suctioning techniques, and automated external defibrillation (AED). Upon course completion, students should have the ability to recognize emergency situations requiring immediate action and appropriately manage these situations.

EMS 105 FIRST RESPONDER (3T)

3 credits

PREREQUISITE: As required by program.

This course provides theory in emergency procedures as

contained in the current National Standard Training Curriculum (NSTC) for the First Responder. The course is an introduction to the emergency medical services system and provides fundamentals for students to improve the quality of emergency care provided as the first person to an emergency scene until emergency medical services arrive. Completion of specific student competencies, as outlined in the current NSTC for the First Responder, are required for successful course completion.

EMS 106 MEDICAL TERMINOLOGY FOR HEALTH PROFESSIONS (2T) 2 credits
PREREQUISITE: As required by program.

This course provides students with a survey of words, terms, and descriptions commonly used in health related professions. The course includes spelling, pronunciation, and meaning of prefixes, suffixes, roots, and terms. Students may have the opportunity to utilize computer assisted instruction for learning various medical terms. Upon course completion, students should have the knowledge to associate a variety of medical terms with their meaning and utilize medical terms to effectively communicate with other health professionals.

EMS 107 EMERGENCY VEHICLE OPERATOR AMBULANCE (1T) 1 credit
PREREQUISITE: Must present a valid driver's license as required by program.

The Emergency Vehicle Operator Course - Ambulance provides the student with training as contained in the current National Standard Training Curriculum (NSTC) for the Emergency Vehicle Operator Course (EVOC) Ambulance. The course provides the knowledge and skill practice necessary for individuals to learn how to safely operate all types of ambulances. Topics include introduction to the NSTC for ambulance operators; legal aspects of ambulance operation; communication and reporting; roles and responsibilities; ambulance types and operation; ambulance inspection, maintenance, and repair; navigation and route planning; basic maneuvers and normal operating situations; operations in emergency mode and unusual situations, special considerations in safety; and the run. Completion of specific student competencies, utilizing NSTC guidelines, are required for successful completion of this course. NOTE: To qualify for licensure status as an ambulance driver in the State of Alabama, students must successfully complete this course and meet additional requirements as required by the Alabama Department of Public Health.

EMS 108 DIRECTED STUDIES IN EMS I (1T) 1 credit
PREREQUISITE: As required by program.

This course offers independent study or computer assisted instruction under faculty supervision and/or theory in an EMS subject relevant to the student's interest and need. Specific cognitive competencies required by the student are defined in writing at the first class period.

EMS 109 DIRECTED STUDIES IN EMS – II (1T) 1 credit
PREREQUISITE: As required by program.

This course offers independent study or computer assisted instruction under faculty supervision and/or theory in an EMS subject relevant to the student's interest and need. Specific cognitive competencies required by the student are

defined in writing at the first class period.

EMS 110 DIRECTED STUDIES IN EMS – III (1T) 1 credit
PREREQUISITE: As required by program.

This course offers independent study or computer assisted instruction under faculty supervision and/or theory in an EMS subject relevant to the student's interest and need. Specific cognitive competencies required by the student are defined in writing at the first class period.

EMS 111 DIRECTED STUDIES IN EMS – IV (1T) 1 credit
PREREQUISITE: As required by program.

This course offers independent study or computer assisted instruction under faculty supervision and/or theory in an EMS subject relevant to the student's interest and need. Specific cognitive competencies required by the student are defined in writing at the first class period.

EMS 112 DIRECTED STUDIES IN EMS – V (1T) 1 credit
PREREQUISITE: As required by program.

This course offers independent study or computer assisted instruction under faculty supervision and/or theory in an EMS subject relevant to the student's interest and need. Specific cognitive competencies required by the student are defined in writing at the first class period.

EMS 114 INFECTION CONTROL REFRESHER (1T) 1 credit
PREREQUISITE: EMS 113 and/or as required by program.

This course is designed as a refresher for students in health related fields of study who have completed material contained in EMS 113. The course provides students with updated information as related to managing potential blood-borne and airborne pathogens. The course is taught following current guidelines set forth by the Occupational Safety and Health Administration (OSHA). Upon course completion, students should be able to participate in the clinical setting, identify potential sources of bloodborne and airborne pathogens, and use appropriate universal precautions.

EMS 115 SPECIAL SKILLS FOR HEALTH RELATED PROFESSIONS (1T) 1 credit
PREREQUISITE: Students enrolled in a health related professions program and/or as required by program.

This course is designed for students enrolled in a health related professions program. The course provides students with concepts related to peripheral venous anatomy and venipuncture techniques. Upon course completion, students should be able to identify veins of the extremities and perform basic venipuncture techniques of the upper extremities.

EMS 116 EMS BASIC THEORY AND LAB (6T,6M) 9 credits

This course is required to apply for certification as an EMT basic. This course provides students with insights into the theory and application of concepts related to the profession of emergency medical services. Specific topics include: EMS preparatory, airway maintenance, patient assessment, treating trauma patients, various medical procedures, treating infants and children, and various EMS operations. This course is based on the Emergency Medical Technician-Basic National Standard Curriculum.

Course Descriptions

EMS 117 EMS BASIC CLINICAL COMPETENCIES (3C) 1 credit

This course is required to apply for certification as an EMT basic. This course provides students with clinical education experiences to enhance knowledge and skills learned in the EMS 116, EMS Basic Theory and Lab. This course helps students prepare for the National Registry Exam.

EMS 120 VEHICLE EXTRICATION (2T) 2 credits PREREQUISITE: As required by program.

This course provides students with theory in the development of concepts related to the removal of persons from damaged vehicles. Topics include gaining access, stabilization, packaging, patient removal, and basic hazardous situations. Upon course completion, students should be able to effectively extricate a person from a wrecked vehicle.

EMS 121 VEHICLE RESCUE (2T, 3S) 3 credits PREREQUISITE: EMS 120 and/or as required by program.

This course is a continuation of EMS 120 and provides students with concepts and skills related to patient management and hazards encountered during vehicle rescue operations. Topics include mechanisms of trauma, patient injuries, assessment, management, extrication tools; and potential hazards to include faulty air bags, loaded hydraulic bumper systems, and patient restraints. Upon course completion, students should be able to identify different areas of vehicle damage and associate this damage with specific patient injuries; and keep the scene safe by recognizing potential hazards encountered during the rescue of patients from vehicles.

EMS 122 STRUCTURAL EXTRICATION (2T) 2 credits PREREQUISITE: As required by program.

This course provides students with theory in the development of concepts related to extrication of persons from a variety of structures from one to three stories. Topics include packaging, removal of patients trapped in buildings, and hazards of structural extrication. Upon course completion, students should be able to identify hazards and have the knowledge to package and remove patients from a three-story building.

EMS 123 STRUCTURAL RESCUE (2T, 3S) 3 credits PREREQUISITE: EMS 122 and/or as required by program.

This course is a continuation of EMS 122 and provides students with concepts and skills related to structural rescue in multilevel buildings. Topics include structural materials, structural damage, commercial and residential construction, toxic combustibles, rescuer safety, self-contained breathing apparatus, and types of rescue tools. Upon course completion, students should have an understanding of how buildings are constructed, different types of structural rescue, and the safest way to approach the rescue of persons trapped in a structure.

EMS 124 SEARCH & WILDERNESS RESCUE (3T) 3 credits PREREQUISITE: As required by program.

This course provides students with concepts related to searching for persons in a remote or isolated area. Topics include organization of a rescue; communications and incident command; missing person history, questionnaire, and checklist; planning to include finances, personnel, technical

specialists, topographic maps, medical units, supplies, documentation, and search and rescue logs. Upon course completion, students should be familiar with how to plan and conduct a search and wilderness rescue.

EMS 125 HIGH ANGLE RESCUE – I (2T) 2 credits PREREQUISITE: As required by program.

This course provides students with theory in the introduction to high angle rescue techniques. Topics include the high angle environment; equipment and protection, care and use of rope and related equipment; knots, rappelling, and ascending techniques; and introduction to rescue techniques. Upon course completion, students should have an understanding in the basic techniques of high angle rescue.

EMS 126 HIGH ANGLE RESCUE – II (2T) 2 credits PREREQUISITE: EMS 125 and/or as required by program.

This course is a continuation and review of EMS 125 and provides students with theory in rescue techniques utilized in rope rescue. Topics include one person rescue techniques, slope evacuation, high angle lowering, hauling systems, high lines, and evacuation operations. Upon course completion, students should have an understanding of how to approach a high angle rescue, utilizing various rigging techniques.

EMS 127 HIGH ANGLE RESCUE – III (2T, 3S) 3 credits PREREQUISITE: EMS 126 and/or as required by program.

This course is a continuation and review of EMS 126 and provides students with demonstration and hands on practice of high angle rescue. The course incorporates all material contained in EMS 125 and EMS 126 and allows students the opportunity to utilize their knowledge to perform high angle rescue. Upon course completion, students should be familiar with how to plan and conduct a safe high angle rescue by participation in a simulated field exercise in high angle rescue.

EMS 128 CAVE RESCUE – I (2T) 2 credits PREREQUISITE: EMS 125 and/or as required by program.

This course provides students with theory and demonstration in planning and conducting a cave rescue. Topics include organization and incident command; assessment and management of unstable environments; cave search teams; medical personnel; and rigging. Upon course completion, students should be familiar with the basic concepts and potential dangers of cave rescue.

EMS 129 CAVE RESCUE II (2T, 3S) 3 credits PREREQUISITE: EMS 128 and/or as required by program.

This course is a continuation and review of EMS 128 and provides students with demonstration and hands on practice of cave rescue. Topics include cave types and dangers; lighting; confined space and water hazards; and conducting a rescue. Upon course completion, students should be familiar with how to plan and conduct a safe cave rescue by participation in a simulated field exercise in cave rescue.

EMS 130 INDUSTRIAL EXTRICATION (2T) 2 credits PREREQUISITE: As required by program.

This course provides students with concepts related to extrication of persons from a variety of industrial accidents.

Topics include confined space, artificial anchors, accident cause, toxic materials, air content, and mechanics of industrial equipment. Upon course completion, students should have a basic understanding of the types of extrication techniques and hazards involved with industrial extrication.

EMS 131 INDUSTRIAL RESCUE (2T, 3S) 3 credits
PREREQUISITE: EMS 130 and/or as required by program.

This course is a continuation and review of EMS 130 and provides students with demonstration and hands on practice of industrial rescue. Topics include local industry types and equipment, approach to a successful rescue, dangers with compression injuries, and overcoming hazards. Upon course completion, students should be familiar with how to plan and conduct a safe industrial rescue by participation in a simulated field exercise in industrial rescue.

EMS 132 AGRICULTURAL EXTRICATION (2T) 2 credits
PREREQUISITE: As required by program.

This course provides students with concepts related to extrication of persons from a variety of agricultural accidents. Topics include confined space, accident cause, toxic materials, and types of agricultural equipment. Upon course completion, students should have a basic understanding of the types of extrication techniques and hazards involved with agricultural extrication.

EMS 133 AGRICULTURAL RESCUE (2T, 3S) 3 credits
PREREQUISITE: EMS 132 and/or as required by program.

This course is a continuation and review of EMS 132 and provides students with demonstration and hands on practice of agricultural rescue. Topics include local agricultural equipment, components and operation; approach to a successful rescue; dangers with compression injuries; federal laws related to the restricted use of pesticides; and overcoming hazards. Upon course completion, students should be familiar with how to plan and conduct a safe agricultural rescue by participation in a simulated field exercise in agricultural rescue.

EMS 134 WATER EXTRICATION (2T) 2 credits
PREREQUISITE: As required by program.

This course provides students with concepts related to extrication of persons from water accidents where they are located on the water's surface. Topics include pathophysiology of near drowning, affects from extreme temperatures, and basic assessment and management techniques of water extrication. Upon course completion, students should have a basic understanding of how to remove persons from the water's surface from accidents occurring in the water.

EMS 135 SURFACE WATER RESCUE (2T, 3S) 3 credits
PREREQUISITE: EMS 134 and/or as required by program.

This course is a continuation and review of EMS 134 and provides students with demonstration and hands on practice of surface water rescue. Topics include water rescue equipment types and use, rescuer safety, resources, the approach to a successful rescue, and overcoming hazards. Upon course completion, students should be familiar with how to plan and conduct a safe surface water rescue by participation in a simulated field exercise in a surface water rescue.

EMS 144 EMT BASIC SPECIALIZED EXPERIENCES (3P3) 1 credit

PREREQUISITE: Admission to the EMT-Basic level of training or current Alabama licensure as an EMT-Basic.

This course provides students with clinical training in specialized areas such as E-911 dispatch, physician offices, and/or mental health centers to enhance knowledge and skills learned in the EMT-Basic training. Specific skills objectives are evaluated, including patient assessment and management, and students are required to complete patient care summaries and other written work. This course is optional for completing requirements for the EMT-Basic level of training.

EMS 145 EMERGENCY DEPARTMENT PRECEPTORSHIP (1T, 3P3) 2 credits

PREREQUISITE: Admission to the EMT-Basic level of training or current Alabama licensure as an EMT-Basic.

COREQUISITE: EMS 113 and CPR verification.

This course provides students with clinical experiences in the emergency department to enhance knowledge and skills learned in the EMT-Basic training. Specific skills objectives, including patient assessment and management, are evaluated and students are required to complete patient care summaries and other written work. This course is optional for completing requirements for the EMT-Basic level of training.

EMS 150 EMT-BASIC REFRESHER (2T) 2 credits
PREREQUISITE: Completion of a NSTC course for EMT-Basic and/or as required by program.

This course provides students with theory in review of the current National Standard Training Curriculum (NSTC) for the EMT-Basic. It also serves as a transition or bridge course when a new national curriculum is adopted. This course contains specific content areas as defined by the NSTC. Students are required to complete specific competencies, as outlined by the NSTC, for successful course completion.

EMS 151 BASIC TRAUMA MANAGEMENT (1T) 1 credit
PREREQUISITE: Completion of a NSTC course for EMT-Basic and/or as required by program.

This course provides students with theory in techniques of basic trauma management. Content areas include general assessment, injuries to the head-neck-face-spine-thorax-abdomen-pelvis-genitalia-extremities. The course is taught in accordance with national standards and requires students to complete specific competencies for successful completion.

EMS 152 DEFIBRILLATION (1T) 1 credit
PREREQUISITE: Current Alabama licensure as a EMT-Basic and/or as required by program.

This course provides students with theory as contained in the National Standard Training Curriculum (NSTC) for EMT-Defibrillation. Content areas include basic cardiac anatomy, electrocardiogram principles, rhythm recognition, monitoring techniques, and defibrillation procedures. Upon course completion, students should have an understanding of when and how to perform cardiac defibrillation.

Course Descriptions

EMS 153 EMS DISPATCHER (3T) 3 credits

PREREQUISITE: As required by program.

This course provides students with theory as contained in the National Training Curriculum (NSTC) for EMS Dispatcher. This course is designed to prepare EMS dispatcher personnel to operate a telecommunication base station for the purpose of receiving requests for emergency medical services and allocating community resources in response to such requests. Upon course completion, students should have an understanding of emergency medical services dispatch procedures and be able to effectively receive a call and dispatch appropriate personnel, utilizing a scenario in a simulated situation.

EMS 154 BASIC PEDIATRIC EMS PROVIDER (1T) 1 credit

PREREQUISITE: EMT-Basic and/or as required by program.

This course provides students with theory in basic emergency care of the pediatric patient. Content areas include the child and family; general pediatric assessment; pediatric respiratory emergencies; pediatric CPR; primary and secondary trauma management; pediatric orthopedic injuries; burn management; child abuse; pediatric medical, neurological, and toxicological emergencies; the infant; sleep apnea and sudden infant death syndrome; and crisis/stress management. Upon course completion, students should be able to provide basic emergency care to infants and children.

EMS 170 RADIATION BIOLOGY & SAFETY (1T) 1 credit

PREREQUISITE: As required by program.

This course provides students with concepts in basic radiation biology. Topics include radiation biology and genetics, dosimetry, radiation safety, and instruments to measure radiation exposure. Upon course completion, students should have an understanding of radiation and the effects of radiation exposure to the human body.

EMS 171 HAZARDOUS MATERIALS AWARENESS AND OPERATIONS (2T) 2 credits

PREREQUISITE: As required by program.

This course provides students with theory in hazardous materials incident awareness and initial operational response. Topics include hazardous materials terms and definitions; recognition of hazardous materials; incident risks and risk assessment; use of protective equipment; basic control, containment, and/or confinement; basic decontamination procedures; and hazardous materials incident standard operating procedures. Upon course completion, students should have basic understanding of hazardous materials incidents and the initial response required by the first personnel responding to such an incident.

EMS 172 HAZARDOUS MATERIALS TECHNICIAN – I (2T) 2 credits

PREREQUISITE: EMS 171

This course provides students with theory in hazardous materials incident response and is a continuation of EMS 171. Topics include an appropriate emergency response plan; classification and verification of known and unknown materials through use of survey instruments and equipment; utilization of specialized chemical protective equipment; hazard and risk assessment techniques; advanced control, containment, and/or confinement; implementation

of decontamination procedures; and understanding termination procedures. Upon course completion, students should be able to effectively respond to and manage a hazardous materials incident.

EMS 173 HAZARDOUS MATERIALS TECHNICIAN – II (2T) 2 credits

PREREQUISITE: EMS 172

This course provides students with theory in hazardous materials incident response specialization and is a continuation of EMS 172. Topics include specific knowledge of various hazardous materials; federal, state, and local requirements regarding the development of a site safety and control plan; and chemical, radiological, and toxicological terminology and behavior. Upon course completion, students should be familiar with requirements for managing a hazardous materials incident.

EMS 174 INCIDENT COMMAND AND EMERGENCY RESPONSE (1T, 3S) 2 credits

PREREQUISITE: EMS 173

This course provides students with theory, demonstration, and practical application in incident command. Topics include incident analysis, command sequence, sizing up the situation, action planning, establishing command, and organization. Upon course completion, students should be able to plan, direct, and control the scene of a hazardous material incident.

EMS 175 RADIOLOGICAL RESPONSE (2T) 2 credits

PREREQUISITE: As required by program.

This course provides students with concepts related to radiation. Topics include radiation physics, radiation biology, radiological monitoring, and radiological response procedures. Upon course completion, students should have an understanding of how radiation exposure affects the human body and know procedures related to radiological exposure response.

EMS 190 EMT-INTERMEDIATE REFRESHER (2T) 2 credits

PREREQUISITE: Completion of a NSTC course for the EMT-Intermediate.

This course provides students with a review of material contained in the National Standard Training Curriculum (NSTC) for the EMT-Intermediate. It also serves as a transition or bridge course when a new national curriculum is adopted. This course contains specific content areas as defined by the NSTC and the Alabama Department of Public Health. Students are required to complete specific competencies according to the NSTC for successful course completion.

EMS 208 DIVE RESCUE BASIC SCUBA (2T) 2 credits

PREREQUISITE: As required by program.

This course provides students with concepts in basic watermanship. Topics include surface rescue, cardiopulmonary resuscitation, basic scuba techniques, and an orientation to public safety diving. Upon course completion, students should have an understanding of basic watermanship. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 209 DIVE RESCUE – ADVANCED SCUBA (2T) 2 credits
PREREQUISITE: EMS 208 and/or as required by program.
 This course provides students with concepts in advanced scuba techniques. Topics include natural and compass navigation, night diving, search and light salvage diving, deep diving, diving in a hazardous environment, and preservation of recovered evidence. Upon course completion, students should have an understanding of dive navigation and recovery. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 210 DIVE RESCUE (2T) 2 credits
PREREQUISITE: EMS 209 and/or as required by program.
 This course provides students with concepts in the rescue of a diver. Topics include dive first aid, response and rescue of the panicked diver, unconscious diver, rescue breathing in the water, operational limited visibility diving, and use of search patterns. Upon course completion, students should have an understanding of the effective approach in the rescue of a diver. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 211 DIVE RESCUE MASTER SCUBA (2T 3S) 3 credits
PREREQUISITE: EMS 210 and/or as required by program.
 This course provides students with theory and practical application in dive rescue. Topics include scuba equipment care and maintenance; search and salvage; night diving; deep diving; research diving; and special response team diving. Upon course completion, students should be able to perform basic procedures associated with dive rescue. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 212 DIVE RESCUE DIVEMASTER (2T 3S) 3 credits
PREREQUISITE: EMS 211 and/or as required by program.
 This course provides students with theory and practical application advanced watermanship. Topics include advanced scuba techniques, diver training procedures, dive physics and physiology, dive site management procedures, evidence preservation, interviewing witnesses, and designing search maps. Upon course completion, students should be able to design a search map and correctly locate and manage a designated dive site. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 213 DIVER RESCUE ASSISTANT INSTRUCTOR (2T, 3S) 3 credits
PREREQUISITE: EMS 212 and/or as required by program.
 This course provides students with theory, demonstration and practical application in dive education. Topics include educational principles, techniques of classroom instruction, techniques of confined water instruction, evaluation in the open water setting, and standards and practices of the diving industry. Upon course completion, students should have the knowledge and skills to become an assistant dive rescue instructor. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 214 UNDERWATER INVESTIGATOR (1T) 1 credit
PREREQUISITE: EMS 210 and/or as required by program.
 This course provides students with concepts related to underwater investigation. Topics include methods and techniques of search; special equipment needs; evidence handling; documentation; and preparation for presentation of evidence. Upon course completion, students should be able to prepare and present evidence of an underwater investigation. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 215 ENRICHED AIR DIVER (1T, 3S) 2 credits
PREREQUISITE: EMS 209 and/or as required by program.
 This course provides students with theory, demonstration, and practical application in the use of enriched air. Topics include special diving circumstances with enriched air, principles of gases, calculation of equivalent air depths (EADs), determining oxygen toxicity exposure, principles of mixing gases, oxygen analyzer techniques, and special procedures used in diving enriched air nitrox (EAN) in the public safety diving environment. Upon course completion, students should be familiar with the use and hazards of enriched air diving. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 216 HAZARDOUS ENVIRONMENT DIVING (1T) 1 credit
PREREQUISITE: EMS 210 and/or as required by program.
 This course provides students with concepts related to diving in hazardous environments. Topics include special equipment needs, hazard analysis, techniques of decontamination, and procedures for determining equipment for special hazards. Upon course completion, students should be familiar with the special needs involved in hazardous environment diving. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 217 DIVE RESCUE INSTRUCTOR (2T, 2E) 3 credits
PREREQUISITE: EMS 212, 213 and/or as required by program.
 This course provides students with theory, demonstration, and practical application in instructional techniques for diving. Topics include classroom presentation techniques, confined water instruction techniques, open water instruction techniques, open water evaluation techniques, and policies, standards, and procedures of certifying agencies. Upon course completion, students should be able to effectively present a variety of topics related to diving and demonstrate dive proficiency. All dive curricula are taught in accordance with the certifying agency. Note: Special equipment and certification/activity fee required.

EMS 218 SUPERVISED STUDIES IN EMS – I (1T) 1 credit
PREREQUISITE: As required by program.
 This course offers various topics of interest and need in emergency medical services. The course is conducted and completed under faculty supervision and includes required student cognitive competencies. Upon course completion, students should have a greater understanding of their assigned course topic.

Course Descriptions

COURSE DESCRIPTIONS

EMS 219 SUPERVISED STUDIES IN EMS – II (1T) **1 credit**
PREREQUISITE: As required by program.
 This course offers various topics of interest and need in emergency medical services. The course is conducted and completed under faculty supervision and includes required student cognitive competencies. Upon course completion, students should have a greater understanding of their assigned course topic.

EMS 220 DIVER MEDICAL TECHNICIAN – I (2T) **2 credits**
PREREQUISITE: Successful completion of EMT-Paramedic and/or as required by program.
 This course provides students with concepts related to diving history. Topics include the history of diving and hyperbaric medicine, introduction to the offshore environment, and hyperbaric chambers. Upon course completion, students should have an understanding of dive history and hyperbaric medicine.

EMS 230 MANAGEMENT IN EMERGENCY MEDICAL SERVICES (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts in the design and management of an emergency medical services organizational unit. Topics include discussion into the issues and challenges surrounding EMS, EMS systems design, resources, EMS councils, problem solving, supervision, medical control, legal issues, financial management, and EMS training. Upon course completion, students should have an understanding of management issues as related to emergency medical services.

EMS 231 EMS LEADERSHIP TECHNIQUES (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts related to emergency medical services leadership. Topics include values and personal styles in leadership, conflict management, work motivation, group dynamics, and organizational behavior. Upon course completion, students should be able to demonstrate appropriate EMS leadership techniques.

EMS 232 COMPUTERS IN EMS (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts as related to the use of computers in emergency medical services. Topics include microcomputers as used in EMS, software applications to include word processing, spread sheets, database systems, electronic filing systems, general accounting procedures, professional development, and patient documentation. Upon course completion, students should have an understanding of how computers are utilized in emergency medical services.

EMS 233 MEDIA AND EMS MARKETING (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts related to EMS marketing. Topics include the communication cycle, nonverbal communication procedures, preparing oral presentations, public speaking skills, communications during crisis situations, marketing EMS, and various forms of media related to EMS. Upon course completion, students should be able to describe ways marketing and media are used for emergency medical services.

EMS 234 DECISION MAKING AND PROBLEM SOLVING IN EMS (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts related to problem solving and decision making. Topics include decision making in the emergency and non-emergency setting, group dynamics and the group thinking phenomenon. Upon course completion, students should be able to begin to use critical thinking skills to solve problems and make appropriate decisions.

EMS 235 EMS FINANCE AND COST ACCOUNTING (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts related to emergency medical services finance. Topics include the budget process, creative financing strategies, accounting procedures, and basic grantsmanship. Upon course completion, students should be able to develop a budget, utilize accounting procedures, and present creative financing strategies.

EMS 236 HUMAN RESOURCE MANAGEMENT IN EMS (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts as related to human resource management in emergency medical services. Topics include supervision, organization, human relations, grievances, training, and labor law. Upon course completion, students should be able to describe effective ways to deal with labor disputes, grievances, and human resource training.

EMS 237 LEGAL REQUIREMENTS FOR EMS (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts related to business and corporate law. Topics include tort proceedings in emergency medical services; implications of a lawsuit; types of professional liability coverage; and federal, state, and local reporting/compliance requirements for emergency medical services. Upon course completion, students should have an understanding of the laws and requirements affecting EMS.

EMS 238 QUALITY ASSURANCE IN EMS (3T) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with concepts related to ensuring quality patient care in emergency medical services. Topics include fundamental principles of EMS medical control and accountability, performance, and evaluation. Upon completion, students should have a knowledge of how an effective quality assurance plan in emergency medical services is implemented.

EMS 239 PRECEPTORSHIP IN EMS MANAGEMENT (9P3) **3 credits**
PREREQUISITE: As required by program.
 This course provides students with field experiences in emergency medical services management. Students are assigned to an EMS service and work under the direct supervision of the chief operating officer, completing various assigned administrative tasks throughout the preceptorship. Upon course completion, students should have an understanding of the various areas and tasks involved in

managing an emergency medical services agency.

EMS 264 PARAMEDIC REGISTRY REVIEW (2T, 2E) 3 credits
PREREQUISITE: Completion of an NSTC course for the Paramedic and/or as required by program.

This course provides students with theory and practical application in preparation for the National Registry Paramedic examination. The course includes a review of knowledge and skill objectives as contained in the National Standard Training Curriculum for the Paramedic. Students successfully completing this course are required to attain specific cognitive, psychomotor, and affective domain competencies.

EMS 265 PARAMEDIC REFRESHER (3T) 3 credits
PREREQUISITE: Completion of an NSTC course for the Paramedic and/or as required by program.

This course provides students with a review of material contained in the current National Standard Training Curriculum (NSTC) for the Paramedic. It also serves as a transition or bridge course when a new national curriculum is adopted. This course contains specific content areas as defined by the NSTC. Students are required to complete specific competencies for successful course completion.

EMS 266 ADVANCED CV LIFE SUPPORT PROVIDER (1T) 1 credit
PREREQUISITE: As required by program.

The Advanced Cardiovascular Life Support Provider Course provides students with concepts related to advanced cardiovascular life support. Content areas include acute myocardial infarction, stroke, cardiovascular pharmacology, electrophysiology, various rhythm disturbances, and techniques of management of cardiovascular emergencies. The course is taught in accordance with national standards and requires specific student competencies. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 267 BASIC TRAUMA LIFE SUPPORT PROVIDER (1T) 1 credit
PREREQUISITE: LPN, R.N., Intermediate EMT, Paramedic, and/or as required by program.

This course provides students with theory and demonstration in advanced trauma care and management. Content areas include mechanism of trauma, trauma assessment, airway-breathing-circulation management, trauma to various portions of the body, multiple system trauma, and load-and-go situations. The course is taught in accordance with national standards and requires specific student competencies. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 269 PEDIATRIC MEDICAL LIFE SUPPORT PROVIDER (1T) 1 credit
PREREQUISITE: LPN, RN, Intermediate EMT, Paramedic, and/or as required by program.

This course provides students with theory and simulated case studies in pediatric care. Content areas include recognition of pediatric pre-arrest conditions; shock; basic life support; oxygenation and airway control; newborn resuscitation; essentials in pediatric resuscitation; dysrhythmia recognition and management; vascular access; and use of

medications. This course is taught in accordance with national standards and requires specific student competencies. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 270 ADVANCED NEONATAL LIFE SUPPORT PROVIDER (1T) 1 credit
PREREQUISITE: RN, Paramedic, and/or as required by program.

This course provides students with theory and demonstration in advanced neonatal care. Content areas include physiology of a newborn; causes of arrest in the neonate; initial steps in the resuscitation to include thermal management, positioning, suctioning, and tactile stimulation; use of resuscitation equipment and procedures for resuscitation; chest compressions and special considerations; anatomy of the neonates airway and endotracheal intubation; and resuscitation medications. The course is taught in accordance with national standards and requires specific student competencies for successful course completion.

EMS 274 PRE HOSPITAL 12 LEAD EKG - (1T) 1 credit
PREREQUISITE: As required by program.

This course is designed for EMT-Intermediates and Paramedics to introduce them to the importance of decreasing "door to treatment" time for acute myocardial infarction patients by transmitting a 12-Lead EKG before arrival at a medical facility. Topics include the prehospital evaluation program; prehospital cardiac evaluation assessment; components of 12-Lead recognition in an acute myocardial infarction; acquiring and transmitting the 12-Lead EKG; chest pain protocols; and practice sessions in 12-Lead EKG recognition with suspected myocardial infarction. Completion of student competencies is required for successful course completion.

EMS 277 PEDIATRIC TRAUMA MANAGEMENT PROVIDER (1T) 1 credit
PREREQUISITE: EMS 267 and/or as required by program.

This course provides students with theory and demonstration in advanced trauma management for the pediatric patient. Content areas include mechanism of injury, trauma assessment and management, airway-breathing-circulation management, and management of the pediatric patient with pre-existing medical conditions. The course is taught in accordance with national standards and requires specific student competencies. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 280 BASIC LIFE SUPPORT INSTRUCTOR (1T) 1 credit
PREREQUISITE: Successful completion, within the past 12 months, of all areas of basic life support training (CPR).

This course provides students with concepts as related to areas of basic life support instruction. Topics include history, concepts, and systems of emergency cardiac care; cardiopulmonary physiology, dysfunction, and actions for survival; introduction to the performance of CPR; foreign body airway obstruction management; pediatric basic life support; special techniques/resuscitation situations, pitfalls, and complications; teaching and learning in basic life support; teaching strategies; and basic provider course organizations. Students will also successfully participate in prac-

Course Descriptions

tice teaching of a cardiopulmonary resuscitation (CPR) class prior to course completion. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 281 ADVANCED CV LIFE SUPPORT

INSTRUCTOR (1T)

1 credit

PREREQUISITE: EMS 266 and/or as required by program.

This course provides the student with theory and practice in the techniques of teaching advanced cardiovascular life support (ACLS). The course is taught in accordance with national standards. Students will also successfully participate in practice teaching of an ACLS provider course prior to course completion. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 282 BASIC TRAUMA LIFE SUPPORT

INSTRUCTOR (1T)

1 credit

PREREQUISITE: EMS 267 and/or as required by program.

This course provides students with theory and practice in the techniques of teaching Basic Trauma Life Support (BTLS). The course is taught to provide instructor training in trauma care and management in accordance with national standards. Students will also successfully participate in practice teaching of a BTLS provider course prior to course completion. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 284 PEDIATRIC MEDICAL LIFE SUPPORT

INSTRUCTOR (1T)

1 credit

PREREQUISITE: EMS 269 and/or as required by program.

This course provides students theory and practice in teaching pediatric medical life support. Topics include recognition of pediatric pre-arrest conditions; shock; basic life support; oxygenation and airway control; newborn resuscitation; essentials in pediatric resuscitation; dysrhythmia recognition and management; vascular access; pediatric trauma; and use of medications. This course is taught in accordance with national standards. Students will also successfully participate in practice teaching of a pediatric medical life support provider course prior to course completion. Students successfully completing this course will receive appropriate documentation of course completion.

EMS 285 ADVANCED NEONATAL LIFE SUPPORT

INSTRUCTOR (1T)

1 credit

PREREQUISITE: EMS 270 and/or as required by program.

This course provides students with theory and practice in teaching advanced neonatal life support. Topics include physiology of a newborn; causes of arrest in the neonate; initial steps in the resuscitation to include thermal management, positioning, suctioning, and tactile stimulation; use of resuscitation equipment and procedures for resuscitation; chest compressions and special considerations; anatomy of the neonates airway and endotracheal intubation; and resuscitation medications. This course focuses on only the neonate and not pediatrics in general. This course is taught in accordance with national standards. Students will also successfully participate in practice teaching of a neonatal advanced life support provider course prior to course completion. Students successfully com-

pleting this course will receive appropriate documentation of course completion.

ENGLISH (ENG)

ENG 092 BASIC ENGLISH I (3T)

3 credits

This course is a review of basic writing skills and basic grammar. Emphasis is placed on the composing process of sentences and paragraphs in standard American written English. Students will demonstrate these skills chiefly through the writing of well-developed, multi-sentence paragraphs.

ENG 093 BASIC ENGLISH II (3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 092 or satisfactory placement score

This course is a review of composition skills and grammar. Emphasis is placed on coherence and the use of a variety of sentence structures in the composing process and on standard American written English usage. Students will demonstrate these skills chiefly through the writing of paragraph blocks and short essays.

ENG 101 ENGLISH COMPOSITION I (3T)

3 credits

PREREQUISITE: Grade of "C" or better in ENG 093 or satisfactory ACT, SAT, or placement score

English Composition I provides instruction and practice in the writing of at least six (6) extended compositions and the development of analytical and critical reading skills and basic reference and documentation skills in the composition process. English Composition I may include instruction and practice in library usage.

ENG 102 ENGLISH COMPOSITION II (3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 101 or equivalent

English Composition II provides instruction and practice in the writing of six (6) formal, analytical essays, at least one of which is a research project using outside sources and/or references effectively and legally. Additionally, English Composition II provides instruction in the development of analytical and critical reading skills in the composition process. English Composition II may include instruction and practice in library usage.

ENG 130 TECHNICAL REPORT WRITING (3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 101 or equivalent

This course provides instruction in the production of technical and/or scientific reports. Emphasis is placed on research, objectivity, organization, composition, documentation, and presentation of the report. Students will demonstrate the ability to produce a written technical or scientific report by following the prescribed process and format.

ENG 251 AMERICAN LITERATURE I (3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 102 or equivalent

This course is a survey of American literature from its inception to the middle of the nineteenth century. Emphasis is placed on representative works and writers of

this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

ENG 252 AMERICAN LITERATURE II

(3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 102 or equivalent

This course is a survey of American literature from the middle of the nineteenth century to the present. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written composition, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

ENG 261 ENGLISH LITERATURE I

(3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 102 or equivalent

This course is a survey of English literature from the Anglo-Saxon period to the Romantic Age. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

ENG 262 ENGLISH LITERATURE II (3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 102 or equivalent

This course is a survey of English literature from the Romantic Age to the present. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

ENG 271 WORLD LITERATURE I (3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 102 or equivalent

This course is a study of selected literary masterpieces from Homer to the Renaissance. Emphasis is placed on major representative works and writers of this period and on the literary, cultural, historical and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

ENG 272 WORLD LITERATURE II (3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 102 or equivalent

This course is a study of selected literary masterpieces from the Renaissance to the present. Emphasis is placed on major representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research.

ENG 297 AFRICAN-AMERICAN LITERATURE (3T)

3 credits

PREREQUISITE: A grade of "C" or better in ENG 102 or equivalent

This course is a study of literature produced by representative African Americans from the eighteenth century to the present. The course emphasizes the diversity of themes and techniques found in these works and examines the historical, cultural, literary and philosophical forces that shaped these works and that are reflected in them. Students will demonstrate the ability to interpret the literature and to relate the works to their historical and literary contexts.

ENG 298 SPECIAL TOPICS IN LANGUAGE AND LITERATURE (1-2T)

1-2 credits

This course, which may be repeated for credit as long as the topics differ, permits a student to study with an instructor a topic in English language or in literature. Emphasis is placed on a narrowly focused topic in which the instructor has special expertise, knowledge, or interest. Students will demonstrate through a research paper and/or a literary critique an understanding of the topic.

ENG 299 DIRECTED STUDIES IN LANGUAGE AND LITERATURE (1-3T)

1-3 credits

This course, which may be repeated for credit as long as the topics differ, provides the student the opportunity to study an English language or literary topic chosen by the student in consultation with the instructor. Emphasis is placed on the student's investigating the topic and reporting the results of the investigation. The student will demonstrate knowledge of the topic through either a written or an oral presentation.

**ENGLISH AS A SECOND LANGUAGE
ALABAMA LANGUAGE INSTITUTE (ALI)**

ALI 030 COMPOSITION I (3T)

3 credits

This course is the beginner course in writing for non-native English speakers. This course provides instruction in basic sentence patterns and progresses through fully developed essays. Upon completion, students will demonstrate improvement in use of standard written English.

ALI 040 READING AND VOCABULARY I (3T)

3 credits

This course is the beginning reading and comprehension course for non-native English speakers. This course pro-

Course Descriptions

vides instruction in a variety of technical, literary and recreational readings. Upon completion, students will demonstrate improvement in English and reading and comprehension.

- ALI 050 Conversational English I (3T) 3 credits**
This course is the beginner course in oral communication for non-native English speakers. This course provides instruction in practice dialogues and grammatical exercises as well as free conversation. Upon completion, students will demonstrate improvement in oral communication skills.

FIRE SERVICES MANAGEMENT (FSC)

- FSC 101 INTRODUCTION TO THE FIRE SERVICE (3T) 3 credits**
This course is a survey of the philosophy and history of fire protection, loss of property and life by fire, review of municipal fire defenses, and the organization and function of federal, state, county, city, and private fire protection.
- FSC 200 FIRE COMBAT TACTICS AND STRATEGY (3T) 3 credits**
This course is a review of fire chemistry, equipment and manpower, basic fire fighting tactics and strategy, methods of attack and preplanning fire problems.
- FSC 210 BUILDING CONSTRUCTION FOR THE FIRE SERVICE (3T) 3 credits**
This course highlights and assesses the problems and hazards to fire personnel when a building is attacked by fire or is under stress from other factors dealing with collapse.
- FSC 240 FIRE CAUSE DETERMINATION (3T) 3 credits**
This course covers the burning characteristics of combustibles, interpretation of clues, burn patterns leading to points of origin, identification of incendiary indications, sources of ignition and ignited materials, and preservation of fire science evidence.
- FSC 292 ELEMENTS OF SUPERVISION/FIRE SERVICE SUPERVISION (3T) 3 credits**
This course covers the responsibility of supervisors, organization, human relations, grievance training, rating, promotion, quality-quantity control, and management-employee relations.

FRENCH (FRN)

- FRN 101 INTRODUCTORY FRENCH I (4T) 4 credits**
This course provides an introduction to French. Topics include the development of basic communication skills and the acquisition of basic knowledge of the cultures of French-speaking areas.
- FRN 102 INTRODUCTORY FRENCH II (4T) 4 credits**
PREREQUISITE: FRN 101 or equivalent.
This continuation course includes the development of basic communication skills and the acquisition of basic knowledge of the cultures of French-speaking areas.

- FRN 201 INTERMEDIATE FRENCH I (3T) 3 credits**
PREREQUISITE: FRN 102 or equivalent
This course includes a review and further development of communication skills. Topics include readings of literary, historical, and/or cultural texts.

- FRN 202 INTERMEDIATE FRENCH II (3T) 3 credits**
PREREQUISITE: FRN 201 or equivalent
This continuation course includes a review and further development of communication skills. Topics include readings of literary, historical, and/or cultural texts.

GEOGRAPHIC INFORMATION SYSTEMS TECH (GIS)

- GIS 101 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS TECHNOLOGY (2T) 2 credits**
This is an introductory GIS course focusing on maps, map analysis, and an introduction to computers. Emphasis is placed on raster GIS capabilities, data acquisition, spatial databases, and using GIS and GIS trends. Upon completion, students will demonstrate the ability to use GIS in spatial analysis, output, graphics output design issues, modes of user/GIS interaction, generating complex products and GIS for archives. (Taught on Demand)

GEOGRAPHY (GEO)

- GEO 100 WORLD REGIONAL GEOGRAPHY (3T) 3 credits**
This course surveys various countries and major regions of the world with respect to location and landscape, world importance and political status, population, type of economy, external and internal organization and relations, problems and potentials.
- GEO 200 GEOGRAPHY OF NORTH AMERICA (3T) 3 credits**
PREREQUISITE: GEO 100
This course is a survey of the geography of the United States and Canada with special emphasis on land usage, mineral resources, industrial development, and social and economic adaptation of man and the natural environment.
- GEO 201 PRINCIPLES OF HUMAN GEOGRAPHY (3T) 3 credits**
PREREQUISITE: GEO 100
This course surveys the science of location, with emphasis on human activities as it relates to agricultural and industrial activities, and cities as market and production centers. Emphasis will be placed on human networks.
- GEO 220 PRINCIPLES OF PHYSICAL GEOGRAPHY (3T) 3 credits**
This course is an introduction to natural features of the earth. It concentrates on weather, climate, soil, and vegetation associations, on landforms and on the forces that have been active in shaping the earth's surface.

GERMAN (GRN)

GRN 101 INTRODUCTORY GERMAN I (4T) **4 credits**
This course provides an introduction to German. Topics include the development of basic communication skills and the acquisition of basic knowledge of the cultures of German-speaking areas.

GRN 102 INTRODUCTORY GERMAN II (4T) **4 credits**
PREREQUISITE: GRN 101 or equivalent
This continuation course includes the development of basic communication skills and the acquisition of basic knowledge of the cultures of German-speaking areas.

GRN 201 INTERMEDIATE GERMAN I (3T) **3 credits**
PREREQUISITE: GRN 102 or equivalent
This course includes a review and further development of communication skills. Topics include readings of literary, historical, and/or cultural texts.

GRN 202 INTERMEDIATE GERMAN II (3T) **3 credits**
PREREQUISITE: GRN 201 or equivalent
This continuation course includes a review and further development of communication skills. Topics include readings in literary, historical and/or cultural texts.

HEALTH EDUCATION (HED)

HED 221 PERSONAL HEALTH (3T) **3 credits**
This course introduces principles and practices of personal and family health. It includes human reproduction, growth and development, psychological dimensions of health, human sexuality, nutrition and fitness, aging, death and dying.

HED 222 COMMUNITY HEALTH (3T) **3 credits**
This course introduces principles and practices of community health. It includes drug use and abuse, communicable diseases, cardiovascular diseases, cancer, consumer health, health organization, and environmental concerns.

HED 226 WELLNESS (1-3T) **1-3 credits**
This course provides health-related education to those individuals seeking advancement in the area of personal wellness. This course has 5 major components: (1) fitness and health assessment, (2) physical work capacity, (3) education, (4) reassessment and (5) retesting.

HED 230 SAFETY AND FIRST AID (3T) **3 credits**
HED 230 is divided into two parts. The first part concerns itself with the development of a safety education program within an organization (i.e. school, office, shop, etc.). The second part deals with physical injuries, emergency care, and treatment of those injuries. CPR certification and Standard Red Cross cards are given upon successful completion of American Red Cross requirements.

HED 231 FIRST AID (3T) **3 credits**
This course provides instruction to the immediate, temporary care which should be given to the victims of accidents and sudden illnesses. It also includes standard and

advanced requirements of the American Red Cross and/or the American Heart Association. CPR training also is included.

HED 277 CPR RECERTIFICATION (1T) **1 credit**
In this course, instruction and review of up-dated information concerning cardio-pulmonary resuscitation (CPR) is presented. The student must satisfactorily execute skills needed to meet requirements for recertification in Basic Cardiac Life Support (BCLS) as required by the American Heart Association.

HISTORY (HIS)

HIS 101 WESTERN CIVILIZATION I (3T) **3 credits**
This course is a survey of social, intellectual, economic, and political developments which have molded the modern western world. The course covers the ancient and medieval periods and concludes in the era of the Renaissance and Reformation.

HIS 102 WESTERN CIVILIZATION II (3T) **3 credits**
This course is a continuation of HIS 101; it surveys development of the modern western world from the era of the Renaissance and Reformation to the present.

HIS 111 TECHNOLOGY AND CIVILIZATION I (3T) **3 credits**
This course introduces the interaction between technology and culture in World History from prehistoric times to 1750. While the course provides a basic survey of World History, primary emphasis is placed on technological change and its consequences.

HIS 112 TECHNOLOGY AND CIVILIZATION II (3T) **3 credits**
This course is a continuation of HIS 111. It surveys technology and culture in World History from 1750 to the present. The course provides a basic survey of modern world history. The course places primary emphasis on technological change and its consequences.

HIS 121 WORLD HISTORY I (3T) **3 credits**
This course surveys social, intellectual, economic, and political developments which have molded the modern world. Focus is on both non-western and western civilizations from the prehistoric to the early modern era.

HIS 122 WORLD HISTORY II (3T) **3 credits**
This course is a continuation of HIS 121; it covers world history, both western and non-western, from the early modern era to the present.

HIS 201 UNITED STATES HISTORY I (3T) **3 credits**
This course surveys United States history during colonial, Revolutionary, early national, and antebellum periods. It concludes with the Civil War.

HIS 202 UNITED STATES HISTORY II (3T) **3 credits**
This course is a continuation of HIS 201; it surveys United States history from the Reconstruction era to the present.

Course Descriptions

HIS 216 HISTORY OF WORLD RELIGIONS (3T) 3 credits

This course presents a comparison of the major religions of the world from an historical perspective. Emphasis is placed on the origin, development, and social influence of Christianity, Judaism, Islam, Hinduism, Buddhism, and others.

HIS 220 CONTEMPORARY STUDIES (3T) 3 credits

This course provides a survey of contemporary problems and issues within an historical context. Topics might include nationalism, the rise of Islam as a powerful influence in the post-Cold War environment, environmental issues, and the impact of colonialism on modern, Third World society.

HIS 256 AFRICAN-AMERICAN HISTORY (3T) 3 credits

This course focuses on the experience of African-American people in the Western Hemisphere, particularly in the United States. It surveys the period from the African origins of the slave trade during the period of exploration and colonization to the present. The course presents a comparison between the African experience in the United States and in Mexico and South America.

HIS 260 ALABAMA HISTORY (3T) 3 credits

This course surveys development of the state of Alabama from its prehistoric times to the present. The course presents material on the discovery, exploration, colonization, territorial period, antebellum Alabama, Reconstruction, and modern history.

HIS 299 DIRECTED STUDIES IN HISTORY (1-3T) 1-3 credits

This course affords students opportunities to study selected topics of a historical nature under the direction of an instructor either as part of class or on an individual basis. Internships with historical and preservation organizations, thesis development, and the analysis of secondary monographs are examples of activities for this course. HIS 299 may be repeated for credit.

HIS 299A HISTORY OF THE ANTEBELLUM SOUTH (1-3T) 1-3 credits

This is a special History section in that it revolves around a 2-day field trip in the Antebellum South. The trip will consist of visiting several antebellum plantations/homes in the South. Two major topics will be addressed in this course and on the trip; (1) Life in/on southern antebellum plantations, and (2) the Jacksonian Era. In the readings for this course, the student will be introduced to a variety of peoples, places, and events that played an integral part in shaping the antebellum south. On the trip, the student will see numerous sites ranging from Rippavilla Plantation to The Hermitage. This trip back through time will, among other things, enable the student to perceive the past as it was experienced by those at the time and acquire both a comprehension of diverse cultures and of shared humanity.

HIS 299B SOUTHERN CIVIL WAR HISTORY (1-3T) 1-3 credits

This is a special History section in that it revolves around a 2-day field trip to southern Civil War locations. The trip will consist of visiting several locations that were important in the South's attempt at independence from the Union. Two major topics will be addressed in this course and on the trip; (1) Life in the south before, during, and after the Civil

War, and (2) some of the battles that took place in the South. In the readings for this course, the student will be introduced to a variety of peoples, places, and events that played an integral part in shaping the South's struggle for independence. On the trip, the student will see numerous sites ranging from Carnton House to the Shiloh Battlefield. This trip back through time will, among other things, enable the student to perceive the past as those at the time experienced it and acquire both a comprehension of diverse cultures and of shared humanity.

HIS 299C NATCHEZ TRACE HISTORY (1-3T) 1-3 credits

This is a special History section in that it revolves around a 3-day field trip down the Natchez Trace Parkway. The trip will consist of visiting several locations that were important in development and growth of the Natchez Trace. Two major topics will be addressed in this course and on the trip; (1) Life and travel along the Old Natchez Trace, and (2) Mounds and Mound Builders along the Old Natchez Trace. In the readings for this course, the student will be introduced to a variety of peoples, and in some cases, specific individuals, who traveled, settled, lived, and died along this historic path. On the trip, the student will see numerous historic markers and sites ranging from pre-Columbian Indian mounds to early 19th century stands. This trip back through time will, among other things, enable the student to perceive the past as those at the time experienced it and acquire both a comprehension of diverse cultures and of shared humanity.

HIS 299D HISTORY THROUGH FILM (1-3T) 1-3 credits

What, if anything, can you learn about history by watching movies? This course looks at critical historical moments and issues of conflict and change, through the vehicle of film. The course is designed to teach students how to use films as historical evidence and how to analyze films as historical documents. This course analyzes relationships between film and history, that is, the ways in which films recreate, distort, interpret, and communicate historic events and personalities. We will look at issues of authenticity and voice, some of the pitfalls of using film to understand history, and the role of cinema in the creation of national and popular memory. Although most of these films have been analyzed on many levels, the emphasis of this particular course will be on content and social or political vision, rather than film theory, technique, or aesthetics. By watching, discussing, and writing about these films, we will examine how motion pictures create a window into society. Students will learn how to read films as cultural texts that help us better understand our history and culture. One of the two weekly class meetings will be a film showing; in addition to required readings, there will sometimes be a second film assigned to watch outside of class.

HIS 299E TWENTIETH-CENTURY AMERICA (1-3T) 1-3 credits

This course looks at critical historical moments and issues in America's twentieth century, such as, the origins and consequences of World War II; the Truman administration and the Fair Deal; the origins of the Cold War; international and domestic issues and conflicts from the 1940s to the 1990s. The twentieth century saw many individuals and events that changed the course of American history with dramatic speed and force. Two World Wars, the presidency

of Franklin Roosevelt, the Cold War, Hollywood, Civil Rights, the Kennedy years, the Clinton presidency-the period holds an abundance of themes and topics ripe for historical and investigative support by swathes of textual and experiential evidence.

HEALTH SCIENCE (HPS)

HPS 100 SAFETY ISSUES FOR CLINICAL PRACTICE (1T) 1 credit

PREREQUISITE: ENG 101, SPH 107, PSY 200, MTH 100 or MTH 112 or MTH 116 (FOR NUR STUDENTS; ONLY) or Permission of instructor.

COREQUISITE: BIO 201, PSY 210, NUR 110, NUR 131, NUR 241 (FOR NUR STUDENTS ONLY).

This course focuses on microbial and physical safety for clinical practice. Emphasis is placed on guidelines established by the Occupational Safety and Health Administration (OSHA) and the Alabama State Department of Public Health: topics include prevention of transmission of blood-borne and air-borne pathogens as well as prevention of injuries during clinical practice. Upon completion of this course, the student should be able to participate in the clinical setting implementing measures which will prevent injuries and using appropriate universal precautions.

HPS 105 MEDICAL TERMINOLOGY (2T, 2E) 3 credits

PREREQUISITE: As required by program.

This course is an application for the language of medicine. Emphasis is placed on terminology associated with health care, spelling, pronunciation, and meanings associated with prefixes, suffixes, and roots as they relate to anatomical body systems. Upon completion of this course, the student should be able to correctly abbreviate medical terms and appropriately use medical terminology in verbal and written communication.

HPS 113 SPANISH FOR HEALTH CARE PROFESSIONALS (3T) 3 credits

This course provides an introduction to Spanish with a focus on the basic communication skills and vocabulary needed by health professionals when a non-English speaking Hispanic enters a health care setting. Topics include soliciting identification information, history taking, performance of physical exam and giving instructions on general care and follow-up.

HPS 114 BASIC PHARMACOLOGY (2T) 2 credits

PREREQUISITE: As required by program.

This course is an introduction to basic pharmacology. Content includes classifications, indications, contraindications, desired effects, and side effects of medications used during diagnostic procedures and the prevention and treatment of common illnesses. Upon completion of the course, the student should be able to relate basic pharmacological concepts to the maintenance of health.

INTERDISCIPLINARY STUDIES (IDS)

IDS 114 INTERDISCIPLINARY SEMINAR: CURRENT TOPICS IN HUMAN CONCERNS (1-2T) 1-2 credits

PREREQUISITE: Permission of the instructor.

This course is a seminar/discussion course designed to provide an opportunity for the student to conduct an in-depth investigation of selected topics. The particular topic selected will include issues from two or more disciplines and is determined by faculty and student interest. Classroom experiences emphasize and help develop skills in organizing and presenting information as well as explaining and defending ideas and conclusions. An oral seminar presentation is required. IDS 114 may be repeated for credit.

INDUSTRIAL ELECTRONICS TECHNOLOGY (ILT)

ILT 103 INTRODUCTION TO INSTRUMENTATION TECHNOLOGY (1T, 4E) 3 credits

PREREQUISITE: ELT 108 and ELT 109

This course introduces various hand and power tools, basic blueprint reading, basic rigging and basic math that will be used in the electronic, instrumentation and electrical trades. Emphasis is placed on basic hand tool and power tool safety and procedures for selecting, inspecting, using and maintaining these tools. Upon completion, students should be able to identify and use various hand and power tools, read a blueprint and know how to perform basic rigging.

ILT 104 INDUSTRIAL INSTRUMENTATION (3T) 3 credits

PREREQUISITE: ILT 103

This course provides a study of instrumentation circuits/systems. Topics include the use of transducers, detectors, actuators, and/or other devices and equipment in industrial applications. Upon completion, the student should be able to apply principles of instrumentation circuits and systems.

ILT 105 INDUSTRIAL INSTRUMENTATION LAB (4E) 2 credits

COREQUISITE: ILT 104

A companion to ILT 104, this lab includes the use of transducers, detectors, actuators, and/or other devices and equipment in industrial application. Upon completion of the course, the student should be able to apply principles of instrumentation circuits and systems.

ILT 108 INTRODUCTION TO INSTRUMENTS AND PROCESS CONTROL (2T, 2E) 3 credits

PREREQUISITE: ILT 104, ILT 105

This course is an introductory study of the control devices and methods used in industry for the control and transmission of information pertaining to process variables. This study includes an introduction to instrumentation and control mathematics. This course also provides instruction in the fundamental concepts of pressure, force, weight, motion, liquid level, fluid flow and temperature.

Course Descriptions

- ILT 163 DIGITAL FUNDAMENTALS (1T,4E) 3 credits**
PREREQUISITE: ELT 108 AND ELT 109
COREQUISITE: ELT 221
 This course provides instruction on basic logic gates, flip-flops, registers, counters, microprocessor/computer fundamentals, analog to digital conversion, and digital analog conversion. Emphasis is placed on number systems, Boolean algebra, combination logic circuits, sequential logic circuits, and typical microprocessor data manipulation and storage. This course also has an embedded lab with exercises designed to develop skills required by industry. Upon completion, students should be able to analyze digital circuits, draw timing diagrams, determine output of combinational and sequential logic circuits and diagnose and troubleshoot electronic components as well as demonstrate knowledge of microprocessor and computer circuits.
- ILT 214 CONTROL AND TROUBLESHOOTING FLOW, LEVEL, TEMPERATURE, PRESSURE AND LEVEL PROCESSES (2T, 2E) 3 credits**
PREREQUISITE: ELT 221, ELT 231
 The student is introduced to analog and digital process control systems. The student is also introduced to process control techniques commonly found in industrial processes used to maintain control process variables. The student gains knowledge and experience in the design and selection of equipment used in troubleshooting control loops on actual equipment in the lab.
- ILT 216 INDUSTRIAL ROBOTICS (3T) 3 credits**
PREREQUISITE : ELT 108 and ELT 109
COREQUISITE: ILT 217
 This course covers principles of electro-mechanical devices. Topics include the principles, concepts, and techniques involved in interfacing microcomputers to various electro-mechanical devices to produce geographical movement. Upon completion, students should be able to apply the principles of electro-mechanical devices.
- ILT 217 INDUSTRIAL ROBOTICS LAB (4E) 2 credits**
COREQUISITE: ILT 216
 This lab covers the principles, concepts, and techniques involved in interfacing microcomputers to various electro-mechanical devices to produce geographical movement. Upon completion students should be able to apply the principles of electro-mechanical devices.
- ILT 291 COOPERATIVE EDUCATION (15I) 3 credits**
PREREQUISITE: Permission of Instructor
 This course provides students work experience with a college-approved employer in an area directly related to the student's program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

- ILT 292 COOPERATIVE EDUCATION (15I) 3 credits**
PREREQUISITE: Permission of Instructor
 This course provides students work experience with a college-approved employer in an area directly related to the student's program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.
- ILT 293 COOPERATIVE EDUCATION (15I) 3 credits**
PREREQUISITE: Permission of Instructor
 This course provides students work experience with a college-approved employer in an area directly related to the student's program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

INDUSTRIAL MAINTENANCE TECHNOLOGY (INT)

- INT 117 PRINCIPLES OF INDUSTRIAL MECHANICS (1T, 4E) 3 credits**
 This course provides instruction in basic physics concepts applicable to mechanics of industrial production equipment. Topics include the basic application of mechanical principles with emphasis on power transmission, specific mechanical components, alignment, and tension. Upon completion, students will be able to perform basic troubleshooting, repair and maintenance functions on industrial production equipment.
- INT 126 PREVENTIVE MAINTENANCE (1T, 4E) 3 credits**
 This course focuses on the concepts and applications of preventive maintenance. Topics include the introduction of alignment equipment, job safety, tool safety, preventive maintenance concepts, procedures, tasks, and predictive maintenance concepts. Upon course completion, students will demonstrate the ability to apply proper preventive maintenance and explain predictive maintenance concepts.
- INT 127 PRINCIPLES OF INDUSTRIAL PUMPS AND PIPING SYSTEMS (2T,2E) 3 credits**
 This course provides instruction in the fundamental concepts of industrial pumps and piping systems. Topics include pump identification, operation, and installation, maintenance and troubleshooting, and piping systems and their installation. Upon course completion, students will be able to install, maintain, and troubleshoot industrial pumps and piping systems.
- INT 234 PRINCIPLES OF INDUSTRIAL MAINTENANCE WELDING AND METAL CUTTING TECHNIQUES (1T, 4E) 3 credits**
 This course provides instruction in the fundamentals of acetylene cutting and the basics of welding needed for the maintenance and repair of industrial production equipment. Topics include oxy-fuel safety, choice of cutting equipment, proper cutting angles, equipment setup, cutting plate and pipe, hand tools, types of metal welding machines, rod and

welding joints, and common welding passes and beads. Upon course completion, students will demonstrate the ability to perform metal welding and cutting techniques necessary for repairing and maintaining industrial equipment.

INT 291 COOPERATIVE EDUCATION (15I) 3 credits
PREREQUISITE: Permission of Instructor

This course provides students work experience with a college-approved employer in an area directly related to the student's program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

INT 292 COOPERATIVE EDUCATION (15I) 3 credits
PREREQUISITE: Permission of Instructor

This course provides students work experience with a college-approved employer in an area directly related to the student's program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

INT 293 COOPERATIVE EDUCATION (15I) 3 credits
PREREQUISITE: Permission of Instructor

This course provides students work experience with a college-approved employer in an area directly related to the student's program of study. Emphasis is placed on integrating classroom experiences with work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

MACHINE TOOL TECHNOLOGY (MTT)

MTT 107 MACHINING CALCULATIONS I (3T) 3 credits
PREREQUISITES: MTT 147 and MTT 149 or Permission of Instructor

This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations. This course is aligned with NIMS certification standards.

MTT 108 MACHINIST HANDBOOK FUNCTIONS I (3T) 3 credits
PREREQUISITES: MTT 107 or Permission of Instructor

This course covers the machinist's handbook. Emphasis is placed on formulas, tables, usage and related information. Upon completion, students should be able to use the handbook in the calculation and set-up of machine tools. This course is aligned with NIMS certification standards.

MTT 109 ORIENTATION TO COMPUTER ASSISTED MANUFACTURING (3T) 3 credits
PREREQUISITE: MTT 140 and MTT 141 or Permission of Instructor

This course serves as an overview and introduction to computer assisted manufacturing (CAM) and prepares students for more advanced CAM courses. Topics covered are basic

concepts and terminology, CAM software environments, navigation commands and file management, 2-D geometry, construction modification, and toolpath generation for CAM machining processes.

MTT 121 BASIC BLUEPRINT READING FOR MACHINISTS (3T) 3 credits

FORMERLY: MTT 126

PREREQUISITES: Permission of Instructor

This course covers the basic principles of blueprint reading and sketching. Topics include multiview drawings; interpretation of conventional lines; and dimensions, notes, and thread notations. Upon completion, students should be able to interpret basic drawings, visualize parts, and make pictorial sketches. This is a CORE course and is aligned with NIMS certification standards.

MTT 128 GEOMETRIC DIMENSIONING AND TOLERANCING I (3T) 3 credits

PREREQUISITES: MTT 121 or Permission of Instructor

This course is designed to teach students how to interpret engineering drawings using modern conventions, symbols, datums, datum targets, and projected tolerance zones. Special emphasis is placed upon print reading skills, and industry specifications and standards. This course is aligned with NIMS certification standards.

MTT 130 MACHINING CALCULATIONS II (3T) 3 credits
FORMERLY MTT 142

PREREQUISITE: MTT 107

This course emphasizes advanced calculations common to machining operations. Students use these calculations for advanced applications for machine setup and planning. Specific topics include positive and negative numbers, symbolism, and algebraic expressions and operations. At the conclusion of this course students will be able to apply advanced machine calculations to equipment set-up and planning.

MTT 134 ENGINE LATHE I (2T,2E) 3 credits
PREREQUISITE: MTT 149 AND MTT 150
COREQUISITE: MTT 135

This course includes more advanced lathe practices such as set-up procedures, work planning, inner- and outer-diameter operations, and inspection and process improvement. Additional emphasis is placed on safety procedures. Upon completion, students will be able to apply advanced lathe techniques. This course is aligned with NIMS standards.

MTT 135 ENGINE LATHE LAB I (6E) 3 credits
FORMERLY MTT 129

PREREQUISITE: MTT 107

COREQUISITE: MTT 134

This course includes more advanced lathe practices such as set-up procedures, work planning, inner- and outer-diameter operations, and inspection and process improvement. Additional emphasis is placed on safety procedures. Upon completion, students will be able to apply advanced lathe techniques. This course is aligned with NIMS standards.

Course Descriptions

COURSE DESCRIPTIONS

- MTT 137 MILLING I (2T,2E) 3 credits**
FORMERLY MTT 136
PREREQUISITE: MTT 149 AND MTT 107
COREQUISITE: MTT 138
 This course covers manual milling operations. Emphasis is placed on related safety, types of milling machines and their uses, cutting speed, feed calculations, and set-up and operation procedures. Upon completion, students should be able to apply manual vertical milling techniques to produce machine tool projects. This course is aligned with NIMS certification standards.
- MTT 138 MILLING I LAB (6E) 3 credits**
FORMERLY MTT 136
COREQUISITE: MTT 137
 This course provides basic knowledge of milling machines. Emphasis is placed on types of milling machines and their uses, cutting speed, feed calculations, and set-up procedures. Upon completion, students should be able to apply milling techniques to produce machine tool projects. This course is aligned with NIMS certification criteria.
- MTT 139 BASIC COMPUTER NUMERICAL CONTROL (2T,2E) 3 credits**
PREREQUISITES: MTT 135 or Permission of Instructor
 This course introduces the concepts and capabilities of computer numeric control (CNC) machine tools. Topics include set-up, operation, and basic applications. Upon completion, students should be able to develop a basic CNC program to safely operate a lathe and milling machine. This course is aligned with NIMS certification standards.
- MTT 140 BASIC COMPUTER NUMERICAL CONTROL TURNING PROGRAMMING I (1T,4E) 3 credits**
PREREQUISITES: MTT 130 AND MTT 135 AND MTT 139 or Permission of Instructor
 This course covers concepts associated with basic programming of a computer numerical control (CNC) turning center. Topics include basic programming characteristics, motion types, tooling, workholding devices, set-up documentation, tool compensations, and formatting. Upon completion, students should be able to write a basic CNC turning program that will be used to produce a part. This course is aligned with NIMS certification standards.
- MTT 141 BASIC COMPUTER NUMERICAL CONTROL MILLING PROGRAMMING I (1T,4E) 3 credits**
PREREQUISITES: MTT 138 AND MTT 139 or Permission of Instructor
 This course covers concepts associated with basic programming of a computer numerical control (CNC) milling center. Topics include basic programming characteristics, motion types, tooling, workholding devices, setup documentation, tool compensations, and formatting. Upon completion, students should be able to write a basic CNC milling program that will be used to produce a part. This course is aligned with NIMS certification standards.
- MTT 144 ELECTRICAL DISCHARGE MACHINING I (1T,4E) 3 credits**
PREREQUISITES: MTT 140 AND MTT 141 or Permission of Instructor
 This course introduces the student to the concepts of

Electrical Discharge Machining (EDM) and the importance of EDM in an industrial setting. Emphasis is placed on safety procedures and machinist responsibility in the set-up and operation of EDM machines and electrode selection. Upon completion, students should be able to produce basic machine products using both the wire-type and plunge-type EDM machines. This course is aligned with NIMS certification standards.

- MTT 147 INTRODUCTION TO MACHINE SHOP I (2T,2E) 3 credits**
PREREQUISITE: Permission of Instructor
COREQUISITE: MTT 148
 This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, saws, milling machines, bench grinders, and layout instruments. Upon completion, students will be able to perform the basic operations of measuring, layout, drilling, sawing, turning, and milling. This is a CORE course.
- MTT 148 INTRODUCTION TO MACHINE SHOP I LAB (6E) 3 credits**
PREREQUISITE: Permission of Instructor
COREQUISITE: MTT 147
 This course provides practical application of the concepts and principles of machining operations learned in MTT 147. Topics include machine shop safety, measuring tools, lathes, saws, milling machines, bench grinders, and layout instruments. Upon completion, students will be able to perform the basic operations of measuring, layout, drilling, sawing, turning, and milling. This is a CORE course. This course is aligned with NIMS certification standards.
- MTT 149 INTRODUCTION TO MACHINE SHOP II (2T,2E) 3 credits**
PREREQUISITE: MTT 147 AND MTT 148 OR Permission of Instructor
COREQUISITE: MTT 150
 This course provides additional instruction and practice in the use of measuring tools, lathes, milling machines, and grinders. Emphasis is placed on set-up and operation of machine tools including the selection of work holding devices, speeds, feeds, cutting tools and coolants. Upon completion, students should be able to perform intermediate level procedures of precision grinding, measuring, layout, drilling, sawing, turning, and milling. This is a CORE course and is aligned with NIMS certification standards.
- MTT 150 INTRODUCTION TO MACHINE SHOP II LAB (6E) 3 credits**
PREREQUISITE: MTT 147 AND MTT 148 or Permission of Instructor
COREQUISITE: MTT 149
 This course provides additional instruction and practice in the use of measuring tools, lathes, milling machines, and grinders. Emphasis is placed on set-up and operation of machine tools including the selection of work holding devices, speeds, feeds, cutting tools and coolants. Upon completion, students should be able to perform intermediate level procedures of precision grinding, measuring, layout, drilling, sawing, turning, and milling. This is a CORE course and is aligned with NIMS certification standards.

MTT 162 PRECISION GRINDING (2T,2E) 3 credits
FORMERLY MTT 146 AND MTT 161
PREREQUISITE: MTT 138
COREQUISITE: MTT 163

This course includes more advanced precision grinder practices such as set-up procedures, work planning, surface grinding, cylindrical grinding, tool and cutter grinding, and inspection and process improvement. Additional emphasis is placed on safety procedures. Upon completion, students will be able to apply advanced precision grinding techniques. This course is aligned with NIMS standards.

MTT 163 PRECISION GRINDING LAB (6E) 3 credits
FORMERLY MTT 146 AND MTT 162
COREQUISITE: MTT 162

This course provides practical application of the concepts and principles of precision grinding learned in MTT 161. Topics include set-up procedures, work planning, surface grinding, cylindrical grinding, tool and cutter grinding, and inspection and process improvement. Additional emphasis is placed on safety procedures. Upon completion, students will be able to apply advanced precision grinding techniques. This course is aligned with NIMS standards.

MTT 212 ADVANCED COMPUTER NUMERICAL CONTROL TURNING (1T,4E) 3 credits
PREREQUISITE: MTT 243

This course details the use of canned cycles and subprograms in computer numerical control (CNC) turning programs. Upon completing this course, the student should be able to write CNC turning programs using canned cycles and subprograms.

MTT 213 ADVANCED COMPUTER NUMERICAL CONTROL MILLING (1T, 4E) 3 credits
PREREQUISITE: MTT 235

This course details the use of canned cycles and subprograms in computer numerical control (CNC) milling programs. Upon completing this course, the student should be able to write CNC milling programs using canned cycles and subprograms.

MTT 218 COMPUTER INTEGRATED MANUFACTURING (CIM) (3T) 3 credits
PREREQUISITES: MTT 219 AND MTT 220

This course is a basic introduction to concepts related to the computer integrated manufacturing (CIM) process. Students cover the design requirements associated with such a cell (center), how a center is integrated into the full system, and the technician's role in the process improvement of not only the cell but the full CIM system. Related safety and inspection and process adjustment are also covered.

MTT 219 COMPUTER NUMERICAL CONTROL GRAPHICS: TURNING (1T, 4E) 3 credits
PREREQUISITES: MTT 140 AND MTT 149 or Permission of Instructor

This course covers techniques involved in writing a program for a multi-axis computerized numeric control (CNC) turning machine using computer assisted manufacturing (CAM) software. In addition, CNC turning machine set-up, programming, and operation are detailed. Upon completion,

the student should be able to set-up, program, and operate a 3-axis CNC turning machine to produce a 2-axis part using CAM software. This course is aligned with NIMS certification standards.

MTT 220 COMPUTER NUMERICAL CONTROL GRAPHICS: MILLING (1T,4E) 3 credits
PREREQUISITES: MTT 109 AND MTT 141 or Permission of Instructor

This course covers techniques involved in writing a program for a multi-axis computerized numeric control (CNC) milling machine using computer assisted manufacturing (CAM) software. In addition, CNC milling machine set-up, programming, and operation are detailed. Upon completion, the student should be able to set-up, program, and operate a 3-axis CNC milling machine to produce a 2-axis part using CAM software. This course is aligned with NIMS certification standards.

MTT 241 CNC MILLING LAB I (6E) 3 credits
PREREQUISITE: MTT 141
Formerly: MTT 235

This course covers basic (3-axis) computer numeric control (CNC) milling machine setup and operating procedures. Upon completion, the student should be able to load a CNC program and set-up and operate a 3-axis CNC milling machine to produce a specified part. Related safety, inspection, and process adjustment are also covered.

MTT 242 CNC MILLING LAB II (6E) 3 credits
PREREQUISITES: MTT 213
Formerly: MTT 236

This course covers advanced (including 4-axis) computer numeric control (CNC) milling machine set-up and operating procedures. Upon completion, the student should be able to load a CNC program and set-up and operate a CNC milling machine (including 4-axis) to produce a specified part. Related safety and inspection and process adjustment are also covered.

MTT 243 CNC TURNING LAB I (6E) 3 credits
PREREQUISITE: MTT 140

This course covers basic computer numeric control (CNC) turning machine set-up and operating procedures (inner diameter and outer diameter). Upon completion, the student should be able to load a CNC program and set-up and operate a CNC turning machine to produce a simple part. Related safety and inspection and process adjustment are also covered.

MTT 244 CNC TURNING LAB II (6E) 3 credits
PREREQUISITE: MTT 212

This course covers advanced computer numeric control (CNC) turning machine set-up and operating procedures. Upon completion, the student should be able to load a CNC program and set-up and operate a CNC turning machine to produce a specified part. Related safety and inspection and process adjustment are also covered.

MTT 281 SPECIAL TOPICS IN MACHINE TOOL TECHNOLOGY (1T, 4E) 3 credits
PREREQUISITE: MTT 244

This course is a guided study of special projects in machine

Course Descriptions

tool technology. Emphasis is placed on student needs. Upon completion, students should be able to demonstrate skills developed to meet specific needs.

MTT 291 COOPERATIVE EDUCATION IN MACHINE TOOL (15I) 3 credits

PREREQUISITE: Permission of Instructor

Students work on a part-time basis in a job directly related to machine tool technology. The employer and supervising instructor evaluate students' progress. Upon course completion, students will be able to apply skills and knowledge in an employment setting.

MTT 292 COOPERATIVE EDUCATION IN MACHINE TOOL TECHNOLOGY (15I) 3 credits

PREREQUISITE: Permission of Instructor

Students work on a part-time basis in a job directly related to machine tool technology. The employer and supervising instructor evaluate students' progress. Upon course completion, students will be able to apply skills and knowledge in an employment setting.

MASS COMMUNICATIONS (MCM)

MCM 130 NEWS REPORTING (3E) 3 credits

PREREQUISITE: Typing ability.

This course includes instruction and practice in newsgathering and newswriting techniques including methodology, observation, interviews, and use of sources.

MCM 250 MASS COMMUNICATIONS PRACTICUM (3T) 3 credits

This course provides practical experience in media through supervised part or full-time employment with a newspaper, radio or television station, or public relations/advertising agency.

MASSAGE THERAPY (MSG)

MSG 100 MASSAGE THERAPY HISTORY AND THEORY (1T) 1 credit

In this course, students learn the origin of massage as well as the types of massage that have existed throughout the world from inception to the present. Emphasis is placed on the benefits of massage, contraindication, client interviews, and client-therapist relationship. In addition to massage history, students will receive theories and research data that substantiate the efficacy of massage for modern times. Information will be provided explaining the theory and value of such techniques as Swedish massage, deep tissue massage, neuromuscular therapy, somatic re-education, myofascial release and integration.

MSG 101 MASSAGE THERAPY LABORATORY I (8E) 4 credits

In this course, students learn therapeutic massage techniques to the regions of the back, neck and torso. Students learn the variety of joint movements and introduction to sports massage. Sports massage includes principles of health-related fitness, core exercises, pre- and post-event massage, hydrotherapy, body mobilization techniques

(BMT) and stretching techniques.

MSG 102 MASSAGE THERAPY LABORATORY II (8E) 4 credits

PREREQUISITE: MSG 101

In this course, students learn various techniques to work soft tissue dysfunction in specific areas of the body, to apply massage to specific muscles, affect the body's fascial sheets, palpate muscles more clearly, work in different directions of the muscle fibers (transversely and longitudinally), and to work different levels of musculature. New techniques include Myofascial release, trigger points, neuromuscular therapy, and deep tissue massage. Students learn therapeutic massage techniques to the regions of the shoulders, arms, hips, legs, feet and hands.

MSG 111 ANATOMY AND PHYSIOLOGY (1T, 4E) 3 credits

In this course, students learn how the body works, from the smallest cells to the largest systems. The course provides a general introduction to epithelial, connective, muscular and nervous tissue as well as to the nervous, endocrine, cardiovascular, immune, respiratory, gastrointestinal, genitourinary and integument systems. Students will also be taught standard first aid measures for common injuries and basic cardio-pulmonary resuscitation (CPR). The instructor uses visual tools as well as hands-on activities to enhance learning. Upon completion of this course, students will have a basic understanding of the various systems of the body and the effects of massage on these systems. Students will also be tested on competencies in standard first aid CPR.

MSG 112 MUSCULO-SKELETAL AND KINESIOLOGY I (1T, 4E) 3 credits

In this course, students learn advance study of the Musculo-skeletal system. They learn basic names and landmarks of the bones and joints as well as the origins, insertions and actions of the major muscles of the body that are important to massage therapy. Students also learn how to demonstrate muscle locations and how to palpate and shorten each of the muscles studied. Topics included specific therapeutic approaches to the regions of the back, torso, neck, examinations of these regions, the movements they produce, and common conditions of the back, torso, and neck. Students will also be able to identify and discuss common pathological conditions related to these areas.

MSG 113 MUSCULO-SKELETAL AND KINESIOLOGY II (1T, 4E) 3 credits

PREREQUISITE: MSG 112

In this course, students learn advance study of the Musculo-skeletal system. Topics include specific therapeutic approaches to the regions of the shoulders, arms, hips and legs, examination of these regions, the movement they produce, and common pathological conditions of the shoulders, arms, hips and legs. Upon completion the students should be able to identify and discuss the regions of the shoulders, arms, hips, legs and the movements they produce and common pathological conditions.

MSG 114 PATHOLOGY (3T) 3 credits

This course presents baseline information on pathologies which massage therapists may encounter in clinical prac-

tice including conditions of the musculoskeletal, neurological, cardiovascular, lymphatic, integumentary, digestive, and immune systems. Content will include etiology, symptomatology, medical approaches to treatment and the potential positive or negative impact of massage.

MSG 120 MESSAGE THERAPY SUPERVISED

CLINICAL I (3C)

1 credit

PREREQUISITE AND/OR COREQUISITE: MSG 100, MSG 101, MSG 112

In this course, students are required to demonstrate competency in specific therapeutic techniques to the back, neck and torso. Students are required to demonstrate core exercises, hydrotherapy and other health related fitness techniques such as BMT and stretching techniques.

MSG 121 MESSAGE THERAPY SUPERVISED

CLINICAL II (3C)

1 credit

PREREQUISITES OR COREQUISITES: MSG 120

In this course, students are required to demonstrate competency in the proper application of specific therapeutic techniques to the whole body.

MSG 130 SPECIAL POPULATIONS (3T)

3 credits

In this course, students learn to adapt massage sessions to the needs of special populations such as pregnant women, infants, the elderly, terminally ill, survivors of abuse and persons living with HIV/AIDS. Topics include technique variations, length of session, contraindications, cautions, and possible benefits. Upon completion, students should be able to discuss and demonstrate the techniques for special populations.

MSG 156 CAREER & PERSONAL DEVELOPMENT AND

ETHICAL BEHAVIOR (2T)

2 credits

This course is designed to focus on personal development and career building skills. Emphasis is placed on building and retaining clientele, communication skills, customer services, continuing professional education and setting goals and objectives. Upon completion, the student should be able to list types of communication skills, articulate personal goals and develop a continuing education plan.

MSG 160 NATIONAL CERTIFICATION EXAM

REVIEW (1T)

1 credit

This course provides a consolidated and intensive review of the basic areas of expertise needed by the entry-level massage therapist. Upon completion, the student should be able to pass a comprehensive exam on information covered in the therapeutic massage program.

MATHEMATICS (MTH)

MATHEMATICS COURSE NUMBERS DO NOT NECESSARILY REFLECT THE DIFFICULTY OF THE COURSE.

MTH 080 MATHEMATICS LABORATORY (1T)

1 credit

PREREQUISITE: As required by program

This course is designed to offer supplemental help to students in mathematics. Students work in a laboratory situation under qualified instructors. This course may be repeated as needed. Emphasis is on arithmetic and algebra as determined by the individual need of the students.

MTH 090 BASIC MATHEMATICS (3T)

3 credits

PREREQUISITE: None

This is a developmental course reviewing arithmetical principles and computations designed to help the student's mathematical proficiency for selected curriculum entrance.

MTH 091-DEVELOPMENTAL ALGEBRA I AND II

MTH 092 (3T)

3 credits each

PREREQUISITE: A grade of "C" or better in MTH 090 or appropriate mathematics placement score. (Placement score will determine where student begins in sequence.)

This sequence of developmental courses provides the student with a review of arithmetic and algebraic skills designed to provide sufficient mathematical proficiency necessary for entry into Intermediate College Algebra.

MTH 098 ELEMENTARY ALGEBRA (4T)

4 credits

PREREQUISITE: A grade of "C" or better in MTH 090 (Basic Mathematics) or appropriate mathematics placement score

This course is a review of the fundamental arithmetic and algebra operations. The topics include the numbers of ordinary arithmetic and their properties; integers and rational numbers; the solving of equations; polynomials and factoring; and an introduction to systems of equations and graphs.

MTH 100 INTERMEDIATE COLLEGE ALGEBRA

(3T)

3 credits

PREREQUISITE: A grade of "C" or better in MTH 092 (Developmental Algebra II) or MTH 098 (Elementary Algebra) or appropriate mathematics placement score

This course provides a study of algebraic techniques such as linear equations and inequalities, quadratic equations, systems of equations, and operations with exponents and radicals. Functions and relations are introduced and graphed with special emphasis on linear and quadratic functions. This course does not apply toward the general core requirement for mathematics for AS degrees.

MTH 103 INTRODUCTION TO TECHNICAL

MATHEMATICS (3T)

3 credits

PREREQUISITE: A grade of "C" or better in MTH 092 (Developmental Algebra II) or MTH 098 (Elementary Algebra) or appropriate mathematics placement score

This course is designed for the student in technology needing simple arithmetic, algebraic, and right triangle trigonometric skills.

Course Descriptions

MTH 104 PLANE TRIGONOMETRY (3T) **3 credits**
PREREQUISITE: A grade of “C” or better in MTH 100 (Intermediate College Algebra)

This course emphasizes such topics as the solution of triangles, vectors, geometric concepts and complex numbers.

MTH 110 FINITE MATHEMATICS (3T) **3 credits**
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a “C” or higher (S if taken as pass/fail) MTH 100 - Intermediate College Algebra

This course is intended to give an overview of topics in finite mathematics together with their applications, and is taken primarily by students who are not majoring in science, engineering, commerce or mathematics (i.e., students who are not required to take Calculus). This course will draw on and significantly enhance the student's arithmetic and algebraic skills. The course includes sets, counting, permutations, combinations, basic probability (including Bayes' Theorem), and introduction to statistics (including work with Binomial Distributions and Normal Distributions), matrices and their applications to Markov chains and decision theory. Additional topics may include symbolic logic, linear models, linear programming, the simplex method and applications.

MTH 112 PRECALCULUS ALGEBRA (3T) **3 credits**
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a “C” or higher (S if taken as pass/fail) MTH 100- Intermediate College Algebra.

This course emphasizes the algebra of functions—including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the binomial theorem. Additional topics may include matrices, Cramer's Rule, and mathematical induction.

MTH 113 PRECALCULUS TRIGONOMETRY (3T) **3 credits**
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with a “C” or higher (S if taken as a pass/fail) MTH 112- Precalculus Algebra

This course includes the study of trigonometric (circular functions) and inverse trigonometric functions, and includes extensive work with trigonometric identities and trigonometric equations. The course also covers vectors, complex numbers, DeMoivre's Theorem, and polar coordinates. Additional topics may include conic sections, sequences, and using matrices to solve linear systems.

MTH 115 PRECALCULUS ALGEBRA & TRIGONOMETRY (4T) **4 credits**
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II, with an appropriate mathematics placement score is required. An alternative

to this is that the student should successfully pass with a “C” or higher (S if taken as pass/fail) MTH 100 (Intermediate College Algebra) and receive permission from the department chairperson.

This course is a one-semester combination of Precalculus Algebra and Precalculus Trigonometry intended for superior students. The course covers the following topics: the algebra of functions (including polynomial, rational, exponential, and logarithmic functions), systems of equations and inequalities, quadratic inequalities, and the binomial theorem, as well as the study of trigonometric (circular functions) and inverse trigonometric functions, and includes extensive work with trigonometric identities and trigonometric equations, vectors, complex numbers, DeMoivre's Theorem, and polar coordinates.

MTH 116 MATHEMATICAL APPLICATIONS (3T) **3 credits**
PREREQUISITE: MTH 090 (Basic Mathematics) or appropriate mathematics placement score

This course provides practical applications of mathematics and includes selected topics from consumer math and algebra. Some topics included are integers, percent, interest, ratio and proportion, metric system, probability, linear equations, and problem solving. This is a terminal course designed for students seeking an AAS degree and does not meet the general core requirement for mathematics for AS degrees.

MTH 120 CALCULUS AND ITS APPLICATIONS (3T) **3 credits**
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with a “C” or higher MTH 112-Precalculus Algebra.

This course is intended to give a broad overview of calculus and is taken primarily by students majoring in Commerce and Business Administration. It includes differentiation and integration of algebraic, exponential, and logarithmic functions and applications to business and economics. The course should include functions of several variables, partial derivatives (including applications), Lagrange Multipliers, L'Hopital's Rule, and multiple integration (including applications).

MTH 125 CALCULUS I (4T) **4 credits**
PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with a “C” or higher MTH 113 (Precalculus Trigonometry) or MTH 115 (Precalculus Algebra & Trigonometry).

This is the first of three courses in the basic calculus sequence taken primarily by students in science, engineering, and mathematics. Topics include the limit of a function; the derivative of algebraic, trigonometric, exponential, and logarithmic functions; and the definite integral and its basic applications to area problems. Applications of the derivative are covered in detail, including approximations of error using differentials, maximum and minimum problems, and curve sketching using calculus.

MTH 126 CALCULUS II (4T) 4 credits

PREREQUISITE: MTH 125 (Calculus I)

This is the second of three courses in the basic calculus sequence. Topics include vectors in the plane and in space, lines and planes in space, applications of integration (such as volume, arc length, work and average value), techniques of integration, infinite series, polar coordinates, and parametric equations.

MTH 227 CALCULUS III (4T) 4 credits

PREREQUISITE: MTH 126 (Calculus II)

This is the third of three courses in the basic calculus sequence. Topics include vector functions, functions of two or more variables, partial derivatives (including applications), quadratic surfaces, multiple integration, and vector calculus (including Green's Theorem, Curl and Divergence, surface integrals, and Stokes' Theorem).

MTH 231 MATHEMATICS FOR THE ELEMENTARY TEACHER I (3T) 3 credits

PREREQUISITE: MTH 090 (Basic Mathematics)

This course is designed to provide appropriate insights into mathematics for students majoring in elementary education and to ensure that students going into elementary education are more than proficient at performing basic arithmetic operations. Topics include logic, sets and functions, operations and properties of whole numbers and integers including number theory, and use of manipulatives by teachers to demonstrate abstract concepts and by students while learning these abstract concepts as emphasized in the class. Upon completion, students are required to demonstrate proficiency in each topic studied as well as to learn teaching techniques that are grade level and subject matter appropriate, and test for mathematical proficiency and the learning of teaching concepts.

MTH 232 MATHEMATICS FOR THE ELEMENTARY TEACHER II (3T) 3 credits

PREREQUISITE: MTH 231 (Mathematics for the Elementary Teacher I)

This course is the second of a three-course sequence and is designed to provide appropriate insights into mathematics for students majoring in elementary education and to ensure that students going into elementary education are more than proficient at performing basic arithmetic operations. Topics include numeration skills with fractions, decimals and percentages, elementary concepts of probability and statistics, and analytic geometry concepts associated with linear equations and inequalities. The use of manipulatives and calculators in the teaching and learning process is stressed. Upon completion, students will test for mathematical proficiency and the learning of teaching concepts. Students also will demonstrate an appropriate teaching technique by preparing a lesson and teaching it to the class for their final exam grade.

MTH 237 LINEAR ALGEBRA (3T) 3 credits

PREREQUISITE: MTH 126 (Calculus II)

This course introduces the basic theory of linear equations and matrices, real vector spaces, bases and dimension, linear transformations and matrices, determinants, eigenvalues and eigenvectors, inner product spaces, and the diagonalization of symmetric matrices. Additional topics may

include quadratic forms and the use of matrix methods to solve systems of linear differential equations.

MTH 238 APPLIED DIFFERENTIAL EQUATIONS I (3T) 3 credits

COREQUISITE: MTH 227 (Calculus III)

An introduction to numerical methods, qualitative behavior of first order differential equations, techniques for solving separable and linear equations analytically, and applications to various models (e.g. populations, motion, chemical mixtures, etc.); techniques for solving higher order linear differential equations with constant coefficients (general theory, undetermined coefficients, reduction of order and the method of variation of parameters), with emphasis on interpreting the behavior of solutions, and applications to physical models whose governing equations are of higher order; the Laplace transform as a tool for the solution of initial value problems whose inhomogeneous terms are discontinuous.

MTH 265 ELEMENTARY STATISTICS (3T) 3 credits

PREREQUISITE: MTH 100 (Intermediate College Algebra) or appropriate mathematics placement score

This course provides an introduction to methods of statistics, including the following topics: sampling, frequency distributions, measures of central tendency, graphic representation, reliability, hypothesis testing, confidence intervals, analysis, regression, estimation, and applications. Probability, permutations, combinations, binomial theorem, random variables, and distributions may be included.

MTH 270 PROBABILITY AND STATISTICS CONCEPTS (3T) 3 credits

COREQUISITE: MTH 126 (Calculus II)

This course provides an examination of the theory and applications of probability and statistics based on topics from calculus. It includes probability, sample spaces, random variables, probability distributions, estimation, confidence intervals, hypothesis testing, experimental analysis, moments and moment-generating functions, and computer-assisted data analysis using appropriate computer software.

MUSIC (MUL) (MUP) (MUS)

MUL 192-193A PIANO ENSEMBLE (2-4E) 1 credit

MUL 292-293A PREREQUISITE: Audition and Permission of instructor

This course provides an opportunity for students to participate in a performing ensemble. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goals of the group. Performances are assigned.

MUL 101-02 CLASS PIANO I, II (2E) 1 credit

These courses, to be taken in sequence, present fundamentals of keyboard technique for students with little or no previous training. Emphasis is placed on the rudiments of music, basic performance technique and general musicianship skills. Upon completion of one or a sequence of courses, students should be able to demonstrate a basic proficiency in playing and a knowledge of music fundamentals.

Course Descriptions

MUL 111-12 MUL 211-12	CLASS VOICE I, II, III, IV (2E) These courses must be taken in sequence. Emphasis is placed on fundamentals of correct breathing, tone production, and diction for students with little or no previous voice training. Literature appropriate for class level is studied. Upon completion of one or a sequence of courses, students should be able to demonstrate a basic proficiency in singing and a knowledge of music fundamentals. A minimum grade of "C" is required to progress to next level.	1 credit	MUL 196-97 MUL 296-97	JAZZ BAND (2-4E) PREREQUISITE: Permission of instructor This course provides an opportunity for students to participate in a performing ensemble. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goals of the group. Upon completion, students should be able to effectively participate in performances presented by the ensemble. Performances are assigned.	1-2 credits
MUL 161-63	CLASS FRETTED INSTRUMENTS I, II, III (2E) These courses must be taken in sequence. These courses include basic techniques, chords, scales, fingering, rhythm, strumming, and playing simple melodies. They are designed for students with little or no previous training. Emphasis is placed on the rudiments of music, basic performance technique and general musicianship skills. Upon completion of one or a sequence of courses, students should be able to demonstrate a basic proficiency in playing and a knowledge of music fundamentals.	1 credit	MUP 101 102, 201 202	PIANO (2-4E) PREREQUISITE: MUL 101, 102 or Permission of instructor Individual study, minimum grade of "B" is required to progress to next level. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. Upon completion, students should be able to effectively perform assigned repertoire and technical studies in an appropriate performance evaluation setting. At the conclusion of the last semester of study, a sophomore recital is required.	1-2 credits
MUL 180-81 MUL 280-81	CHORALE (2-4E) PREREQUISITE: Permission of instructor These courses are selected performing ensembles open to all students. Chorale is required for voice majors and minors. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goals of the group. Performances are assigned.	1-2 credits	MUP 103 104, 203, 204	ORGAN (2-4E) Individual study, minimum grade of "B" is required to progress to next level. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. Upon completion, students should be able to effectively perform assigned repertoire and technical studies in an appropriate performance evaluation setting. At the conclusion of the last semester of study, a sophomore recital is required.	1-2 credits
MUL 182-83 MUL 282-83	MADRIGAL SINGERS (2-4E) PREREQUISITE: Permission of instructor and audition This course provides an opportunity for students to participate in a performing ensemble. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goals of the group. This course is a select a cappella performing ensemble. Enrollment is limited. Performances are assigned.	1-2 credits	MUP 111 112, 211 212	VOICE (2-4E) PREREQUISITE: MUL 111 Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.	1-2 credits
MUL 184-85 MUL 284-85	CONNECTION (2-4E) PREREQUISITE: Permission of instructor and audition This course provides an opportunity for students to participate in a performing ensemble. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goals of the group. Upon completion, students should be able to effectively participate in performances presented by ensemble. Performances are assigned.	1-2 credits	MUP 133 134, 233 234	GUITAR (2-4E) PREREQUISITE: MUL 161, 162 Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. Minimum grade of "B" is required to progress to the next level.	1-2 credits
MUL 192-93B MUL 292-93B	GUITAR ENSEMBLE (2-4E) PREREQUISITE: Permission of instructor This course provides ensemble experience for guitar students in playing standard literature and arrangements and transcriptions for classical technique. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goals of the group. Performances are assigned. This course is open to all students and is required for guitar majors.	1-2 credits			

MUP 141
142, 241
242
FLUTE (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. Minimum grade of "B" is required to progress to the next level.

MUP 143
144, 243
244
CLARINET (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUP 145
146, 245
246
CLARINET (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUP 151
152, 251
252
OBOE (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUP 153
154, 253,
254
BASSOON (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUP 161
162, 261
262
TRUMPET (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is

MUP 163
164, 263
264
FRENCH HORN (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUP 171
172, 271
272
TROMBONE (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUP 173
174, 273
274
EUPHONIUM (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUP 175
176, 275
276
TUBA (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUP 181
182, 281
282
PERCUSSION (2-4E) **1-2 credits**
Individual instruction to include the study of standard literature and technique. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. At the conclusion of the last semester, a sophomore recital is required. A minimum grade of "B" is required to progress to the next level.

MUS 101
MUSIC APPRECIATION (3T) **3 credits**
This course is designed for non-music majors and requires no previous musical experience. It is a survey course that incorporates several modes of instruction including lecture, guided listening, and similar

Course Descriptions

	experiences involving music. The course will cover a minimum of three (3) stylistic periods, provide a multi-cultural perspective, and include both vocal and instrumental genres. Upon completion, students should be able to demonstrate a knowledge of music fundamentals, the aesthetic/stylistic characteristics of historical periods, and an aural perception of style and structure in music. This course is offered in a tele-course, self-paced and lecture format.		
MUS 103	SURVEY OF POPULAR MUSIC (1-2T) 1-2 credits This course provides a study of the origins, development and existing styles of popular music. Topics include ragtime, jazz, rhythm and blues, rock, country and western, folk and world music. Upon completion, students should be able to demonstrate a knowledge, understanding and an aural perception of the stylistic characteristics of popular music. This course is offered in a self-paced and lecture format.		
MUS 110	BASIC MUSICIANSHIP (3T) 3 credits This course is designed to provide rudimentary music knowledge and skills for the student with a limited music background. Topics include a study of notation, rhythm, scales, keys, intervals, chords and basic sight singing and ear training skills. Upon completion, students should be able to read and understand musical scores and demonstrate basic sight singing and ear training skills for rhythm, melody and harmony. Required for music majors or acceptable score on placement test (75%).		
MUS 111	MUSIC THEORY I (3T) 3 credits PREREQUISITE: Minimum grade of "C" in MUS 110 or acceptable score on placement test (75%) COREQUISITE: MUS 113 This course introduces the student to the diatonic harmonic practices in the Common Practice Period. Topics include fundamental musical materials (rhythm, pitch, scales, intervals, diatonic harmonies) and an introduction to the principles of voice leading and harmonic progression. Upon completion, students should be able to demonstrate a basic competency using diatonic harmony through analysis, writing, sight singing, dictation and keyboard skills. Open lab required. Spring; Decatur campus.	MUS 113	MUSIC THEORY LAB I (1E) 1 credit PREREQUISITE: MUS 110 or suitable placement score or permission of instructor COREQUISITE: MUS 111 This course provides the practical application of basic musical materials through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include intervals, simple triads, diatonic stepwise melodies, basic rhythmic patterns in simple and compound meter and four-part triadic progressions in root position. Upon completion, students should be able to write, sing and play intervals, scales, basic rhythmic patterns, diatonic stepwise melodies, simple triads and short four-part progressions in root position. Spring; Decatur campus.
MUS 112	MUSIC THEORY II (3T) 3 credits PREREQUISITE: Minimum grade of "C" in MUS 111 COREQUISITE: MUS 114 This course completes the study of diatonic harmonic practices in the Common Practice Period and introduces simple musical forms. Topics include principles of voice leading used in three- and four- part triadic harmony and diatonic seventh chords, non-chord tones, cadences, phrases and periods. Upon completion, students should be able to demonstrate competence using diatonic harmony through analysis, writing, sight singing, dictation and keyboard skills. Open lab required. Fall; Decatur campus.	MUS 114	MUSIC THEORY LAB II (1E) 1 credit PREREQUISITE: MUS 113 COREQUISITE: MUS 112 This course continues the practical application of diatonic musical materials through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include intervals, scales, diatonic melodies with triadic arpeggiations, more complex rhythmic patterns in simple and compound meter and four-part diatonic progressions in all inversions. Upon completion, students should be able to write, sing and play all intervals, rhythmic patterns employing syncopations and beat divisions, diatonic melodies and four-part progressions. Fall; Decatur campus.
		MUS 211	MUSIC THEORY III (3T) 3 credits PREREQUISITE: Minimum grade of "C" in MUS 112 COREQUISITE: MUS 213 This course introduces the student to the chromatic harmonic practices in the Common Practice Period. Topics include secondary functions, modulatory techniques, and binary and ternary forms. Upon completion, students should be able to demonstrate competence using chromatic harmony through analysis, writing, sight singing, dictation and keyboard skills. Open lab required. Spring; Decatur campus.
		MUS 213	MUSIC THEORY LAB III (1E) 1 credit PREREQUISITE: MUS 114 COREQUISITE: MUS 211 This course provides the practical application of chromatic musical materials through sight singing; melodic, harmonic and rhythmic dictation; and keyboard harmony. Topics include melodies with simple modulations, complex rhythms in simple and compound meter, and secondary function chords. Upon completion, students should be able to write, sing and play modulating melodies, rhythmic patterns with beat subdivisions and four-part chromatic harmony. Spring; Decatur campus.
		MUS 251	INTRODUCTION TO CONDUCTING (3T) 3 credits PREREQUISITE: MUS 110 or acceptable score on placement test (75%) This course introduces the fundamentals of conduct-

ing choral and/or instrumental ensembles. Topics include a study of simple and compound meters, score reading and techniques for conducting effective rehearsals. Upon completion, students should be able to prepare and conduct a choral and/or instrumental score in a rehearsal or performance setting.

- MUS 270 ORGANIZATION OF THE CHURCH MUSIC PROGRAM (2-3T) 2-3 credits**
PREREQUISITE: MUS 110
This course is designed to explore administrative models of a comprehensive church music program. Topics include leadership, administrative structure, music personnel, facilities, equipment, vestments, music library, budgeting, planning, vocal and instrumental ensembles and scheduling for a music program. Upon completion, students should be able to demonstrate how to plan, coordinate and administer a comprehensive church music program.
- MUS 271 CHURCH MUSIC LITERATURE (2-3T) 2-3 credits**
PREREQUISITE: MUS 110
This course provides an historic survey of traditional church music from the 17th century to the present and introduces contemporary Christian styles. Topics include criteria for choosing appropriate music for graded church choirs at easy, medium and advanced levels of difficulty, and a survey of publishing resources and cataloging systems. Upon completion, students should be able to demonstrate a knowledge and understanding of church music literature.
- MUS 272 THE CHILDREN'S CHOIR (2-3T) 2-3 credits**
This course is designed to provide techniques for working with the child's voice in a choral setting. Topics include working with children's voices, rehearsal techniques, selecting literature, vestments and organizing a graded choir program. Upon completion, students should be able to demonstrate how to plan, coordinate and administer a graded choir program in a church.
- MUS 290 INTRODUCTION TO COMMERCIAL MUSIC (2-3T) 2-3 credits**
This course provides an introduction to the commercial music industry and the types of careers in commercial music. Topics include music publishing, recording, contracts, agents and managers, copyrights, unions, music companies and dealers. Upon completion, students should be able to demonstrate a basic knowledge and understanding of the different components of the commercial music industry and the various career options.
- MUS 291 MUSICAL ACOUSTICS (2-3T) 2-3 credits**
PREREQUISITE: Permission of instructor
This course is designed to acquaint the student with the nature of musical acoustics and the science of sound. Topics include terminology, symbols, the nature and transmission of sound, vibration, frequency, pitch, intervals, harmonies, resonance, consonance and dissonance. Upon completion, students

should be able to demonstrate an understanding of the basic skills and concepts through the successful presentation of an individual project in musical acoustics.

- MUS 292 SONG WRITING (3T) 3 credits**
PREREQUISITE: As required by program
This course provides an introduction to song writing and marketing techniques. Topics include lyric writing, song structures, preparing a lead sheet, notation, rhythmic and melodic dictation, key signatures, basic chord structures, recording, basic copyright laws and publishing. Upon completion, students should be able to compose a song, prepare a lead sheet and demo tape, apply for a copyright and market a song.

MUSIC INDUSTRY COMMUNICATIONS (MIC)

- MIC 100 INTRODUCTION TO MASS COMMUNICATIONS 3 credits**
This course provides the student with general study of mass communications and journalism. This course includes theory, development, regulation, operation, and effects upon society. Upon completion of this class, students should be able to decide which field of mass communications on which to focus.
- MIC 153 INTRODUCTION TO RECORDING TECHNOLOGY (3T) 3 credits**
This course is designed to acquaint the student with basic recording fundamentals. Emphasis is placed on microphone techniques, recording principals, musician and recording engineers' code. Upon completion, students should be able to do basic analog recordings.
- MIC 201 PUBLISHING FOR THE RECORDING INDUSTRY (3T) 3 credits**
This course is an introduction to the operation and functions of publishing in the recording industry.
- MIC 250 MASS COMMUNICATIONS PRACTICUM (3T) 3 credits**
PREREQUISITE: MIC 153 or instructor approval
This course provides practical experience in media through supervised part- or full-time employment with a newspaper, radio or television station, recording studio, or public relations/advertising agency. Upon completion, students should be able to receive employment based on demonstration of their skills in their subject area.
- MIC 251 RECORDING STUDIO PRODUCTION (3T) 3 credits**
PREREQUISITE: MIC 153 or instructor approval
This course is designed to acquaint the student with the functional roles of the commercial recording studio. Emphasis will be placed on studio production projects, and include a study of contracts, managers, agents, recording rights, copyright laws, unions, publishers, and music companies. Upon completion, students should be able to produce studio quality recordings and have an understanding of the music industry.

Course Descriptions

MIC 253 COMPUTER LITERACY FOR THE MUSICIAN I

(3T)
3 credits

This course is designed to teach musicians how to use computers for music writing, ear training, theory, and sequencing. Topics include an introduction to MIDI, sequencing, Master Tracks Pro, Studio 3.1 and 4.0, Cakewalk and Musicator. Upon completion, students should have an understanding of MIDI, Charting and Sequencing on the computer.

MIC 254 COMPUTER LITERACY FOR THE MUSICIAN II

(3T)
3 credits
PREREQUISITE: MIC 253 or instructor approval

This course is designed to teach advanced computer sequencing techniques. Emphasis is placed on projects and the use of computer sequencing software and hardware. Students should be able to sequence and perform advanced editing using MIDI.

MIC 255 DIGITAL RECORDING (3T)

3 credits
PREREQUISITE: MIC 253 or instructor approval

This course is designed to teach Digital Recording using hard disk wave recording techniques. Emphasis is placed on projects and the use of Digital Recording software and hardware. Upon completion, students should be able to do recordings on the "Special Audio Engine" and other software with masters of digital quality.

MIC 293 MUSIC NOTATION (3T)

3 credits
PREREQUISITE: MIC 253 or instructor approval

This course is designed to teach students the music program for charting and writing music. Emphasis will be placed on the use of the software program "FINALE". Upon completion, students should be able to chart and write music using industry standards.

NURSING ASSISTANT (NAS)

NAS 100 FUNDAMENTALS OF LONG TERM CARE

(3T, 3C)
4 credits

This course fulfills the seventy-five (75) hour Omnibus Budget Reconciliation Act (OBRA) requirements for training of long-term care nursing assistants in preparation for certification through competency evaluation. Emphasis is placed on the development of the knowledge, attitudes, and skills required of the long-term care nursing assistant. Upon completion of this course, the student should demonstrate satisfactory performance on written examinations and clinical skills.

NURSING (ADN/LPN)

NUR 102 FUNDAMENTALS OF NURSING

(3T, 6S/3C)
6 credits
PREREQUISITE: As required by program.

This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students learn concepts and theories basic to the art and science of nursing. The role of the nurse as a member of the healthcare team is emphasized.

Students are introduced to the concepts of client needs, safety, communication, teaching/learning, critical thinking, ethical-legal, cultural diversity, nursing history, and the program's philosophy of nursing. Additionally, this course introduces psychomotor nursing skills needed to assist individuals in meeting basic human needs. Skills necessary for maintaining microbial, physical, and psychological safety are introduced along with skills needed in therapeutic interventions. At the conclusion of this course, students demonstrate competency in performing basic nursing skills for individuals with common health alterations.

NUR 103 HEALTH ASSESSMENT (3S)

1 credit
PREREQUISITE: As required by program.

This course is designed to provide students the opportunity to learn and practice history taking and physical examination skills with individuals of all ages, with emphasis on the adult. The focus is on symptom analysis along with physical, psychosocial, and growth and development assessments. Students will be able to utilize critical thinking skills in identifying health alterations, formulating nursing diagnoses and documenting findings appropriate to nursing.

NUR 104 INTRODUCTION TO PHARMACOLOGY (3S)

1 credit
PREREQUISITE: As required by program.

This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. This course introduces students to basic principles of pharmacology and the knowledge necessary to safely administer medication. Course content includes legal implications, pharmacokinetics, pharmacodynamics, calculations of drug dosages, medication administration, and an overview of drug classifications. Students will be able to calculate and administer medications.

NUR 105 ADULT NURSING (5T, 3S/6C)

8 credits
PREREQUISITE: As required by program.

This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Emphasis is placed on providing care to individuals undergoing surgery, fluid and electrolyte imbalance, and common alterations in respiratory, musculoskeletal, gastrointestinal, cardiovascular, endocrine, and integumentary systems. Nutrition, pharmacology, communication, cultural, and community concepts are integrated.

NUR 106 MATERNAL AND CHILD NURSING (4T, 3C)

5 credits
PREREQUISITE: As required by program.

This course focuses on the role of the nurse in meeting the physiological, psychosocial, cultural and developmental needs of the maternal and child client. Course content includes antepartal, intrapartal, and postpartal care, complications of pregnancy, newborn care, human growth and development, pediatric care, and selected pediatric alterations. Nutrition, pharmacology, cultural diversity, use of technology, communication, anatomy and physiology review, medical terminology, critical thinking, and application of the nursing process are integrated throughout this course. Upon completion of this course, students will be

able to provide and manage care for maternal and pediatric clients in a variety of settings.

NUR 107 ADULT/CHILD NURSING (5T, 9C) 8 credits

PREREQUISITE: As required by program.

This course provides students with opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process in a variety of settings. Emphasis is placed on providing care to individuals experiencing complex alterations in: sensory/perceptual, reproductive, endocrine, genitourinary, neurological, immune, cardiovascular, and lower gastrointestinal systems. Additional instruction is provided for care for clients experiencing burns, cancer, and emergent conditions. Nutrition, pharmacology, therapeutic communication, community, cultural diversity, health promotion, error prevention, critical thinking, impacts on maternal and child clients are integrated throughout the course.

NUR 108 PSYCHOSOCIAL NURSING (2T, 3C) 3 credits

PREREQUISITE: As required by program.

This course is designed to provide an overview of psychosocial adaptation and coping concepts used when caring for clients with acute and chronic alterations in mental health in a variety of settings. Topics include therapeutic communication skills, normal and abnormal behaviors, treatment modalities, and developmental needs. Upon completion of this course, students will demonstrate the ability to assist clients in maintaining psychosocial integrity through the use of the nursing process.

NUR 109 ROLE TRANSITION FOR THE PRACTICAL NURSE (2T, 3S) 3 credits

PREREQUISITE: As required by program.

This course provides students with opportunities to gain knowledge and skills necessary to transition from student to practicing nurse. Content includes a discussion of current issues in health care, practical nursing leadership and management, professional practice issues, and transition into the workplace. Emphasis is placed on NCLEX-PN test-taking skills, computer-assisted simulations and practice tests, development of a prescriptive plan for remediation, and review of selective content, specific to the practice of practical nursing.

NUR 200 NURSING CAREER MOBILITY ASSESSMENT (3T, 9S) 6 credits

This course is designed to provide LPN mobility students self-directed opportunities to prepare for placement into the third semester of the ADN program. Emphasis is on assessment and validation of selected theory, process, and skills covered in NUR 102, 103, 104, 105, and 106. Upon successful completion of assessments, students are eligible for entry into NUR 201. Students who successfully complete this course are awarded 15 non-traditional hours at the completion of the LPN mobility curriculum.

NUR 201 NURSING THROUGH THE LIFESPAN (3T, 6C) 5 credits

PREREQUISITE: As required by program.

This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students manage and provide collaborative care to clients who are experiencing selected alterations in gastrointestinal, reproductive, sensory, and endocrine systems in a variety of settings. Additional instruction is provided for oncology, mental health, teaching/learning concepts, and advanced dosage calculations, nutrition, pharmacology, communication, cultural, and community concepts are integrated.

This course builds upon previous instruction and provides additional opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students manage and provide collaborative care to clients who are experiencing selected alterations in cardiovascular, hematologic, immune, and genitourinary systems in a variety of settings. Additional instruction is provided for psychiatric disorders and high-risk obstetrics. Teaching/learning concepts, advanced dosage calculations, nutrition, pharmacology, communication, cultural, and community concepts are integrated.

NUR 202 NURSING THROUGH THE LIFESPAN II (3T, 9C) 6 credits

PREREQUISITE: As required by program.

This course builds upon previous instruction and provides additional opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students manage and provide collaborative care to clients who are experiencing selected alterations in cardiovascular, hematologic, immune, and genitourinary systems in a variety of settings. Additional instruction is provided for psychiatric disorders and high-risk obstetrics. Teaching/learning concepts, advanced dosage calculations, nutrition, pharmacology, communication, cultural, and community concepts are integrated.

NUR 203 NURSING THROUGH THE LIFESPAN III (4T, 6C) 6 credits

PREREQUISITE: As required by program.

This course builds upon previous instruction and provides additional opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students manage and provide collaborative care to clients who are experiencing selected alterations in cardiovascular, respiratory, and neurological systems in a variety of settings. Additional instruction is provided in care for selected mental health disorders, selected emergencies, multiple organ dysfunction syndrome and related disorders. Teaching/learning concepts, advanced dosage calculations, nutrition, pharmacology, communication, cultural, and community concepts are integrated.

NUR 204 ROLE TRANSITION FOR THE REGISTERED NURSE (2T, 6C) 4 credits

PREREQUISITE: As required by program.

This course provides students with opportunities to gain knowledge and skills necessary to transition from student to registered nurse. Content includes current issues in health care, nursing leadership and management, professional practice issues for registered nurses, and transition into the workplace. Additional instruction is provided for preparing for the NCLEX-RN.

Course Descriptions

OFFICE ADMINISTRATION (OAD)

OAD 101 BEGINNING KEYBOARDING (3T) 3 credits

This course is designed to enable the student to use the touch method of keyboarding through classroom instruction and outside lab. Emphasis is on speed and accuracy in keying alphabetic, symbol, and numeric information using the typewriter or microcomputer keyboard. Upon completion, the student should be able to demonstrate proper technique and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of basic business documents such as memos, letters, reports, and tables.

OAD 102 KEYBOARDING SKILL BUILDING (3T) 3 credits PREREQUISITE: OAD 100 or OAD 101 or equivalent

This course enables students to correct speed and accuracy deficiencies by first identifying the causes of such deficiencies and by providing individualized descriptive practice for correcting the deficiencies.

OAD 103 INTERMEDIATE KEYBOARDING (3T) 3 credits PREREQUISITE: OAD 101 or Keyboarding/Typing skills recommended

This course is designed to assist the student in increasing speed and accuracy using the touch method of keyboarding through classroom instruction and outside lab. Emphasis is on the production of business documents such as memoranda, letters, reports, tables, and outlines. Upon completion, the student should be able to demonstrate proficiency and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of business documents.

OAD 104 ADVANCED KEYBOARDING (3T) 3 credits PREREQUISITE: OAD 103 or Permission of instructor

This course is designed to assist the student in continuing to develop speed and accuracy using the touch method of keyboarding through classroom instruction and outside lab. Emphasis is on the production of business documents using decision-making skills. Upon completion, the student should be able to demonstrate proficiency and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of high-quality business documents.

ORIENTATION (ORI)

ORI 101 ORIENTATION TO COLLEGE (1) 1 credit

This course aids new students in their transition to the institution; exposes new students to the broad educational opportunities of the institution; and integrates new students into the life of the institution.

ORI 103 ORIENTATION (STUDY SKILLS) (2T) 2 credits

This course helps students develop practical knowledge and skills toward a successful college experience, both academically and personally. Topics include time management, reading, memory, notes, tests, diversity, thinking, writing, relationships, health, and career planning.

ORIENTATION/TECHNICAL (ORT)

ORT 100 ORIENTATION TO COLLEGE 1(2) 1 credit

This course is designed to introduce the beginning student to college life. It provides the student with information on what the college expects from the student and what the student should expect from the college. The course also addresses student attitudes and goals as well as safety and other issues pertinent for technical students. For non-degree programs only.

PHYSICAL EDUCATION (PED)

PED 100 FUNDAMENTALS OF FITNESS (3T) 3 credits

This lecture course includes the basic principles of physical education and physical fitness. It explores psychological and physiological effects of exercise and physical fitness, including effects on the human skeleton, muscle development, respiration and coordination. It is reviewed as an introduction to such laboratory courses as slimnastics, weight training, and conditioning. This course may also include fitness evaluation, development of individual fitness programs, and participation in fitness activities.

PED 101 SLIMNASTICS (Beginning) (2A) 1 credit

This course provides an individualized approach to physical fitness, wellness, and other health-related factors. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program. This is an individual and dual sport activity.

PED 102 SLIMNASTICS (Intermediate) (2A) 1 credit

This course is an intermediate-level class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems, nutrition, and weight control. Upon completion, students should be able to implement and evaluate an individualized physical fitness program. This is an individual and dual sport activity.

PED 103 WEIGHT TRAINING (Beginning) (2A) 1 credit

This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight-training program. This is an individual and dual sport activity.

PED 104 WEIGHT TRAINING (Intermediate) (2A) 1 credit

This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight-training program. This is an individual and dual sport activity.

PED 105 PERSONAL FITNESS (2A) 1 credit

This course is designed to provide the student with information allowing him/her to participate in a personally

developed fitness program. Topics include cardiovascular, strength, muscular endurance, flexibility and body composition. This is an individual and dual sport activity.

and individual sports. Emphasis is placed on rules, equipment, and motor skills used in various sports. Upon completion, students should be able to demonstrate knowledge of the sports covered. This is an individual and dual sport activity.

PED 106 AEROBICS (2A) 1 credit

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. This is an individual and dual sport activity.

PED 121 BOWLING (Beginning) (2A) 1 credit

This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling. This is an individual and dual sport activity.

PED 107 AEROBICS DANCE (Beginning) (2A) 1 credit
PREREQUISITE: PED 106 or Permission of instructor

This course introduces the fundamentals of step and dance aerobics. Emphasis is placed on basic stepping up, basic choreographed dance patterns, cardiovascular fitness, and upper body, floor, and abdominal exercises. Upon completion, students should be able to participate in basic dance aerobics. This is a rhythm activity.

PED 122 BOWLING (Intermediate) (2A) 1 credit
PREREQUISITE: PED 121 or Permission of instructor

This course covers more advanced bowling techniques. Emphasis is placed on refining basic skills and performing advanced shots, spins, pace, and strategy. Upon completion, students should be able to participate in competitive bowling. This is an individual and dual sport activity.

PED 108 AEROBICS DANCE (INTERMEDIATE) (2A) 1 credit
PREREQUISITE: PED 107 or Permission of instructor

This course provides a continuation of step aerobics. Emphasis is placed on a wide variety of choreographed step and dance patterns; cardiovascular fitness; and upper body, abdominal, and floor exercises. Upon completion, students should be able to participate in and design an aerobics routine. This is a rhythm activity.

PED 123 GOLF (Beginning) (2A) 1 credit

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. This is an individual and dual sport activity.

PED 124 GOLF (Intermediate) (2A) 1 credit
PREREQUISITE: PED 123 or Permission of instructor

This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the game such as a club selection, trouble shots, and course management. Upon completion, students should be able to demonstrate the knowledge and ability to play a recreational round of golf. This is an individual and dual sport activity.

PED 109 JOGGING (2A) 1 credit

This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities. This is an individual and dual sport activity.

PED 125 SKATING (2A) 1 credit

This course introduces the fundamentals of skating. Emphasis is placed on basic positioning, balance, and form. Upon completion, students should be able to demonstrate skills necessary for recreational skating.

PED 118 GENERAL CONDITIONING (Beginning) (2A) 1 credit

This course provides an individualized approach to general conditioning utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness and conditioning programs. Upon completion, students should be able to set up and implement an individualized physical fitness and conditioning program. This is an individual and dual sport activity.

PED 126 RECREATIONAL GAMES (2A) 1 credit

This course is designed to give an overview of a variety of recreational games and activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime recreational games. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime recreational activities. This is a rhythm activity.

PED 119 GENERAL CONDITIONING (Intermediate) (2A) 1 credit
PREREQUISITE: PED 118 or Permission of instructor

This course is an intermediate-level fitness and conditioning program class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness and conditioning program. This is an individual and dual sport activity.

PED 127 ARCHERY (2A) 1 credit

This course introduces basic archery safety and skills. Topics include proper techniques of stance, bracing, drawing, and releasing as well as terminology and scoring. Upon completion, students should be able to participate safely in target archery. This is an individual and dual sport activity.

PED 120 TECHNIQUES OF DUAL AND INDIVIDUAL SPORTS (2T) 2 credits

This course introduces the fundamentals of popular dual

Course Descriptions

- PED 129 EQUITATION (2A)** **1 credit**
This course is designed to give advanced riding experiences in a variety of specialized situations. Emphasis is placed on the development of skills such as jumping, rodeo games, and trail riding. Upon completion, students should be able to demonstrate control and management of the horse and perform various riding techniques. This is an individual and dual sport activity.
- PED 131 BADMINTON (Beginning) (2A)** **1 credit**
This course covers the fundamentals of badminton. Emphasis is placed on the basics of serving, clears, drops, drives, smashes and the rules and strategies of singles and doubles. Upon completion, students should be able to apply these skills in playing situations. This is an individual and dual sport activity.
- PED 133 TENNIS (Beginning) (2A)** **1 credit**
This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. This is an individual and dual sport activity.
- PED 134 TENNIS (Intermediate) (2A)** **1 credit**
PREREQUISITE: PED 133 or Permission of instructor
This course emphasizes the refinement of playing skills. Topics include the development of fundamentals, learning advanced serves, strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis. This is an individual and dual sport activity.
- PED 140 SWIMMING (BEGINNING) (2A)** **1 credit**
This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning elementary strokes. Upon completion, students should be able to demonstrate safety skills and be able to tread water, back float, and use the crawl stroke for 20 yards.
- PED 141 SWIMMING (INTERMEDIATE) (2A)** **1 credit**
PREREQUISITE: PED 140 or Permission of instructor
This course is designed for those who have mastered basic swimming skills. Emphasis is placed on refining basic skills and learning new swim strokes. Upon completion, students should be able to demonstrate the four basic strokes, the scissor kick, the underwater swim, and other related skills.
- PED 142 SWIMMING (ADVANCED) (2A)** **1 credit**
PREREQUISITE: PED 141 or Permission of instructor
This course introduces lap swimming, aquasizes, water activities, and games. Emphasis is placed on increasing cardiovascular efficiency through aquatic exercise. Upon completion, students should be able to develop an individualized aquatic fitness program.
- PED 143 AQUATIC EXERCISE (2A)** **1 credit**
This course introduces rhythmic aerobic activities and aquatic exercises performed in water. Emphasis is placed on increasing cardiovascular fitness levels, muscular strength, muscular endurance, and flexibility. Upon completion, students should be able to participate in an individually paced exercise program.
- PED 145 DIVING (2A)** **1 credit**
This course provides basic instruction in fundamental skills and safety procedures for diving. Emphasis is placed on the history, theory, and principles of diving; development of diving skills; safety; and care and maintenance of equipment. Upon completion, students should be able to demonstrate skills, knowledge and techniques of diving.
- PED 150 TAI CHI (2A)** **1 credit**
Tai Chi is an ancient martial art form through which the student will improve flexibility, balance, strength, and mental discipline. By learning the slow and elaborate movements of Tai Chi, the student will develop proper breathing and relaxation techniques and enhance joint flexibility. Tai Chi skills are a combination of stretching, isometrics, and isotonic movements in combination with diaphragmatic breathing and postural maintenance.
- PED 151 JUDO (BEGINNING) (2A)** **1 credit**
This course introduces the basic discipline of judo. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of judo.
- PED 153 KARATE (BEGINNING) (2A)** **1 credit**
This course introduces the martial arts using the Japanese Shotokan form. Topics include proper conditioning exercise, book control, proper terminology, historical foundations, and etiquette relative to karate. Upon completion, students should be able to perform line drill techniques and Kata for various ranks.
- PED 155 SELF-DEFENSE (2A)** **1 credit**
This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and non-physical nature.
- PED 160 SOCIAL DANCE (2A)** **1 credit**
This course introduces the fundamentals of popular social dance. Emphasis is placed on basic social dance techniques, dances, and a brief history of social dance. Upon completion, students should be able to demonstrate specific dance skills and perform some dances. This is a rhythm activity.
- PED 163 SQUARE DANCING (2A)** **1 credit**
This course introduces the terminology and skills necessary to perform square dancing. Topics include working from squared sets-squared circles to squared throughs, right and left throughs, and Dixie Chains. Upon completion, students should be able to perform square dance routines and recognize the calls made for all formations. This is a rhythm activity.
- PED 171 BASKETBALL (Beginning) (2A)** **1 credit**
This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the

rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball. This is a team sport activity.

PED 172 BASKETBALL (2A) 1 credit
PREREQUISITE: PED 171 or Permission of instructor

This course covers more advanced basketball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play basketball at a competitive level. This is a team sport activity.

PED 176 VOLLEYBALL (Beginning) (2A) 1 credit

This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball. This is a team sport activity.

PED 177 VOLLEYBALL (Intermediate) (2A) 1 credit
PREREQUISITE: PED 176 or Permission of instructor

This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball. This is a team sport activity.

PED 181 BASEBALL (Beginning) (2A) 1 credit

This course covers the fundamentals of baseball. Emphasis is placed on skill development, knowledge of the rules and basic game strategy. Upon completion, students should be able to participate in recreational baseball. This is a team sport activity.

PED 182 BASEBALL (Intermediate) (2A) 1 credit

This course covers more advanced baseball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play baseball at a competitive level. This is a team sport activity.

PED 186 SOFTBALL (Beginning) (2A) 1 credit

This course introduces the fundamental skills and rules of softball. Emphasis is placed on proper techniques and strategies for playing softball. Upon completion, students should be able to participate in recreational softball. This is a team sport activity.

PED 187 SOFTBALL (Intermediate) (2A) 1 credit

This course presents advanced skills and competitive practice in softball. Emphasis is placed on proper techniques and strategies for playing softball. Upon completion, students should be able to participate in competitive softball. This is a team sport activity.

PED 188 YOGA (2A) 1 credit

This course introduces basic instruction in yoga for beginners. Emphasis is placed on instruction in gentle stretching, breathing practices, progressive deep relaxation, and posture. Upon completion, students should be able to participate in and appreciate the benefits of the activity. This is a rhythm activity.

PED 190 WELLNESS LITERACY FOR SENIOR ADULTS (2A) 1 credit

This is a "hands on" introduction to wellness literacy with emphasis placed on maintaining a healthy body to prevent premature deaths. This course provides students with a fitness evaluation, health assessment, and participation in fitness activities of their choice.

PED 191 TEAM SPORTS (2A) 1 credit

This course covers the basic concepts involved in team sport competition. Emphasis will be placed on refining basic skills, rules and regulations, officiating, and team play. Upon completion, students should be able to participate and implement an intramural program. This is a team sport activity.

PED 200 FOUNDATIONS OF PHYSICAL EDUCATION (3T) 3 credits

In this course, the history, philosophy, and objectives of health, physical education, and recreation are studied with emphasis on the physiological, sociological, and psychological values of physical education. It is required of all physical education majors.

PED 216 SPORTS OFFICIATING (3T) 3 credits

This course surveys the basic rules and mechanics of officiating a variety of sports, including both team and individual sports. In addition to classwork, students will receive at least 3 hours of practical experience in officiating.

PED 226 HIKING (2A) 1 credit

This course provides instruction on how to equip and care for one's self on the trail. Topics include clothing, hygiene, trail ethics, and necessary equipment. Upon completion, students should be able to successfully participate in nature trail hikes. This is an individual and dual sport activity.

PED 227 ANGLING (2A) 1 credit

This course introduces the sport of angling. Emphasis is placed on fishing with the use of artificial lures. Upon completion, students should be able to cast and retrieve using baitcaster and spinning reels and identify the various types of artificial lures. This is an individual and dual sport activity.

PED 236 CANOEING (2A) 1 credit

This course provides basic instruction for the beginning canoeist. Emphasis is placed on safe and correct handling of the canoe and rescue skills. Upon completion, students should be able to demonstrate basic canoeing, safe-handling, and self-rescue skills. This is an individual and dual sport activity.

PED 245 CYCLING (2A) 1 credit

This course is designed to promote physical fitness through cycling. Emphasis is placed on selection and maintenance of the bicycle gear shifting, pedaling techniques, safety procedures, and conditioning exercises necessary for cycling. Upon completion, students should be able to demonstrate safe handling of a bicycle for recreational use. This is an individual and dual sport activity.

Course Descriptions

PED 246 CAMPING (2A) **1 credit**
 This course is designed to acquaint the beginning camper with outdoor skills. Topics include camping techniques such as cooking and preserving food, safety, and setting up camp. Upon completion, students should be able to set up camp sites in field experiences using proper procedures. This is an individual and dual sport activity.

PED 251 VARSITY BASKETBALL (2A) **1 credit**
PREREQUISITE: Permission of instructor
 This course covers advanced fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules and basic game strategy. Upon completion, students should be able to participate in competitive basketball. This is a team sport activity.

PED 252 VARSITY BASEBALL (2A) **1 credit**
PREREQUISITE: Permission of instructor
 This course covers advanced baseball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play baseball at a competitive level. This is a team sport activity.

PED 254 VARSITY SOFTBALL (2A) **1 credit**
PREREQUISITE: Permission of instructor
 This course introduces the fundamental skills and rules of softball. Emphasis is placed on proper techniques and strategies for playing softball. Upon completion, students should be able to play competitive softball. This is a team sport activity.

PED 257 VARSITY CHEERLEADING (2A) **1 credit**
PREREQUISITE: Permission of instructor
 This course covers advanced co-ed cheerleading techniques. Emphasis is placed on refining skills and improving all areas related to co-ed cheerleading including: knowledge of safety techniques, partner stunts, tumbling, basket tosses, pyramids, motions, physical conditioning, and mental preparation. Upon completion of this program, Students should be able to participate in a competitive program at the university level. This is a team sport activity.

PHOTOGRAPHY AND FILM (PFC)

Also see ART

PFC 173 PHOTOGRAPHY I (2T, 2E) **3 credits**
 This course is an introduction to photography. Emphasis is placed on aesthetic as well as technical aspects of photography. Upon completion, students will be able to produce well composed photographs.

PFC 174 PHOTOGRAPHY II (2T, 2E) **3 credits**
PREREQUISITE: Permission of instructor
 This is a sequence to Photography I and serves as an introductory photography course. Emphasis is placed on aesthetic as well as technical aspects of photography. Upon completion, the student will be able to produce well composed photographs.

PFC 176 FILMMAKING (6E) **3 credits**
 This course provides a knowledge of the basics of filmmaking. Emphasis is placed on procedure, equipment, editing

and sound. Upon completion, students should demonstrate a basic knowledge of filmmaking through critical analysis and film projects.

PFC 177 COLOR PHOTOGRAPHY (2T, 2E) **3 credits**
PREREQUISITE: ART 173 or ART 176 or Permission of instructor

This course covers the primary materials and processes of color photography. Emphasis is placed on the correct exposure, processing, creative color usage, and printing of both positive/negative color materials through exploration of films, filters, processes, and color temperature. Upon completion, students should be able to correctly execute the technical controls of color materials and explore the creative possibilities of color photography.

PFC 178 AUDIO-VISUAL TECHNIQUES (1T, 2E) **2 credits**
 This course is an exploration of the area of linkage between the visual and auditory senses. Work with sound and recording equipment, projected images and multimedia hardware and software is included. Students will produce finished multimedia pieces.

PFC 187 PHOTOGRAPHY, FILM, AND MEDIA I (1T, 2E) **2 credits**
PREREQUISITE: ART 173 or PFC 177 or Permission of instructor
 This course is designed to help the student explore creative approaches to photography, film, and related media. Problems in darkroom techniques, laboratory techniques, and special effects are included. Upon completion, the student should be able to apply these techniques to professional quality finished pieces.

PFC 188 PHOTOGRAPHY, FILM, AND MEDIA II (1T, 2E) **2 credits**
PREREQUISITE: PFC 187 or Permission of instructor
 This course is designed to help the student explore creative approaches to photography, film, and related media in greater depth. Problems in darkroom techniques, laboratory techniques, and special effects are included. Upon completion, the student should be able to apply these techniques to professional quality finished pieces.

PFC 258 PHOTOGRAPHIC AND MEDIA PROBLEMS (1T, 2E) **2 credits**
 This course deals with special problems in the student's area of interest. Emphasis is placed on design, technique and results. Upon completion, the student will be able to produce professional quality photographs in one particular area of photography.

PFC 273 STUDIO PHOTOGRAPHY I (2T, 2E) **3 credits**
 This course stresses image-making problems requiring studio or other controlled environment solutions. Lights, props, and related equipment and techniques are utilized. The student will produce quality photographs using studio techniques.

PFC 274 STUDIO PHOTOGRAPHY II (2T, 2E) **3 credits**
PREREQUISITE: PFC 273 or Permission of instructor
 This course deals with advanced problems requiring studio or other controlled environment solutions. Lights, props,

and related equipment and techniques are utilized. The student will produce quality photographs using studio techniques.

PFC 276 FILMMAKING II (2T, 2E) 3 credits
PREREQUISITE: PFC 176 or Permission of instructor

This course is a continuation of the study of film production. Emphasis is on various aspects of filmmaking which may include design, special effects, digital and linear production techniques, and machine control. Upon completion, students should have hands-on experience and an understanding of professional filmmaking.

PFC 277 FILMMAKING III (2T, 2E) 3 credits
PREREQUISITE: PFC 276 or Permission of instructor

This course is a continuation of the study of film production. Emphasis is on various aspects of filmmaking which may include design, special effects, digital and linear production techniques, and machine control. Upon completion, students should have hands-on experience and an understanding of professional filmmaking.

PHILOSOPHY (PHL)

PHL 106 INTRODUCTION TO PHILOSOPHY (3T) 3 credits

This course is an introduction to the basic concepts of philosophy. The literary and conceptual approach of the course is balanced with emphasis on approaches to ethical decision making. The student should have an understanding of major philosophical ideas in an historical survey from the early Greeks to the modern era.

PHL 116 LOGIC (3T) 3 credits

This course is designed to help students assess information and arguments. The focus of the course is on logic and reasoning. The student should be able to understand how inferences are drawn, be able to recognize ambiguities and logical and illogical reasoning.

PHL 206 ETHICS AND SOCIETY (3T) 3 credits

This course involves the study of ethical issues which confront individuals in the course of their daily lives. The focus is on the fundamental questions of right and wrong, of human rights, and of conflicting obligations. The student should be able to understand and be prepared to make decisions in life regarding ethical issues.

PHL 210 ETHICS AND THE HEALTH SCIENCES (3T) 3 credits

This course is a study of ethical issues related to the health sciences such as contraception, abortion, and eugenics; human experimentation; truth in drugs and medicine; death and dying; and other health-related issues. The student should be able to clarify relevant ethical considerations and have a philosophical basis for decisions on right and wrong, good and bad, rights and responsibilities.

PHYSICAL GEOGRAPHY (GEO)

(Courses qualify as Natural Science electives)

GEO 101 PRINCIPLES OF PHYSICAL GEOGRAPHY I (3T, 2E) 4 credits

Physical Geography I is the first in a two-part sequence including topics such as weather and climate relative to the earth and relationships between the earth and sun. Laboratory is required.

GEO 102 PRINCIPLES OF PHYSICAL GEOGRAPHY II (3T, 2E) 4 credits

Physical Geography II is the second in a two-part sequence including topics such as landforms, landscapes, soil and vegetation of the earth. Laboratory is required.

PHYSICAL SCIENCE (PHS)

PHS 111 PHYSICAL SCIENCE (3T, 2E) 4 credits

This course provides an introduction to the basic principles of geology, oceanography, meteorology, and astronomy for students who do not intend to major in science or engineering. Laboratory is required.

PHS 112 PHYSICAL SCIENCE II (3T, 2E) 4 credits
PREREQUISITE: MTH 098 Elementary Algebra

This course provides an introduction to the principles of chemistry and physics for students who do not intend to major in science or engineering. Laboratory is required.

PHS 120 ENVIRONMENTAL SCIENCE (3T, 2E) 4 credits

PHS 120 is an interdisciplinary course intended for non-science majors who desire an introduction to environmental science. The environment will be studied with an emphasis on such topics as air, soil, water, wildlife, forestry, and solid waste pollution. Laboratory will include both field studies and experimentation.

PHS 121 APPLIED PHYSICAL SCIENCE I (3T, 2E) 4 credits

PREREQUISITE: As required by program.
(Course taught in Spring Semester of odd numbered years only)

This course introduces the general principles of physics and chemistry. Topics include measurement, motion, Newton's laws of motion, momentum, energy, work, power, heat, thermodynamics, waves, sound, light, electricity, magnetism, and chemical principles. Upon completion, students should be able to demonstrate an understanding of the physical environment and be able to apply the scientific principles to observations experienced. Laboratory is required.

PHS 230 INTRODUCTION TO METEOROLOGY (3T, 2E) 4 credits

This course is an introductory survey of meteorology emphasizing the hydrologic cycle, cloud formation, weather maps, forecasting, and wind systems. Local weather systems will be given detailed study. Laboratory is required.

Course Descriptions

PHYSICS (PHY)

PHY 115 TECHNICAL PHYSICS (3T, 2E) **4 credits**
PREREQUISITE: MTH 100
 (Course taught infrequently, only as enrollment demands)

Technical physics is an algebra-based physics course designed to utilize modular concepts to include: motion, forces, torque, work energy, heat wave/sound, and electricity. Results of physics education research and physics applications in the workplace are used to improve the student's understanding of physics in technical areas. Upon completion, students will be able to define motion and describe specific module concepts; utilize microcomputers to generate motion diagrams; understand the nature of contact forces and distinguish passive forces; work cooperatively to set-up laboratory exercises; and demonstrate applications of module-specific concepts. Laboratory is required.

PHY 201 GENERAL PHYSICS I- TRIG BASED (3T, 2E) **4 credits**
PREREQUISITE: MTH 104 or MTH 113 or Equivalent
 (Course taught in Fall Semester of odd numbered years only)

This course is designed to cover general physics at a level that assumes previous exposure to college algebra and basic trigonometry. Specific topics include mechanics, properties of matter and energy, thermodynamics, and periodic motion. Laboratory is required.

PHY 202 GENERAL PHYSICS II – TRIG BASED (3T, 2E) **4 credits**
PREREQUISITE: PHY 201
 (Course taught in Spring Semester of even numbered years only)

This course is designed to cover general physics using college algebra and basic trigonometry. Specific topics include wave motion, sound, light, optics, electrostatics, circuits, magnetism and modern physics. Laboratory is required.

PHY 205 RECITATION IN PHYSICS I (1T) **1 credit**
 One hour weekly purely for problem solving.

PHY 206 RECITATION IN PHYSICS II (1T) **1 credit**
 One hour weekly purely for problem solving.

PHY 213 GENERAL PHYSICS WITH CALCULUS I (3T, 2E) **4 credits**
PREREQUISITE: MTH 125 or Permission of instructor

This course provides a calculus-based treatment of the principal subdivisions of classical physics: mechanics and energy. Laboratory is required.

PHY 214 GENERAL PHYSICS WITH CALCULUS II (3T, 2E) **4 credits**
PREREQUISITE: PHY 213

This course provides a calculus-based study in classical physics. Topics included are simple harmonic motion, waves, sound, light, optics, electricity and magnetism. Laboratory is required.

PHY 216 RECITATION IN PHYSICS WITH CAL I (1T) **1 credit**
 One hour weekly purely for problem solving.

PHY 217 RECITATION IN PHYSICS WITH CAL II (1T) **1 credit**
 One hour weekly purely for problem solving.

PHY 218 MODERN PHYSICS (3T, 2E) **4 credits**
PREREQUISITE: PHY 214 and MTH 227

The focus of this course is the development of the theory of relativity, the old quantum theory of Planck, Einstein, Bohr and Sommerfeld, and the new quantum physics of Schroedinger, Heisenberg, Dirac and Pauli. Laboratory experiments illustrate the principles discussed and include, but are not limited to, determination of the speed of light, charge and charge to mass ratio of the electron, the Planck constant and the Rydberg constant. Laboratory is required.

PHY 219 RECITATION FOR MODERN PHYSICS (1T) **1 credit**
PREREQUISITE: As required by program.
 One hour weekly purely for problem solving.

PROCESS TECHNOLOGY (PCT)

PCT 100 FUNDAMENTALS OF PROCESS TECHNOLOGY (3T) **3 credits**

This course provides an overview or introduction into the field of Process Operation. An overview of basic operating concepts and process control principles used within the process industries will be introduced and investigated.

PCT 110 PROCESS TECHNOLOGY I, EQUIPMENT (3T, 2E) **4 credits**
PREREQUISITE: PCT 100

This course provides an overview or introduction into the field of process technology equipment within the process industry. Students will be introduced to many process industry related equipment concepts including purpose, components, operation, and Process Technicians' role for operating and troubleshooting the equipment.

PCT 115 INSTRUMENTATION I (2T, 2E) **3 credits**
PREREQUISITE: PCT 100

This course covers process variables and various instruments used to sense, measure, transmit and control these variables. Introduces the students to control loops and the elements that are found in different types of loops, such as controllers, regulators and final control elements. Concludes with a study of instrumentation drawings and diagrams and a unit on troubleshooting instrumentation.

PCT 215 INSTRUMENTATION II (3T, 2E) **4 credits**
PREREQUISITES: PCT 110 and PCT 115

This course introduces the student to switches, relays and annunciators systems and moves on to discuss signal conversion and transmission. Students move on to learn about digital control, programmable logic control and distributed control systems before ending the course with a discussion of instrumentation power supplies, emergency shutdown

systems and instrumentation malfunctions.

PCT 220 PROCESS TECHNOLOGY II, SYSTEMS

(3T, 2E)

4 credits

PREREQUISITES: PCT 105 and PCT 110

This course is a study of the interrelations of process equipment and process systems. Students will be able to arrange process equipment into systems, describe the purpose and function of specific process systems, explain how factors affecting process systems are controlled under normal conditions, and recognize abnormal process conditions. Students are also introduced to the concept of system process control and manufacturing plant process economics.

PCT 230 PROCESS TECHNOLOGY III, OPERATIONS

(3T, 2E)

4 credits

PREREQUISITES: PCT 215 and PCT 220

This course provides an overview or introduction into the field of operations within the process industry. Students will use existing knowledge of equipment, systems and instrumentation to understand the operation of an entire unit including using a Process Control simulator.

PCT 232, INDUSTRIAL CO-OP TRAINING (5-15M)

1-3 credits

233, 234, PREREQUISITE: Permission of Instructor

235, 236 This course provides a supervised work experience on a part-time basis at an approved industrial facility. Students will work in a job directly related to the process technology industry. A training plan will be arranged to assure the student's opportunity to apply and/or expand principles and concepts in the field. The employer evaluates the student's performance, and the student will submit a descriptive report of his/her work experiences.

PCT 240 PROCESS TROUBLESHOOTING

(3T, 2E)

4 credits

PREREQUISITES: PCT 215 and PCT 220

This course involves instruction in different types of troubleshooting techniques, procedures, and methods used to solve process problems. Topics include application of data collection and analysis, cause-effect relationships and reasoning. In addition to troubleshooting static equipment problems as presented within a textbook, dynamic problems will also be presented via a process simulator for problem resolution by the student.

POLITICAL SCIENCE (POL)

POL 103, CURRENT AFFAIRS (2T)

2 credits

104, 105 This course sequence is designed to acquaint students with major issues and problems of contemporary society through examination of current events. Emphasis is placed on topics which contribute to student awareness of historical development and political significances of selected contemporary issues. Upon completion, students should be able to identify and explain factors in the historical development of, explain political significances of, and express informed judgments about selected contemporary social and political issues.

POL 106 CURRENT AFFAIRS (3T)

3 credits

This course is a study of contemporary world events as

reflected in current media reports. Emphasis is placed on topics of current significance as news or human interest events on the national and international levels. Upon completion, students should be able to identify and explain factors involved with, explain political significances of, and express informed judgments about selected contemporary social and political issues.

POL 200 INTRODUCTION TO POLITICAL SCIENCE

(3T)

3 credits

This course is an introduction to the field of political science through examination of the fundamental principles, concepts, and methods of the discipline, and the basic political processes and institutions of organized political systems. Topics include approaches to political science, research methodology, the state, government, law, ideology, organized political influences, governmental bureaucracy, problems in political democracy, and international politics. Upon completion, students should be able to identify, describe, define, analyze, and explain relationships among the basic principles and concepts of political science and political processes and institutions of contemporary political systems.

POL 211 AMERICAN NATIONAL GOVERNMENT

(3T)

3 credits

This course surveys the background, constitutional principles, organization, and operation of the American political system. Topics include the U.S. Constitution, federalism, civil liberties, civil rights, political parties, interest groups, political campaigns, voting behavior, elections, the presidency, bureaucracy, Congress, and the justice system. Upon completion, students should be able to identify and explain relationships among the basic elements of American government and function as more informed participants of the American political system.

POL 220 STATE AND LOCAL GOVERNMENT (3T)

3 credits

This course is a study of the forms of organization, functions, institutions, and operation of American state and local governments. Emphasis is placed on the variety of forms and functions of state and local governments, with particular attention to those in Alabama and to the interactions between state and local government and the national government. Upon completion, students should be able to identify elements of and explain relationships among the state, local, and national governments of the U.S. and function as more informed participants of state and local political systems.

POL 230 COMPARATIVE GOVERNMENT (3T)

3 credits

This course introduces comparative analysis of political systems. Emphasis is placed on institutions and processes of contemporary national political systems in selected democratic industrial nations. Upon completion, students should be able to compare and contrast the organization, institutions, and processes of major types of governmental systems of the world.

POL 236 SURVEY OF INTERNATIONAL RELATIONS

(3T)

3 credits

PREREQUISITE: Permission of instructor

This course is a survey of the basic forces affecting interna-

Course Descriptions

tional relations. Topics include bases of national power, balance of power, causes of war, the international political economy, international law, international organization, and possible futures of international relations. Upon completion, students should be able to identify and discuss relevant terms and concepts and identify, analyze, evaluate and discuss the primary factors influencing the international relations of selected states.

POL 240 POLITICAL THEORY (3T) 3 credits

PREREQUISITE: Permission of instructor

This course is an introduction to political theory through examination of philosophical concepts related to development of modern political ideologies. Emphasis is placed on selected sources of political philosophies. Upon completion, students should be able to identify selected political concepts and associated philosophers, and define, analyze, and explain major tenets of selected ideologies.

POL 299 DIRECTED STUDIES 1-3 credits*

PREREQUISITE: Recommendation of instructor and approval of department chairperson

This course provides opportunities for non-traditional exploration of selected topics in political science. Emphasis is placed on knowledge and experience students gain through learning activities such as guided reading, internships, and programs combining personal experience with related intensive study. Upon completion, students should be able to prepare papers, presentations, or other projects on approved topics related to their individual experiences.

*Credit to be determined from appropriate contact-to-credit ratio formula.

PARALEGAL (PRL)

PRL 101 INTRODUCTION TO PARALEGAL STUDY (3T) 3 credits

This course introduces the paralegal profession and the legal system. Topics include an overview of major areas of legal practice, ethics, legal analysis and research, professional development including certification and employment, and related topics.

***Note: PRL 101 & PRL 102 must be taken before any other course with the PRL prefix, except that PRL 101 & PRL 103 may be taken concurrently.**

PRL 102 BASIC LEGAL RESEARCH AND WRITING (3T) 3 credits

PREREQUISITE: Grade of "C" or better in ENG 093 or satisfactory ACT, SAT, or placement score

This course introduces the techniques of legal research and writing. Emphasis is placed on locating, analyzing, applying, and validating sources of law. Topics include legal research, legal writing, proper citation, and electronic research.

***Note: PRL 101 & PRL 102 must be taken before any other course with the PRL prefix, except that PRL 101 & PRL 103 may be taken concurrently.**

PRL 150 COMMERCIAL LAW (3T) 3 credits

This course covers contracts, selected portions of the Uniform Commercial Code, and forms of business organization.

***Note: This course may be substituted by BUS 263**

PRL 160 CRIMINAL LAW AND PROCEDURE (3T) 3 credits

This course introduces substantive and procedural criminal law including elements of state and federal crimes, defenses, constitutional issues, pre-trial process, and other related topics.

****Note: This course may be substituted by CRJ 140**

PRL 210 REAL PROPERTY LAW (3T) 3 credits

This course emphasizes the study of real property law. Topics include the distinction between real and personal property, various estates and interests in property, and the mechanics of conveyance, encumbrances, and closing procedure.

***Note: This course may be substituted by RLS 125**

PRL 230 DOMESTIC LAW (3T) 3 credits

This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, and other related topics.

PRL 240 WILLS, TRUSTS, AND ESTATES (3T) 3 credits

This course covers wills, trusts, and inheritance. Topics include types of wills, the law of intestacy (inheritance), probating estates, and alternatives to probate. The course also covers trusts, medical directives, and associated litigation.

PRL262 CIVIL LAW AND PROCEDURE (3T) 3 credits

This course examines the Federal Rules of Civil Procedure, the Alabama Rules of Civil Procedure, and trial procedure.

PRL282 LAW OFFICE MANAGEMENT AND PROCEDURES (3T) 3 credits

This course focuses on the organization and policies and procedures of a law office.

PRL 291 PARALEGAL INTERNSHIP (3L) 3 credits

PREREQUISITE: PRL 101, 102, 262, and permission of the Program Director

This course provides students opportunities to work in paid or unpaid positions in which they apply paralegal skills and knowledge. This course requires a minimum of 100 hours of practical experience in the legal field.

PSYCHOLOGY (PSY)

PSY 100 ORIENTATION (1T) 1 credit

This course is designed to introduce the student to college life, responsibilities, rules and regulations. This course is required for all students placing in at least two developmental courses on placement exam.

PSY 102 APPLIED PSYCHOLOGY (2T) 2 credits

This course introduces the basic principles of psychology as they apply to daily life. Topics include perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one's personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living and on-the-job experiences.

PSY 106 CAREER EXPLORATION (1T)	1 credit	
This course is designed for students to explore potential career fields. The course includes an assessment, thorough testing of strengths and weaknesses, general information about careers and job skills, value and decision making techniques, and career research.		
PSY 107 STUDY SKILLS (1T)	1 credit	
In this course, emphasis is placed on the skills of "how to study." The course introduces the student to effective techniques for listening in class, note taking, preparation for test taking, and an overall system of successful study.		
PSY 110 PERSONAL DEVELOPMENT (3T)	3 credits	
This is a structured group experience that emphasizes effective living through developing one's own internal resources. Topics included are self-programmed control, relaxation training, and inter-personal skills. The course is designed to translate other life skills into successful college adjustment. Study skills, library skills, and life planning are also discussed. This course may not transfer to some four-year institutions.		
PSY 200 GENERAL PSYCHOLOGY (3T)	3 credits	
COREQUISITE: ENG 093, C or better or satisfactory ACT, SAT, or RDG placement score.		
This course is a survey of behavior with an emphasis on psychological processes. This course includes the biological bases for behavior, thinking, emotion, motivation, and the nature and development of personality.		
PSY 207 PSYCHOLOGY OF ADJUSTMENT (3T)	3 credits	
This course provides an understanding of the basic principles of mental health and an understanding of the individual modes of behavior.		
PSY 208 CONTEMPORARY ISSUES IN PSYCHOLOGY (3T)	3 credits	
PREREQUISITE: PSY 200		
This course is a study of selected topics in general psychology.		
PSY 210 HUMAN GROWTH AND DEVELOPMENT (3T)	3 credits	
PREREQUISITE: PSY 200		
This course is a study of the psychological, social and physical factors that affect human behavior from conception to death.		
PSY 211 CHILD GROWTH AND DEVELOPMENT (3T)	3 credits	
PREREQUISITE: PSY 200		
This course is a systematic study of the behavior and psychological development of the child from conception to adolescence. Emphasis will be placed on principles underlying physical, mental, emotional and social development, methods of child study, and practical implications.		
PSY 212 ADOLESCENT PSYCHOLOGY (3T)	3 credits	
PREREQUISITE: PSY 200		
This course covers a systematic study of the behavior and psychological development of the adolescent from late childhood to early adulthood. Emphasis will be placed on principles underlying physical, mental, emotional, and		
		social development.
PSY 216 ADULT PSYCHOLOGY (3T)	3 credits	
PREREQUISITE: PSY 200		
This course covers a systematic study of the behavior and psychological development of the adult. Emphasis will be placed on principles underlying physical, mental, emotional and social development.		
PSY 217 PSYCHOLOGY OF DEATH AND DYING (3T)	3 credits	
This course is a study of the special psychological adjustments surrounding the issue of death and dealing with the terminally ill.		
PSY 220 HUMAN SEXUALITY (3T)	3 credits	
This course is a comprehensive and integrated approach to human sexuality emphasizing biological, psychological, social and emotional aspects.		
PSY 230 ABNORMAL PSYCHOLOGY (3T)	3 credits	
PREREQUISITE: PSY 200		
This course is a survey of abnormal behavior and its social and biological origins. The anxiety related disorders, psychoses, personality disorders and mental deficiencies will be covered.		
PSY 240 EDUCATIONAL PSYCHOLOGY (3T)	3 credits	
PREREQUISITE: PSY 200		
This course is a study of psychological theories and principles as applied to the educational process.		
PSY 250 SOCIAL PSYCHOLOGY (3T)	3 credits	
PREREQUISITE: PSY 200		
This course is a study of social factors as they influence individual behavior.		
PSY 260 STATISTICS FOR THE SOCIAL SCIENCES (3T)	3 credits	
This course is an introduction to the basic statistical concepts, measures, and techniques used in social science research and report writing. It includes both descriptive and inferential statistics.		
PSY 270 BUSINESS AND INDUSTRIAL PSYCHOLOGY (3T)	3 credits	
PREREQUISITE: Permission of instructor		
This course is a study of interpersonal relations in the working environment, interpersonal communications, and techniques for selection and supervision of personnel.		
PSY 276 HUMAN RELATIONS (3T)	3 credits	
PREREQUISITE: Permission of instructor		
This course focuses on readings, inter- and intra- personal experiences, individual testing, employer visits and open discussions. Its goal is to assist the student in making a successful transition from classroom to the world of work.		
PSY 280 BRAIN, MIND AND BEHAVIOR (3T)	3 credits	
PREREQUISITE: PSY 200		
This course is a comprehensive study of the human brain and its functions.		

Course Descriptions

RELIGION (REL)

REL 100 HISTORY OF WORLD RELIGIONS (3T) 3 credits

This course is designed to acquaint the student with the beliefs and practices of the major contemporary religions of the world. This includes the religions of Africa, the Orient, and the western world. The student should have an understanding of the history and origins of the various religions of the world.

REL 101 SURVEY OF CHURCH HISTORY I (3T) 3 credits

This is the first course in a sequence of two courses which is a study of the growth and development of the church from the New Testament to the Reformation.

REL 102 SURVEY OF CHURCH HISTORY II (3T) 3 credits

This course is the second in a sequence of two courses which is a study of the growth and development of the church from the Reformation to the present day.

REL 106 CHRISTIAN DOCTRINES (3T) 3 credits

This course is a comparative study of church doctrines. The student should have an understanding of the various doctrines of the church.

REL 107 INTRODUCTION TO CHRISTIAN LIVING (3T) 3 credits

This course is a study of the categories of Christian ethics. Attention is given to the social institutions and how Christian ethics are applied to these institutions. The student should have an understanding of the ethical decisions of Christian living.

REL 108 INTRODUCTION TO PREACHING MINISTRY (3T) 3 credits

This course is a study of the meaning of preaching and the importance of the sermon. Included in the course is an introduction to the textual and topical resources for sermons. The student should understand and be able to prepare sermons.

REL 109 TEACHING IN THE CHURCH (3T) 3 credits

This course is a study of methods designed to improve teaching in the church. It addresses the meaning, methods and material that are effective in teaching in a church environment. The student should be able to develop a church curriculum upon completion of this course.

REL 116 CHURCH ADMINISTRATION (3T) 3 credits

This course is a comparative study of various types of church administration. The student should have an understanding of the various types of church administration.

REL 119 INTERPRETING THE BIBLE (3T) 3 credits

This course is an attempt to understand the method of dealing with scripture as the word of God. Attention is given to different approaches to interpretation and suggestions are provided for legitimate application. The student should develop a greater understanding of the Bible as a result of this course.

REL 120 LIFE AND TEACHING OF JESUS (3T) 3 credits

This course is a study of the teaching of Jesus as recorded in the Gospels, covering an examination of major events in

his life in light of modern Biblical and historical scholarship. The student should have knowledge of Jesus' life and the application of his teachings to modern life. Emphasis in the course is given to the reading and interpretation of the gospels and on other ancient and modern source material.

REL 151 SURVEY OF THE OLD TESTAMENT (3T) 3 credits

This course is an introduction to the content of the Old Testament, with emphasis on the historical context and contemporary theological and cultural significance of the Old Testament. The student should have an understanding of the significance of the Old Testament writings upon completion of this course.

REL 152 SURVEY OF THE NEW TESTAMENT (3T) 3 credits

This course is a survey of the books of the New Testament, with special attention focused on the historical and geographical setting. The student should have an understanding of the books of the New Testament and the cultural and historical events associated with these writings.

REL 166 BIBLICAL BACKGROUND (3T) 3 credits

This course is a contemporary overview of Biblical lands. The student should have an understanding of the geographical and cultural context of the lands associated with the Bible.

REL 206 HISTORY OF AMERICAN CHRISTIANITY (3T) 3 credits

This course is an attempt to understand the complex character of American churches and sects, their origin and development.

REAL ESTATE (RLS)

RLS 101 REAL ESTATE PRINCIPLES (4T) 4 credits

This is an introductory real estate course providing the necessary terminology, background, and understanding of real estate principles. Topics include history of property ownership, real estate finance, real estate law, and the mechanics of listing and closing the sale. It is designed to assist those preparing for the real estate salesman's licensing examination in Alabama.

RLS 110 REAL ESTATE FINANCE (3T) 3 credits PREREQUISITE: RLS 101

This course provides an analysis of money markets, with special emphasis on real estate financing. Topics include interest rates, lending policies, problems and rules in real estate financing of real property.

RLS 116 REAL ESTATE APPRAISAL CERTIFICATION (4T) 4 credits PREREQUISITE: RLS 101

This is an introductory course providing the foundation of real estate appraisal. Topics include site and physical factors; effects of the money and capital markets; methodologies used to value property; and how to present and evaluate the appraisal report.

RLS 125 REAL ESTATE LAW (3T) **3 credits**
This course deals with Alabama real estate law. Emphasis is placed on such areas as real property and zoning easements, titles, deeds, recording practices, contracts, mortgages, and law.

RLS 140 INDEPENDENT STUDY IN REAL ESTATE (1-3T) **1-3 credits**
This course allows a student to pursue independent studies in the real estate field. Projects and/or topics may be assigned by the instructor or designed by the student, with instructor's approval.

RLS 190 REAL ESTATE WORKSHOP (1-3T) **1-3 credits**
These workshops consist of presentations of current topics of interest to those employed in the real estate industry. They can be developed to meet the continuing education requirements of the real estate professional. They are offered upon demand.

RLS 205 PROPERTY MANAGEMENT (3T) **3 credits**
This course includes principles and practices of property management. Emphasis is placed on residential, business, industrial, and investment properties.

RADIO AND TV BROADCASTING (RTV)

RTV 106 BROADCAST ANNOUNCING (3T) **3 credits**
This course offers a study of standard American and foreign pronunciation for radio, television, and related media. Practice in the skills of music announcing, sportscasting, interviewing, copy interpretation, and speaking ad lib is included.

RTV 116 RADIO PRODUCTION AND PROGRAMMING (3T) **3 credits**
Theory and application of audio media writing and production techniques are covered in this course. Emphasis is placed on effective use of words, music and/or sound effects in the production of audio programming for radio.

RTV 117 TELEVISION PRODUCTION (3T) **3 credits**
The theory and application of television media writing and production techniques are covered in this course through an examination of the equipment, process, and technology required in production for television and related media.

RTV 143 PRACTICUM IN RADIO OR TELEVISION BROADCASTING (1T, 3-6M) **1-3 credits**
This course offers supervised campus experience in radio or television broadcasting with emphasis in the planning, production and editing of electronic media announcements and programs.

RTV 217 ADVANCED TELEVISION PRODUCTION (2T, 3M) **3 credits**
PREREQUISITE: RTV 117
This course is a continuation of RTV 117 with emphasis on television, producing, directing, and editing theory and applications.

SOCIOLOGY (SOC)

SOC 200 INTRODUCTION TO SOCIOLOGY (3T) **3 credits**
This course is an introduction to vocabulary, concepts, and theory of sociological perspective of human behavior.

SOC 208 INTRODUCTION TO CRIMINOLOGY (3T) **3 credits**
This course delves into the nature and extent of crime in the United States, as well as criminal delinquent behavior and theories of causation. The study includes criminal personalities, principles of prevention, control and treatment.

SOC 209 JUVENILE DELINQUENCY (3T) **3 credits**
PREREQUISITE: SOC 200
This course examines the causes of delinquency. It also reviews programs of prevention and control of juvenile delinquency, as well as the role of the courts.

SOC 210 SOCIAL PROBLEMS (3T) **3 credits**
PREREQUISITE: SOC 200
The course examines the social and cultural aspects, influences, incidence and characteristics of current social problems in light of sociological theory and research.

SOC 246 MODERN WOMEN IN A CHANGING SOCIETY (3T) **3 credits**
PREREQUISITE: SOC 200
This course explores the role of the contemporary woman and the changing family and the world of work.

SOC 247 MARRIAGE AND THE FAMILY (3T) **3 credits**
PREREQUISITE: SOC 200
The course is a study of family structures and families in a modern society. It covers preparation for marriage, as well as sociological, psychological, biological, and financial factors relevant to success in marriage and family life.

SOC 296 DIRECTED STUDIES IN SOCIOLOGY (1-3T) **1-3 credits**
PREREQUISITE: SOC 200
This course provides students with opportunities to have "hands-on" experience with research methods used in the behavioral sciences or to complete directed readings under faculty supervision.

SPANISH (SPA)

SPA 101 INTRODUCTORY SPANISH I (4T) **4 credits**
PREREQUISITE: Grade of "C" or better in ENG 093 or satisfactory ACT, SAT or placement score
This course provides an introduction to Spanish. Topics include the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish speaking areas.

SPA 102 INTRODUCTORY SPANISH II (4T) **4 credits**
PREREQUISITE: SPA 101 or Equivalent.
This continuation course includes the development of basic communication skills and the acquisition of basic knowl-

Course Descriptions

edge of the cultures of Spanish speaking areas.

SPA 201 INTERMEDIATE SPANISH I (3T) 3 credits
PREREQUISITE: SPA 102 or Equivalent.

This course includes a review and further development of communication skills. Topics include readings of literary, historical, and/or cultural texts.

SPA 202 INTERMEDIATE SPANISH II (3T) 3 credits
PREREQUISITE: SPA 201.

This continuation course includes a review and further development of communication skills. Topics include readings of literary, historical, and/or cultural texts.

SPEECH COMMUNICATIONS (SPH)

SPH 107 FUNDAMENTALS OF PUBLIC SPEAKING (3T) 3 credits

This course explores principles of audience and environment analysis as well as the actual planning, rehearsing and presenting of formal speeches to specific audiences. Historical foundations, communication theories and student performances are emphasized.

SPH 116 INTRODUCTION TO INTERPERSONAL COMMUNICATION (3T) 3 credits

This course is an introduction to the basic principles of interpersonal communication.

SPH 206 ORAL INTERPRETATION (3T) 3 credits
(Course offered only in the Fall Semester at the Decatur Campus)

This course is designed to help students develop specific skills in the analysis and oral interpretation of poetry, prose, and drama. It includes a study of the elements of oral communication such as imagery, structure, and dramatic timing. Opportunity is given for public/classroom performance of literature.

SOCIAL WORK TECHNOLOGY (SWT)

SWT 109 TECHNIQUES OF BEHAVIOR MODIFICATION I (3T) 3 credits

In this course, the student will demonstrate the ability to decrease inappropriate behaviors and to shape appropriate behavior through the use of behavior modification techniques.

SWT 130 THE COMMUNITY AND THE SOCIAL WORKER (3T) 3 credits

This course is designed to acquaint the student with the demographic, economic and cultural composition of the community. The student will develop technical skills for making practical application of available resources for enhancing the quality of life within the community.

SWT 131 PROBLEMS OF CHILDREN AND YOUTH (3T) 3 credits

This course develops an understanding of the emotional,

social, psychological, and physical needs of children and youth. This course presents the influences and responsibilities of natural and surrogate parents. The student becomes familiar with the nature and causes of the more common problems and develops skills for assisting with the prevention and/or improvement of problems common among children and youth.

SWT 133 GERIATRICS (3T) 3 credits

This course includes the study of the needs of making adjustments to retirement, activities and hobbies of the older person, and community agencies available for the aged. This course will include common psychological and physical problems of the aging. Actual experience will be provided in helping the elderly accept the changes in later life and teaching them of the many services available to them.

SWT 138 COUNSELING FROM A CULTURAL PERSPECTIVE (3T) 3 credits

This course will acquaint the students with some of the problems facing minorities. It will stress the importance of the counselor's knowledge of, and sensitivity to, the minority client experiences and how these experiences are greater now than they have been at any time in the past three decades. This course will help counselors and mental health practitioners maximize their effectiveness when working with a culturally diverse population. The student will learn to establish the necessary and sufficient conditions of a counseling relationship with clients who are culturally different. Similarities in race, ethnicity, and culture will be stressed.

SURGICAL TECHNOLOGY (SUR)

SUR 100 PRINCIPLES OF SURGICAL TECHNOLOGY (3T, 6S) 5 credits
PREREQUISITES: Admission to the Surgical Technology Program and permission of the instructor

This course is an introduction to the field of surgical technology as a career. Emphasis is on the role of the surgical technologist, principles of asepsis, principles of patient care, surgical procedures, operative techniques, blood-borne pathogens, safety, pharmacology, and surgical instrumentation. Upon completion, the student should be able to demonstrate practical application of the basic procedures and skills of the surgical technologist.

SUR 102 APPLIED SURGICAL TECHNOLOGIES (2T, 6S) 4 credits
PREREQUISITES: Admission to the Surgical Technology Program and permission of the instructor

This course is the application of principles of asepsis and the role of the surgical technologist. Emphasis is placed on creating and maintaining a sterile environment and applying skills of interoperative procedures. Upon completion of this course, the student should be able to participate in mock surgical procedures.

SUR 103 SURGICAL PROCEDURES (3T, 6S) 5 credits
PREREQUISITES: SUR 100, SUR 102, SUR 107, and HPS 114

This course is a study of surgical procedures as they relate to anatomy, pathology, specialty equipment, and team responsibility. Patient safety is emphasized and medications used in surgery are discussed. Upon completion of the course, the student should be able to participate in surgical procedures in the operating room.

SUR 104 SURGICAL PRACTICUM I (20, P5) 4 credits
PREREQUISITES: SUR 100, SUR 102, SUR 107, and HPS 114

This course is the application of perioperative principles in the perioperative setting. Emphasis is placed on application of the surgical technologist's role. Upon completion of the course, the student should be able to participate in the surgical technologist role.

SUR 105 SURGICAL PRACTICUM II (1T, 20, P5) 5 credits
PREREQUISITES: SUR 103 and SUR 104

This clinical experience allows the student to practice in the health care environment using entry level skills attained in previous classroom, laboratory, and clinical instruction. In addition to clinical skills, emphasis is placed on specialty surgical procedures, the study of trends, professional and interpersonal skills in the health care setting, and case review. Upon completion of this course, the student should be able to apply concepts of surgical technology to student levels.

SUR 106 SPECIAL TOPICS IN SURGICAL TECHNOLOGY (1T) 1 credit
PREREQUISITES: SUR 100 and SUR 102

This course is designed to provide specialized instruction in selected topics in the field of Surgical Technology. Emphasis is on review of content specific to the practice of surgical technology and preparation for the LCC-ST certification examination. Upon completion of this course, the student will be able to demonstrate readiness to take the certification examination.

SUR 107 SURGICAL ANATOMY AND PATHOPHYSIOLOGY (3T) 3 credits
PREREQUISITES: Admission to the program and/or as required by the department

This course is an overview of surgical anatomy and pathophysiology. Emphasis is placed on the organization structure of the body, organ systems, relevant surgical pathophysiology, and related medical terminology. Upon completion, the student should be able to apply knowledge of anatomy in the clinical environment.

THEATRE (THR)

THR 113, THEATRE WORKSHOP 114, 115 I, II, III (2T) 2 credits each

These courses provide practical experience in the production and performance of a dramatic presentation with assignments in scenery, lighting, props, choreography, sound, costumes, make-up, publicity, acting, directing, and other aspects of theatre production.

THR 120 THEATRE APPRECIATION (3T) 3 credits
This course is designed to increase appreciation of contemporary theatre. Emphasis is given to the theatre as an art form through the study of the history and theory of drama and the contributions of playwright, actor, director, designer, and technician to modern media. Attendance at theatre productions is required. (Offered as a telecourse.)

THR 126 INTRODUCTION TO THE THEATRE (3T) 3 credits
This course is designed to teach the history of the theatre and the principles of drama. It also covers the development of theatre production and the study of selected plays as theatrical presentations.

THR 131 ACTING TECHNIQUES I (3T) 3 credits
This is the first of a two-course sequence in which the student will focus on the development of the body and voice as the performing instruments in acting. Emphasis is placed on pantomime, improvisation, acting exercises, and building characterizations in short acting scenes. Students will participate in a theatre production.

THR 132 ACTING TECHNIQUES II (3T) 3 credits
PREREQUISITE: THR 131
This course is a continuation of THR 131. Students will participate in a theatre production.

THR 141 INTRODUCTION TO DANCE IN THEATRE I (1-2T) 1-2 credits
This is the first of a two-course sequence which offers the student an introduction to basic dance movements and the use of dance in dramatic productions.

THR 142 INTRODUCTION TO DANCE IN THEATRE II (1-2T) 1-2 credits
This course is a continuation of THR 141.

THR 213, THEATRE WORKSHOP 214, 215 IV, V, VI (1-2T) 1-2 credits each
These courses are a continuation of THR 113, 114, and 115.

THR 216 THEATRICAL MAKE-UP (2T) 2 credits
This course is a study of the materials and techniques of theatrical make-up.

THR 236 STAGECRAFT (3T) 3 credits
This course is a study of the principles, techniques, and materials in theatrical scenery and lighting.

THR 251 THEATRE FOR CHILDREN I (3T) 3 credits
This is the first in a two-course sequence which offers the student practical experience in acting, directing, and developing material for children's theatre.

THR 252 THEATRE FOR CHILDREN II (3T) 3 credits
This course is a continuation of THR 251.

THR 266 FUNDAMENTALS OF DIRECTING (3T) 3 credits
This course is designed to cover the fundamentals of directing. Instruction will include lectures, demonstration, writing.

Course Descriptions

ten and oral analysis of scripts and performances.

THR 281 STAGE MOVEMENT I (1T)

1 credit

This is the first in a two-course sequence which offers the student a basic introduction to movement for the stage for those interested in acting or dance. They also include consideration of role development through movement.

THR 282 STAGE MOVEMENT II (1T) PREREQUISITE: THR 281

1 credit

This course is a continuation of THR 281.

THR 296 DIRECTED STUDIES IN THEATRE (TBA)

2 credits

This course deals with problems in theatre and arts management. Problems may be arranged in conjunction with other disciplines in the Fine Arts. Participation in theatre productions may be required.

VISUAL COMMUNICATIONS (VCM)

CAT 182 3D GRAPHICS AND ANIMATION (1T, 2E, 3M)

3 credits

PREREQUISITE: ART 221

This course is designed to tap the imagination of the student in a three dimensional problem solving environment. Topics include a basic introduction to the concepts of 3D design and animation as applied to a design project. Upon completion, students should be able to create and animate objects in a three-dimensional environment.

VCM 131 COMPUTER PUBLISHING GRAPHICS (2T, 2E)

3 credits

This course is designed to acquaint the student with basic publishing software. The emphasis will be on basic layout and graphics. Upon course completion, the student should be able to produce graphics work in a format suitable for publication.

VCM 145 INTRODUCTION TO DIGITAL PHOTOGRAPHY (1T, 2E)

2 credits

PREREQUISITE: VCM 232 or Permission of instructor

This course is an introduction to digital photography. Emphasis is placed on aesthetic as well as technical aspects of photography. Upon completion, the student should understand quality in photography and be able to apply the techniques necessary to produce professional photographs.

VCM 146 DIGITAL PHOTOGRAPHY (1T, 2E)

2 credits

PREREQUISITE: VCM 232 or Permission of instructor

This course explores various uses of digital photography. Subjects may include studio, portrait, landscape and other areas of photography. Upon completion, the student should be able to apply the techniques necessary to produce professional photographs of a variety of subjects.

VCM 150 TYPOGRAPHY (2T, 2E)

3 credits

PREREQUISITE: ART 221

This course is an introduction to designing and using type.

Emphasis is on typographic techniques used in layout and graphic design. Upon completion, the student should be able to view type as a design element.

VCM 171 GRAPHICS SOFTWARE APPLICATIONS (1-3T)

1-3 credits

This course is an introduction to graphics software packages. Students are given a basic overview of the software as applied to specific production problems. Upon completion, the student should be able to produce basic graphics using applicable software. This course may be repeated for credit.

VCM 180 INTRODUCTION TO GRAPHIC DESIGN (2T, 2E)

3 credits

This course is an introduction to the various elements of graphic design. Emphasis is on aspects of production design including layout, typography, graphic photography, computer graphics and printing techniques. Upon completion, students should have a basic understanding of the graphics process from concept through production.

VCM 181 SPECIAL TOPICS (0-3T, 0-6E, 0-9M)

1-3 credits

This course allows for specialized, in-depth study. Emphasis is placed on individualized instruction.

VCM 232 ADVANCED COMPUTER GRAPHICS (2T, 2E)

3 credits

This course is designed to acquaint the student with computer graphics. Topics include illustration and image manipulation. Upon completion, students should be able to apply design principles to computer graphics.

VCM 250 INTRODUCTION TO TECHNICAL ILLUSTRATION (2T, 2E)

3 credits

PREREQUISITE: ART 221 or Permission of instructor

This course is a study of technical drawings prepared for industry. Topics include perspective and axonometric drawing. Upon completion, students should be able to apply basic drawing and design principles to technical drawings.

VCM 251 TECHNICAL ILLUSTRATION (2T, 2E)

3 credits

PREREQUISITE: VCM 250

This course focuses on renderings prepared for industry. Various techniques are used to illustrate charts, graphs, perspective and axonometric drawings and enhanced assembly views. Upon completion, students should be able to apply design principles to technical drawings and highly creative drawings using technical skills.

VCM 253 GRAPHIC DESIGN BASICS (2T, 2E)

3 credits

This course focuses on the basic principles of graphic design. Emphasis is on design, layout, and production. Upon completion, students should be able to prepare artwork for printing.

VCM 254 GRAPHIC DESIGN (2T, 2E)

3 credits

This course focuses on graphic design. Emphasis is on the creative process and the projection process. Upon completion,

tion, students should be able to produce high quality graphic designs.

VCM 255 ADVANCED GRAPHIC DESIGN

(2T, 2E)

3 credits

This course focuses on graphic communications. Emphasis is on application of design principles to projects involving such skills as illustration, layout, typography, computer graphics, and production technology. Upon completion, students should be able to apply graphic design principles and production skills.

VCM 270 SUPERVISED STUDY IN GRAPHICS

(2-6E)

1-3 credits

PREREQUISITE: All studio courses offered in the selected area of study and Permission of instructor

This course is designed to enable the student to continue studio experiences in greater depth. Areas of study are chosen by the student, with the approval of the instructor. This course will result in a better understanding of various aspects of graphics. This course may be repeated for credit.

VCM 273 SUPERVISED STUDY IN COMPUTER GRAPHICS

(2-6E)

1-3 credits

PREREQUISITE: All studio courses offered in the selected areas of study and Permission of instructor

This course is designed to enable the student to continue studying computer graphics in greater depth. Areas of study will be chosen by the student, with the approval of the instructor. This course will result in a better understanding of various aspects of computer graphics. This course may be repeated for credit.

VCM 281 DIGITAL DESIGN

(1T, 2E)

2 credits

PREREQUISITE: ART 221 and VCM 232 or Permission of instructor

This course focuses on products for digital media. Emphasis is on creativity and an understanding of software and production. Upon completion, the student should be able to apply creative design and production skills to finished projects.

VCM 282 ADVANCED DIGITAL DESIGN

(1T, 2E)

2 credits

PREREQUISITE: ART 221 and VCM 232 or Permission of instructor

This course focuses on advanced applications in the production of digital design. Emphasis is on computer skills, creativity & design. Upon course completion, students should be able to apply production techniques to various media.

VCM 285 MULTIMEDIA PRODUCTION

(1T, 2E)

2 credits

PREREQUISITE: ART 221 and VCM 232 or Permission of instructor

This course introduces the student to multimedia production. Emphasis is on production design, creativity, visual design, and technical skills. Upon course completion, students should be able to create a multimedia production.

VCM 286 ADVANCED MULTIMEDIA PRODUCTION

(1T, 2E)

2 credits

PREREQUISITE: VCM 285 or Permission of instructor

This course focuses on advanced multimedia production. Emphasis is on comprehensive interactive multimedia production. Upon course completion, students should be able to apply creative design and production skills to finished interactive projects. Problems will include comprehensive interactive multimedia production. The student will apply creative design and production skills to finished interactive projects.

VCM 287 SPECIAL TOPICS (0-3T, 0-6E, 0-9M)

1-3 credits

This course allows for specialized, in-depth study. Emphasis is placed on individualized instruction.

VCM 289 PORTFOLIO (2E)

1 credit

PREREQUISITE: Permission of instructor

This course is designed to assist students in the preparation and presentation of a portfolio. This portfolio is developed with faculty consultation and reflects the students' ability to produce professional design and graphics.

WORKPLACE SKILLS ENHANCEMENT (WKO)

WKO 107 WORKPLACE SKILLS PREPARATION (2E)

1 credit

This course utilizes computer based instructional modules which are designed to access and develop skills necessary for workplace success. The instructional modules in the course include applied mathematics, applied technology, reading for information, and locating information. Upon completion of this course, students will be assessed to determine if their knowledge of the subject areas has improved.

SPECIAL POPULATIONS

ADULT LITERACY (ADL)

ADL 020 MATH I (3T) 3 credits

Beginning Math: teaches Whole numbers, Addition, Subtraction, Multiplication and Division. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL 021 MATH II (3T) 3 credits

Primary focus is decimals, with continuing attention to Whole Number problems. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL 022 MATH III (3T) 3 credits

Primary focus is on computation of fractions. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL 023 MATH IV (3T) 3 credits

Primary focus is on understanding word problems, with continuing review of previous math criteria. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL 024 MATH V (3T) 3 credits

Primary focus is on Percent Problems. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL 025 MATH VI (3T) 3 credits

Primary focus is on Ratio & Proportion/Measurement. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL 026 MATH VII (3T) 3 credits

Primary focus is on Algebra with continuing attention to appropriate Word Problems. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL 027 MATH VIII (3T) 3 credits

Primary focus is on Geometry at the Pre-GED level with post-testing on all previous Math disciplines. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL 040 LEARNING ABOUT CAREERS (3T) 3 credits

This course introduces students to the many career opportunities that exist in the world of work. Topics include the nature of work, specific job requirements, and the impact of interest and aptitude on successful employment. Upon completion, each student will be able to summarize aspects of working, including job requirements specific to various fields and the impact of one's aptitude and interest. (Job search techniques will be included in this course.)

ADL 053 UNDERSTANDING CONDENSED DATA (3T) 3 credits

This course presents a variety of charts, graphs, and tables for interpretation. Topics include work and transportation schedules, line and bar graphs, pie charts, and tables of contents. Upon completion, students should be able to use condensed data to enhance vocational skills.

ADL 055 ESSENTIALS OF A GOOD CITIZEN (3T) 3 credits

This course presents concepts from history, law, and government. Topics include citizens' responsibilities and privileges in a market-driven society. Upon completion, students should be able to describe the opportunities and constraints facing citizens in a democracy.

ADL 056 BASIC WRITING (3T) 3 credits

This course is designed to meet the needs of students with writing deficiencies. Topics may include instruction in grammar, usage, mechanics, sentence structure, and paragraph development. Upon completion, using rules of grammar, students should be able to write paragraphs that start with a topic sentence and develop that topic with three or four complete sentences.

ADL 057 INTERMEDIATE WRITING (3T) 3 credits

This course is designed to meet the needs of students with moderate writing deficiencies. Topics include grammar, usage, mechanics, sentence structure, transitional tools, and paragraph development. Upon completion, students should be able to write a composition of three or more paragraphs developing a topic related to a technical occupation.

ADL 058 BASIC MATHEMATICS (3T) 3 credits

This developmental course constitutes a review of arithmetical principles and computations designed to help the student develop the mathematical proficiency necessary for selected curriculum entrance.

ADL 059 DEVELOPMENTAL ALGEBRA (3T) 3 credits

This developmental course is a review of algebra, designed to help the student develop the mathematical proficiency for selected curriculum entrance.

ADL 060 BASIC GEOMETRY (3T) 3 credits
PREREQUISITE: ADL 059 or Permission of instructor

This course is designed for those who have no previous experience in geometry or who need preparatory work in this area. Topics include fundamental concepts of geometry such as: points, lines, planes, angles, circles, polygons, axioms, theorems, ratio and proportion, and measurement of lengths and areas.

ADL 061 DEVELOPMENTAL READING I (3T) 3 credits

This developmental course is designed to assist students whose placement test scores indicate serious difficulty with decoding skills, comprehension, vocabulary, and study skills.

ADL 062 DEVELOPMENTAL READING II
(3T) **3 credits**
PREREQUISITE: ADL 061 or Permission of instructor
This developmental course is designed to assist students whose placement test scores indicate serious difficulty with decoding skills, comprehension, vocabulary, and study skills.

ADL 063 DEVELOPMENTAL READING III
(3T) **3 credits**
PREREQUISITE: ADL 062 or Permission of instructor
This developmental course is designed to assist students whose placement test scores indicate serious difficulty with decoding skills, comprehension, vocabulary, and study skills.

AUTOMOTIVE BODY REPAIR (ABR)

ABR 111 NON-STRUCTURAL REPAIR
(1T, 2E, 3M) **3 credits**
PREREQUISITIES: As required by college
Students are introduced to basic principles of non-structural panel repairs. Topics include shop safety, identification and use of hand/power tools, panel preparation, sheet metal repairs, and materials. This is a CORE course. This course supports CIP code 47.0603.

ABR 114 NON-STRUCTURAL PANEL REPLACEMENT
(1T, 2E, 3M) **3 credits**
PREREQUISITIES: As required by college
Students are introduced to the principles of non-structural panel replacement. Topics include replacement and alignment of bolt on panels, full and partial panel replacement procedures, and attachment methods. This is a CORE course. This course supports CIP code 47.0603.

ABR 122 SURFACE PREPARATION
(1T, 2E, 3M) **3 credits**
PREREQUISITIES: As required by college
This course introduces students to methods of surface preparation for vehicular refinishing. Topics include sanding techniques, metal treatment, selection of undercoats, and proper masking procedures. This is a CORE course. This course supports CIP code 47.0603.

ABR 123 PAINT PREPARATION AND EQUIPMENT
(1T, 2E, 3M) **3 credits**
PREREQUISITIES: As required by college
This course introduces students to methods of paint application and equipment used for vehicular refinishing. Topics include spray gun and related equipment use, paint mixing, matching, and applying the final topcoat. This is a CORE course. This course supports CIP code 47.0603.

ABR 151 SAFETY AND ENVIRONMENTAL PRACTICES
(1T, 2E, 3M) **3 credits**
PREREQUISITIES: As required by college
This course is designed to instruct the student in safe work practices. Topics includes OSHA requirement, the right to know laws, and EPA regulations, as well as state and local laws. This is a CORE course. This course supports CIP code 47.0603.

ABR 154 AUTOMOTIVE GLASS AND TRIM
(1T, 2E, 3M) **3 credits**
PREREQUISITIES: As required by college
This course is a study of automotive glass and trim. Emphasis is placed on removal and replacement of structural and nonstructural glass and automotive trim. Upon completion, students should be able to remove and replace automotive trim and glass. This is a CORE course. This course supports CIP code 47.0603.

ABR 156 AUTOMOTIVE CUTTING AND WELDING
(1T, 2E, 3M) **3 credits**
PREREQUISITIES: As required by college
Students are introduced to the various automotive cutting and welding processes. Emphasis is placed on safety, plasma arc, oxy-acetylene cutting, resistance type spot welding, and Metal Inert Gas (MIG) welding. Upon completion, students should be able to safely perform automotive cutting and welding procedures. This is a CORE course. This course supports CIP code 47.0603.

ABR 157 AUTOMOTIVE PLASTIC REPAIRS
(1T, 2E, 3M) **3 credits**
PREREQUISITE: As required by college.
This course provides instruction in automotive plastic repairs. Topics include plastic welding (airless, hot, and chemical), use of flexible repair fillers, identification of types of plastics, and determining the correct repair procedures for each. Upon completion, students should be able to correctly identify and repair the different types of automotive plastics. This course supports CIP code 47.0603.

ABR 181 SPECIAL TOPICS IN AUTO BODY
(0-1T, 0-1E, 1M) **1 credits**
This course is guided independent study in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student needs to improve or expand skills. Upon course completion students should be able to demonstrate skills to meet specific needs.

ABR 182 SPECIAL TOPICS IN AUTO BODY
(0-2T, 0-2E, 2M) **2 credits**
This course is guided independent study in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student needs to improve or expand skills. Upon course completion students should be able to demonstrate skills to meet specific needs.

ABR 213 AUTOMOTIVE STRUCTURAL ANALYSIS
(1T, 2E, 3M) **3 credits**
PREREQUISITIES: As required by college
Students learn methods of determining structural misalignment. Topics include methods of inspection, types of measuring equipment, data sheets, and identifying types of structural damage. This is a CORE course. This course supports CIP code 47.0603.

ABR 214 AUTOMOTIVE STRUCTURAL REPAIR
(1T, 2E, 3M) **3 credits**
PREREQUISITE: As required by college
This course provides instruction in the correction of struc-

Course Descriptions

tural damage. Topics include types and use of alignment equipment, anchoring and pulling methods, and repair/replacement of structural components. This is a CORE course. This course supports CIP code 47.0603.

ABR 223 AUTOMOTIVE MECHANICAL COMPONENTS
(1T, 2E, 3M) **3 credits**

PREREQUISITE: As required by college

This course provides instruction in collision related mechanical repairs. Emphasis is placed on diagnosis and repair to drive train, steering/suspension components, and various other mechanical repairs. This is a CORE course. This course supports CIP code 47.0603.

ABR 224 AUTOMOTIVE ELECTRICAL COMPONENTS
(1T, 2E, 3M) **3 credits**

PREREQUISITE: As required by college

This course provides instruction in collision related electrical repairs and various restraints systems, including seat belts, seat belt tensioners, and airbags. Topics include basic DC theory, types of diagnostic equipment, circuit protection, wire repair, use of wiring diagrams, airbag modules, and impact sensors. This is a CORE course. This course supports CIP code 47.0603 and 47.0604.

ABR 255 STEERING AND SUSPENSION
(1T, 2E, 3M) **3 credits**

PREREQUISITE: As required by college

This course introduces students to the various types of suspension and steering systems used in the automotive industry. Emphasis is placed on system components, suspension angles and effect of body/frame alignment on these components and angles. This is a CORE course. This course supports CIP code 47.0603 and 47.0604.

ABR 258 HEATING AND AC IN COLLISION REPAIR
(1T, 2E, 3M) **3 credits**

PREREQUISITE: As required by college

This course is a study of automotive air conditioning, heating, and cooling systems. Topics include automotive air conditioning, heating and cooling systems theory, component replacement and system service. This is a CORE course. This course supports CIP code 47.0603 and 47.0604.

ABR 261 RESTRAINT SYSTEMS
(1T, 2E, 3M) **3 credits**

PREREQUISITE: As required by college

Both the function and design of various restraints and passive restraints systems, including seat belts, seat belt tensioners, and airbags, will be discussed. Topics include airbag modules and impact sensors for both front and side airbag systems. Students learn about using service manuals, flow charts, and wiring diagrams during the diagnosis and repair process. This is a CORE course. This course supports CIP code 47.0603.

ABR 265 PAINT DEFECTS AND FINAL REPAIR
(1T, 2E, 3M) **3 credits**

PREREQUISITE: As required by college

This course introduces students to methods of identifying paint defects, causes, cures, and final detailing. Student learns to troubleshoot and correct paint imperfections. This is a CORE course. This course supports CIP code

47.0603.

ABR 266 ALUMINUM WELDING IN COLLISION REPAIR
(1T, 2E, 3M) **3 credits**

PREREQUISITE: As required by college

This course covers the principles and techniques of aluminum GMA (MIG) welding. Students learn to set up and tune a welding machine, address safety issues, perform proper welding techniques, prepare metal surfaces, and identify and correct weld defects. This course supports CIP code 47.0603.

ABR 267 SHOP MANAGEMENT
(1T, 2E, 3M) **3 credits**

PREREQUISITE: As required by college

Students are instructed in basic principles of body shop management. Emphasis is placed on management structure, customer/insurance company relations, and sound business practices. Upon completion, students should be able to understand the principles of operating a collision repair facility.

ABR 281 SPECIAL TOPICS IN AUTO BODY
(0-3T, 0-3E, 3M) **3 credits**

This course is guided independent study in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student needs to improve or expand skills. Upon course completion, students should be able to demonstrate skills to meet specific needs.

AUTOMOTIVE MECHANICS (AUM)

AUM 101 FUNDAMENTALS OF AUTOMOTIVE TECHNOLOGY
(1T, 2E, 3M) **3 credits**

PREREQUISITES: As required by college

This course provides basic instruction in Fundamentals of Automotive Technology. This is a CORE course and supports CIP code 15.0803 and 47.0604

AUM 110 ELECTRICAL AND ELECTRONIC SYSTEMS I
(1T, 2E, 3M) **3 credits**

PREREQUISITES: As required by college

This is an introductory course in automotive electrical and electronic systems. Emphasis is placed on troubleshooting and repair of systems, subsystems, and components. This is a CORE course and supports CIP code 15.0803 and 47.0604.

AUM 121 BRAKING SYSTEMS
(1T, 2E, 3M) **3 credits**

PREREQUISITES: As required by college

This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of brakes. This is a CORE course and supports CIP code 15.0803 and 47.0604.

AUM 122 STEERING AND SUSPENSION
(1T, 2E, 3M) **3 credits**

PREREQUISITES: As required by college

This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical

application of steering and suspension. This is a CORE course and supports CIP code 15.0803 and 47.0604.

AUM 124 ENGINE REPAIR I (1T, 2E, 3M) 3 credits

PREREQUISITES: As required by college

This course provides instruction on the operation, design, and superficial repair of automotive engines. Emphasis is placed on understanding the four-stroke cycle, intake and exhaust manifolds and related parts, engine mechanical timing components, engine cooling and lubrication system principles and repairs, and basic fuel and ignition operation. This is a CORE course and supports CIP code 15.0803 and 47.0604.

AUM 130 DRIVE TRAIN AND AXLES (1T, 2E, 3M) 3 credits

PREREQUISITES: As required by college

This course provides basic instruction in automotive drive trains and axles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and drivability. This is a CORE course and supports CIP code 15.0803 and 47.0604.

AUM 133 MOTOR VEHICLE AIR CONDITIONING (1T, 2E, 3M) 3 credits

PREREQUISITES: As required by college

This course provides instruction in theory, operation, and repair of automotive heating and air conditioning systems. Emphasis is placed on the understanding and repair of vehicle air conditioning and heating systems, including but not limited to air management, electrical and vacuum controls, refrigerant recovery, and component replacement. This is a CORE course and supports CIP code 15.0803 and 47.0604.

AUM 181 SPECIAL TOPICS (0-1T, 0-2E, 0-3M) 1 credit

PREREQUISITES: As required by college

These courses are designed to allow the student to specialize in a particular area of study with minimum instruction in automotive mechanics application and with evaluation at the instructor's discretion. Emphasis is placed on a topic/project that the student is interested in and may include any automotive, or related area in automotive mechanics. Upon completion, the student should be able to work minimum instruction and execute the necessary techniques to finish a live work project of their choice.

AUM 182 SPECIAL TOPICS (0-2T, 0-4E, 0-6M) 2 credits

PREREQUISITES: As required by college

These courses are designed to allow the student to specialize in a particular area of study with minimum instruction in automotive mechanics application and with evaluation at the instructor's discretion. Emphasis is placed on a topic/project that the student is interested in and may include any automotive, or related area in automotive mechanics. Upon completion, the student should be able to work minimum instruction and execute the necessary techniques to finish a live work project of their choice.

AUM 210 ELECTRICAL AND ELECTRONIC SYSTEMS II (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

This course provides instruction in advanced automotive electrical and electronic systems. Emphasis is placed on advanced troubleshooting and repair of electrical systems, subsystems, and components. This is a CORE course and supports CIP Code 15.0803 and 47.0604.

AUM 211 ADVANCED ELECTRONICS (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

This course builds on the principles of laws of electricity. Emphasis is placed on series, parallel and series-parallel circuits. Upon completion, students should be able to calculate, build and measure circuits.

AUM 220 ENGINE REPAIR II (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

This course provides in-depth instruction concerning internal engine diagnosis, overhaul and repair, including but not necessarily limited to the replacement of timing chains, belts, and gears, as well as the replacement or reconditioning of valve train components, pistons, connecting rods, piston rings, bearing, lubrication system components, gas-kets, and oil seals. This course supports CIP Code 47.0604 and 15.0803.

AUM 224 MAN TRANSMISSION AND TRANSAXLE (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

This course covers basic instruction in manual transmissions and transaxles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and drive ability. This course supports CIP Code 15.0803 and 47.0604.

AUM 230 AUTO TRANSMISSION AND TRANSAXLE (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

This course provides basic instruction in automatic transmissions and transaxles. Emphasis is placed on the comprehension of principles and power flow of automatic transmissions and repairing or replacing internal and external components. This is a CORE course supports CIP Code 15.0803 and 47.0604.

AUM 239 ENGINE PERFORMANCE I (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

This course provides basic instruction in engine performance with emphasis on fuel and ignition systems relating to engine operation. This is a CORE course and supports CIP Code 15.0803 and 47.0604.

AUM 244 ENGINE PERFORMANCE II (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

This course provides advanced instruction in engine performance. Emphasis is placed on engine management and computer controls of ignition, fuel, and emissions systems relating to engine performance and drive ability. This is a

Course Descriptions

CORE course and supports CIP Code 15.0803 and 47.0604.

AUM 246 AUTOMOTIVE EMISSIONS

(1T, 2E, 3M)

3 credits

PREREQUISITE: As required by college

This is an introductory course in automotive emission systems. Emphasis is placed on troubleshooting and repair of systems, subsystems, and components. This course supports CIP Code 15.0803 and 47.0604.

AUM 281 SPECIAL TOPICS

(0-3T, 0-6E, 0-9M)

3 credits

PREREQUISITE: As required by college

These courses are designed to allow the student to specialize in a particular area of study with minimum instruction in automotive mechanics application and with evaluation at the instructor's discretion. Emphasis is placed on a topic/project that the student is interested in and may include any automotive, or related area in automotive mechanics. Upon completion, the student should be able to work with minimum instruction and execute the necessary techniques to finish a live work project of their choice.

CARPENTRY (CAR)

CAR 111 CONSTRUCTION BASICS

(3T)

3 credits

PREREQUISITE: As required by college

COREQUISITE: CAR 114 – Construction Basics Lab

This course introduces students to the opportunities in and requirements of the construction industry. Topics include economic outlook for construction, employment outlook, job opportunities, training, apprenticeship, entrepreneurship, construction tools, materials and equipment, job safety and OSHA standards. Upon course completion, students should be able to identify the job market, types of training, knowledge of apprenticeship opportunities, construction tools, materials, equipment, and safety procedures. CORE

CAR 112 FLOORS, WALLS, SITE PREP

(3T)

3 credits

PREREQUISITE: As required by college

COREQUISITE: CAR 113 – Floors, Walls, Site Prep Lab

This course introduces the student to site preparation, floor and wall layout, and construction. Topics include methods of site preparation, measurement and leveling tools, framing, layouts and components of wall and floor framing to include beams, girders, floor joists, sub-flooring, partitions, bracing, headers, sills, doors and corners. Upon course completion, students will be able to identify various types of wall and floor framing systems and their components, identify building lines set backs, and demonstrate a working knowledge of leveling applications. CORE

CAR 113 FLOORS, WALLS, AND SITE PREP LAB

(3T)

3 credits

PREREQUISITE: As required by college

COREQUISITE: CAR 112 – Floors, Walls, and Site Prep

In this course the student will engage in applications of site preparation, floor and wall layout, and construction. Emphasis is placed on following job safety procedures, the

use of required tools and equipment, performing site preparation, laying out and framing a floor system, and laying out and erecting walls. Students will use various measurement and leveling tools, identify and install beams, girders, floor joists, sub-flooring, and install various wall components such as partitions, bracing, headers, sills, doors and windows, and corners. Upon course completion, students should be able to follow proper safety procedures, identify building lines and set backs, ensure proper site preparation, layout and frame a floor, and layout, frame and erect walls. CORE

CAR 114 CONSTRUCTIONS BASICS LAB

(6E)

3 credits

PREREQUISITE: As required by college

COREQUISITE: CAR 111 – Construction Basics

This course provides practical and safe application of hand, portable power, stationary and pneumatic tools, use of building materials, fasteners and adhesives, and job site safety. Emphasis is placed on the safe use of hand, power, and pneumatic tools, proper selection of lumber, plywood, byproducts, nails, bolts, screws, adhesives, fasteners, construction materials, and job safety. Upon course completion, the student should be able to identify hand, power, stationary, and pneumatic tools and demonstrate their safe use, identify and properly select wood and non-wood building products, and properly use nails, fasteners, and adhesives. CORE

CAR 121 INTRODUCTION TO BLUEPRINT READING

(3T)

3 credits

PREREQUISITE: As required by college

COREQUISITE: As required by college

This course introduces the student to the basic concepts of blueprint reading. Topics include scales, symbols, site plans, notations, schedules, elevations, sections, specifications, and detail drawings. Upon completion, the student should be able to identify drawings, scale various drawings, identify different types of lines, symbols, and notations, as well as use plot plans, describe easements, understand building code concepts, locate utilities, and explain various aspects of all types of plans and drawings. CORE

CAR 122 CONCRETE AND FORMING

(3T)

3 credits

PREREQUISITE: As required by college

COREQUISITE: CAR 123 Concrete and Forming Lab

This course introduces the student to concrete, its properties and uses, and procedures for designing concrete forms. Topics include making and pouring concrete, constructing concrete forms, reinforcement methods, finishing concrete, and job safety. Upon completion, students should be able to list safety rules for the job site, list what concrete is made of, describe how concrete forms are built, and how concrete is poured, reinforced, and finished. CORE

CAR 123 CONCRETE AND FORMING LAB

(6E)

3 credits

PREREQUISITE: As required by college

COREQUISITE: CAR 122 Concrete and Forming

This course provides practical experience in mixing concrete, building forms, using reinforcing materials, pouring

and finishing concrete, and demonstrating proper safety techniques at the job site. Emphasis is placed on job site safety, concrete forming, mixing, pouring, finishing and reinforcing. Upon completion, the student should be able to demonstrate job safety, set forms, reinforce, mix, pour and finish concrete correctly. CORE

CAR 131 ROOF AND CEILING SYSTEMS (3T) 3 credits

PREREQUISITE: As required by college

COREQUISITE: CAR 133 Roof and Ceiling Systems lab

This course focuses on framing ceilings and roofs. Emphasis is placed on the various types of ceiling and roofing frames, rafters, trusses, ceiling joists, roof decking, and roofing materials. Upon completion, students should be able to explain how to frame a roof and ceiling, identify proper installation methods of roofing materials, and describe applicable safety rules. CORE.

CAR 132 INTERIOR AND EXTERIOR FINISH (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

COREQUISITE: As required by college

This course introduces the student to interior and exterior finishing materials and techniques. Topics include interior trim of windows and doors, ceilings, wall moldings, exterior sidings, trim work, painting and masonry finishes. Upon completion the students should be able to identify, describe the uses of, and install different types of doors, windows, and moldings, identify and install the types of exterior siding and trim, and describe the different types of paint and their proper application. CORE

CAR 133 ROOF AND CEILING SYSTEMS LAB (6E) 3 credits

PREREQUISITE: As required by college

COREQUISITE: CAR 131 roof and ceiling systems

This course provides students with practical experience in roof and ceiling layout, framing, and installation. Upon completion, the student should be able to layout and frame a roof and ceiling, cut and install rafters and joists, install trusses, cut and apply roof decking and roofing materials, and apply job site safety rules. CORE.

CAR 214 INTRODUCTION TO CABINETRY (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

COREQUISITE: As required by college

This course is an introductory cabinetry course. Emphasis is placed on design and construction of cabinetry. Upon completion, the student should be able to design and build cabinets according to specification. This supports CIP code 46.0201.

CAR 224 FLOOR, WALL, AND CEILING SPECIALTIES (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

COREQUISITE: As required by college

This course focuses on advanced interior applications for floors, walls, and ceilings. Topics include paneling, molding, trim, hardwood floors, drop ceilings, acoustical ceil-

ings, tray ceilings, and box ceilings. Upon completion, the students should be able to install and finish all of the specialties covered. This is an advanced course and supports CIP code 46,0201.

CAR 226 METAL FRAMING (6E) 3 credits

PREREQUISITE: As required by college

COREQUISITE: As required by college

This course introduces the students to metal framing of floors, walls, ceilings and roofs. Emphasis is placed on metal frame construction. Upon completion, students are expected to be able to describe components and proper application of metal framing, properly construct floors, walls, ceilings, and roofs.

CAR 228 STAIRS, MOLDING, AND TRIM (1T, 2E, 3M) 3 credits

PREREQUISITE: As required by college

COREQUISITE: As required by college

This course focuses on the basics of stair design, layout, and construction. Topics also include cutting and installing stair trim and moldings. Upon course completion, students should be able to layout, cut, and construct stairs, and install trim and molding. This supports CIP code 46.0201.

CAR 230 RESIDENTIAL REPAIR AND REMOLDING (2T, 2E) 3 credits

PREREQUISITE: As required by college

COREQUISITE: As required by college

This course focuses on the methods used for a repair or remodeling project. Topics include design, estimation of materials, cost, time, manpower, and problem solving. Upon completion, the students should be able to demonstrate an ability to design a repair or remodeling project; accurately quote materials, cost, time, and manpower requirements; and obtain all necessary permits for construction.

CAR 232 CONSTRUCTION MANAGEMENT (3T) 3 credits

PREREQUISITE: As required by college

COREQUISITE: As required by college

This course focuses on the basic information necessary for successfully managing a construction project. Topics include project definition, construction management software, basic building blocks for scheduling, refining a schedule, communications, techniques for estimating material, equipment, time cost, and manpower requirements. Special emphasis topics include requirements for carpentry licensing, filing, qualifications, fees, and exams. Upon completion, students are expected to understand the meaning and purpose of project planning and management, use of a schedule in management, and be able to communicate and coordinate work activities. The students should also be able to develop a comprehensive estimate for a carpentry job and be knowledgeable for the requirements of the state licensing test.

Course Descriptions

DESIGN DRAFTING TECHNOLOGY (DDT)

DDT 104 INTRODUCTION TO COMPUTER AIDED

DRAFTING

3 credits

FORMERLY DDT 103

(1T,4E)

This course provides an introduction to basic Computer Aided Drafting and Design (CADD) functions and techniques, using "hands-on" applications. Topics include terminology, hardware, basic CADD and operating system functions, file manipulation, and basic CADD software applications in producing softcopy and hardcopy.

DDT 111 FUNDAMENTALS OF DRAFTING

AND DESIGN TECHNOLOGY

(1T, 4E)

3 credits

This course serves as an introduction to the field of drafting and design, and provides a foundation for the entire curriculum. Topics include safety, lettering, tools and equipment, geometric constructions, orthographic sketching, and drawing.

DDT 115 BLUEPRINT READING FOR

MACHINISTS (3T)

3 credits

This course provides the students with terms and definitions, theory of orthographic projection, and other information required to interpret drawings used in the machine trades. Topics include multiview projections, pictorial drawings, dimensions and notes, lines and symbols, and sketching. Upon completion, students should be able to interpret blueprint drawings used in the machine trades.

DDT 116 BLUEPRINT READING FOR CONSTRUCTION

(3T)

3 credits

This course provides the students with terms and definitions, theory of orthographic projection, and other information required to interpret drawings used in the construction trades. Topics include multiview projection, dimensions and notes, lines and symbols, floor plans, elevations, sections, details, schedules, electrical plans and specifications. Upon completion, students should be able to interpret blueprints used in the construction trades.

DDT 117 MANUFACTURING PROCESSES

(1T, 4E)

3 credits

This course in materials and processes includes the principles and methodology of material selection, application, and manufacturing processes. Emphasis is directed to solids to include material characteristics, castings, forging, and die assemblies. Upon completion, students should be able to discuss and understand the significance of materials' properties, structure, basic manufacturing processes, and express and interpret material specifications.

DDT 118 BASIC ELECTRICAL DRAFTING

(1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 111, 112, 104, or Permission of instructor

This course covers the universal language of electrical drafting, including electrical lines, symbols, abbreviations, and notation. Emphasis is placed on typical components such as generators, controls, transmission networks, and lighting, heating and cooling devices. Upon completion, students should be able to draw basic diagrams of electrical and electronic circuits using universally accepted lines and symbols.

DDT 119 ADVANCED ELECTRONIC

DRAFTING (1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 111, 112, 104, or Permission of instructor

This course introduces drafting and design techniques dealing with production of electronic equipment for consumer, commercial, and military applications. Emphasis is placed on schematic drawings, connection or wiring diagrams, industrial electronic diagrams, ladder schematics, flow block diagrams, and documentation types and techniques related to the power delivery industry. Upon completion, students should be able to prepare documentation specified to ANSI standards and be familiar with the techniques of composition and the unique symbols and practices of industry.

DDT 121 INTERMEDIATE TECHNICAL

DRAWING (1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 111, 112, 113, or Permission of instructor

This course is designed to develop a strong foundation in common drafting and design practices and procedures. Topics include auxiliary views, basic space geometry, pictorial drawings, and basic charts and graphs. Upon completion, students should be able to project and develop auxiliary views; locate and specify points, lines, and planes in space; develop axonometric, oblique, and perspective drawings; and draw basic charts and graphs.

DDT 122 ADVANCED TECHNICAL DRAWING

(1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 111, 112, 103, or Permission of instructor

This course covers the methods of providing size description and manufacturing information for production drawings. Emphasis will be placed on accepted dimensioning and tolerancing practices including Geometric Dimensioning and Tolerancing for both the Customary English System and the ISO system. Upon completion, students should be able to apply dimensions, tolerances, and notes to drawings to acceptable standards, including Geometric Dimensioning and Tolerancing, and produce drawings using and specifying common threads and various fasteners, including welding methods.

DDT 124 TECHNICAL DRAWING I

(1T,4E)

3 credits

PREREQUISITE: DDT 104

This course covers sections, auxiliary views, and basic space geometry. Emphasis will be placed on the theory as well as the mechanics of applying sections, basic dimensioning, auxiliary views, and basic space geometry.

DDT 125 SURFACE DEVELOPMENT

(1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 111, DDT 112, or Permission of instructor

This course covers surface intersections and developments. Emphasis is placed on the basic types of intersections using simple geometric forms. Upon completion, students should be able to draw common types of surface

intersections and handle them simply as applications of the concepts learned in this class.

**DDT 127 INTERMEDIATE COMPUTER AIDED
DRAFTING AND DESIGN
(1T,4E)**

3 credits

This course covers intermediate-level concepts and applications of CADD. Emphasis will be placed on intermediate-level features, commands, and applications of CADD software

**DDT 128 TECHNICAL DRAWING II
FORMERLY DDT 121
(1T,4E)**

3 credits

This course is designed to develop a strong foundation in common drafting and design practices and procedures. Topics include dimensioning concepts and pictorial drawings.

**DDT 131 BASIC MACHINE DRAFTING
(1T, 2E, 3M)**

3 credits

PREREQUISITE: DDT 104, DDT 111, or Permission of instructor

This course in machine drafting and design provides instruction in the largest specialty area of drafting in the United States, in terms of scope and job opportunities. Emphasis will be placed on the applications of multi-view drawings, including drawing organization and content, title block and parts lists, assembly drawings, detail drawings, dimensioning, and application of engineering controls in producing industrial-type working drawings including the application of title blocks, parts lists, assemblies, details, dimensions, and engineering controls.

**DDT 132 ARCHITECTURAL DRAFTING
(1T, 2E, 3M)**

3 credits

PREREQUISITE: DDT 104, DDT 111, or Permission of instructor

This course in architectural design and drafting introduces basic terminology, concepts, and principles of architectural design and drawing. Topics include design consideration, lettering, terminology, site plans, and construction drawings. Upon completion, students should be able to draw, dimension, and specify basic residential architectural construction drawings.

DDT 133 BASIC SURVEYING (1T, 2E, 3M)

3 credits

This course covers the use of surveying instruments, mathematical calculations, and the theory of land surveying. Topics include USGS benchmarks, measuring horizontal and vertical angles and distances, terms, and recording and interpreting field notes. Upon completion, students should be able to recognize benchmarks and measure, specify, and record field notes.

**DDT 134 DESCRIPTIVE GEOMETRY
(1T, 2E, 3M)**

3 credits

This course is designed to teach the fundamental concepts of descriptive geometry through an emphasis on logical reasoning, visualization, and practical applications. Topics include orthographic projection, points and lines in space, auxiliary views, plane representation, intersecting and non-intersecting planes, plane development, and calculations.

Upon completion, students should be able to project and intersect points, lines, and planes with their relationship in space, as well as develop surfaces of an object for fabrication purposes.

**DDT 150 THEORY OF RESIDENTIAL DRAWING AND DESIGN
(3T)**

3 credits

COREQUISITE: DDT 155

PREREQUISITE: DDT 104 or Permission of instructor

This course provides the theory of residential drawing and design. Topics include architectural styles, house design, site and space planning, climate, drawing requirements, construction materials and process, terminology, and specific types of drawings required to complete a full set of construction documents. Introductory, intermediate, and advanced topics are covered. Emphasis is placed on an understanding of the various issues and requirements essential to the field of residential drawing and design.

**DDT 155 DRAWING FOR RESIDENTIAL CONSTRUCTION
(8E)**

4 credits

COREQUISITE: DDT 150

PREREQUISITE: DDT 104, or Permission of instructor

This course is a direct applications lab to the topics covered within DDT 150. Emphasis is placed upon the production of quality construction documents.

**DDT 181 SPECIAL TOPICS IN DRAFTING AND
DESIGN TECHNOLOGY (1-3T)**

1-3 credits

These courses provide specialized instruction in various areas related to the drafting industry. Emphasis is placed on meeting students' needs.

**DDT 182 SPECIAL TOPICS IN DRAFTING AND
DESIGN TECHNOLOGY (1-3T)**

1-3 credits

These courses provide specialized instruction in various areas related to the drafting industry. Emphasis is placed on meeting students' needs.

**DDT 211 INTERMEDIATE MACHINE
DRAFTING (1T, 2E, 3M)**

3 credits

PREREQUISITE: DDT 131 or Permission of instructor

This second course in machine drafting and design provides more advanced instruction in the largest specialty area of drafting. Topics include applications of previously developed skills in the organization and development of more complex working drawings, use of vendor catalogs and The Machinery's Handbook for developing specifications, and use of standardized abbreviations in working drawings.

DDT 213 CIVIL DRAFTING, PLAT MAPS (1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 104, DDT 111, or Permission of instructor

This course introduces the drafting practices, symbols, conventions, and standards utilized in civil engineering contract documents. Topics include site planning, land surveying, topographic surveys, along with civil terminology. Upon completion, students should be able to draw accurate plat maps, give legal descriptions of land parcels, draw simple site plans, and identify and use proper symbols and conventions on civil engineering drawings.

Course Descriptions

DDT 214 PIPE DRAFTING

(1T, 4-6M)

3-4 credits

PREREQUISITE: DDT 104, DDT 111, or Permission of instructor

This course covers the theory and practical application needed to understand piping fundamentals as used in refineries and petrochemical plants. Topics include process and mechanical flow diagrams, plant equipment, isometric drawings, instrumentation symbols, pipe symbols, flanges, fittings, and applications of basic math and trigonometry. Upon completion, students should be able to demonstrate pipe drafting techniques and fundamentals in order to prepare working drawings used in refineries and the petrochemical environment.

DDT 215 GEOMETRIC DIMENSIONING

AND TOLERANCING (1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 111 or Permission of instructor

This course is designed to teach fundamental concepts of size description by geometric methods, including appropriate engineering controls. Emphasis is placed on the drawing and application of common geometric dimensioning and tolerancing symbols to engineering drawings as designated by the latest ANSI/ASME Standards. Upon completion, students should be able to use geometric dimensioning and tolerancing symbols in applying size information and manufacturing controls to working drawings.

DDT 221 ADVANCED MACHINE DRAFTING

(1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 131 or Permission of instructor

This third course in machine drafting and design covers the development of complex, advanced working drawings by applying previously developed skills. Topics include application of previously developed skills in the organization and development of complex, advanced-level working drawings, including sub-assemblies and a basic design problem. Upon completion, students should be able to organize, layout, and produce complex, advanced-level working drawings, including sub-assemblies and a basic design problem.

DDT 222 ADVANCED ARCHITECTURAL

DRAFTING (1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 132 or Permission of instructor

This third course in architectural design and drafting continues with advanced architectural plans, including a slant toward light commercial construction. Topics include climate control plans, application of building codes, building materials and finish specifications, cost estimating, and bid specifications. Upon completion, students should be able to apply current techniques in producing advanced-level architectural plans, including residential and light commercial applications.

DDT 223 ADVANCED CIVIL DRAFTING

(1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 213 or Permission of instructor

This course is designed to build on the concepts learned in Civil Drafting I and introduce the student to more complex projects and problems. Topics include, but are not limited to, profiles, staking plans, grading plans, utility plans, and civil detailing. Upon completion, students should be able

to accurately draft the documents described previously.

DDT 224 STRUCTURAL CONCRETE

DRAFTING (1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 111 or Permission of instructor

This course is designed to develop the knowledge and skills necessary to understand the basic components and terminology of pre-cast and poured-in place concrete structures. Emphasis is placed on pre-cast concrete framing plans, sections, fabrication and connection details, poured-in place concrete foundations, floor systems, and bills of materials. Upon completion, students should be able to construct engineering and shop drawings of concrete beams, columns, floors, roof, and wall framing plans using the A.I.S.C. manual and incorporating safety practices.

DDT 225 STRUCTURAL STEEL DRAFTING

(1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 104, DDT 111, or Permission of instructor

This course covers the theory and practical applications necessary to understand the basic design and terminology of structural steel components used in light commercial buildings. Emphasis is placed on structural steel drafting techniques, bolted and welded connections, framing plans, sections, fabrication and connection details, and bills of materials. Upon completion, students should be able to produce engineering and shop drawings incorporating standard shapes, sizes, and details using the A.I.S.C. manual and incorporating safety practices.

DDT 226 TECHNICAL ILLUSTRATION

(1T, 2E, 3M)

3 credits

PREREQUISITE: DDT 121 or Permission of instructor

This course provides the student with various methods of illustrating structures and machine parts. Topics include axonometric drawings; exploded assembly drawings; one point, two point, and three point perspectives; surface textures; and renderings. Upon completion, students should be able to produce drawings and illustrations using the previously described methods.

DDT 227 STRENGTH OF MATERIALS

(4T)

4 credits

This course in statics and strength of materials includes the study of forces and how they act and react on bodies and structures. Topics include the effects of forces as found in structures and machines under conditions of equilibrium, how materials resist forces, strengths of common construction material and structural components. Force systems such as parallel, concurrent, and non-concurrent are studied, and coplanar and non-coplanar situations are included. Upon completion, students should be able to apply the principles of force in engineering drawings.

DDT 231 ADVANCED CAD (3T, 2E)

4 credits

PREREQUISITE: DDT 131 or Permission of instructor

This course covers the advanced applications of CAD software to engineering projects in various applications, including architectural, civil, mechanical, and environmental engineering, with consideration for advanced physical and psychological principles of CAD. These principles will

be applied toward CAD customization and programming principles for the express purpose of increasing productivity and improving the performance of the CAD operator, thereby making CAD much more productive in an engineering environment. Emphasis will be placed on using intelligent CAD techniques to increase the quality of output. 3D modeling and rendering will be introduced. Upon completion, students should be able to apply advanced CAD techniques in solving complex problems related to all engineering applications.

DDT 232 CAD CUSTOMIZATION (2T, 2E, 3M) 4 credits

PREREQUISITE: DDT 123 or Permission of instructor

This course introduces the various methods of customizing CAD software to meet individual or company needs. Topics include menu customization, programming, custom command macros, script files, slides, and slide libraries. Upon completion, students should be able to write menus, write programming routines, and write script files for the purpose of increasing the proficiency of the CAD operator.

DDT 233 SOLIDS MODELING (2T, 2E, 3M) 4 credits

PREREQUISITE: DDT 123 or Permission of instructor

This course provides instructions in 3D Design Modeling, utilizing the 3D capabilities of CAD software. Emphasis is placed on 3D wire frame, surface and solids modeling along with the development of 2D detail drawings from 3D models. Upon completion, students should be able to generate 3D surface and solid models and 2D orthographic production drawings from created solid models.

DDT 235 SPECIALIZED CAD (2T, 2E, 3M) 4 credits

PREREQUISITE: DDT 104 or Permission of instructor

This course introduces alternative CAD application software and alternative platforms and can serve as a means of introducing third party programs that work in conjunction with a specific CAD application. Topics include various Graphical User Interfaces (GUI's) and how to navigate them, as well as how to use a third party application to make working in a specific CAD package easier and more productive. Upon completion, students should be able to use more than one CAD software package, produce hardcopy, and use third party software to make certain tasks easier with a specific CAD program.

DDT 236 DESIGN PROJECT (1T, 2E, 3M) 3 credits

PREREQUISITE: Permission of instructor

This course is designed for advanced students who aspire to more advanced and specialized skills in one certain drafting area. Emphasis is placed on the student's ability to apply the principles learned in previous drafting classes in one special area, as approved by the instructor. The required project must be agreed upon by the instructor and the student, as well as how the work is to be accomplished. Upon completion, students will further reinforce previously learned concepts by applying engineering principles and controls to a personal design project.

DDT 240 PUBLIC UTILITY DRAFTING (1T, 2E, 3M) 3 credits

PREREQUISITE: DDT 223 or Permission of instructor

This course is designed to develop the knowledge and skills

necessary to understand the basic components of public utility systems. Emphasis is placed on drafting techniques, sections, fabrication and connection details, and bills of materials for fresh water, storm water, and wastewater. Upon completion, students should be able to produce engineering and shop drawings, incorporating safety practices and details using the A.I.S.C. manual.

HORTICULTURE (HOC)

HOC 110 INTRODUCTION TO HORTICULTURE SCIENCE (2T, 2E) 3 credits

This course introduces students to botany, genetics, and plant nomenclature. Topics include an overview of the horticultural industry and career opportunities. Upon course completion, students will be able to perform basic tasks associated with employment in the horticulture industry.

HOC 111 HORTICULTURE BUSINESS MANAGEMENT (1T, 2E, 3M) 3 credits

This course provides the essential information needed to establish and maintain a horticulture-related business. Topics of discussion will include the basic principles of business and personnel management, customer services, insurance, and record keeping. The student will develop an understanding of the requirements placed on the manager of a small business to comply with mandated state and federal regulations and meet consumer demands.

HOC 115 SOILS AND FERTILIZERS (2T, 2E) 3 credits

This course is a study of soil properties and the management practices related to the use of fertilizers. Topics include soil classification, mapping, and fertilizer needs based on current and intended use. Upon course completion, students will be able to develop soil fertility management programs.

HOC 120 PLANT PROPAGATION (1T, 4E) 3 credits

This course is a study of the seed production, root formation, wound healing, and other practical phases of plant reproduction. Methods commonly used to reproduce plants by sexual and asexual means are emphasized. Upon course completion, students will be able to identify and demonstrate methods of reproducing plants from seeds, cuttings, and layering.

HOC 125 TURF MANAGEMENT (1T, 4E) 3 credits

This course is the study of all major southern lawn and sports grasses, including their establishment and maintenance. Topics include turf equipment, fertilizers, insect and disease problems, and mowing techniques. Upon course completion, students will be able to evaluate the quality of an existing turf area and prescribe a maintenance program for turf used for lawns, playing fields, and parks.

HOC 130 NURSERY PRODUCTION (1T, 4E) 3 credits

PREREQUISITE: HOC 115 or Permission of instructor

This course focuses on all aspects of producing plants in a

Course Descriptions

nursery. Topics include soil and other media for plant growth, container selection, plant propagation, watering, and fertilization, pest control, and product practices commonly used by commercial growers. Upon course completion, students will be able to demonstrate proficiency in all phases of nursery plant production.

HOC 134 INTRODUCTION TO FLORICULTURE

(1T, 2E)

2 credits

This course introduces students to principles of floral design and flower shop management. Topics include design techniques, marketing, and management practices. Upon completion, students should be able to create basic floral designs and demonstrate an understanding of effective flower shop management practices.

HOC 135 ORNAMENTAL PLANT IDENTIFICATION AND CULTURE

(1T, 4E)

3 credits

This course focuses on the identification and growth requirements of ornamental plants. Topics include identification, habits of growth, cultural requirements, and landscape use of ornamental plants in the southeastern United States. Upon course completion, students will know common and botanical names of landscape plants and will know the appropriate use of each plant.

HOC 136 RESIDENTIAL LANDSCAPE DESIGN (2T, 4E)

4 credits

This course provides an overview of the fundamentals of residential site design. Topics include site measuring and base map preparation, functional diagrams, landscape design principles, drafting and drawing procedures, design principles, appropriate use of plant materials, planting, site preparation, and spatial composition. Upon course completion, students will be able to develop a master plan for a residential property.

HOC 137 COMMERCIAL LANDSCAPE DESIGN (1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course is a study of landscape design principles, drafting and drawing procedures, and the use of plant materials. Emphasis will be placed on drawing techniques and the appropriate use of plant materials in the commercial setting. Lab time is provided for the student to develop landscape drawings.

HOC 140 ORNAMENTAL PLANT PEST MANAGEMENT (2T, 2E)

3 credits

This course is a study of plant pests affecting the production and maintenance of ornamental plants. Emphasis is placed on arthropods, weeds, cultural control, chemical control, and disease-causing agents including environmental factors. Upon course completion, students will be able to identify the signs and symptoms of invading pests, the characteristics associated with the onset of diseases in turfgrass and ornamental plants, and will be able to develop appropriate pest control plans.

HOC 151 IRRIGATION SYSTEMS (1T, 2E)

2 credits

This course is designed to provide students with the infor-

mation needed to design, layout, and install an irrigation system on residential and commercial properties. Topics of discussion will include system design, cost estimating, installation techniques, and electronic control devices. Upon course completion, students will be able to design and install residential and commercial irrigation systems.

HOC 167 GOLF COURSE MAINTENANCE

(2T, 2E)

3 credits

This course introduces students to procedures commonly used to maintain golf course greens and fairways. Topics include mowing procedures, fertilizing, watering, pest control, overseeding, and greens protection. Upon completion, students will be able to demonstrate appropriate greens and fairway maintenance procedures.

HOC 175 SEMINAR IN HORTICULTURE

(1T)

1 credit

PREREQUISITE: Permission of instructor

This course focuses on current topics in horticulture. Topics are not normally included in the prescribed course of study, but are to ensure that students remain current in the field.

HOC 176 ADVANCED STUDIES IN HORTICULTURE

(6M)

2 credits

This course allows students to do practical research to develop a project of special interest under the guidance and supervision of a faculty member. Students and faculty confer in the selection of a project and in identification of objectives.

HOC 181 SPECIAL TOPICS IN HORTICULTURE

(2-6E, 3-9M)

3 credits

This course provides specialized instruction in various areas related to the horticulture industry. Emphasis is placed on meeting student needs.

HOC 182 SPECIAL TOPICS IN HORTICULTURE

(2-6E, 3-9M)

3 credits

This course provides specialized instruction in various areas related to the horticulture industry. Emphasis is placed on meeting student needs.

HOC 210 GREENHOUSE MANAGEMENT

(1T, 4E)

3 credits

This is an introductory course in greenhouse plant production. Topics include types of structures, construction techniques, covering materials, and temperature control. Upon course completion, students will be able to apply basic greenhouse production procedures.

HOC 211 GREENHOUSE CROP PRODUCTION (1T, 4E)

3 credits

This is an introductory course in the use of greenhouse facilities for the production of foliage and flowering plant crops. Topics include propagation, scheduling, soils and media, crop selection, pest management, and methods of production. Upon course completion, students will be able to produce a wide range of commercial greenhouse crops.

HOC 216 LANDSCAPE MAINTENANCE

(2T, 2E)

3 credits

PREREQUISITE: Permission of instructor

This course focuses on maintaining plant materials and turf in an existing landscape. Topics include pruning, mowing techniques, pest management, and selection of maintenance equipment. Upon course completion, students will be able to demonstrate landscape maintenance techniques and will be able to prepare labor-time estimates and cost analysis for maintaining landscapes.

HOC 218 LANDSCAPE CONSTRUCTION

(2T, 2E)

3 credits

This course is an introduction to landscape construction. Emphasis is placed on grading and drainage, site development, irrigation systems, lighting, and other landscape construction. Upon course completion, students will be able to evaluate a blueprint and reconcile it to the job site.

HOC 230 VEGETABLE AND ORCHARD

CROPS (1T, 4E)

3 credits

PREREQUISITE: HOC 115 or Permission of instructor

This course focuses on vegetable and fruit crops. Topics include cultural requirements, production procedures, and marketing. Upon course completion, students should be able to grow vegetables and establish orchard layouts.

MASONRY (MAS)

MAS 111 MASONRY FUNDAMENTALS

(2T, 3M)

3 credits

COREQUISITE: MAS 151

This course is designed as an introduction and orientation to masonry construction, specifically to brick and block construction. Topics include the identification and safe use of tools, equipment, and masonry materials. Upon completion, students should be able to properly apply masonry techniques.

MAS 121 BRICK/BLOCK MASONRY (3T)

3 credits

COREQUISITE: MAS 161, 162

PREREQUISITE: MAS 111 or Permission of instructor

This course is designed to provide the student with a working knowledge of the various concrete block and brick sizes, as well as types of joints. Emphasis is placed on understanding the modular system, wall types, joints, and wall insulation. Upon completion, students should be able to identify methods of brick and block reinforcements, wall supports, and wall types, joints, insulation, and sample panels and prisms.

MAS 131 RESIDENTIAL/COMMERCIAL

(3T)

3 credits

COREQUISITE: MAS 171

PREREQUISITE: MAS 111 or Permission of instructor

This course introduces students to residential and commercial construction, plans and layouts, and reinforced masonry. Emphasis is placed on home building, shopping centers and high rise buildings, residential and commercial drawings and their specifications, job costing, job preparation, as well as brick and block moisture control. Upon completion,

students should be able to read full-scale construction drawings, estimate job costs, specify job preparation techniques, and identify methods for veneering a wall, constructing a composite wall, installing expansion joints, setting coping, and moisture control.

MAS 151 MASONRY FUNDAMENTALS

LAB (9M)

3 credits

COREQUISITE: MAS 111

This course provides a practical application of industry brick and block construction. Emphasis is placed on mixing mortar, using masonry equipment and tools, job preparation, spreading and furrowing mortar, and dry bonding. Upon completion, students should be able to demonstrate appropriate practices, including safety in brick and block construction to entry-level standards.

MAS 152 MASONRY FUNDAMENTALS

LAB (9M)

3 credits

PREREQUISITE: MAS 111

This course provides a practical application of introductory brick and block construction. Emphasis is placed on spreading mortar and laying bricks; coursing bricks; laying a running bond; building course pyramids; and building stretcher, wall common, Flemish, English, and stack bonds. Upon completion, students should be able to demonstrate appropriate practices, including safety, in brick and block construction to entry-level standards.

MAS 153 SPECIAL TOPICS/PROJECTS

(1T, 4E)

3 credits

A selection of topics/projects related to the masonry profession is addressed in this combined theory and lab course. Subject matter and projects will vary according to industry and student needs, and the course may be repeated for credit within institutional policy. Upon completion, students will demonstrate competencies designed to assess course objectives.

MAS 161 CONCRETE BLOCK MASONRY

(9M)

3 credits

COREQUISITE: MAS 121

PREREQUISITE: MAS 111 or Permission of instructor

This course provides practical application of concrete block advanced laying techniques. Emphasis is placed on developing skill in laying concrete block, constructing and reinforcing walls, joints, and sample panels and prisms. Upon completion, students should be able to construct concrete block walls to entry-level standards.

MAS 162 BRICK MASONRY LAB (9M)

COREQUISITE: MAS 121

3 credits

PREREQUISITE: MAS 111 or Permission of instructor

This course provides practical application of advanced brick layout techniques. Emphasis is placed on developing skill in laying brick, constructing and reinforcing walls, joints, and sample panels and prisms. Upon completion, students should be able to construct brick walls to entry-level standards.

Course Descriptions

MAS 171 RESIDENTIAL/COMMERCIAL (9M)

3 credits

COREQUISITE: MAS 131

PREREQUISITE: MAS 111 or Permission of instructor

This course provides application of residential and commercial techniques for plans and layouts, as well as brick veneer, composite walls, expansion joints, and moisture control. Emphasis is placed on developing skill in reading residential and commercial drawings, applying specifications to acceptable code standards, job costing, job preparation, and brick and block moisture control. Upon completion, students should be able to demonstrate use of the scaling rule for a set of plans; identify and sketch standard symbols for walls, openings, floors, and materials; estimate job costs according to plan; utilize appropriate methods to ensure moisture control; lay brick and block to the line; and build brick and block foundations to entry-level standards.

MAS 181 SPECIAL TOPICS IN MASONRY

(3-9M)

1-3 credits

These courses provide specialized instruction in various areas related to the industry. Emphasis is placed on meeting students' needs.

MAS 281 SPECIAL TOPICS IN MASONRY

(3-9M)

1-3 credits

These courses provide specialized instruction in various areas related to the industry. Emphasis is placed on meeting students' needs.

UPHOLSTERY (UPH)

UPH 111 UPHOLSTERY FUNDAMENTALS

AND DESIGN (3T)

3 credits

This course is designed to introduce the student to a working knowledge of upholstery techniques and hands-on experience using the fundamentals of Upholstery/Design. Emphasis is placed on safety, upholstery terminology, housekeeping, tools, equipment, minor sewing machine repair, a brief history of furniture styles, color, fabrics, woods, and an introduction to principles and elements of furniture/automotive design. Upon completion, the student should be able to cite the principles and elements of design and apply upholstery techniques in all areas specified to complete requirements of this course.

UPH 112 UPHOLSTERY DESIGN

FURNITURE LAB (9M)

3 credits

This course is designed to teach the student specific techniques and applications in furniture design foundations. Emphasis is placed on proper use, care, storage, and maintenance of tools and equipment and proper application of design techniques working with the function, beauty, and individuality of a good design plan or foundation. Upon completion, students should be able to identify tools and equipment and apply foundation techniques including tying springs, applying stuffing and padding, and using a variety of materials to achieve a good design plan.

UPH 113 UPHOLSTERY DESIGN AUTO LAB

(9M)

3 credits

This course provides an introduction to automotive techniques and design with application or live work projects.

Emphasis is placed on the application of design techniques including working with springs, door panels, headliners, auto seating, rear shelves, carpet, windlace, arm rests, and dashboards. Upon completion, students should be able to perform hands-on upholstery techniques including design to automotive upholstery.

UPH 114 UPHOLSTERY DESIGN

EXPERIMENTAL LAB (6E)

3 credits

This course is an experimental lab in Upholstery/Design. It consists of demonstrations by the instructor and experimentation by students. Upon completion, students should be able to demonstrate, with appropriate safety precautions, the basic principles of Upholstery/Design.

UPH 121 CORRELATING DECORATIVE

ELEMENTS (3T)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to effectively bring together the elements and principles of design while allowing the student to specialize in automotive, furniture, or both areas including job planning and decorative techniques. This course covers job planning, layouts, correlation of decorative elements including simple floor plans, color, draperies, wall coverings with special emphasis on diamonds, channeling, and decorative trims. Upon completion, students should be able to plan layouts, identify and apply the principles and elements of design, and select decorative trims that blend with the décor.

UPH 122 DECORATIVE ELEMENTS

FURNITURE LAB (9M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to teach the student to use a layout in computing yardage and to plan decorative techniques to be used with furniture projects. Topics include layouts, planning, redesigning, use of decorative trims, yardage charts and accessories necessary to achieve a harmonious design. Upon completion, students should be able to execute plans, compute yardage, redesign furniture, and select decorative techniques and accessories to complete a design.

UPH 123 DECORATIVE ELEMENTS AUTO LAB (9M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed for instruction in using a layout to compute yardage and in planning decorative techniques which include windlace, hidem welt, various trims, and finishing techniques. Upon completion, students should be able to compute yardage from a well-planned layout and apply decorative techniques to the finished automotive upholstery project.

UPH 124 DECORATIVE ELEMENTS

EXPERIMENTAL LAB (6E)

3 credits

PREREQUISITE: Permission of instructor

This course is an experimental lab in Decorative Elements. It consists of demonstrations by the instructor and experimentation by students. Upon completion, students should be able to demonstrate the basic principles of planning, measurement, and the use of appropriate decorative techniques.

UPH 131 WOOD REPAIR AND REFINISHING

(1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course provides the students with skills necessary to repair or refinish antique woods, repair scars or scratches, and touch-up existing finishes. Topics covered in this course include tools, supplies, repairs, stains, sanding, refinishing products, and special techniques to restore a finish. Upon completion, students should be able to restore woods, replace broken parts, and refinish woods.

UPH 132 HISTORY OF FURNITURE

STYLES (3T)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to teach the student to identify period furniture and some of the basics of style using the vocabulary of furniture description. Topics include history of furniture, furniture facts, period furniture, furniture identification, and important trends, fabrics, motifs, woods, finishes, and styles. Upon completion, students should be able to identify furniture styles, periods, motifs, woods and finishes, and coordinate styles.

UPH 183 SPECIAL TOPICS

(1-3T)

1-3 credits

These courses are designed to allow the student to specialize in a particular area of study with minimum supervision in Upholstery/Design application and with evaluation at the instructor's discretion. Emphasis is placed on a topic/project that the student is interested in and may include any automotive, furniture, or related area in Upholstery/Design. Upon completion, students should be able to work with minimum supervision and execute the necessary techniques to finish a live work project of their choice.

UPH 211 DESIGN INTERIORS

FURNITURE AND AUTO (3T)

3 credits

PREREQUISITE: Permission of instructor

This course is designed for instruction in planning interiors that satisfy individual needs in furniture or automobiles, using the elements and principles of design. Emphasis is placed on blending styles, specifying interior materials, correlating a color scheme, placing furniture in a room, placing seats in a car or resort vehicle as well as vans and boats. Upon completion, students should be able to work with a customer on appropriate color schemes, materials, and designs which are appropriate for the lifestyles or needs of the family.

UPH 212 DESIGN INTERIORS FURNITURE

LAB (9M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed for instruction in applying the principles and elements of design when upholstering furniture and to create a unified design. Emphasis is placed on the use of appropriate fabrics, colors, textures, types of furniture, needs of customers, lifestyles, occupation, commercial or residential setting. Upon completion, students should be able to identify elements of design and apply them to the principles of design in order to achieve a unified design which best suits the décor.

UPH 213 DESIGN INTERIORS AUTO LAB

(9M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to instruct the student to apply the principles and elements of design when upholstering automobiles and to create a unified design. Emphasis is placed on the use of appropriate fabrics, colors, textures, types of automobiles, needs of customers, and purpose for which the vehicle is being upholstered. Upon completion, students should be able to identify elements of design and apply them to the principles of design in order to achieve a unified design which best suits the automobile décor.

UPH 214 DESIGN INTERIORS

EXPERIMENTAL LAB (6E)

3 credits

PREREQUISITE: Permission of instructor

This course is an experimental lab in Design Interiors. It consists of demonstration by the instructor and experimentation by students. Upon completion, students should be able to demonstrate their knowledge of materials and other elements of design.

UPH 215 SHOP MANAGEMENT AND

LAYOUT (3T)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to provide the student with necessary information to operate and manage an upholstery business. Emphasis is placed on shop layouts, necessary equipment, supplies, tax information, setting up an accounting system and managing work loads and inventory control in a simulated working atmosphere. Upon completion, students should be able to layout, perform set-up, and manage an upholstery business.

UPH 216 DRAPERIES, CORNICES,

BEDDING (1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course provides the student with basic techniques in designing draperies, cornices, and bedding. Emphasis is placed on designing headboards, comforters, pillow shams, dust ruffles, cornices, pinch pleats, rod pockets, drapery, and various shades. Upon completion, students should be able to design functional draperies, cornices, and bedding accessories to contribute an aesthetic quality to the décor.

UPH 217 UPHOLSTERY CRAFTS AND

ACCESSORIES (1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to teach the student to construct the most up-to-date crafts/accessories in upholstery. Emphasis is placed on creating patterns, designing crafts, using various fabrics, and identifying a list of new crafts using upholstery materials. Upon completion, students should be able to design upholstery crafts/accessories, create patterns, and use various fabrics.

UPH 221 AUTOMOTIVE UPHOLSTERY

AND DESIGN (3T)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to introduce the student to several different types of automobile interior designs. Topics covered include fabric, vinyl and leather seat inserts, sheared and loop carpet, headliners, and interior panels. Upon

Course Descriptions

completion, students should be able to select suitable materials and complete an automotive upholstery project using a style of their choice.

UPH 222 INTERIOR MATERIALS - FURNITURE (1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to teach the student to choose the most appropriate interior materials to be used on and with furniture. Emphasis is placed on wall paper, paint, upholstery fabrics, drapery fabrics, carpet, paneling, floor coverings, and window treatments. Upon completion, students should be able to utilize interior materials and to advise customers in planning décor.

UPH 223 INTERIOR MATERIALS-AUTO (1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to teach the student to use interior materials available in the ever-changing industry of automotive upholstery. Emphasis is placed on design, color, pattern, texture, type of vehicle, and durability of fabric to be used in customizing or restoring a vehicle to its original status. Upon completion, students should be able to select materials, match colors, choose suitable patterns, search for new materials, repair damaged materials, and contour new designs.

UPH 224 AUTO UPHOLSTERY DESIGN EXPERIMENTAL LAB (6E)

3 credits

PREREQUISITE: Permission of instructor

This course is an experimental lab in Automotive Upholstery/Design. It consists of demonstrations by the instructor and experimentation by the students. Upon completion, students should be able to apply appropriate techniques in Automotive Upholstery/Design.

UPH 225 ADVANCED FURNITURE TECHNIQUES (1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed for instruction in advanced techniques of furniture coverings and design. Emphasis is placed on advanced cushion making, diamond tufting, redesigning furniture frames, redesigning coverings, advanced skirts, headboards, and other specific projects. Upon completion, students should be able to perform advanced skills necessary to complete furniture redesigns and coverings.

UPH 226 ADVANCED AUTOMOTIVE TECHNIQUES (1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to instruct the student in advanced automotive techniques necessary to perform skills to complete jobs. Emphasis is placed on tuck and roll, customization, convertible tops, and specialized techniques in boat seats, boat carpeting, tarps, and recreational vehicles. Upon completion, students should be able to apply advanced techniques and skills in any aspect of automotive upholstery.

UPH 227 QUILTING TECHNIQUES AND DESIGN (1T, 2E, 3M)

3 credits

PREREQUISITE: Permission of instructor

This course is designed to introduce the student to basic techniques in quilt design. Emphasis is placed on selecting colors, fabrics, and patterns; piecing; marking appliques; assembling quilt blocks; using a quilting machine; and using quilting techniques as applied to upholstery. Upon completion, students should be able to select colors, fabrics, assemble quilt pieces in a design, use appliques, and use basic techniques of quilting in upholstery projects.

UPH 281 SPECIAL TOPICS (3M)

1 credit

These courses are designed to allow the student to specialize in a particular area of study with minimum supervision in Upholstery/Design application and with evaluation at the instructor's discretion. Emphasis is placed on a topic/project that the student is interested in and may include any automotive, furniture, or related area in Upholstery/Design. Upon completion, students should be able to work with minimum supervision and execute the necessary techniques to finish a live work project of their choice.

WELDING TECHNOLOGY (WDT)

WDT 108 SMAW FILLET/OFC (3T)

3 credits

This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting.

WDT 110 INDUSTRIAL BLUEPRINT READING (3T)

3 credits

This course provides students with the understanding and fundamentals of industrial blueprint reading. Emphasis is placed on reading and interpreting lines, views, dimensions, weld joint configurations, and weld symbols. Upon completion, students should be able to interpret welding symbols and blueprints as they apply to welding and fabrication.

WDT 119 GAS METAL ARC/FLUX CORED ARC WELDING THEORY (3T)

3 credits

This course introduces the student to the gas metal arc and flux cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification, various welding techniques, and base and filler metal identification.

WDT 120 SHIELDED METAL ARC WELDING GROOVE THEORY (3T)

3 credits

This course provides the student with instruction on joint design, joint preparation, and fit-up of groove welds in

accordance with applicable welding codes. Emphasis is placed on safe operation, joint design, joint preparation, and fit-up. Upon completion, students should be able to identify the proper joint design, joint preparation and fit-up of groove welds in accordance with applicable welding codes. This is a CORE course.

WDT 122 SMAW FILLET/OFC LAB

(6E)

3 credits

This course is designed to introduce the student to the proper set-up and operations of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of oxy-fuel cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-3 groups in accordance with applicable welding code and be able to safely operate oxy-fuel equipment and perform those operations as per the applicable welding code.

WDT 123 SMAW FILLET PAC/CAC LAB (6E)

3 credits

This course is designed to introduce the student to the proper set-up and operations of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of plasma arc and carbon arc cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-4 groups in accordance with applicable welding code and be able to safely operate plasma arc and carbon arc equipment and perform those operations as per the applicable welding code.

WDT 124 GAS METAL ARC/FLUX CORED ARC WELDING LAB

(6E)

3 credits

This course provides instruction and demonstration using the various transfer methods and techniques to gas metal arc and flux cored arc welds. Topics included are safety, equipment set-up, joint design and preparation, and gases.

WDT 125 SHIELDED METAL ARC WELDING GROOVE LAB

(6E)

3 credits

This course provides instruction and demonstrations in the shielded metal arc welding process on carbon steel plate with various size F3 and F4 group electrodes in all positions. Emphasis is placed on welding groove joints and using various F3 and F4 group electrodes in all positions. Upon completion, the student should be able to make visually acceptable groove weld joints in accordance with applicable welding codes.

**WDT 155 GAS TUNGSTEN ARC WELDING
CARBON PIPE LAB**

(6E)

3 credits

This course is designed to provide the student with the skills in welding carbon steel pipe with gas tungsten arc welding techniques in various pipe weld positions. Upon completion, students should be able to perform gas tungsten arc welding on carbon steel pipe with the prescribed filler metals in various positions in accordance with the applicable code.

WDT 180 SPECIAL TOPICS

(6E)

3 credits

This course allows the student to plan, execute, and present results of individual projects in welding. Emphasis is placed on enhancing skill attainment in the welding field. The student will be able to demonstrate and apply competencies identified and agreed upon between the student and instructor.

WDT 181 SELECTED TOPICS LAB

(6E)

3 credits

This course provides specialized instruction in various areas related to the welding industry. Emphasis is placed on meeting students needs.

WDT 217 SMAW CARBON PIPE THEORY

(3T)

3 credits

This course introduces the student to the practices and procedures of welding carbon steel pipe using the shielded metal arc weld (SMAW) process. Emphasis is placed on pipe positions, electrode selection, joint geometry, and joint preparation and fit-up. Upon completion, students should be able to identify pipe positions, electrodes, proper joint geometry, joint preparation, and fit-up in accordance with applicable code.

WDT 218 CERTIFICATION THEORY

(3T)

3 credits

This course is designed to provide the student with the knowledge needed to perform welds using the prescribed welding process. Emphasis is placed on the welding test joints in accordance with the prescribed welding code. Upon completion, students should be able to pass a industry standard welding test in accordance with various applicable welding code requirements.

WDT 228 GAS TUNGSTEN ARC WELDING THEORY

(3T)

3 credits

This course provides the student with knowledge needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas, and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes.

WDT 257 SMAW CARBON PIPE LAB

(6E)

3 credits

COREQUISITE: WDT 217

This course is designed to provide the student with the skills in welding carbon steel pipe with shielded metal arc welding techniques in various pipe weld positions. Upon completion, students should be able to perform gas tungsten arc welding on carbon steel pipe with the prescribed filler metals in various positions in accordance with the applicable code.

Course Descriptions

WDT 258 CERTIFICATION LAB

(6E)

3 credits

This course is designed to provide the student with the skills needed to perform welds using the prescribed welding process. Emphasis is placed on the welding test joints in accordance with the prescribed welding code. Upon completion, students should be able to pass a industry standard welding test in accordance with various welding code requirements.

WDT 268 GAS TUNGSTEN ARC WELDING LAB

(6E)

3 credits

This course provides the student with skills needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes.

WDT 269 BOILER TUBE LAB

(6E)

3 credits

This course is designed to provide the student with the skills in welding boiler tubes using the gas tungsten arc and shielded metal arc welding process using filler metals in the F6 and F4 groups to applicable code. Emphasis is placed on welding boiler tubes using the gas tungsten arc and shielded metal arc welding process in the 2G and 6G positions in accordance with the applicable code. Upon completion, students should be able to perform gas tungsten arc and shielded metal arc welding on boiler tubes with the prescribed filler metals in the 2G and 6G positions to the applicable code.

ADMINISTRATION FACULTY & STAFF



COLLEGE ADMINISTRATION, FACULTY, AND STAFF

- ABUDIAB, NIZAR.** Computer and Office Information Systems/Mathematics. B.S., M.S., McNeese State University.
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- BAKER, SUSAN.** PBX Operator/Receptionist. Technical Diploma, Calhoun Community College.
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- BEADLE, KRISTINE.** Art. B.F.A., Memphis Academy of Arts; M.E., Alabama A&M University.
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- BROWN, CHERYL.** Cosmetology Lab Assistant. Virginia Farrell Beauty College; Instructor Certification, State of Alabama.
- BRYANT, JOHN DAVID.** Welding. A.A.S., Calhoun Community College; B.S., Athens State University.
- BRYSON, TERRI.** Director of Development. B.S., Mississippi University for Women.
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- BUTLER, RUTH.** Custodian.
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- JORDAN, JOHN.** Security Supervisor, Huntsville Campus.
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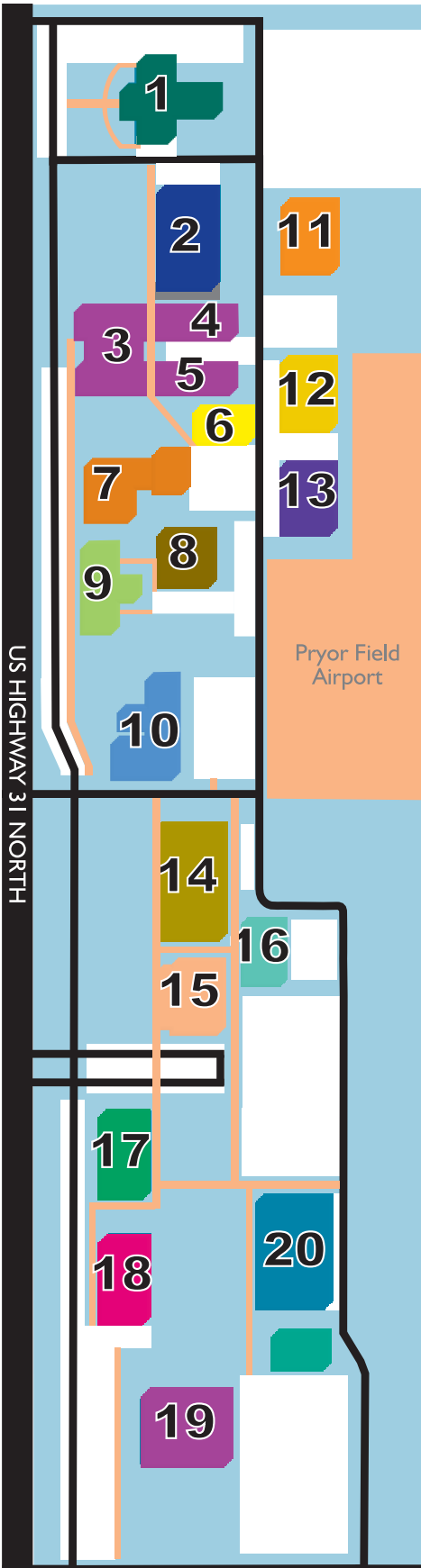
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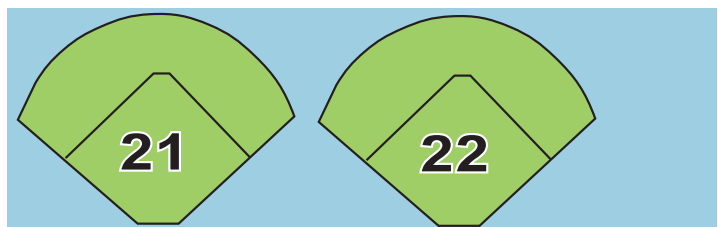
DECATUR CAMPUS MAP



Your Community. Your College. Your Future.

P.O. Box 2216 • Highway 31 North
Decatur, Alabama 35609
Phone: 256-306-2500

1. Aerospace Training Center (ATC)
 - Aerospace
 - Business and Industry Services
 - Co-op
2. Health Sciences Building (HS)
 - Nursing
 - EMT
 - Dental Assisting
 - Surgical Operating Room Tech.
 - Clinical Lab Technician
 - Massage Therapy
3. Center for Manufacturing Innovation (CMI)
 - Industrial Maintenance
 - Electricity
4. Barbering and Cosmetology (BAC)
5. Information Technologies Center
6. Campus Police/Security
7. Noble Russell (NR)
 - Accounting
 - Economics
 - Business/CIS Division
 - Computer Classes
 - Design Drafting
 - Photography
 - Television Studio
8. Vacant
9. Business Center (BC)
 - Adult Education
 - GED Testing
 - Testing Center
10. Tennessee Valley Rehabilitation Center
11. Maintenance/Receiving
12. Air Conditioning and Refrigeration (ACR)
 - Air Conditioning and Refrigeration (HVAC)
 - Welding
13. Machine Tool Technology (MTT)
14. Math, Science, and Administration (MS)
 - First Floor - Math Classrooms/Labs
 - Second Floor - Science Classrooms/Labs
 - Third Floor - Administrative Offices (President, Vice-President, Grants Administration, Public Relations, Development, Human Resources, Business Operations, Payroll, Institutional Research, ROADS Program, & Math/Science Faculty)
15. Chasteen Student Center (SC)
 - Student Affairs
 - Admissions
 - Counseling/Advising & Career Services
 - Financial Aid
16. Harris Hall (HH)
 - English/Speech
 - Social Sciences
 - Developmental Math Lab
17. Wallace (WA)
 - Social Science
 - Upward Bound
 - Mail Room
18. Brewer Library (L)
19. Fine Arts (FA)
 - Art
 - Music
 - Theatre
20. Kelley Gymnasium (GYM)
 - Physical Education
 - Bookstore
 - Printing Services
21. Softball Field
22. Baseball Field





INDEX

A

Academic Bankruptcy	34
Academic Calendar	5
Academic Excellence	36
Academic Honesty	8
Accelerated High School Program	20
Accommodations/Disabilities	8
Accounting (A.S.)	49
Accounting Technology (A.A.S.)	85
Accreditation	1
Administration/Faculty/Staff	221
Admission Requirements	17
Adult Education (AE)	41
Adult Literacy (ADL) Courses	204
Advanced Placement Test (AP)	35
Advanced Standing Credit	34
Advising Center	39
Aerospace Technology (A.A.S.)	59
Agricultural Science (A.S.)	49
Air Conditioning and Refrigeration (A.A.S.)	60
Air Conditioning and Refrigeration (Cert.)	61
Alabama State Board of Education Members	3
Alabama Student Assistance Grants (ASAG)	26, 28
Application Procedures	21
Art (A.S.)	49
Associate of Arts/Science Degrees	49
Associate of Applied Science Degree	59
Attendance Policies	36
Audit Students	21
Auditing a Course	33

B

Barbering (Cert.)	84
Biological Science (A.S.)	50
Bookstore	30
Bookstore Return Policies	30
Brewer Library	38
Business (A.S.)	50
Business Administration (A.A.S.)	85
Business and Industry Services	44
Business Office Hours	24

C

Calendar	5
Campus Crime Statistical Disclosure Report	16
Campus Maps	228
Campus Organizations and Clubs	40
Campus Security/Police	16
Campus Site Information	43
Career Mobility for Practical Nurses	35
Career Services	39
Certificates	37
Chancellor	3
Chemistry (A.S.)	51
Child Development (A.S.)	52
Child Development (A.A.S.)	87
Child Development (CDA Credential)	87
Child Development (Cert.)	88
CIP Codes	46
Classification of Students	31
CLEP Subject Examinations	34
Clinical Practice/Manipulative Laboratory	127
College Policies and Regulations	8
College President	4
College Work-Study (CWS)	28
College-Level Examination Program (CLEP)	34
Computer Graphics (A.A.S.)	90

Option I - Graphic Design	90
Option II - Computer Graphics/Electronic Imaging	90
Option III - Graphic Animation/Electronic Imaging	91
Computer Information Systems (A.S.)	51
Computer Information Systems (A.A.S.)	91
Option I-Microcomputers	91
Option II-Programming	92
Option III-Networking Technology	92
Computer Information Systems (Cert.)	93
Software Applications Certificate	93
Conditional Admission	18
Conduct Expectations	8
Cooperative Education	42
Cosmetology (Cert.)	93
Instructor Training	93
Nail Technology	94
Course Audit	33
Course Descriptions	125
Course Forgiveness Policy	33
Course Load	31
Course Overloads	34
Course Prefixes	126
Creditable/Non-creditable Courses	17
Credit by Transfer	19, 34
Credit for Prior Experience	35
Credit from Nontraditional Sources	34
Credit Hour Equivalencies	127
Credit Hour Loads	31
Criminal Justice (A.S.)	52
Cum Laude	37

D

Dean's List	36
Decatur Campus	43
Degree-Eligible Students	17
Degrees	37
Degree Requirements	37
Dental Assisting (A.A.S.)	94
Dental Assisting (Cert.)	95
Design Drafting Technology (A.A.S.)	68
Design Drafting Technology/Mechanical (Cert.)	68
Design Drafting Technology/Architectural (Cert.)	69
Disabilities Accommodations	8
Disabled, Rights of	8, 14
Discrimination	8, 14
Distance Education	43
Drop and Add Period	31
Drop/Add Refund Policy	23
Drug Policy	8
Dual Enrollment	20
Due Process	9

E

Early Childhood Articulation with Athens State	52
Electives/Humanities/Social Sciences/Natural Sciences	47
Electrical Technology (A.A.S.)	69
Elementary Teacher Education (A.S.)	52
Emergencies	39
Emergency Medical Services (A.A.S.)	97, 98
EMS Special Courses	100
EMT Basic/Paramedic General Admission Requirements	98
EMT Basic/ Paramedic Entry Requirements	99
EMT Basic (Cert.)	97
EMT-Paramedic (Cert.)	97
English (A.A.)	53
Entrepreneurship (A.A.S.)	85

Entrepreneurship (Cert.)	86
Equal Opportunity	2
Experimental Laboratory	127

F

Facility Renewal Fee	23
Family Educational Rights/Privacy Act (F.E.R.P.A.)	22
Family Financial Planning and Counseling (A.S.)	53
Federal Financial Aid Programs/Applications	26
Fees	23
Final Examination Attendance	36
Financial Aid	26
Financial Assistance Credit Load	31
Financial Information	23
Fire Services Management (A.S.)	53
Fire Science (Cert.)	101
Former Students/Readmission	21
Full-Time Credit Load	31

G

GED Test Fee	24
GED Testing	41
General Admission Information	17
General Education (A.S.)	54
General Education Requirements	48
GPA	32
Grade Appeal Procedure	32
Grade Points	32
Grade ((Symbols))	31
Grades	31
Graduation	37
Graphic Design, Option I (A.A.S.)	90
Graphic Design, Option II Computer Graphics/Electronic Imaging (A.A.S.)	90
Graphic Design, Option III Graphic Animation/Electronic Imaging	91
Grievance Committee	15

H

Health and Physical Education (A.S.)	54
History of Calhoun	3
Honor Graduates	37
Humanities Electives	47
Huntsville/Research Park	43

I

In-State Tuition Rates	23
Instructional Fees	23
Instructional Information	31
International Student	19

L

Late Registration Fee	23
Law/Pre-Law (A.A.)	54
Library Services	38
Limestone Correctional Facility Site (LCF)	43

M

Machine Tool Technology (A.A.S.)	77
Computer Numerical Control (CNC) Certificates	80
Certificate I Milling	80
Certificate II Turning	80
Certificate III CAM	82
Magna Cum Laude	37

Major Field of Study Change	33
Management (A.A.S.)	86
Massage Therapy (Cert.)	101
Mathematics (A.S.)	55
Medicine/Pre-Medicine or Pre-Dentistry (A.S.)	55
Medicine/Pre-Veterinary Medicine (A.S.)	55
Minority Student Affairs	39
Missile and Munitions-Basic (A.A.S.)	102
Option I. Calibration Specialist	103
Option II. Technical Management	103
Option III. Military Technology	103
Mission of College	4
Motor Vehicle Registration	16
Music Education (A.S.)	56
Music/Church Music (Cert.)	104
Music Industry Communications (A.A.S.)	104

N

Natural Sciences Electives	47
Non-Degree Eligible Students	18
Nondiscrimination Statement	2
Nursing/ADN: Basic (A.A.S.)	105
Nursing/ADN: Career Mobility (A.A.S.)	112
Nursing/Practical Nursing (Cert.)	113
Nursing/Pre-Nursing (A.S.)	56

O

Official Student Records	22
One-Half Credit Load	31
Orientation to College	40
Out-of-State Tuition Rates	23

P

Paralegal Studies (A.A.S.)	118
Parking Citation	17
Pell Grants	28
Pharmacy/Pre-Pharmacy (A.S.)	57
Photography and Film Communications (A.S.)	57
Placement Testing	41
Placement Testing Exemptions	41
Police (Campus)	16
Police Academy Work	35
Practical Nursing (Cert.)	113
Pre-Admission Services	40
President	4
President's List	36
Probation and Suspension	36
Process Technology (A.A.S.)	83
Program CIP Codes	46
Programs of Study Index	46

R

Real Estate Sales and Management (A.A.S.)	87
Recruitment	40
Refund Policy	23
Residency Tuition Rates	24
Restroom Policy	17
Rights of Appeal/Disciplinary	15
Rights of Appeal/Financial Aid	28

S

Scholarships and Grants-in-Aid	29
Secondary Teacher Education (A.S.)	58
Security (Campus)	16
Security (Cert.)	118
Senior Adult Program Scholarship	21
Servicemember's Opportunity College	42

Index

Services for Persons with Disabilities.....	40
Sexual Harassment.....	14
Social Sciences Electives.....	47
Special Programs.....	120
Automotive Body Repair (Cert.)	
Advanced Repair.....	120
Basic Repair.....	120
Automotive Mechanics (Cert.)	
Advanced Repair.....	121
Basic Repair.....	121
Carpentry (Cert.)	
Finish.....	121
Rough.....	121
Design Drafting (Cert.)	
Basic Design.....	121
Basic Architectural.....	122
Basic Civil-Structural.....	122
Advanced Computer Aided Drafting.....	122
Electro-Mechanical.....	122
Horticulture (Cert.)	
General.....	122
Landscape Development.....	123
Nursery and Greenhouse Management.....	123
Masonry.....	123
Upholstery (Cert.)	
Automotive Interior and Trim.....	123
Basic.....	123
Furniture Repair and Refinishing.....	124
Welding Technology/Pipe (Cert.).....	124
Welding /Basic Structural (Cert.).....	124
Specialized Military Training.....	35
Specialized Training with Industry.....	35
Statement of Values.....	4
Statewide Transfer and Articulation Reporting System.....	44
Student Activities.....	40
Student Affairs.....	39
Student Course Overloads.....	34
Student Government Association.....	40
Student Grievance Procedures.....	14
Student Identification Cards.....	16
Student Organizations and Clubs.....	40
Student Records and Transcripts.....	22
Student Responsibilities.....	8
Student Services.....	39
Summa Cum Laude.....	37
Supplemental Educational Opportunity	
Grant (FSEOG).....	28
Surgical Technology (Cert.).....	118
Suspension.....	36

T

Table of Contents.....	6
Tech Prep.....	42
Testing Services.....	41
Theatre Arts (A.S.).....	58
Traffic Citations.....	17
Transcript Policy.....	23
Transfer of Credit.....	19
Transfer Students.....	18
Transient Students.....	26
Tuition.....	23

U

Unconditional Admission.....	18
University Parallel Student.....	31
Upward Bound.....	41

V

Veterans' Benefits.....	29
Vision, Mission, Goals, and Objectives of the Alabama Community College System.....	232
Visiting Student Program.....	37

W

Weapons Policy.....	17
Weekend College.....	43
Withdrawals.....	31
Work-Study.....	28

The Alabama Community College System Vision, Mission, Goals, and Objectives

Vision Statement

The Alabama Community College System believes education improves the life of every individual and advances society as a whole.

Mission Statement

The Alabama Community College System, consisting of public two-year community, and technical colleges and an upper division university, seeks to provide accessible quality educational opportunities, promote economic growth, and enhance the quality of life for the people of Alabama.

Goals

- To provide accessible quality educational opportunities.
- To promote economic growth.
- To enhance the quality of life.

Objectives

The Alabama Community College System shall provide:

- General education and other collegiate programs at the freshman and sophomore levels that prepare students for transfer to other colleges and universities.
- Technical, vocational, and career education that prepares students for immediate employment, retrain existing employees, and promotes local and state economic stability and competitiveness.
- An upper division university that provides selected baccalaureate opportunities for students within the postsecondary system.
- Developmental education that assists individuals in improving learning skills and overcoming educational deficiencies.
- Student services and activities that assist individuals in formulating and achieving their educational goals.
- Learning resources that support the needs of the institution and the community.
- Business and industry development training that meets employer needs.
- Continuing education and personal enrichment opportunities that support life-long learning and the civic, social, and cultural quality of life.
- Expanded partnerships with schools and school systems in the state to deliver seamless educational options and supportive articulation services.