

Chattanooga State Technical Community College

1998-1999 Catalog
Volume Number 23

Contents

	Page No.		Page No.
ACADEMIC PROGRAMS	2-4	GENERAL INFORMATION	63-90
		History	64
ACADEMIC CALENDAR	4	Statement of Mission	64-65
		A Community College Guarantee.....	65
ACADEMIC TERMINOLOGY.....	5-6	Notice to Students	65
		Admission	66-71
CAREER PROGRAMS	7-40	Academic Regulations	72-79
General Information/General Education	8-9	Financial Information	80
Business & Information Systems Division	10-18	Financial Aid.....	81-84
Engineering & Environmental Technology Division....	18-25	Continuing Education & Corporate Services.....	85
Liberal Arts Division.....	26-27	Disabilities Support Services.....	85-86
Mathematics & Sciences Division	28	Distance Learning Program	86
Nursing/Allied Health Division	29-40	Families First Program.....	87
		Instructional Materials Center	87-88
TRANSFER PROGRAMS	41-56	Library Services.....	88
General Information/General Education	42-43	The Business and Community Development Center....	89
Curriculum Guides	44-56	The Career Planning and Counseling Services Center	89-90
		The Child Development Center	90
INDUSTRIAL TECHNOLOGY PROGRAMS	57-62	The Small Business Development & Resource Center	90
		Direct Dial Numbers	90
		COURSE DESCRIPTIONS	91-136
		ADMINISTRATIVE/PROFESSIONAL STAFF/ FACULTY/ACCREDITATION/INDEX.....	137-152
		ADMISSION APPLICATION	LAST INSERT

1998-99 Academic Programs

Degree: **Associate of Arts**
Major: **General**

Area of Emphasis:
Accounting
Art
Broadcasting
Business Administration
Chemistry
Drama
Economics
English
French
German
Graphic Design
History
Humanities
Journalism
Management
Marketing
Mathematics
Music
Philosophy
Psychology
Religion
Sociology
Spanish
Theatre Arts

Division:
Business & Information Systems
Liberal Arts
Business & Information Systems
Business & Information Systems
Mathematics & Sciences
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Business & Information Systems
Business & Information Systems
Mathematics & Sciences
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts

Degree: **Associate of Science**
Major: **General**

Area of Emphasis:
Accounting
Art
Art Education
Biology
Broadcasting
Business Administration
Chemistry
Criminal Justice
Drama
Early Childhood Education
Economics
Elementary Education
Environmental Studies
Forestry, Fisheries, or Wildlife
Geography
Graphic Design
Health & Physical Education
Information Systems
Management
Marketing
Mathematics
Music
Nutrition
Physics
Political Science
Pre-Cytotechnology
Pre-Dentistry
Pre-Engineering
Pre-Law
Pre-Medical Technology
Pre-Medicine
Pre-Occupational Therapy
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Veterinary Medicine
Psychology
Secondary Education: English
Secondary Education: Mathematics
Secondary Education: Science
Secondary Education: Social Sciences
Social Work
Sociology
Theatre Arts
Wellness/Fitness Leadership

Division:
Business & Information Systems
Liberal Arts
Liberal Arts
Mathematics & Sciences
Business & Information Systems
Business & Information Systems
Mathematics & Sciences
Consortium with Cleveland State
Liberal Arts
Liberal Arts
Liberal Arts
Liberal Arts
Mathematics & Sciences
Mathematics & Sciences
Liberal Arts
Liberal Arts
Liberal Arts
Business & Information Systems
Business & Information Systems
Business & Information Systems
Mathematics & Sciences
Liberal Arts
Mathematics & Sciences
Mathematics & Sciences
Liberal Arts
Mathematics & Sciences
Mathematics & Sciences
Engineering & Environmental Technology
Liberal Arts
Mathematics & Sciences
Mathematics & Sciences
Mathematics & Sciences
Mathematics & Sciences
Mathematics & Sciences
Mathematics & Sciences
Mathematics & Sciences
Liberal Arts
Liberal Arts
Mathematics & Sciences
Mathematics & Sciences
Liberal Arts
Liberal Arts
Liberal Arts

1998-99 Academic Programs

Degree: **Associate of Applied Science**

Major:

Accounting Technology

Concentration:

Accounting Technology
Financial Planning

Division:

Business & Information Systems

Advertising Arts

Business & Information Systems

American Sign Language Studies

Liberal Arts

Applied Technology

Air Conditioning and Refrigeration
Auto Body Repair
Automotive Technology
Diesel Equipment Mechanics
Industrial Electricity
Industrial Electronics
Industrial Maintenance Mechanics
Landscaping and Turf Management
Machine Tool Technology
Marine Engine Technology
Medical Office Assisting
Surgical Technology
Technical Drafting
Welding

Business & Information Systems

CAD/CAM Technology

Engineering & Environmental Technology

Civil Engineering Technology

Engineering & Environmental Technology

Dental Hygiene

Nursing/Allied Health

Early Childhood Education

Liberal Arts

Electrical/Electronic Engineering Technology

Automated Controls
Computer Systems
Networking Technology

Engineering & Environmental Technology

Environmental Health & Safety Technology

Health Physics and Industrial Hygiene
Occupational Health & Safety Technology

Engineering & Environmental Technology

Environmental Protection Technology

Chemical Plant Operations Technology
Chemical Technology
Environmental Protection Technology
Environmental Remediation Technology

Engineering & Environmental Technology

Fire Science Technology

Emergency Medical Care
Emergency Service Supervision & Administration
Fire Suppression

Engineering & Environmental Technology

Health Information Management

Nursing/Allied Health

Human Services Specialist

Liberal Arts

Information Systems Technology

End User Support
Programming

Business & Information Systems

Legal Assisting Technology

Business & Information Systems

Management

Aviation
Banking and Financial
General
Health Services
Hospitality
Industrial
Insurance
Marketing
Retail
Small Business

Business & Information Systems

Mechanical Engineering Technology

Engineering & Environmental Technology

Medical Laboratory Technician

Consortium with Cleveland State

Nursing

Nursing/Allied Health

Office Systems Technology

Court Reporting
Office Systems Technology

Business & Information Systems

Physical Therapist Assistant

Nursing/Allied Health

Radiologic Technology

Nursing/Allied Health

Respiratory Care

Nursing/Allied Health

1998-99 Academic Terminology

The following is a list of terms commonly used in admission and registration procedures.

<i>Admissions</i>	The process of being admitted to the College with the opportunity to register for classes. Completion of the Admissions process does not constitute registration for classes.	<i>Remedial/ Developmental</i>	Foundation courses in English, mathematics, reading, and study skills designed for students who are not prepared for college level courses. Placement in remedial/developmental courses is determined by ACT or SAT and/or AAPP tests scores.
<i>Admissions file</i>	The set of documents related to a request for admission. The set contains the application form and official transcripts of previous work in high school or college and may contain standardized test scores (ACT or SAT and/or AAPP) or other information required by the Admissions Office.	<i>Prerequisite</i>	A requirement to be completed (or a level of skill or knowledge to be demonstrated) prior to enrollment in a course or program.
<i>Reapplication</i>	A form students must fill out if they do not attend Chattanooga State for one or more semesters (Summer excluded).	<i>Corequisite</i>	A course to be taken or a requirement to be fulfilled at the same time as a particular course is being taken.
<i>Registration</i>	The process of officially gaining entrance into one or more courses. Students must be admitted to the College before they are allowed to register for classes.	<i>Audit</i>	Registering for and attending class but not receiving credit.
<i>Preregistration</i>	The period of time before registration day in which students may register for the following semester.	<i>Honors course</i>	A version of a regular course reserved for students with superior preparation for that course.
<i>Orientation</i>	A meeting (or series of meetings) designed to acquaint a new student with the facilities, policies, sources of information and assistance, and academic and social atmosphere of the College.	<i>Elective</i>	A course that is accepted toward fulfillment of credit for a degree or certificate but is not specifically required for that degree or certificate. So termed because a student "elects" or chooses to take the course(s).
<i>Curriculum</i>	The set of courses offered in a particular degree or certificate program. More generally, the courses (in total) offered in a college or university. The plural word is curricula.	<i>Semester</i>	The division of the calendar year used in academic scheduling. A semester is roughly four months in duration.
		<i>Semester credit hour</i>	The unit of academic credit at Chattanooga State. Generally the number of hours a course meets each week determines the amount of credit it carries. (Laboratory and clinical courses are notable exceptions to this guideline.)
		<i>Academic load</i>	The total semester hours of credit for all courses taken during a semester.

1998-99 Academic Terminology

Continued

<i>Quality points</i>	Academic performance records are compiled through use of a scale assigning 4 “quality points” per semester hour of credit for an “A” grade ranging to 1 “quality point” per semester hour of credit for a “D” grade.	<i>Suspension</i>	The status of students (usually following probation) when their cumulative GPA drops below Chattanooga State’s standards for two consecutive semesters. Students may not enroll while on suspension. (Students who have twice previously attempted a remedial or developmental course and failed to meet the minimum standards for progression will also be suspended for one semester.)
<i>Grade point average (GPA)</i>	An average on the 4 point scale determined by dividing the total accumulated quality points by the corresponding total of hours of credit attempted. Certain grades do not influence this computation.	<i>Transcript</i>	A cumulative record of a student’s course work and grades.
<i>Major</i>	The academic area in which one specializes.	<i>Course I.D.</i>	The combination of letters and numbers found in the schedule of classes that designates a particular class.
<i>Concentration</i>	A group of courses within a major which emphasizes one aspect of the major.		EXAMPLE: <i>EN 110-01</i> <i>EN</i> stands for English <i>110</i> is the course number representing Composition I <i>01</i> is the section number representing particular days and time the class meets and the location.
<i>Drop</i>	Officially discontinuing a portion of one’s schedule for the remainder of the semester.		<i>Note: Certain section numbers are reserved for particular kinds of classes (e.g. honors, VIP, etc.). See the “Schedule of Classes” published each semester for more information.</i>
<i>Withdraw</i>	Officially discontinuing all of one’s schedule for the remainder of the semester.		
<i>Add and drop deadlines</i>	The latest date in an academic term when a course may be added or dropped from a student’s class schedule.		
<i>Census Date</i>	The 14th calendar day of the term. This is the date on which official enrollment figures are based. Dropping and adding classes prior to the Census Date may cause a student’s financial aid award to be adjusted. (<i>Note: During the summer or other shortened terms, the Census Date for each session is adjusted appropriately to reflect the condensed time frame.</i>)		
<i>Probation</i>	The status of students when their cumulative GPA drops below Chattanooga State’s standards. Students may still enroll while on probation.		

1998-99 Career Programs

Contents

	Page No.		Page No.
GENERAL INFORMATION			
Associate of Applied Science Degree	8	Environmental Health & Safety Technology	22
Technical Certificate	8	Health Physics and Industrial Hygiene Concentration	23-24
General Education	8-9	Occupational Health & Safety Technology Concentration	25
Math Placement	9	Environmental Protection Technology	22
BUSINESS & INFORMATION SYSTEMS DIVISION			
Accounting Technology	10	Chemical Plant Operations Technology Concentration	19-20
Accounting Technology Concentration	10	Chemical Technology Concentration	20
Financial Planning Concentration	12-13	Environmental Protection Technology Concentration	22
Advertising Arts	10	Environmental Remediation Technology Concentration	22-23
Applied Technology	10-11	Fire Science Technology	23
Business, see "Management"	16	Emergency Medical Care Concentration	21
Computer Science, see		Emergency Service Supervision & Administration Concentration	21-22
"End User Support Concentration"	12	Fire Suppression Concentration	23
"Programming Concentration"	17	Mechanical Engineering Technology	24
"Information Systems Technology Certificate"	15	LIBERAL ARTS DIVISION	
Computer Programming, see "Programming Concentration"	17	American Sign Language Studies	26
Court Reporting (Concentration of Office Systems Technology)	12	Criminal Justice Consortium with Cleveland State..	26
Information Systems Technology	15	Early Childhood Education	26-27
End User Support Concentration	12	Human Services Specialist	27
Programming Concentration	17	MATHEMATICS & SCIENCES DIVISION	
Information Systems Technology Certificate	15	Pharmacy Technician Certificate	28
Legal Assisting Technology	15	NURSING/ALLIED HEALTH DIVISION	
Management	16	Admission and Retention Policies	29-30
Aviation Management Concentration	11	Dental Hygiene	30-31
Banking and Financial Management Concentration	11-12	Diagnostic Medical Sonography Certificate	31
General Management Concentration	13	Health Information Management	31-32
Health Services Management Concentration	13-14	Medical Laboratory Technician Consortium with Cleveland State	32-33
Hospitality Management Concentration	14	Medical Record Technology, see "Health Information Management"	31-32
Industrial Management Concentration	14	Nuclear Medicine Technology Certificate	33
Insurance Management Concentration	15	Nursing	33-36
Marketing Concentration	16	LPN Transition Program	36
Retail Management Concentration	17	Physical Therapist Assistant	36-37
Small Business Management Concentration	17-18	Radiation Therapy Technology Certificate	38
Office Systems Technology	16	Radiologic Technology	38-39
Office Systems Technology Concentration	16	Respiratory Care	40
Court Reporting Concentration	12	Ultrasound, see "Diagnostic Medical Sonography" ..	31
Word Processing Certificate	18	X-Ray Technology, see "Radiologic Technology"	38-39
Paralegal, see "Legal Assisting Technology"	15	ENGINEERING & ENVIRONMENTAL TECHNOLOGY DIVISION	
ENGINEERING & ENVIRONMENTAL TECHNOLOGY DIVISION			
CAD/CAM Technology	19		
Civil Engineering Technology	20		
Electrical/Electronic Engineering Technology	21		
Automated Controls Concentration	18-19		
Computer Systems Concentration	20-21		
Networking Technology Concentration	24-25		

Cattanooga State offers more than 50 career programs which prepare students for a specialized career with marketable skills. These programs are designed for the student who does not intend to transfer to a baccalaureate program. Students can pursue programs leading to the Associate of Applied Science (AAS) degree or a Technical Certificate.

ASSOCIATE OF APPLIED SCIENCE

Associate of Applied Science degrees are designed to prepare students for immediate employment in a specialized area. The AAS degree normally requires a minimum of 60 semester credit hours of college level work, including a minimum of 36 semester hours in the technical specialty.

TECHNICAL CERTIFICATE

Programs leading to Technical Certificates are offered in response to the training needs of business and industry. Since the credential depicts proficiency in an area of employment skill, the program's standards are determined primarily by the training needs of business. Students admitted to Technical Certificate programs may be enrolled as special students.

Note: Credit hours earned in developmental or remedial courses are institutional credit; they are not applicable to credit hours required for a degree or certificate.

GENERAL EDUCATION

The goal of general education is to provide students with a common set of learning experiences which will develop the attitudes, knowledge, and skills to enable them to function effectively in society and enjoy enriched personal lives.

The Associate of Applied Science degree has a General Education Core Requirement consisting of a minimum of one course from each of the following areas: Written Communication, Oral Communication, Humanities, Mathematics, Natural Science (some majors substitute an additional Mathematics course for Natural Science), Social/Behavioral Science, and Computers.

APPROVED GENERAL EDUCATION COURSES

The lists below indicate courses which have been approved for use in the various General Education categories. Because these are foundation courses on which more advanced work in the major may need to build, the SUMMARY OF REQUIRED HOURS for the student's

major may require that a specific course be taken to satisfy a given General Education requirement. Otherwise, the student may select any course from the list. If the requirement calls for three credit hours and the student selects a four- or five-credit course, the extra credit hour(s) will count as unrestricted elective credit toward graduation. (If the requirement specified in the student's major is a four-hour course, the fourth credit hour will **not** count toward satisfying the unrestricted elective requirement because it is *required* as opposed to being *selected* by the student.)

WRITTEN AND ORAL COMMUNICATION ELECTIVES (6 HOURS)

Must include one course in Written Communication and one course in Oral Communication

Written Communication

EN 110 Composition I

Oral Communication

EN 227 Technical Reports

SP 110 Fundamentals of Public Speaking

Note: Some programs require technical courses which

may be used to satisfy this requirement. Such courses are noted in the SUMMARY OF REQUIRED HOURS.

COMPUTER ELECTIVES (3 HOURS)

CS 101, Computer Literacy, is the course most commonly used to satisfy this requirement. However, certain majors may specify other courses more appropriate to the major (e.g., ET 115, Computers in Engineering Technology, for Engineering Technology majors). If the SUMMARY OF REQUIRED HOURS indicates a Computer Elective, the student may take CS 101 or any course in Information Systems (CS prefix).

HUMANITIES ELECTIVES (3 HOURS)

AR 112 Introduction to Art History

AR 212 Art Structure

DR 111 Introduction to the Theatre

EN 210 Literature of the Western World I

EN 211 Literature of the Western World II

EN 213 American Masterpieces I

EN 214 American Masterpieces II

EN 218 English Masterpieces I

- EN 219 English Masterpieces II
- EN 237 Literature by Women
- EN 261 African-American Literature
- EN 265 Literature in Culture: World Perspectives
- HU 110 Introduction to the Humanities
- HU 120 Philosophy of Science and Technology
- HU 210 Religions of the World
- HU 213 Mythology
- HU 220 Religion in America
- HU 230 Contemporary Women Artists and Writers
- HU 238 Folklore and Native Culture
- HU 240 Leadership Development
- HU 265 Literature in Culture: World Perspectives
- MU 110 Music Appreciation
- PL 111 Introduction to Western Philosophy
- PL 220 Philosophy of Religion: Old Testament
- PL 221 Philosophy of Religion: New Testament

MATHEMATICS ELECTIVES (3 HOURS)

- MA 117 College Algebra
- MA 118 Pre-Calculus
- MA 121 Algebra and Trigonometry for Technologies I
- MA 125 Algebra and Trigonometry for Technologies II
- MA 135 Calculus I with Analytic Geometry
- MA 136 Calculus II with Analytic Geometry
- MA 143 Contemporary Mathematics
- MA 153 Introductory Statistics
- MA 163 Structure of Number Systems I
- MA 164 Structure of Number Systems II
- MA 170 Statistics I
- MA 171 Statistics II
- MA 193 Calculus for Management, Life, and Social Sciences
- * MG 165 Business Mathematics

*Allowed for designated AAS degree programs in the division of Business and Information Systems only

Math Placement

For students pursuing majors requiring Calculus, Pre-Calculus, or Algebra and Trigonometry for Technologies, placement in mathematics courses is based on the criteria listed below. The student should take the highest level course for which he/she is qualified. If this is a higher level course than the one required for graduation, it will automatically be substituted for the lower level course. All degrees at Chattanooga State require at least one college level mathematics course. Meeting the criteria to place into a higher level course does not exempt the student from this requirement. If a student in a career program places into a higher level math course, he/she may be allowed to graduate with fewer than the total number of hours published in the SUMMARY OF REQUIRED HOURS for that major, provided that all other requirements for the degree are met and the student completes

- | | |
|---|--|
| <p>Criteria</p> <p>1. Three (3) high school mathematics credits above the Algebra I level and a Math subscore of 25 on the ACT or corresponding SAT score.</p> <p>2. Two (2) high school mathematics credits above the Algebra I level and a Math subscore of 21 on the ACT or corresponding SAT score.</p> | <p>Advanced Placement Course Calculus I with Analytic Geometry, MA 135</p> <p>Pre-Calculus, MA 118 or Algebra and Trigonometry for Technologies II, MA 125 or Calculus for Management, Life, and Social Sciences, MA 193</p> |
|---|--|

at least 64 semester hours.

NATURAL SCIENCE ELECTIVES (4 HOURS)

- BI 100 Essentials of Life Science
- ‡ BI 115 Introduction to Human Biology
- BI 134 General Biology I
- BI 135 General Biology II
- † BI 174 Human Anatomy and Physiology I
- † BI 175 Human Anatomy and Physiology II
- BI 205 Plant Morphology
- CH 104 Principles of Chemistry
- CH 105 Survey of Organic and Analytical Chemistry
- CH 134 General Chemistry I
- CH 135 General Chemistry II
- ES 150 Environmental Science I

- ES 151 Environmental Science II
- GE 111 Physical Geology
- GE 112 Historical Geology
- PH 109 The Physical Environment
- PH 110 Concepts of Physics
- PH 114 Physics I
- PH 115 Physics II
- PH 154 Astronomy
- PH 254 General Physics with Calculus I
- PH 255 General Physics with Calculus II

‡ Allowed for Legal Assisting Technology majors only
 † Allowed for the following majors only:

- Human Services Specialist
- Fire Science Technology—Emergency Medical Care Concentration
- Management—Health Services Management Concentration
- Designated AAS degree programs within the division of Nursing/Allied Health

SOCIAL AND BEHAVIORAL SCIENCE ELECTIVES (3 HOURS)

- EC 110 Introduction to Economics
- EC 211 Principles of Economics I — Macro
- EC 212 Principles of Economics II — Micro
- GO 101 Physical Geography
- GO 103 World Geography
- HI 118 Heroes and Villains
- HI 203 United States History to 1865
- HI 204 United States History from 1865
- HI 205 Western Civilization to 1715
- HI 206 Western Civilization from 1715
- HI 207 World History to 1500
- HI 208 World History from 1500
- HI 261 Afro-American History
- HI 271 Tennessee History
- PO 110 Introduction to American Government
- PO 120 Introduction to Political Science
- PY 101 General Psychology I
- PY 250 Leadership Development
- PY 251 Psychology of Personal Adjustment
- SO 110 Introduction to Sociology
- SO 120 Social Problems
- SO 215 Marriage and Family
- SO 216 Cultural Anthropology

1998-99 CAREER PROGRAMS

The SUMMARY OF REQUIRED HOURS for the programs listed on these pages illustrates the course of study which should be pursued by a full-time student. Part-time students should consult with their adviser to make sure all prerequisites are met and courses are completed in the proper sequence. One unrestricted elective is included in every program. Credit hours will vary depending on the student's choice, but will normally range from 1 to 4.

COOPERATIVE EDUCATION WORK EXPERIENCE can be an important addition to a student's formal classroom work. Co-op courses may be used as Unrestricted Electives, and when appropriate may substitute for major courses if approved by the appropriate dean. To register for Co-op, contact the Co-op office prior to the registration process.

BUSINESS & INFORMATION SYSTEMS

Accounting Technology Concentration

IN ACCOUNTING TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

The primary objective of the Accounting Technology Degree Program is to provide students with the theoretical and practical knowledge of accounting concepts, principles, standards, methods and procedures that will prepare students for employment in accounting. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Accountant, Bookkeeper, Cost Accountant, Payroll Bookkeeper, Accounts Receivable Bookkeeper, Auditor, Accounts Payable Bookkeeper, Tax Accountant, Internal Auditor, Controller

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	4	4
BU 173,175	Business Law I, II	3	3
CS 101	Computer Literacy		3
EN 110	Composition I	3	
MA 117 or MG 165	College Algebra or Business Mathematics	3	
MA 170	Statistics I		3
MG 103	Introduction to Business	3	
MG 254	*Salesmanship		3
	Social/Behavioral Science Elective		3
		16	19
Sophomore			
BU 110	Business Tax Reporting	3	
BU 185	Federal Taxes I	3	
BU 204, 205	Intermediate Accounting I, II	3	3
BU 224	Cost & Budgeting	3	
BU 233	Auditing		3
BU 240	Practical Accounting Applications		3
BU 250, 251	Accounting Information Systems I, II	3	3
BU 255	Professional Review in Accounting and Taxation		3
	Humanities Elective	3	
	Unrestricted Elective		1
		18	16
Total Hours: 69			

*Satisfies Oral Communication requirement.

Accounting Technology Major

(Associate of Applied Science Degree)

Accounting Technology majors specialize in one of the following areas by following the SUMMARY OF REQUIRED HOURS listed under the concentration:

- Accounting Technology Concentration, page 10
- Financial Planning Concentration, page 12-13

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

Advertising Arts Major

(Associate of Applied Science Degree)

The primary goal of this program is to train individuals for careers in advertising agencies, art services, department stores, printing industries, television, graphic arts industries, and in-plant or agency packaging services. Students enrolling in Advertising Arts will need to acquire certain basic professional equipment, costing approximately \$200-\$250, during the first year of the program. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Art Director, Production Artist, Graphic Designer, Illustrator, Printer, Printing, Pre-Press, Service Bureau

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
AA 106	Design	4	
AA 107	Illustration I		3
AA 108	Advertising Concepts	3	
AA 109	Production Art	4	
AA 116	Typography		4
CS 101	Computer Literacy	3	
EN 110	Composition I	3	
OF 127	*Desktop Publishing		3
	Mathematics/Natural Science Elective		3/4
	Social/Behavioral Science Elective		3
		17	16/17
Sophomore			
AA 209, 210	Graphic Design I, II	4	4
AA 215, 217	Advertising Design I, II	3	3
AA 219	Illustration II	4	
AA 222	Portfolio		2
AA 245	Computer Applications for Graphic Design	3	
AA 246	Computer Illustration		3
AR 112	Introduction to Art History		3
MG 165	Business Mathematics	3	
SP 110	Fundamentals of Public Speaking		3
	Unrestricted Elective	1	
		18	18
Total Hours: 69/70			

*Prerequisite: OF 107 or equivalent keyboarding skills.

Applied Technology Major

(Associate of Applied Science Degree)

The Applied Technology program is designed to broaden the education of students who have successfully completed specialized training in the Industrial Technology Division and to prepare those students for entry into supervisory level positions. The following Industrial Technology programs have been approved as concentrations under the Applied Technology major: Air Conditioning and Refrigeration, Auto Body Repair, Automotive Technology, Diesel Equipment Mechanics, Industrial Electricity, Industrial Electronics, Industrial Maintenance Mechanics, Landscaping and Turf Management, Machine Tool Technology, Marine Engine Technology, Medical Office Assisting, Surgical Technology, Technical Drafting, Welding. This program is designed for the student

who does not intend to transfer to a baccalaureate degree program.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
	*Advanced Placement	32		
BU 114	Principles of Accounting I	4		
BU 173	Business Law I		3	
CS 101	Computer Literacy	3		
EN 110	Composition I	3		
MG 103	Introduction to Business	3		
MG 114	Principles of Management		3	
MG 134	Supervision and Human Relations			3
MG 165	Business Mathematics	3		
PY 251	Psychology of Personal Adjustment		3	
MG 254	**Salesmanship		3	
	Humanities Elective			3
	Natural Science Elective		4	
	Unrestricted Elective			1
Total Hours: 71		<u>48</u>	<u>16</u>	<u>7</u>

Total Hours: 71

* Advanced Placement credit will be awarded in accordance with the "Industrial Technology Certificate/AAS Degree Articulation" policy on page 62.

** Satisfies Oral Communication requirement.

Aviation Management Concentration

IN MANAGEMENT MAJOR

(Associate of Applied Science Degree)

This program leads to an Associate of Applied Science degree in Management with a concentration in Aviation Management. It is designed for the individual preparing for a career in the aviation industry. The aviation courses prepare the individual for the FAA written exams for the Private Pilot, Instrument Pilot, and the Commercial Pilot. The required flight instruction classes provide laboratory flight experience both in flight simulators and in actual aircraft. For completion of the Commercial Pilot Certificate, a Second Class Aviation Medical Certificate is also required. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
AV 111	Flight Theory	3	
AV 112	Navigation	3	
AV 113	FAA Regulations	3	
AV 123	Meteorology		3
AV 141,142	Flight Instruction I, II	3	3
AV 231	Instrument Flight		3
BU 173	Business Law I	3	
EN 110	Composition I	3	
MG 103	Introduction to Business		3
MG 165	Business Mathematics		3
MG 254	*Salesmanship		3
		<u>18</u>	<u>18</u>
Sophomore			
AV 143,144	Flight Instruction III, IV	3	3
AV 201	Aerospace Internship		3
AV 221	Aviation Management		3
BU 114	Principles of Accounting I	4	
CS 101	Computer Literacy	3	
MG 114	Principles of Management	3	
MG 134	Supervision and Human Relations		3
	Humanities Elective		3
	Mathematics Elective		3
	Social/Behavioral Science Elective	3	
	Unrestricted Elective	1	
Total Hours: 71		<u>17</u>	<u>18</u>

Total Hours: 71

*Satisfies Oral Communication requirement.

ADVANCED

STANDING FOR FLIGHT RELATED EXPERIENCE

College credit may be granted for specific Aerospace courses on the basis of flight training and experience prior to the first semester of enrollment at Chattanooga State. The student must provide documentation to substantiate his/her background to the Vice President for Academic Affairs through the appropriate faculty/department. The following credentials may justify advanced standing with credit for the listed classes:

Private Pilot, Airplane Single Engine – Land

AV 101 General Aeronautics – 3 credit hours

AV 141 Flight Instruction I – 3 credit hours

Commercial Pilot, Airplane Single or Multi-Engine Land

AV 111 Flight Theory – 3 credit hours

AV 112 Navigation – 3 credit hours

AV 113 FAA Regulations – 3 credit hours

AV 142 Flight Instruction II – 3 credit hours

Instrument Rating, Airplane

AV 123 Meteorology – 3 credit hours

AV 143 Flight Instruction III – 3 credit hours

AV 231 Instrument Flight – 3 credit hours

In order to obtain this credit, these certificates must be current and valid. Flight evaluation may be requested by Chattanooga State prior to granting credit for the above certificates.

Banking and Financial Management Concentration

IN MANAGEMENT MAJOR

(Associate of Applied Science Degree)

This program leads to an Associate of Applied Science degree in Management, Banking and Financial Management Concentration. The primary goal of this program is to prepare individuals for supervisory and/or management positions in the financial services industry. A secondary goal is to upgrade the level of skills and knowledge possessed by those currently employed in the field. This program has been developed within the guidelines of the American Institute of Banking, American Bankers Association. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Bank Operations, Branch Banking, Commercial Lending, Consumer Credit, Mortgage Lending

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BK 110	Principles of Banking	3	
BK 112	Money and Banking	3	
BK 122	Economics for Bankers		3
BK 130	Consumer Lending	3	
BU 114	Principles of Accounting I		4
CS 101 or	Computer Literacy or		
	Computer Elective	3	
EN 110	Composition I	3	
MA 170 or	Statistics I or		
	Natural Science Elective	3/4	
MG 103	Introduction to Business		3
MG 165	Business Mathematics		3
MG 254	*Salesmanship		3
		<u>18/19</u>	<u>16</u>

Sophomore

BK 211	Marketing for Bankers		3	
BK 212	Analyzing Financial Statements	3		
BK 219	Law and Banking Principles		3	
BK 229	Law and Banking Applications		2	
BU 115	Principles of Accounting II	4		
BU 173	Business Law I		3	
EC 211	Principles of Economics I	3		
MG 114	Principles of Management	3		
MG 134	Supervision and Human Relations	3		
	**Banking Electives	3	3	
	Humanities Elective		3	
	Unrestricted Elective		1	
		<hr/>	<hr/>	<hr/>
		19	18	

Total Hours: 71/72

* Satisfies Oral Communication requirement.

** RS 102 may be substituted for one Banking Elective.

Business

See "See Management Major"

Computer Science

See: "End User Support Concentration," "Programming Concentration," "Information Systems Technical Certificate"

Computer Programming

See "Programming Concentration"

Court Reporting Concentration

IN OFFICE SYSTEMS TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

This program leads to an Associate of Applied Science degree in Office Systems Technology with a concentration in Court Reporting. Although the course content is oriented toward Tennessee laws and practices, the computer-aided machine shorthand portion can be applied in any jurisdiction when the student is familiar with its laws. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
CS 101	Computer Literacy	3		
EN 110	Composition I		3	
HS 104,114	General Medical Terminology I, II	3	3	
LA 110	Fundamentals of Law	3		
MG 165	Business Mathematics		3	
OF 210, 220, 230	Court Reporting I, II, III	5	4	4
OF 113	Keyboarding/Document Processing I		3	
OF 104	Business Communications I	3		
	Unrestricted Elective	1		
		<hr/>	<hr/>	<hr/>
		18	16	4
Sophomore				
LA 130	Legal Research	3		
OF 114	Keyboarding/Document Processing II		3	
OF 175	Medical and Technical Dictation			3
OF 240, 250, 255	Court Reporting IV, V, VI	4	4	4
OF 260, 270	Court Reporting Procedures I, II	4	4	
SP 110	Fundamentals of Public Speaking		3	
	Social/Behavioral Science Elective	3		
	Humanities Elective	3		
	Natural Science Elective		4	
		<hr/>	<hr/>	<hr/>
		17	18	7

Total Hours: 80

End User Support Concentration

IN INFORMATION SYSTEMS TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

This program of study is designed to develop competent information systems technicians who will work as specialists in the microcomputer field. Both technical and non-technical related subjects are included so that the graduate will have a better understanding of possible application areas and supervisory and administrative responsibilities. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Microcomputer Specialist, End-user Support

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CS 104	Fundamentals of Information Systems	3	
CS 114	Concepts of Programming	2	
CS 124	Visual Basic I	3	
CS 176	Microcomputer Operating Systems		3
CS 185	C++ Programming Language		3
CS 198	Database Software Applications		3
EN 110	Composition I	3	
MA 170,171	Statistics I, II	3	3
	Humanities Elective		3
	Social/Behavioral Science Elective	3	
		<hr/>	<hr/>
		17	15
Sophomore			
BU 114,115	Principles of Accounting I, II	4	4
CS 197	Spreadsheet Software Applications	3	
CS 204	Microcomputer Architecture	3	
CS 205	Computer Networks	3	
CS 215	Local Area Network Management		3
CS 244	Systems Analysis and Design		3
CS 296	Principles of Database Mgmt. Systems	3	
EN 227	Technical Reports		3
	Information Systems Elective		3
	Unrestricted Elective	1	
		<hr/>	<hr/>
		17	16

Total Hours: 65

Financial Planning Concentration

IN ACCOUNTING TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

Financial Planning is a two-year career program leading to an Associate of Applied Science Degree in Accounting Technology. The primary goal of this program is to prepare the student for a position in one of the areas of financial planning. The skills learned in this degree should expedite the student's entrance into the field of financial planning in small businesses, large corporations, or government organizations. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Financial Planning – Accounting Firm, Estate Law Firm, Pension & Benefits Company, Insurance Agency, Investment Firm

Financial Counseling – NonProfit Organization, Government Agency

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	4	4
BU 185,186	Federal Taxes I, II	3	3
CS 101	Computer Literacy		3
EN 110	Composition I		3
FP 101	Fundamentals of Financial Planning	3	
IS 107	Principles of Life and Health Insurance	3	
LA 110	Fundamentals of Law		3
MG 165	Business Mathematics		3
MG 185	Basic Investing	3	
		<u>16</u>	<u>19</u>
Sophomore			
BU 110	Business Tax Reporting	3	
EC 211	Principles of Economics I		3
FP 201	Estate Planning	4	
FP 219 or FP 220	Computerized Financial Planning or Comprehensive Financial Planning		3
IS 104	Insurance Mathematics	3	
IS 113	Pension Planning		3
MG 103	Introduction to Business	3	
SP 110	Fundamentals of Public Speaking		3
	Humanities Elective		3
	Mathematics/Natural Science Elective	3/4	
	Unrestricted Elective	1	
		<u>17/18</u>	<u>15</u>
Total Hours: 67/68			

**Directed Electives totaling five (5) hours to be selected from the following:

Course No.	Course Title	Hours
MG 101	Professional Ethics in the Workplace: Business and Commerce	1
MG 110	Leadership Skills	1
MG 170	Labor Relations	3
MG 214	Purchasing	3
MG 285	Organizational Behavior	3
OF 125	Word Processing I	3

‡Prerequisite or corequisite: OF 113 or equivalent.

Health Services Management
Concentration

IN MANAGEMENT MAJOR

(Associate of Applied Science Degree)

This program leads to an Associate of Applied Science degree in Management, Health Services Management Concentration. The primary goal of this program is to prepare individuals for supervisory and/or management positions in the health care industry. A secondary goal is to upgrade the level of skills and knowledge possessed by those currently employed in the health care field. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Emergency Medical Services Management, Dental Office Management, Health Care Field Management

Admission Requirements

There are three ways to meet the admission requirements for the Health Services Management Concentration:

1. Completion of a clinically-based health program consisting of a minimum of 25 semester credit hours **and** current registration/certification/licensure in the State of Tennessee. Students with these credentials shall be awarded 25 semester hours of Advanced Placement credit toward the 71 total credit hours required for the degree.
2. Completion of a health related certificate less than 25 semester credit hours **and** completion of the 25 semester credit hours of course work specified below as courses to be taken in lieu of Advanced Placement.
3. A minimum of two (2) years of work experience in a health field **and** completion of the 25 semester credit hours of course work specified below as courses to be taken in lieu of Advanced Placement.

13

General Management Concentration

(Associate of Applied Science Degree)

General Management is a two-year career program leading to an Associate of Applied Science Degree in Management Major. The primary goal of the program is to prepare students for management positions in a variety of areas in small and large businesses and in public and private organizations. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Office Manager, Assistant Manager, Department Manager, Personnel Administration, Supervisor

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	4	4
BU 173	Business Law I		3
CS 101	Computer Literacy	3	
EN 110	Composition I	3	
MA 170	Statistics I		3
MG 103	Introduction to Business	3	
MG 114	Principles of Management		3
MG 165	Business Mathematics		3
	Humanities Elective	3	
	Social/Behavioral Science Elective		3
		<u>16</u>	<u>19</u>
Sophomore			
CS 197	Spreadsheet Software Applications	3	
CS 198	Database Software Applications		3
FM 201	Financial Management I	3	
MG 105	Introduction to Quality Management	3	
MG 134	Supervision and Human Relations		3
MG 154	Marketing	3	
MG 160	Project Management	3	
MG 254	*Salesmanship		3
MG 264	Human Resources Management	3	
	**Directed Electives		5
	Unrestricted Elective		3
		<u>18</u>	<u>17</u>
Total Hours: 70			

*Satisfies Oral Communication requirement.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
	*Advanced Placement	25		
BI 174,175	Human Anatomy and Physiology I,II	4	4	
CS 101	Computer Literacy			3
EN 110	Composition I		3	
BU 114	Principles of Accounting I	4		
BU 173	Business Law I		3	
FM 201	Financial Management I	3		
MG 103	Introduction to Business	3		
MG 114	Principles of Management		3	
MG 134	Supervision and Human Relations			3
MG 165	Business Mathematics	3		
SP 110	Fundamentals of Public Speaking			3
	Humanities Elective			3
	Social/Behavioral Science Elective			3
	Unrestricted Elective			1
		<u>42</u>	<u>16</u>	<u>13</u>
Total Hours: 71				

1998-99 CAREER PROGRAMS

* Advanced Placement hours will be the result of the student's completion of a clinically-based health program consisting of a minimum of 25 semester credit hours and current registration/certification/licensure in the State of Tennessee. Students who do not qualify for Advanced Placement must complete the following 25 semester credit hours of course work in lieu of Advanced Placement:

HS 104	General Medical Terminology I	3
HS 114	General Medical Terminology II	3
MG 101	Professional Ethics in the Workplace: Business and Commerce	1
MG 105	Introduction to Quality Management	3
MG 286	Health Services Management Practicum	3
MR 103	Legal Aspects of Health Records	2
OM 101	Medical Office Supervision	1
OM 102	Medical Office Personnel Practices	1
OM 103	Medical Practice Marketing and Ethics	1
OM 104	Medical Office Communications	1
OM 105	Medical Office Accounting	2
	**Directed Electives	4
		<hr/> 25

**Directed Electives totaling four (4) hours to be selected from the following:

ED 212	Drug and Alcohol Abuse Awareness	3
OM 106	Medical Office Coding	2
PE 118	Concepts of Wellness	1
PE 154	First Aid and Safety Education	3
PE 211	Personal and Community Health	3

Hospitality Management Concentration

IN MANAGEMENT MAJOR

(Associate of Applied Science Degree)

The primary goal of this program is to prepare students to work in one of the areas of Hospitality Management. Hospitality is a wide-ranging industry and the student may choose to specialize in hotel/motel management, restaurant management or tourist attraction management. The skills learned in this degree should expedite the student's entrance into the fast growing tourism and hospitality management field. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Hotel/Motel Manager, Front Office Manager, Hotel/Motel Assistant Manager, Housekeeping Supervisor, Front Office Reservation Manager, Hotel/Motel Sales Manager, Food and Beverage Manager, Tourist Attraction Supervisor, Restaurant Manager/Assistant Manager, Conference/Convention Manager/Assistant Manager

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114	Principles of Accounting I	4	
CS 101	Computer Literacy	3	
EN 110	Composition I	3	
HM 101	Hospitality Internship I		3
HM 103	Introduction to Hospitality Management	3	
MA 170	Statistics I		3
MG 103	Introduction to Business	3	
MG 114	Principles of Management		3
MG 165	Business Mathematics	3	
MG 254	*Salesmanship		3
	**Directed Elective		3
		<hr/> 19	<hr/> 15
Sophomore			
BU 173	Business Law I	3	
MG 101	Professional Ethics in the Workplace: Business and Commerce		1
MG 134	Supervision and Human Relations	3	
MG 154	Marketing	3	
MG 264	Human Resources Management		3
HM 201	Hospitality Internship II		3
	**Directed Electives	6	6
	Humanities Elective	3	
	Social/Behavioral Science Elective		3
	Unrestricted Elective		1
		<hr/> 18	<hr/> 17
	Total Hours: 69		

*Satisfies Oral Communication requirement.

**Directed Electives totaling fifteen (15) hours must be selected from the following:

HM 213	Hotel/Motel Management: Front Office Operations and Administration	3
HM 223	Restaurant Management	3
HM 233	Hospitality Marketing: Sales and Marketing for Hotels, Motels and Resorts	3
HM 243	Hotel Back Office Operations and Administration	3
HM 255	Tourism and Travel	3
HM 265	Conference/Convention Management	3
HM 274	Regional Tourist Attractions	3
HM 280	Introduction to Culinary Preparation	3
HM 281	Hot and Cold Food Preparation	3
HM 282	Introduction to Professional Baking Methods	3
ND 120	Food Service Sanitation	2
ND 121	Food Service Sanitation Practicum	1

Industrial Management Concentration

IN MANAGEMENT MAJOR

(Associate of Applied Science Degree)

This Associate of Applied Science degree program is designed for those interested in the technical aspects of operations management as applied to service and manufacturing industries. The required courses have been selected to provide the technical background necessary to understand today's complex business activities in the areas of marketing, finance, production, quality control, supervision and personnel management. Students are required to develop skills in quantitative methods and in oral and written communications, as well as develop an appreciation for the importance of proper management of human resources as related to successful business operations. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Methods and Systems Analysis, Inventory Management, Production Planning and Control, Quality Control, Time Study and Work Measurement, Industrial Sales, Personnel Administration, Purchasing, Production Supervision

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	4	4
CS 101	Computer Literacy	3	
EN 110	Composition I		3
MA 170	Statistics I		3
MD 114	Engineering Drawing I		3
MD 184	Manufacturing Processes	3	
MG 103	Introduction to Business	3	
MG 134	Supervision and Human Relations		3
MG 165	Business Mathematics	3	
MG 214	Purchasing	3	
	Unrestricted Elective		1
		<hr/> 19	<hr/> 17
Sophomore			
BU 173	Business Law I	3	
FM 201	Financial Management I	3	
IM 204	Production and Inventory Control		3
IM 225	Statistical Quality Control		3
IM 230	Work Design and Measurement	3	
MA 171	Statistics II	3	
MG 114	Principles of Management		3
MG 154	Marketing		3
MG 254	*Salesmanship		3
MG 264	Human Resources Management		3
PY 251	Psychology of Personal Adjustment	3	
	Humanities Elective	3	
		<hr/> 18	<hr/> 18
	Total Hours: 72		

*Satisfies Oral Communication requirement.

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

Information Systems Technology Certificate

(Technical Certificate)

This certificate is designed for persons with an interest in microcomputers-data processing. In order to provide the flexibility to meet the unique needs of individual students, the curriculum is divided into two parts. Roughly half of the program (14 semester hours) consists of a core of courses required of every student, while the remainder of the coursework consists of directed electives chosen from information systems, accounting, management, or office systems technology. Directed electives must be approved in advance by a full-time instructor from the department of Information Systems Technology.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
BU 114	Principles of Accounting I	4	
CS 101	Computer Literacy	3	
CS 124	Visual BASIC I	3	
MG 103	Introduction to Business	3	
	*Directed Electives		15-18
Total Hours: 28-31		13	15-18

* Must include a minimum of nine hours of courses with a CS prefix. The remaining hours must be chosen from BU, MG, CS, or OF courses. For additional information, see a full-time instructor in the Department of Information Systems Technology.

Information Systems Technology Major

(Associate of Applied Science Degree)

Information Systems Technology majors specialize in one of the following areas by following the SUMMARY OF REQUIRED HOURS listed under the concentration:

- End User Support Concentration, page 12
- Programming Concentration, page 17

Insurance Management Concentration

IN MANAGEMENT MAJOR

(Associate of Applied Science Degree)

Insurance Management is a two-year career program leading to an Associate of Applied Science Degree within the Management Major. The primary goal of this program is to prepare the student for a position in one of the areas of life/health or property/casualty insurance. The skills learned in this degree should expedite the student's entrance into the field of life/health or property/casualty insurance in small businesses, large corporations, or government organizations. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

- Life Insurance Agency/Branch, Life Insurance Home Office, Health Insurance Home Office, Health Insurance Sales, Insurance Office—Government, Insurance Office—Private Business

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	4	4
CS 101	Computer Literacy		3
EC 211	Principles of Economics I		3
EN 110	Composition I	3	
IS 107 or IS 109	Principles of Life & Health Insurance or Principles of Risk & Insurance	3	
IS 108	Insurance Law	3	
MG 103	Introduction to Business	3	
MG 134	Supervision and Human Relations		3
MG 165	Business Mathematics		3
MG 254	*Salesmanship		3
		16	19
Sophomore			
BU 173	Business Law I		3
FM 201	Financial Management I	3	
IS 104	Insurance Mathematics	3	
IS 205	Insurance Company Operations		3
MA 170	Statistics I		3
MG 114	Principles of Management	3	
MG 264	Human Resources Management		3
	Humanities Elective		3
	Insurance Electives	9	3
	Unrestricted Elective		1
		18	19
Total Hours: 72			

*Satisfies Oral Communications requirement.

Legal Assisting Technology Major

(Associate of Applied Science Degree)

This program is designed to prepare students to work as paralegals in law offices. The student will be working with practicing lawyers doing legal research, legal writing, assisting with preparation of legal documents, and other aspects of the law. The program will give the student first-hand insight into the legal field. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114	Principles of Accounting I	4	
CS 101	Computer Literacy	3	
EN 110	Composition I	3	
LA 110	Fundamentals of Law	3	
LA 130	Legal Research	3	
LA 135	Legal Writing/Case Analysis		3
MA 153	Introductory Statistics	3	
SP 110	Fundamentals of Public Speaking		3
	Social/Behavioral Science Elective		3
	Humanities Elective		3
	Natural Science Elective		4
	Unrestricted Elective		1
		19	17
Sophomore			
LA 140	Advanced Legal Writing and Research	3	
LA 210	Contracts		3
LA 220	Torts		3
LA 240	Trial Practice and Civil Procedure	3	
MG 103	Introduction to Business	3	
OF 125	*Word Processing I	3	
	Legal Assisting Electives	6	9
		18	15
Total Hours: 69			

*Prerequisite or corequisite: OF 113 or equivalent.

Management Major

(Associate of Applied Science Degree)

Management majors specialize in one of the following areas by following the SUMMARY OF REQUIRED HOURS listed under the concentration:

- Aviation Management Concentration, page 11
- Banking and Financial Management Concentration, page 11-12
- General Management Concentration, page 13
- Health Services Management Concentration, page 13-14
- Hospitality Management Concentration, page 14
- Industrial Management Concentration, page 15
- Insurance Management Concentration, page 15
- Marketing Concentration, page 16
- Retail Management Concentration, page 17
- Small Business Management Concentration, page 17-18

Marketing Concentration

IN MANAGEMENT MAJOR

(Associate of Applied Science Degree)

The primary goal of this program is to prepare the student for a position in one of the areas of Marketing. The skills learned in this degree should expedite the student's entrance into the field of Marketing, in both the public and private sectors. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

- Advertising, Customer Service, Merchandising Management, Physical Distribution, Publicity/Public Relations, Research, Retailing, Sales/Sales Management, Sales Promotion, Wholesaling

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	4	4
BU 173	Business Law I		3
CS 101	Computer Literacy		3
EN 110	Composition I	3	
MA 170	Statistics I		3
MG 103	Introduction to Business	3	
MG 114	Principles of Management		3
MG 154	Marketing	3	
MG 165	Business Mathematics	3	
	Unrestricted Elective	1	
		<u>17</u>	<u>16</u>
Sophomore			
FM 201	Financial Management I	3	
MG 134	Supervision and Human Relations		3
MG 214	Purchasing	3	
MG 215	Retail Operations	3	
MG 216	Consumer Behavior		3
MG 235	Merchandising and Inventory Control		3
MG 244	Advertising	3	
MG 254	*Salesmanship		3
MG 260	Market Research	3	
MG 280	Problems in Marketing		3
	Humanities Elective		3
	Social/Behavioral Science Elective	3	
		<u>18</u>	<u>18</u>
Total Hours: 69			

*Satisfies Oral Communication requirement.

Office Systems Technology Concentration

IN OFFICE SYSTEMS TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

The Office Systems Technology Program is designed to provide a two-year degree with emphasis in legal, medical, or professional training. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Certified Professional Secretary

When an individual passes all parts of the Certified Professional Secretary examination and receives a certificate, Chattanooga State, on an individual basis, will award up to 21 semester hours credit as recommended in *The National Guide to Credit Recommendations for Non-Collegiate Courses*. The student must be working toward a two-year degree at Chattanooga State to receive this credit. See an Office Systems Technology adviser for assistance in applying for credit in a major field of study.

Career Opportunities

- Administrative Assistant, Clerk/Typist, Data Entry Clerk, File Clerk, Office Manager, Receptionist, Secretary, Stenographer, Transcriber, Word Processor

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CS 101	Computer Literacy		3
EN 110	Composition I		3
MG 165	Business Mathematics	3	
OF 103	Records Management/Calculators		3
OF 104	Business Communications I	3	
OF 113,114	Keyboarding/Document Processing I, II	3	3
OF 125,126	Word Processing I, II	3	3
OF 127	Desktop Publishing		3
OF 195	General Office Procedures	3	
	*Directed Elective	3	
		<u>18</u>	<u>18</u>
Sophomore			
BU 114	Principles of Accounting I	4	
CS 293	Microcomputer Software Applications	4	
OF 105	Business Communications II	3	
OF 128	Advanced Desktop Publishing		3
OF 183	Machine Transcription	3	
OF 206	Office Systems Internship		3
SP 110	Fundamentals of Public Speaking		3
	*Directed Elective	3	
	Humanities Elective		3
	Mathematics/Natural Science Elective		3/4
	Social/Behavioral Science Elective		3
	Unrestricted Elective	1	
		<u>18</u>	<u>18/19</u>
Total Hours: 72/73			

*Directed Electives should be selected based on the student's Emphasis:

Legal Emphasis

- BU 173 or Business Law I or
- LA 110 Fundamentals of Law 3
- LA 130 Legal Research 3

Medical Emphasis

- HS 104, 114 General Medical Terminology I, II 6

Professional Emphasis

- MG 103 Introduction to Business 3
- MG 114 Principles of Management 3

Office Systems Technology Major

(Associate of Applied Science Degree)

There are two concentrations offered in the Office Systems Technology major:

- Court Reporting Concentration, page 12
- Office Systems Technology Concentration, page 16

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

Paralegal
See "Legal Assisting Technology"

Programming Concentration
IN INFORMATION SYSTEMS TECHNOLOGY MAJOR
(Associate of Applied Science Degree)

This program of study is designed to develop competent information systems technicians who will work as computer programmers in the business field. Both technical and non-technical related subjects are included so that the graduate will have a better understanding of possible application areas and supervisory and administrative responsibilities. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Computer Programmer, Control Clerk, Job Control Specialist, Operations Librarian

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CS 104	Fundamentals of Information Systems	3	
CS 114	Concepts of Programming	2	
CS 124	Visual Basic I	3	
CS 154	COBOL Programming Language I		4
CS 185	C++ Programming Language		3
CS 198	Database Software Applications		3
EN 110	Composition I	3	
MA 170,171	Statistics I, II	3	3
MG 160	Project Management	3	
	Humanities Elective		3
	Unrestricted Elective		1
		17	17
Sophomore			
BU 114,115	Principles of Accounting I, II	4	4
CS 134	RPG Programming Language	4	
CS 233	Interactive RPG Programming		3
CS 244	Systems Analysis and Design		3
CS 280	COBOL Programming Language II	3	
CS 296	Principles of Database Management Systems	3	
CS 299	Special Projects		3
EN 227	Technical Reports	3	
	Social/Behavioral Science Elective		3
		17	16
Total Hours: 67			

Retail Management Concentration
IN MANAGEMENT MAJOR
(Associate of Applied Science Degree)

The primary goal of this program is to train individuals for supervisory and/or management positions in the retail business. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Store Manager/Assistant Manager, Customer Service, Buyer Merchandising Manager, Personnel Manager, Department Manager/Assistant Manager

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	4	4
EN 110	Composition I	3	
MA 170	Statistics I	3	
MG 103	Introduction to Business	3	
MG 114	Principles of Management		3
MG 154	Marketing		3
MG 165	Business Mathematics	3	
SP 110	Fundamentals of Public Speaking		3
	Social/Behavioral Science Elective	3	
	Unrestricted Elective		3
		19	16
Sophomore			
BU 173	Business Law I		3
CS 101	Computer Literacy	3	
FM 201	Financial Management I	3	
MG 134	Supervision and Human Relations	3	
MG 215	Retail Operations		3
MG 235	Merchandising and Inventory Control		3
MG 244	Advertising	3	
MG 254	Salesmanship		3
MG 264	Human Resources Management	3	
	Humanities Elective		3
	Business & Information Systems Elective	3	
		18	15
Total Hours: 68			

Small Business Management Concentration
IN MANAGEMENT MAJOR
(Associate of Applied Science Degree)

This Associate of Applied Science program is designed for those interested in starting, financing, and operating a small business. The secondary goal is to train individuals for supervisory/management positions in small businesses. The courses required have been selected to provide the necessary background to understand today's complex business activities. Emphasis is placed on the areas of finance, marketing, accounting, and various aspects of management including personnel management and supervision. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Career Opportunities

Store Manager/Assistant Manager, Proprietor, Buyer, Department Supervisor, Personnel Manager, Sales Representative

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	4	4
BU 173	Business Law I		3
CS 101	Computer Literacy	3	
EN 110	Composition I		3
MG 103	Introduction to Business	3	
MG 114	Principles of Management		3
MG 165	Business Mathematics	3	
	Humanities Elective	3	
	Social/Behavioral Science Elective		3
		16	16

Sophomore			
CS 197	Spreadsheet Software Applications		3
FM 201	Financial Management I	3	
MA 170	Statistics I	3	
MG 134	Supervision and Human Relations		3
MG 154	Marketing	3	
MG 224	Entrepreneurship		3
MG 235	Merchandising and Inventory Control		3
MG 254	*Salesmanship		3
MG 264	Human Resources Management	3	
	Business & Information Systems Electives	3	3
	Unrestricted Elective	3	
		18	18
Total Hours: 68			

*Satisfies Oral Communication requirement.

Word Processing Certificate (Technical Certificate)

This two-semester certificate provides students with entry-level word processing skills. The curriculum is designed to provide training in document formatting and use of the microcomputer.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
OF 113,114	Keyboarding/Document Processing I, II	3	3
OF 125,126	Word Processing I, II	3	3
OF 127	Desktop Publishing		3
OF 195	General Office Procedures	3	
		9	9
Total Hours: 18			

ENGINEERING & ENVIRONMENTAL TECHNOLOGY

Students pursuing an Associate of Applied Science degree in one of the Engineering Technology fields should be aware of the difference between Engineering and Engineering Technology.

DEFINITION OF ENGINEERING: Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize economically, the materials and forces of nature for the benefit of mankind. Students wishing to pursue an Engineering degree should follow the articulation agreement for the senior institution to which they plan to transfer. If no articulation agreement exists, the "Pre-Engineering" Curriculum Guide in the "Transfer Programs" section of the catalog can serve as a general guideline in selecting courses. See a Pre-Engineering adviser for more specific information.

DEFINITION OF ENGINEERING TECHNOLOGY: Engineering Technology is that part of the technological field which requires the application of scientific and engineering knowledge and methods combined with technical skills in support of engineering activities; it lies in the occupational spectrum between the craftsman and the engineer at the end of the spectrum closest to the engineer.

Transferability of courses: Engineering Technology courses (those with prefixes CI, MD, EE, etc.) are not generally accepted as equivalent to corresponding courses at four-year institutions offering degree programs in Engineering, but are accepted at many four-year Engineering Technology programs.

Automated Controls Concentration IN ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology

The Electrical/Electronic Engineering Technology program is designed to give the student a broad education in the areas of AC and DC circuits, electronic circuits, logic circuits, advanced electronic circuits, digital computer systems, and integrated circuits through practical laboratory experiences and classroom instruction. Building on this foundation, the Automated Controls Concentration provides in-depth study in the areas of robotics, process control with feedback control loops, programmable logic controllers, transducers, and factory cell automation.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program and plans for a career as an engineering technician. However, if a baccalaureate degree in Engineering Technology is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Engineering Technician, Electronics Technician, Industrial Electronics Technician, Industrial Electrician, Instrumentation Technician, Manufacturing Technician, Plant Technician, Robotics Technician, Service Technician, Systems Application Technician

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
DD 116	CAD for Electronics		3	
EE 110	Electrical Circuits I	5		
EE 121	Electronics I		4	
EE 140	Digital Circuits	4		
EE 141	Microcomputer Circuits		4	
EN 110	Composition I		3	
ET 107	Intro. to Engineering Technology	1		
ET 115	Computers in Engr. Technology	3		
MA 121,125	Algebra and Trigonometry for Technologies I, II	4	4	
PH 114	Physics I			4
	Unrestricted Elective			1
		17	18	5
Sophomore				
EE 212	Electrical Circuits II	4		
EE 221	Electronics II		4	
EE 260	Programmable Logic Controllers	4		
EE 261	Automation Control Systems		4	
EE 271	Robotic Systems		4	
EN 227	Technical Reports	3		
MA 135	Calculus I w/Analytic Geometry	4		
	Humanities Elective		3	
	Social/Behavioral Science Elective	3		
		18	15	
Total Hours: 73				

CAD/CAM Technology Major

(Associate of Applied Science Degree)

The CAD/CAM Technology program (Computer Aided Drafting/Computer Aided Manufacturing) is designed to give the student a broad education in the areas of mechanical design, manufacturing processes, jig and fixture design, creation and utilization of electrical and mechanical power, metals and special materials, numerical control machine tools, automated manufacturing systems, and computer-aided drafting and design practice and principles. Graduates of this program will be prepared for an exciting careers in manufacturing, engineering design, and computers. They are also eligible for certification by the Society of Manufacturing Engineers.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program and plans for a career as an engineering technician. However, if a baccalaureate degree in Engineering Technology is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Applications Programmer, Engineering Designer, Computer-Aided Design Drafter, Engineering Technician, Material Handling Technician, NC Programmer, Computer-Aided Manufacturing Technician, Engineering Aide/Assistant

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
DD 118	Introduction to Intergraph Microstation		3	
EN 110	Composition I	3		
EN 227	Technical Reports		3	
ET 107	Intro. to Engineering Technology	1		

ET 115	Computers in Engr. Technology	3		
MA 121,125	Algebra and Trigonometry for Technologies I, II	4	4	
MA 153	Introductory Statistics			3
MD 114,124	Engineering Drawing I, II	3	3	
MD 184	Manufacturing Processes	3		
MD 254	Metallurgy		3	
PH 114	Physics I			4
		17	16	7

Sophomore

DD 204	Computer-Aided Design/Modeling		3	
DD 209	CAD Applications	3		
DD 210	AutoLISP Programming		3	
EE 284	Electrical Technology for Mechanical Engineering Technology	3		
MD 134	Statics and Strength of Materials I	3		
MD 207, 208	Numerical Control I, II	3	3	
MD 226	Fluid Power		3	
MD 294	Automated Manufacturing	3		
	Humanities Elective	3		
	Social/Behavioral Science Elective		3	
	Unrestricted Elective			1
		18	16	
Total Hours : 74				

Chemical Plant Operations Technology Concentration

IN ENVIRONMENTAL PROTECTION TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

The Chemical Plant Operations Technology Concentration is intended to provide fundamental theory, principle and practices necessary to enable the graduate to work as a plant operations technician in a chemical manufacturing industry. Students will learn terminology of chemical plant operations and how chemical reactions are used and controlled to produce saleable products. Graduates will gain an understanding of the types of operations that are used to improve and control quality products. The curriculum includes coverage of the processes and plant designs of most chemical manufacturing facilities in the Chattanooga area.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program but rather plans to pursue a career as a chemical plant operator. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Fractionation Operator, Reactor Operator, Material Separation Operator, Pollution Control Operator, Lead Operator

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
CH 134	General Chemistry I	4		
CT 120	Quality Systems	3		
CT 130,131	Industrial Chemistry I, II	3	3	
CT 150	Unit Operations I		4	
EN 110	Composition I	3		
EN 227	Technical Reports		3	
HZ 120	Hazardous Materials Regulations		3	
HZ 235	Hazardous Waste Operations and Emergency Response			4
IH 104	Essentials of Industrial Hygiene		4	
MA 117	College Algebra	3		
		16	17	4

Sophomore

CS 101	Computer Literacy	3	
CT 220, 225	Unit Operations II, III	4	4
CT 230	Environmental Control Systems		3
CT 235	Process Control Systems		3
MG 134	Supervision and Human Relations	3	
OS 140	Health & Safety for Confined Spaces		3
	Humanities Electives	3	
	Social/Behavioral Science Elective		3
	*Technical Elective	3	
	Unrestricted Elective	1	
		<hr/>	<hr/>
		17	16

Total Hours : 70

*Technical Elective must be selected from the following:

CT 240	Plant Operations Practicum	3
FI 255	Industrial Fire Prevention & Protection	3
HZ 230	Chemistry of Hazardous Materials	4
IH 204	Industrial Hygiene Sampling & Monitoring	4
OS 120	Industrial Safety Compliance	3

Chemical Technology Concentration

IN ENVIRONMENTAL PROTECTION TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

The Chemical Technology Concentration is intended to prepare students to work in chemical or related industries, governmental or independent laboratories, or other facilities as chemical technologists. The program emphasizes those areas of chemistry which are most important to quality control programs in the chemical industry, environmental monitoring, or bio-chemical research.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program but rather plans to pursue a career as a chemical technologist. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Analytical Technician, Environmental Monitor, Chemical Operator, Chemical Sales

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CH 134,135	General Chemistry I, II	4	4
CS 101	Computer Literacy	3	
CT 110	Laboratory Methods and Techniques		4
EN 110	Composition I	3	
HZ 120	Hazardous Materials Regulations	3	
HZ 235	Hazardous Waste Operations and Emergency Response		4
MA 117	College Algebra	3	
MA 118	Pre-Calculus		5
	Humanities Elective	3	
		<hr/>	<hr/>
		19	17
Sophomore			
CH 210, 211	Organic Chemistry I, II	4	4
CH 217	Quantitative Analysis	4	
CT 120	Quality Systems	3	
CT 211, 212	Instrumental Analysis I, II	4	4
EN 227	Technical Reports	3	
IH 104	Essentials of Industrial Hygiene		4
MG 134	Supervision and Human Relations		3
	Social/Behavioral Science Elective		3
	Unrestricted Elective		1
		<hr/>	<hr/>
		18	19
		<hr/>	<hr/>
	Total Hours : 73		

Civil Engineering Technology Major

(Associate of Applied Science Degree)

The primary goal of this program is to provide the graduate with the ability to apply scientific and engineering knowledge and methods combined with the technical skills to support Civil Engineering activities. The graduate will be able to work as an engineering technician in the activities of designing structures such as bridges, highways, and industrial complexes; monitoring construction of structures; maintaining the quality of the materials used in construction of structures; surveying and mapping; construction estimating; and hydraulics.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program and plans on a career as a Civil Engineering Technician. However, if a baccalaureate degree in Civil Engineering Technology is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Civil Engineering Technician, Construction Estimator, Construction Inspector, Land Surveyor, Hydraulics Technician, Structural Design Technician, Construction Materials Lab Technician

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
CI 164	Construction Methods & Estimating	3		
CI 174	Surveying I		4	
EN 110	Composition I	3		
EN 227	Technical Reports		3	
ET 107	Introduction to Engineering Technology	1		
ET 115	Computers in Engineering Technology	3		
MA 121,125	Algebra and Trigonometry for Technologies I, II	4	4	
MD 114,124	Engineering Drawing I, II	3	3	
PH 114	Physics I			4
	Social/Behavioral Science Elective		3	
	Unrestricted Elective			1
		<hr/>	<hr/>	<hr/>
		17	17	5
Sophomore				
CI 224	Hydraulics	3		
CI 231	Construction Materials Testing	3		
CI 242	Structures I		3	
CI 243	Structures II		3	
CI 274	Surveying II	4		
MA 135	Calculus I w/Analytic Geometry	4		
MD 134, 242	Statics & Strength of Materials I, II	3	3	
PH 115	Physics II			4
	Humanities Elective			3
		<hr/>	<hr/>	<hr/>
		17	16	
	Total Hours: 72			

Computer Systems Concentration

IN ELECTRICAL/ELECTRONIC ENGINEERING

TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology

The Electrical/Electronic Engineering Technology program is designed to give a student a broad education in the areas of AC and DC circuits, electronic circuits, logic circuits, advanced electronic circuits, digital computer systems, and integrated circuits through practical laboratory experiences and classroom instruction. Building on this foundation, the Computer Systems Concentration provides in-depth study in areas of microcomputer peripherals, bus standards, communication protocols, and the lat-

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

est in microprocessor technology.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program and plans for a career as an engineering technician. However, if a baccalaureate degree in Engineering Technology is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Associate Engineering Technician, Computer Technician, Communications Technician, Electronics Technician, Industrial Electronics Technician, Instrumentation Technician, Networking Technician, Plant Technician, Service Technician, Systems Application Technician

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
DD 116	CAD for Electronics		3	
EE 110	Electrical Circuits I	5		
EE 121	Electronics I		4	
EE 140	Digital Circuits	4		
EE 141	Microcomputer Circuits		4	
EN 110	Composition I		3	
ET 107	Intro. to Engineering Technology	1		
ET 115	Computers in Engr. Technology	3		
MA 121,125	Algebra and Trigonometry for Technologies I, II	4	4	
PH 114	Physics I			4
	Unrestricted Elective			1
		17	18	5
Sophomore				
EE 212	Electrical Circuits II	4		
EE 221	Electronics II		4	
EE 250	Microcomputer Systems	4		
EE 251	Microcontrollers Applications		4	
EN 227	Technical Reports	3		
MA 135	Calculus I w/Analytic Geometry	4		
	*Computer Elective		3	
	Humanities Elective		3	
	Social/Behavioral Science Elective	3		
		18		14
	Total Hours: 72			

*CS 154, CS 185, or ET 266.

Electrical/Electronic Engineering Technology Major

(Associate of Applied Science Degree)

There are three concentrations offered under the Electrical/Electronic Engineering Technology major: Automated Controls Concentration, page 18-19 Computer Systems Concentration, page 20-21 Networking Technology Concentration, page 24-25

**Emergency Medical Care Concentration
IN FIRE SCIENCE TECHNOLOGY MAJOR**

(Associate of Applied Science Degree)

This program leads to an Associate of Applied Science degree in Fire Science Technology with a concentration in Emergency Medical Care. It is designed both for the individual preparing for a career in the emergency services field and for the currently employed emergency services professional seeking improved job performance and advancement.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However,

if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Private and municipal ambulance companies, Industrial fire and medical response teams, Fire departments which employ combination fire fighters/paramedics, Hospital Emergency rooms, Hazardous Material Team Member (emergency medical emphasis)

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
	*Advanced Placement	25		
EN 110	Composition I	3		
FI 111	Introduction to Emergency Services	3		
FI 140	Emergency Laws, Standards, & SOP's	3		
FI 142	Emergency Services Community Relations	3		
FI 146	Emergency Service Stress	1		
FI 235	Fundamentals of Emergency Service Safety		3	
FI 280	Emergency Services Practicum			3
PO 110 or PO 219	Introduction to American Government or State and Local Government		3	
PY 101 or PY 251	General Psychology I or Psychology of Personal Adjustment		3	
SP 110	Fundamentals of Public Speaking		3	
	Computer Elective(s)	3		
	Humanities Elective		3	
	Mathematics Elective	3		
	Natural Science Elective		4	
	Unrestricted Elective			1
		44	19	4

Total Hours: 67

* Advanced Placement hours will be the result of a student's completion of the Paramedic Training Program or current state or national paramedic certification/licensure.

For information on Chattanooga State's Paramedic Training Program, see "Emergency Medical Services" under Certificates of Advancement.

Emergency Service Supervision and Administration Concentration

IN FIRE SCIENCE TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

The Emergency Service Supervision and Administration concentration in Fire Science Technology is designed for individuals with experience in the emergency service field who desire additional education for improved job performance and/or advancement. Students may be given credit for advanced state/national certification, Federal courses and National Fire Academy courses related to emergency services. Courses are offered in a distance learning format to meet the unique work schedules of the emergency service field.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Company Officer to Chief Officer level positions with Fire Departments, Emergency Medical Service Coordinator, Supervisor with emergency ambulance/air medical transport service, Fire Marshal with local or state government, Fire Brigade leader with industrial response organizations

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
EN 110	Composition I	3	
FI 111	Introduction to Emergency Services	3	
FI 140	Emergency, Laws, Standards, and SOP's	3	
FI 212	Emergency Service Supervision/Leadership		3
PO 110 or PO 219	Introduction to American Government or State and Local Government		3
SP 110	Fundamentals of Public Speaking		3
	Computer Elective(s)	3	
	Mathematics Elective	3	
	Humanities Electives		3
	*Technical Electives	3	4
		18	16
Sophomore			
FI 142	Emergency Service Community Relations	3	
FI 146	Emergency Service Stress	1	
FI 235	Fundamentals of Emergency Service Safety	3	
FI 265	Emergency Service Administration/Mgt.	3	
FI 270	Emergency Service Strategic Planning & Innovation		3
FI 280	Emergency Services Practicum		3
PY 101 or PY 251	General Psychology I or Psychology of Personal Adjustment		3
	*Technical Electives	3	6
	Natural Science Elective	4	
	Unrestricted Elective	1	
		18	15

Total Hours: 67

*Technical Electives totaling sixteen (16) hours must be selected from courses with the following prefixes: EA, FI, HZ, IH, MG, OS. Alternatively, students who plan to transfer to a four year program may, with adviser approval, use their Technical Elective hours to take additional General Education courses needed to satisfy requirements for the baccalaureate degree.

Career Opportunities

Hazardous Waste Technician, Environmental Compliance Technician, Environmental Audit Technician, Air Pollution Control Technician, Due Diligence Technician, Water Quality Technician

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CH 134	General Chemistry I	4	
CS 101	Computer Literacy		3
EN 110	Composition I	3	
EN 227	Technical Reports		3
MG 134	Supervision and Human Relations		3
HZ 120	Hazardous Materials Regulations	3	
HZ 125	Pollutant Migration		3
HZ 235	Hazardous Waste Operations and Emergency Response		4
MA 117	College Algebra	3	
OS 120	Industrial Safety Compliance	3	
	Humanities Elective		3
		16	19
Sophomore			
CT 120	Quality Systems	3	
HZ 150, 250	Facility Compliance I, II	3	3
HZ 225	*Environmental Sampling	4	
HZ 230	Chemistry of Hazardous Materials	4	
HZ 240	Hazardous Waste Disposal		3
HZ 245	Hazardous Materials Practicum		2
IH 104	Essentials of Industrial Hygiene		4
	**Hazardous Materials Electives		6
	Social/Behavioral Science Elective	3	
	Unrestricted Elective	1	
		18	18

Total Hours: 71

* Prerequisite: MA 153 or equivalent.

**Hazardous Materials Electives totaling six (6) hours must be selected from the following:

HZ 140	Federal Facility Compliance	3
HZ 165	Maps and Mapping	3
HZ 170	Equipment Operations and Management	3
HZ 226	Air Monitoring and Instrumentation	3
HZ 227	Water Monitoring and Instrumentation	3

**Environmental Health and Safety
Technology Major**

(Associate of Applied Science Degree)

There are two concentrations offered under the Environmental Health and Safety Technology major:

Health Physics and Industrial Hygiene Concentration,
page 23-24

Occupational Health and Safety Technology Concentration,
page 25

**Environmental Protection Technology
Concentration**

IN ENVIRONMENTAL PROTECTION TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

This program of study will prepare graduates with the skills necessary to conduct environmental sampling, audit, and compliance activities. Students are given training in state and federal environmental regulatory system and steps necessary to ensure compliance. Extensive hands-on training with survey and monitoring instrumentation is also provided. This program includes course work in the areas of industrial hygiene, occupational safety, and chemistry. Graduates may be employed by facilities, consulting companies, or regulatory agencies.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Environmental Protection Technology Major

(Associate of Applied Science Degree)

Four concentrations are offered in the Environmental Protection Technology major:

Chemical Plant Operations Technology Concentration,
page 19-20

Chemical Technology Concentration, page 20

Environmental Protection Technology Concentration, page 22

Environmental Remediation Technology Concentration,
page 22-23

**Environmental Remediation Technology
Concentration**

IN ENVIRONMENTAL PROTECTION TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

The Environmental Remediation Technology Concentration provides graduates with the technical theory, principles and skills to handle and manage hazardous chemicals in a variety of career fields. The graduate will be prepared to manage hazardous materials and wastes in compliance with federal environmental regulations and in a fashion necessary to protect human health and the environment.

This program is designed for the student who does not

intend to transfer to a baccalaureate degree program and plans on pursuing a career as an environmental technologist. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Hazardous Materials Technician, Hazardous Waste Management Technician, Superfund Cleanup Technician, Environmental Compliance Technician, Lab Pack Chemist

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CH 134	General Chemistry I	4	
CS 101	Computer Literacy	3	
EN 110	Composition I	3	
HZ 120	Hazardous Materials Regulations	3	
HZ 125	Pollutant Migration		3
HZ 235	Hazardous Waste Operations and Emergency Response		4
MA 117	College Algebra	3	
MG 134	Supervision and Human Relations		3
OS 120	Industrial Safety Compliance	3	
	Humanities Elective		3
	Social/Behavioral Science Elective		3
	Unrestricted Elective		1
		19	17
Sophomore			
CT 120	Quality Systems	3	
EN 227	Technical Reports	3	
HZ 165	Maps and Mapping	3	
HZ 170	Equipment Operations and Management		3
HZ 225	*Environmental Sampling	4	
HZ 230	Chemistry of Hazardous Materials	4	
HZ 245	Hazardous Materials Practicum		2
IH 104	Essentials of Industrial Hygiene		4
OS 125	Construction Safety Compliance		3
	**Hazardous Materials Electives		6
	Total Hours : 71	17	18

*Prerequisite: MA 153 or equivalent.

**Hazardous Materials Electives totaling six (6) hours must be selected from the following:

HZ 140	Federal Facility Compliance	3
HZ 226	Air Monitoring and Instrumentation	3
HZ 227	Water Monitoring and Instrumentation	3
HZ 240	Hazardous Waste Disposal	3

Fire Science Technology Major

(Associate of Applied Science Degree)

There are three concentrations offered under the Fire Science Technology major:

- Emergency Medical Care Concentration, page 21
- Emergency Service Supervision and Administration Concentration, page 21-22
- Fire Suppression Concentration, page 23

Fire Suppression Concentration

IN FIRE SCIENCE TECHNOLOGY MAJOR

(Associate of Applied Science Degree)

The Fire Suppression Concentration in Fire Science Technology is designed for the individual preparing for a career in the emergency response field or for those employed in entry level positions who desire additional training and education for improved job performance and advancement. This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student

of colleges and universities that will accept courses taken in this program.

Career Opportunities

Fire Suppression, Rescue and Hazardous Materials Organizations (public and private), Fire Prevention and Investigation for City, County, Insurance and Industrial Organizations, Fire Protection System Installation/Inspection and Fire Extinguisher Companies, Industrial Fire Protection (Fire Brigades and Fire Marshals)

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
EN 110	Composition I	3	
FI 111	Introduction to Emergency Services	3	
FI 114	Building Construction for Fire Science		3
FI 140	Emergency Laws, Standards, and SOP's	3	
PO 110 or PO 219	Introduction to American Government or State and Local Government		3
SP 110	Fundamentals of Public Speaking		3
	Computer Elective(s)	3	
	Humanities Elective		3
	Mathematics Elective	3	
	*Technical Electives	3	4
		18	16
Sophomore			
FI 115	Fire Apparatus and Equipment	3	
FI 116	Fire Fighting Tactics and Strategy I		3
FI 142	Emergency Services Community Relations	3	
FI 146	Emergency Service Stress	1	
FI 235	Fundamentals of Emergency Service Safety	3	
FI 280	Emergency Services Practicum		3
PY 101 or PY 251	General Psychology I or Psychology of Personal Adjustment		3
	Natural Science Elective	4	
	*Technical Electives	3	6
	Unrestricted Elective	1	
		18	15
	Total Hours : 67		

*Technical Electives totaling sixteen (16) hours must be selected from courses with the following prefixes: EA, FI, HZ, IH, MG, OS. Alternatively, students who plan to transfer to a four year program may, with adviser approval, use their Technical Elective hours to take additional General Education courses needed to satisfy requirements for the baccalaureate degree.

Health Physics and Industrial Hygiene Concentration

IN ENVIRONMENTAL HEALTH AND SAFETY TECHNOLOGY

MAJOR

(Associate of Applied Science Degree)

The Health Physics and Industrial Hygiene Concentration is designed to prepare technologists with the skills necessary to conduct both health physics and industrial hygiene activities in a variety of occupational and environmental settings. In the health physics area, students study the basic properties of radiation including its origin, its interactions with matter, and radiation detection procedures. In the industrial hygiene area, students study the kinds and nature of occupational health hazards present in modern work environments, the methods used to detect and quantify those hazards, and the technologies used to control work-place hazards. Rules and regulations governing human exposures to occupational health hazards are covered, including radiation, chemical agents and physical agents. Emphasis is placed on the proper use of survey instrumentation to detect and measure occupational health hazards, the equipment and techniques employed to conduct work-place and environmental surveys, and the current technologies used in hazard control.

1998-99 CAREER PROGRAMS

This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Health & Safety, Health Physics Surveying, Industrial Hygiene, Nuclear Power, Nuclear Instrumentation Manufacturing, Research Institutions

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CH 134,135	General Chemistry I, II	4	4
EN 110	Composition I	3	
EN 227	Technical Reports		3
HZ 235	*Hazardous Waste Operations and Emergency Response	4	
IH 104	Essentials of Industrial Hygiene		4
MA 118	Pre-Calculus		5
NU 101	Health Physics and Industrial Hygiene Seminar	1	
NU 204	Introduction to Health Physics and Industrial Hygiene	4	
	Humanities Elective	3	
	Social/Behavioral Science Elective		3
		<u>19</u>	<u>19</u>
Sophomore			
IH 204	Industrial Hygiene Sampling & Monitoring	4	
IH 214	Industrial Hygiene Control Technology		4
MA 135	Calculus I w/Analytic Geometry	4	
NU 104	Radiation Protection and Radiological Health Administration	4	
NU 264	Health Physics		4
PH 114,115	Physics I, II	4	4
	Computer Elective(s)		3
	Unrestricted Elective	3	
		<u>19</u>	<u>15</u>
Total Hours : 72			

*Prerequisite: HZ 120.

Mechanical Engineering Technology Major
(Associate of Applied Science Degree)

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology

The Mechanical Engineering Technology program is designed to give the student a broad education in the areas of mechanical design; manufacturing processes; creation and utilization of mechanical power; thermosciences; heating, ventilation, and air conditioning (HVAC) design; metals and special materials; and computer-aided drafting and design. This program is designed for the student who does not intend to transfer to a baccalaureate degree program and plans on a career as an engineering technician. However, if a baccalaureate degree in Engineering Technology is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Customer Support Technician, Draftsman/Designer, Engineering Assistant, HVAC Technician, Computer-Aided Draftsman/Designer, Industrial Mechanics Technician, Metallurgical Laboratory Technician, Mechanical Engineering Technician

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
CH 104	Principles of Chemistry			4
EN 110	Composition I	3		
ET 107	Intro. to Engineering Technology	1		
ET 115	Computers in Engr. Technology	3		
MA 121,125	Algebra and Trigonometry for Technologies I, II	4	4	
MD 114,124	Engineering Drawing I, II	3	3	
MD 184	Manufacturing Processes	3		
MD 254	Metallurgy		3	
PH 114	Physics I			4
	Social/Behavioral Science Elective		3	
	Humanities Elective			3
		<u>17</u>	<u>17</u>	<u>7</u>
Sophomore				
DD 209	CAD Applications	3		
EE 284	Electrical Tech. for Mech. Engr. Tech.	3		
EN 227	Technical Reports			3
MA 135	Calculus I w/Analytic Geometry	4		
MD 134, 242	Statics and Strength of Materials I, II	3	3	
MD 226	Fluid Power			3
MD 264, 265	Thermodynamics I, II	3	3	
MD 274	Machine Design			3
	Unrestricted Elective			1
		<u>16</u>	<u>16</u>	
Total Hours: 73				

Networking Technology Concentration
IN ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY
MAJOR

(Associate of Applied Science Degree)

The evolving trend in distributed electronic information processing (voice, data, video) over different computer platforms, integrating traditional systems with other types of hardware devices, has created a need for employees with training that bridges the boundaries between traditionally separate fields of computer software specialists and computer hardware specialists. The primary goal of the Networking Technology Concentration in Electrical/Electronic Engineering Technology is to train individuals to function as entry-level technicians in an environment where data/telecommunications equipment exists (or plans exist to install such equipment) and is utilized as an integral part of the organization's information processing systems and procedures. Graduates of this program will be employed in areas requiring a broad knowledge of computer operating systems protocol as well as techniques for establishing physical connections between various computer platforms. Graduates will possess knowledge applicable to small firms utilizing stand-alone local area networks and to large firms utilizing distributed workgroups that are linked directly over shared medium and/or indirectly through a host computer. Students will also receive training in interconnecting computers of different platforms.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Management Information System Technician, Management Information System Coordinator, Computer Network Installer, Network Repair (Maintenance) Technician, Computer Technician

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CS 101	Computer Literacy	3	
CS 114	Concepts of Programming	2	
EE 110	Electrical Circuits I	5	
EE 121	Electronics I		4
EE 140	Digital Circuits	4	
EE 141	Microcomputer Circuits		4
EN 110	Composition I		3
ET 115	Computers in Engineering Technology		3
MA 121	Algebra & Trigonometry for Technologies I	4	
	Social/Behavioral Science Elective		3
		18	17
Sophomore			
CS 185	C++ Programming Language		3
CS 205	*Computer Networks	3	
CS 215	Local Area Network Management		3
EE 200, 201	Networking Technology I, II	4	4
EE 250	Microcomputer Systems	4	
EN 227	Technical Reports	3	
	Humanities Elective	3	
	Natural Science Elective		4
	Computer Elective		3
	Unrestricted Elective	1	
		18	17

Total Hours: 70

*Prerequisite: CS 176. Corequisite: CS 204.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CH 134,135	General Chemistry I, II	4	4
EN 110	Composition I	3	
IH 104	Essentials of Industrial Hygiene		4
MA 118	Pre-Calculus		5
OS 120	Industrial Safety Compliance	3	
OS 190	Special Topics in Occupational Safety		3
	Computer Elective(s)	3	
	Humanities Elective	3	
	Social/Behavioral Science Elective		3
	Unrestricted Elective	1	
		17	19
Sophomore			
EN 227	Technical Reports	3	
HZ 235	*Hazardous Waste Operations and Emergency Response		4
IH 204	Industrial Hygiene Sampling & Monitoring	4	
IH 214	Industrial Hygiene Control Technology		4
MA 153	Introductory Statistics	3	
OS 230	Process Safety Management	3	
OS 240	Occupational Safety & Health Program Management		3
PH 114,115	Physics I, II	4	4
	**Occupational Safety Elective		3
		17	18

Total Hours : 71

*Prerequisite: HZ 120.

**Must be selected from:

OS 125	Construction Safety Compliance	3
OS 140	Health and Safety for Confined Spaces	3
OS 150	Excavation and Trenching Operations	3
OS 210	Motor Carrier Safety	3
OS 220	Ergonomics and Human Factors	3

Occupational Health and Safety Technology
Concentration

**IN ENVIRONMENTAL HEALTH AND SAFETY TECHNOLOGY
MAJOR**

(Associate of Applied Science Degree)

The Occupational Health and Safety Technology Concentration in Environmental Health and Safety Technology is designed to provide graduates with the skills necessary to conduct or manage a wide variety of occupational health and safety functions in business and industry. Students are given practical, interdisciplinary training in occupational safety, industrial hygiene, and environmental technology. In the safety area, students take several basic courses that apply to occupational safety in general, including program management. The remainder of the safety courses can be tailored to the specific needs of the student. Along with these are three industrial hygiene courses encompassing recognition, evaluation, and control of occupational health hazards. Students also take a course in hazardous waste operations and emergency response (HAZ-WOPER), for which they receive a certificate of training plus a supervisory certificate. The training emphasizes "hands-on" field training along with theory and principles. Graduates may be employed as safety, industrial hygiene or environmental specialists either in a "field" capacity or as a manager of health and safety program elements. The program will be of particular value in upgrading the qualifications of employees who already have health and safety responsibilities.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However, if a baccalaureate degree is wanted, an appropriate adviser can advise the student of colleges and universities that will accept courses taken in this program.

Career Opportunities

Industrial Health and Safety Technicians, Managers of Health and Safety Programs, Safety Engineers and Specialists, Human Resource Officers, Environmental Specialists and Managers

For list of approved Humanities, Mathematics, Natural Science, and Social/Behavioral Science Electives, see General Education section.

LIBERAL ARTS

LIBERAL ARTS

26

American Sign Language Studies Major

(Associate of Applied Science Degree)

The American Sign Language Studies degree program is designed to provide two years of intensive study of ASL, the language of the Deaf Community, for transfer to a four year university for further preparation towards a baccalaureate degree with a major in Interpretation. To meet this goal, the program is oriented to providing instruction in the language of ASL, the world of deafness, and general liberal arts coursework as required by university programs.

The national trend for interpreter preparation has been changed to a bachelor's degree from an accredited university. The student completing the two year degree for American Sign Language Studies will be able to communicate effectively both expressively and receptively with deaf persons. The student will be able to enroll in upper level courses required for interpreter preparation as she/he continues to pursue a goal of becoming a certified sign language interpreter.

Entry requirements include completion of minimum high school proficiency standards and competence for English language usage.

This degree program does not lead directly to employment as an interpreter. For students planning to work with disabled persons, this degree will serve to enhance their communication skills with deaf persons in the workplace, thus satisfying compliance requirements for accessibility and reasonable accommodation as specified in the ADA. Students may also work as class aides in a class for deaf children, as assistants in special education classes, or as teacher-aides in pre-school and kindergarten programs with deaf children enrolled.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
EN 110,111	Composition I, II	3	3
HP 120,121	American Sign Language I, II	3	3
HP 130	Orientation to Deafness	3	
HP 132	Psychology of Deaf People and Their Culture		3
HI 205, 206	Western Civilization	3	3
PY 101,102	General Psychology I, II	3	3
SP 110	Fundamentals of Public Speaking		3
	Mathematics Elective	3	
		<u>18</u>	<u>18</u>
Sophomore			
CS 101	Computer Literacy		3
HP 220, 221	American Sign Language III, IV	3	3
HP 222	Fingerspelling		2
PY 213	Abnormal Psychology		3
	Humanities Elective	3	
	Natural Science Electives	4	4
	*Social Science Electives	3	3
	Unrestricted Elective	3	
		<u>16</u>	<u>18</u>
Total Hours : 70			

*For list of approved Social Science Electives, see American Sign Language Studies Adviser.

Criminal Justice Consortium with Cleveland State (Associate of Science Degree)

Degree offered by Cleveland State Community College Courses offered on Chattanooga State Campus

This program is designed for students who plan to earn Associate of Science degrees for transfer toward Bachelor of Science degrees at other colleges or universities.

The Criminal Justice program has been developed to help prepare the person desiring employment in the field of criminal justice, including private security, or to upgrade the performance of a person already employed by a criminal justice agency.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CJP 1010	*Overview of Criminal Justice Systems	3	
CJP 1050	*Administration in Criminal Justice		3
CJP 1070	*Criminal Law	3	
CJP 1110	*Procedures/Evidence in Criminal Justice		3
CS 101	Computer Literacy		3
EN 110,111	Composition I, II	3	3
SO 110	Introduction to Sociology	3	
	Mathematics Elective	3	
	Physical Education Activity		1
	Natural Science Sequence	4	4
		<u>19</u>	<u>17</u>
Sophomore			
CJP 1210	*Correctional Issues and Alternatives		3
CJP 2110	*Legal Issues in Criminal Justice Investigations	3	
CJP 2210	*Issues in Juvenile Justice	3	
CJP 2310	*Community and Public Relations		3
CJP 2410	*Externship in Criminal or Juvenile Justice		6
EN 210 or EN 218	Literature of the Western World or English Masterpieces	3	
HI 203, 204	†United States History	3	3
SO 214	Criminology	3	
SP 110	Fundamentals of Public Speaking	3	
	Physical Education Activity	1	
	Humanities Elective		3
		<u>19</u>	<u>18</u>
Total Hours : 73			

†One course in Tennessee History may be substituted for one course in American History.
*Cleveland State courses taught at Chattanooga State.

**For information telephone
(423) 472-7141**

Early Childhood Education Major

(Associate of Applied Science Degree)

The Early Childhood Education major is designed to provide comprehensive training for individuals preparing to enter the rapidly growing field of early childhood education, as well as for those already employed in an early childhood program servicing children ages birth through eight. It includes both the theoretical and practical elements and features 150 hours of supervised classroom practice teaching. This program is designed for the student who does not intend to transfer to a baccalaureate degree program. If a baccalaureate degree is desired, the student should consult an Early Childhood Education adviser for information on articulation agreements and transferability of courses.

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

Career Opportunities

Nursery School Teacher, Child Care Teacher, *Child Care Center Director, Family Child Care Teacher, Teacher in School Age Programs, Aide in Kindergarten, Aide in Elementary School, Substitute Teacher (Public and Private Schools)

*This job also requires some successful job experience.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
ED 117	Principles of Childhood Education	3	
ED 126	Creative Expression	3	
ED 219	Family Dynamics/Parent Educator		3
ED 223	Language Arts for Young Children		3
ED 240	Infant and Toddler Care	3	
EN 110	Composition I	3	
MA 163	Structure of Number Systems I		3
PE 213	Health and First Aid for Young Children	3	
PY 101	General Psychology I	3	
PY 215	Child Growth and Development		3
	*Humanities Elective		3
		<u>18</u>	<u>15</u>
Sophomore			
ED 201	Foundations of Education	3	
ED 220	Development of the Exceptional Child		3
ED 221	Supervision and Administration of Preschool Centers		3
ED 222	Educating the Culturally Different	3	
ED 298	Methods of Early Childhood Teaching	3	
ED 299	Practicum		5
EN 209	Literature for Children	3	
PE 214	Physical Education for Children		3
SP 110	Fundamentals of Public Speaking		3
	**Computer Elective	3	
	Mathematics/Natural Science Elective	3/4	
	Unrestricted Elective		1
		<u>18/19</u>	<u>18</u>
Total Hours : 69/70			

*MU 110 recommended.

**CS 101 or 104 recommended.

Human Services Specialist Major

(Associate of Applied Science Degree)

The Human Services Specialist program is designed for the individual who plans on beginning his/her career as a human services paraprofessional. The curriculum covers the appropriate knowledge and skills necessary for the student to become competent in working with many human service agencies in the areas of drug abuse counseling, aging, child care and mental health. This program is designed for the student who does not intend to transfer to a baccalaureate degree program. If a baccalaureate degree is desired, the student should consult the Human Services Coordinator for information on how this program may articulate with a baccalaureate degree in Social Work.

Career Opportunities

Drug Abuse Counselor, Child Care Specialist, Youth Worker, Mental Health Technician, Geriatric Technician, Psychiatric Technician, Adolescent Counseling Assistant, Activity Therapist, Social Services Delivery Worker, Crisis Companions

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BI 134	General Biology I or Natural Science Elective		4
CS 101	Computer Literacy	3	
EN 110	Composition I	3	
HR 101	Introduction to the Field of Social Welfare	4	
HR 125	Community Social Services		3
HR 130	Substance Abuse Theories		3
PY 101	General Psychology I	3	
PY 251	Psychology of Personal Adjustment		3
SO 110	Introduction to Sociology	3	
	Approved SO or PY Elective		3
		<u>16</u>	<u>16</u>
Sophomore			
EC 211	Principles of Economics I		3
HR 205	Human Relations and Explorations	3	
HR 210	Methods of Human Service Practice	3	
HR 219	Family Dysfunction	3	
HR 220	Human Services Practicum		6
HR 245	Introduction to Counseling		3
MA 153	Introductory Statistics or Mathematics Elective		3
PO 110	Introduction to American Government	3	
SP 110	Fundamentals of Public Speaking	3	
	Humanities Elective	3	
	Unrestricted Elective		3
		<u>18</u>	<u>18</u>
Total Hours : 68			

MATHEMATICS & SCIENCES

MATHEMATICS & SCIENCES

Pharmacy Technician Certificate

(Technical Certificate)

This twelve month program is designed to prepare students for certification by the Pharmacy Technician Certification Board (PTCB). Pharmacy technicians assist and support licensed pharmacists in providing health care and medications to patients. Pharmacy technicians must have a broad knowledge of pharmacy practice and be skilled in the techniques required to fill prescriptions, constitute IV solutions, and prepare medications, but they do not need the advanced college education required of a licensed pharmacist.

Although pharmacy technicians work under the supervision of a pharmacist and must be willing to take directions, they must also be able to work competently without constant instruction by the pharmacist. Pharmacy technicians must care about serving patients. Because of the critical nature of many pharmacy duties, pharmacy technicians must perform precise work where details can be a matter of life or death. Good communication and interpersonal skills are essential to interact with patients and other health care professionals on a daily basis.

The Pharmacy Technician courses are designed in accordance with American Society of Health-System Pharmacists (ASHP) guidelines. They are not designed for college transfer credit.

A class will be accepted each Fall semester.

Career Opportunities

Community Pharmacies, Drug Manufacturing Companies, Drug Wholesale Companies, Home Health Care, Hospital Pharmacies, Nuclear Medicine Pharmacies, Nursing Homes

Admission Requirements

In addition to completing the application process for Chattanooga State, students seeking admission to the Pharmacy Technician Program must also:

1. Submit a Pharmacy Technician Program Application Form to the Division of Mathematics & Sciences prior to the May 31 deadline.
2. Submit official copies of high school transcript(s) or GED scores to the Director of the Pharmacy Technician Program. Transfer students must also submit official college transcript(s) from all colleges attended.
3. Complete an interview with the Director of the Pharmacy Technician Program.
4. Demonstrate an acceptable level of proficiency in English, Reading, and Mathematics as follows:

ENGLISH — ACT English subscore of 19 or higher (or corresponding SAT score) **or** AAPP placement at college level **or** completion of EN 081 **or** completion of a college level English course with a minimum grade of “C.”

READING — ACT composite of 19 or higher (or corresponding SAT score) **or** AAPP placement at college level in Reading **or** completion of RE 081 **or** completion of a college level English course with a minimum grade of “C.”

MATHEMATICS — ACT Math subscore of 19 or higher (or corresponding SAT score) **or** AAPP placement at

MA 081 level **or** completion of MA 080 **or** completion of a college level Math course with a minimum grade of “C.”

5. Complete an Authorization to Release Information form granting Chattanooga State permission to complete a drug-related conviction check. Criminal convictions of a drug-related nature will disqualify an applicant for admission to the Pharmacy Technician Program.
6. Submit two (2) character references from previous employers and/or someone who has known the applicant for at least two years.
7. Upon acceptance into the program, the applicant must provide proof of a negative TB skin test and Rubella immunity.

Deadline

All required materials must be submitted to the Pharmacy Technician Program in the Division of Mathematics & Sciences by **May 31** for priority consideration. Applications received after the deadline will be accepted for the current year only if space permits.

Continuation Policy

For progression a grade of “C” or better is required in all Pharmacy Technician courses and all science courses.

Repeat Policy and Termination

Students who receive a grade of “F” in any course in the program will be withdrawn from the program. Such individuals will be allowed to re-apply.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
PC 101	Introduction to Pharmacy Practice	3		
PC 104	*Principles of Chemistry	4		
PC 105	Pharmacy Law and Ethics	3		
PC 110	Pharmaceutical Calculations		4	
PC 115	**Introduction to Human Biology	4		
PC 201	Pharmacology and Therapeutics		4	
PC 205	Pharmacy Practice		5	
PC 220	Pharmacy Practice Clinical Rotations			5
		14	13	5
Total Hours: 32				

* Corequisite: MA 081.

** BI 174,175 may be substituted.

NURSING/ALLIED HEALTH

Admission/Retention Policies

*Selection into health programs is based on a comparative evaluation of all applicants' test scores, transcripts and other application information. To be considered for Fall admission, students must have successfully completed, or be scheduled to complete during the summer, **all remedial/developmental courses and specific chemistry or other required prerequisite courses.** (Some programs do not require completion of all remedial/developmental courses prior to entrance. Please consult program specific information for exact admission criteria for each program.) One unrestricted elective is included in every program. Credit hours will vary depending on the student's choice, but will normally range from 1 to 4.*

Once these requirements have been met, students are encouraged to take other science and general education courses. HOWEVER, completion of the application process and any/all science and general education courses **does not guarantee acceptance** into a health program. Composition of a class will reflect diversity based on age, gender and race.

The goal of all Chattanooga State's health programs is to prepare practitioners who can function in the health care arena to ensure the safety of patients. Program standards are in place to assure that students have the potential to perform as entry level practitioners. These program standards are available in the Nursing/Allied Health Division office. Acceptance into a health program is contingent upon the student's demonstrated ability to meet these standards.

EACH APPLICANT MUST:

1. Have a high school diploma or GED.
2. Complete an application to Chattanooga State.
3. Complete a Nursing/Allied Health Application Form to be turned in to the Division of Nursing/Allied Health.
4. Send **official** transcripts from all high schools and/or colleges attended to the Chattanooga State Records Office.
5. Provide scores on an entrance test specifically for the program to which applicant is applying (see specific program information).
6. Submit scores from appropriate test(s) to the Division of Nursing/Allied Health. (See specific program information.)
7. Complete any remedial/developmental course requirements before entrance into a program of study (see program specific information).
8. Complete any prerequisite course requirements before entrance into a program of study.
9. Present proof of CPR certification prior to entering the clinical area. (Health Information Management students do not have to present CPR certification.)

ADDITIONAL INFORMATION RELATED TO APPLICATION/ADMISSION PROCEDURES:

1. College level laboratory science courses taken prior to acceptance into a program of study may not be older than five years at the time of entrance into the program.
2. Students must be able to provide their own transportation to clinical facilities.
3. Students are strongly recommended to have medical insurance prior to clinical experience. The school assumes no liability in the event of injury.
4. Admission to a program is on a space-available basis and will be based on a comparative evaluation of all test scores, transcripts and application information.
5. Following acceptance into a program of study, each applicant must be able to meet the essential job functions (technical standards criteria) for enrollment in program courses. An accepted student may be allowed to continue in the program only if knowledge, character, or mental and/or physical fitness enable him/her to function in the program of study in accordance with the essential job functions.
6. The preferred deadline for application varies among programs but is generally between March 15 and April 15 of the year the applicant wishes to enter a program of study.
7. Applicants will generally be notified of their acceptance no later than June 1. Exceptions to this may vary depending on program requirements and special testing/interview needs and schedules.
8. Some programs may require documentation of tours, special projects, reference letters and/or interviews as part of the application procedure.
9. Students accepted into a program will be required to furnish a "Health Verification Form" completed by a physician on the form supplied by the Division of Nursing/Allied Health. All students must provide documentation of recent tuberculosis testing. Hepatitis-B vaccine is recommended for students in programs which require patient contact.
10. A drug screen will be required after acceptance into a health program. Agencies used for clinical experience require a drug screen of all applicants for employment as a condition of employment and students working in a clinical environment are subject to these same standards. (Approximate cost: \$25.00.) Students who test positive will be contacted by the Division of Nursing/Allied Health. Appropriate intervention(s) and/or actions will be discussed with the student on an individual basis.
11. Applicants who are not accepted into their preferred program of study are encouraged to see an adviser who will assist them with other career options and/or taking additional courses to improve the chances of acceptance for the next class.
12. Prior convictions (excluding traffic violations) may affect licensure eligibility. Please see a program adviser for specific information.
13. Applicants who are, or have been, previously licensed/credentialed in a health area and whose license is on suspension/probation or a revoked status will be evaluated; admission to a health program may be jeopardized in these instances. Please see a program adviser for specific information.
14. Students accepted into a Program must purchase liability insurance through the Chattanooga State group policy.

RETENTION/PROGRESSION CRITERIA

1. Generally, a minimum of a "C" grade, and a minimum GPA of 2.0, is required in all science and health program courses for progression in the program of study. EMT/Paramedic students must maintain an 80% average for progression (State of Tennessee regulation).
2. Clinical competencies must be satisfactory in order to receive a passing grade in health program courses. Students who are not satisfactory in clinical performance will not pass the course.
3. Competency in drug calculation is mandatory to be considered satisfactory in the clinical setting (this applies to specific programs).
4. Students who receive less than a "C" grade in a health program course will not progress and must repeat the course. Each program states criteria for the number of repeats allowed in a given program and when repeats would be possible. EMT/Paramedic students must have a "B," or better, grade for progression.
5. Students who demonstrate significant problems during the course of the program may be asked to undergo evaluation to determine their ability to continue in the program.

Note: Application and admission policies and procedures for individual programs may vary slightly. Consult program specific information for details.

Dental Hygiene Major

(Associate of Applied Science Degree)

The Dental Hygiene program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Post-secondary Accreditation and by the United States Department of Education. The dental hygiene curriculum provides a background in basic studies as well as directed dental hygiene experience. The student will develop judgment and skills needed for providing oral health care to the public under the supervision of a dentist and within the limits of the Code of Ethics of the American Dental Hygienists Association and the laws of the state in which he/she practices.

Clinical dental hygiene experience is acquired in a dental facility located on campus as well as in some community facilities. Students are required to purchase professional liability insurance and to provide transportation to and from community facilities used for clinical laboratory experiences.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However, many science and general education courses will fully transfer to a four-year college or university. Dental Hygiene courses may be accepted as electives.

Career Opportunities

- Private practice - general, group, specialty
- Health departments or associated institutions
- Teaching - dental, dental hygiene or dental assisting schools, school systems, continuing education seminars
- Pediatric, geriatric or special needs centers
- Health Maintenance Organizations
- Dental claims departments of insurance companies
- Sales representative of preventive dental products
- Hospitals and nursing homes
- Uniformed services

Admission Procedures

A new class is accepted each fall semester; matriculating students are required to attend four semesters of Dental Hygiene coursework. The Dental Hygiene Program Selection Committee must give first preference to qualified applicants from the State of Tennessee. Each applicant is evaluated on the scores from the required tests listed below, grades from completed courses, and a personal interview designed to determine the level of the applicant's skills in communication and problem solving, relevant work experience, and true desire to become a dental hygienist.

In addition to the admission requirements to Chattanooga State, applicants for the Program must meet the requirements listed below. Evidence of completion of these items, or documentation of any required courses in progress, should be received by **April 1** of the year in which program admission is sought. Applications, however, will be processed until the class is full.

1. Minimum composite score of 19 on the ACT (or corresponding SAT score). A score below 19 on any component requires a placement assessment test (AAPP) with completion of any remedial studies determined necessary before enrollment into the Program. A higher ACT score will make the applicant more competitive.
2. Candidates who are over 21 years of age shall be required to undergo a placement assessment rather than the ACT, and remedial studies determined necessary must be completed before acceptance into the Program.
3. Application to the Dental Hygiene Program.
4. If not presently enrolled at Chattanooga State, send an official copy of transcripts of completed courses from each high school or college attended to the Records Office.
5. Complete the Allied Health Aptitude Test (AHAT) and submit the results to the Health Applications Office in the Division of Nursing/Allied Health.
6. It is recommended that the applicant, if accepted, complete a Hepatitis B vaccine series.
7. Upon acceptance, the applicant must complete a medical and dental examination prior to August 1.

Continuation Policy

Continuation in the Dental Hygiene Program is contingent upon the following:

1. A minimum grade of "C" or "S" must be achieved in all required Dental Hygiene and science courses.
2. A grade of "D," "F," or "N" achieved in a Dental Hygiene course requires that the student not be allowed to enroll in subsequent Dental Hygiene courses until being re-admitted to the program and repeating the course. A student may be re-admitted only once. Readmittance requires the approval of the faculty and is not automatic.
3. Demonstration that appropriate technical skills and competencies can be achieved and maintained throughout the Program.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
BI 174,175	Human Anatomy and Physiology I, II	4	4	
BI 143	Nutrition			3
CH 104	Principles of Chemistry	4		
DH 140,143	Dental Hygiene Science I, II	4	4	
DH 141,144	Dental Hygiene Theory I, II	4	4	
DH 142,145	Dental Hygiene Applications I, II	4	4	
DH 160	Dental Hygiene Seminar I	1		
EN 110	Composition I		3	
PY 101	General Psychology I			3
SP 110	Fundamentals of Public Speaking			3
	Computer Elective			3
		<u>21</u>	<u>19</u>	<u>12</u>

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

Sophomore

BI 234	Microbiology	4	
DH 246	Dental Hygiene Science III	3	
DH 247	Dental Hygiene Theory III	2	
DH 248, 249	Dental Hygiene Applications III, IV	4	4
DH 261	Dental Hygiene Seminar II	1	1
DH 270	Advanced Dental Concepts	1	1
DH 271	Principles of Dental Research	1	1
DH 272	Community Dental Care	1	1
SO 110	Introduction to Sociology		3
	Humanities Elective	3	
	*Mathematics Elective	3	
	Unrestricted Elective	1	
		16	15
	Total Hours : 83		

*MA 153 recommended.

MA 163 not acceptable for Nursing/Allied Health programs.

Continuation Policy

For progression a grade of "C" or better is required in each Diagnostic Medical Sonography course.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
US 200	Introduction to Diagnostic Medical Sonography	1		
US 201, 212	Ultrasound Physics I, II	2	2	
US 202, 212, 222	Obstetrics and Gynecology I, II, III	3	2	2
US 203, 213, 223	Abdominal and Small Parts I, II, III	3	2	2
US 205, 225	Clinic I, III	8		1
US 210	Departmental Management		1	
US 220	Ultrasound Seminar			1
US 221	Physical Instrumentation Applications			2
		17	7	8
	Total Hours: 32			

Diagnostic Medical Sonography Certificate (Technical Certificate)

The Diagnostic Medical Sonography program is accredited by the Joint Review Committee on Education in Diagnostic Medical Sonography (JRCDMS) and the Commission on Accreditation of Allied Health Education Programs (CAAHEP). This twelve (12) month advanced certificate program is designed to provide specialty education for registered radiographers and prepare students for certification by the American Registry of Diagnostic Medical Sonographers (ARDMS) in the specialty categories of Abdomen & Small Parts and Obstetrics & Gynecology, in addition to the physics portion of the registry exam. Classes are conducted every other week on Monday and Tuesday, with clinical experience obtained at approved clinic affiliates within the region. Full-time status is required for those who have no previous work experience in sonography.

Applicants who have worked as diagnostic medical sonographers for a minimum of two (2) years may qualify for the Non-Traditional program. Interested applicants should contact the program office for further information.

A class will be accepted each year for Fall admission. Following acceptance into the program, students will be required to purchase liability insurance and provide proof of CPR certification before entering the clinic environment.

Admission Requirements

1. Graduation from an accredited Radiologic Technology program **AND** be ARRT (American Registry of Radiologic Technologists) registry eligible

OR

Current certification by the ARRT (additional coursework may be required).

2. Interview with the program Selection Committee.

Deadlines

All required materials must be submitted to the Division of Nursing/Allied Health by **April 15** for priority consideration for fall admission.

Applications received by April 15 will be reviewed and personal interviews will be scheduled with qualified applicants. Each applicant is evaluated on the basis of previous academic achievement (especially within the Radiologic Technology program), the ARRT score, and the personal interview score.

The entire application process will be completed and accepted applicants notified by July 1. A physical examination, to include a drug screening and proof of immunizations, will be required prior to beginning classes.

Health Information Management Major (Associate of Applied Science Degree)

The Health Information Management program (formerly Medical Record Technology) prepares a student to become a Health Record Technician (HRT). The HRT plays an important role in the maintenance of health information systems in various health care facilities. The HRT must be proficient in technical and supervisory skills in performing such medical record functions as record analysis, information storage and retrieval, health information statistics, coding and indexing of diseases and operations, assignment of DRGs, medical transcription, release of medical information, and assistance to the medical staff in quality assurance and research. Most responsibilities are primarily performed as office work with minimal contact with patients.

The program consists of a combination of classroom, laboratory, and clinical practice designed to meet the requirements for an Associate of Applied Science degree with program content based on guidelines established by the American Health Information Management Association.

Graduates of the program are prepared with the knowledge and skills to maintain health information in hospitals, ambulatory health care facilities, government health agencies, mental health facilities, skilled nursing facilities, insurance companies, hospices, and home health agencies.

This Allied Health curriculum is designed for the student interested in pursuing a career as a technician who does not necessarily intend to transfer to a baccalaureate degree program.

The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the Council on Accreditation of the American Health Information Management Association. Graduates are eligible to take the accreditation exam administered by the American Health Information Management Association and receive recognition as an Accredited Record Technician (ART) if the examination is passed successfully.

Note: The Health Information Management program conducts its curriculum on an alternate-year cycle. A first-year class will be accepted the fall of each odd-numbered year. During evenly-numbered academic years, e.g. fall 1998, fall 2000, etc., only second-year technical courses will be offered. Until policy changes, first-year and second-year technical courses that have "MR" prefixes will not be offered concurrently. Students may complete support courses required for the degree prior to enrollment in the Health Information Management program. Completion of these support courses does not guarantee admission into the program.

Admission Requirements

1. Complete all admissions procedures for Chattanooga State.
Note: It is the responsibility of the applicant to verify with the Records Office the receipt of any transcript(s) and/or transfer credit.
2. Submit completed application to the Health Information Management program. (Form is available through the Nursing/Allied Health Division office.) Completed applications must be submitted to the Health Applications Office in the Division of Nursing/Allied Health by **April 15** for priority consideration for Fall admission. Applications will be accepted after that date on a space-available basis.
3. Upon acceptance into the program, students must submit a written statement of good physical health signed by a practicing physician. (The "Health Verification Form" is available through Nursing/Allied Health Division office.) Students must be free of any physical or emotional condition that might adversely affect performance in any of the clinical programs. The College reserves the right to determine the student's continuation in the program if doubt exists due to a physical or emotional problem.
4. Take the Allied Health Aptitude Test (AHAT) and submit scores to the Health Applications Office in the Division of Nursing/Allied Health.
5. Have interview with members of the Nursing/Allied Health Division, including academic and clinical faculty members.
6. Enroll as full-time student unless non-technical courses are completed prior to matriculation into the program.
7. Assume total responsibility for transportation to and from the College and various hospitals and other health agencies which are utilized for clinical experience.
8. Purchase liability insurance coverage (available through Chattanooga State group policy) after admission into the program.

Admission to the Health Information Management program will be based upon a comparative evaluation of all applicants' test scores, transcripts and application information. Composition of the class will reflect diversity based on age, gender, and race. Tennessee residents are given priority consideration.

Progression Policy

1. A grade of "C" or better is required for progression in all courses with BI, HS and MR prefixes. A student who does not meet the minimum grade requirement may be dropped from the program until the course is offered again in the sequence. He/she may be evaluated for eligibility to retake the course if a vacancy exists.
2. A semester grade point average of 2.0 or better must be maintained for the student to remain in the program. Any student who does not meet this requirement will be dropped from the program. A student may re-apply to the program after he/she raises the GPA, provided that a vacancy exists.
3. The College has the right to recommend to the dean the withdrawal of any student whose adjustment and progress and/or personal demeanor do not meet the needs required in a clinical setting. The student will be advised to select another field of study.
4. In order to enter a clinical track in a specific program, the student must be approved and accepted by the clinical faculty and a vacancy in that track must exist.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BI 174,175	Human Anatomy and Physiology I, II	4	4
EN 110	Composition I	3	
HS 104,114	General Medical Terminology I, II	3	3
MR 103	Legal Aspects of Health Records		2
MR 105	Maintenance of Medical Records	4	
MR 106	Health Data Systems		4
MR 110	Medical Record Directed Practice I		2
	Computer Elective	3	
	Unrestricted Elective		1
		<u>17</u>	<u>16</u>
Sophomore			
MG 134	Supervision and Human Relations	3	
MR 223	Pathophysiology	3	
MR 240	ICD-9-CM Coding	4	
MR 245	Health Care Delivery Systems	3	
MR 250	Coding for Reimbursement		3
MR 270	Medical Record Directed Practice II		2
MR 275	Medical Record Seminar		3
MR 285	Medical Transcription		4
SP 110	Fundamentals of Public Speaking	3	
	Humanities Elective		3
	*Mathematics Elective		3
	Social/Behavioral Sciences Elective	3	
		<u>19</u>	<u>18</u>
Total Hours: 70			

*MA 163 not acceptable for Nursing/Allied Health programs.

Medical Laboratory Technician Major Consortium with Cleveland State

(Associate of Applied Science Degree)

Degree offered by Cleveland State Community College Courses offered on Chattanooga State Campus

Chattanooga State does not have a Medical Laboratory Technician program; through the consortium, Chattanooga State provides support courses which may be credited toward the degree in MLT and provides space for conducting MLT classes. The degree in MLT is a Cleveland State degree.

Application for the MLT program must be through Cleveland State; a separate application is required for general admission to Cleveland State. If support courses are going to be taken at Chattanooga State, another application must be filed with Chattanooga State.

A student who registers for support courses through Chattanooga State is not automatically accepted into the MLT program at Cleveland State and acceptance from Cleveland State must occur.

Registration for MLT courses cannot be done through Chattanooga State. This is done the first class period through Cleveland State.

The medical laboratory plays an important part in the detection, diagnosis, and treatment of disease. The medical laboratory technician uses precision instruments such as microscopes and automatic analyzers to test blood, tissues, and fluids of the human body. Results of such tests help physicians treat patients.

The Medical Laboratory Technician program is offered through the cooperative efforts of Cleveland State Community College and area hospitals. It is accredited by the AMA Committee on Allied Health Education and Accreditation and approved by the Tennessee Department of Public Health.

Graduates of this program are awarded an Associate of Applied Science degree in Medical Laboratory Technician and are eligible to participate in examinations given by the Tennessee Laboratory Licensing Service and the American Society of Clinical Pathologists (ASCP) Board of Registry.

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

Students applying for admission to the program must meet the entrance requirements of Cleveland State Community College and the admission requirements for the Medical Laboratory Technician program. This program is not designed for transfer, although many institutions accept all or part of the course work toward the baccalaureate degree. Students are advised that the Medical Laboratory Technician Program is designed to prepare students for technician-level positions. Students desiring to become Medical Technologists should follow the curriculum guide for Pre-Medical Technology found in the Transfer Programs section of the catalog.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
EN 110	Composition I	3		
BI 134	†General Biology I	4		
CH 134,135	‡General Chemistry I, II	4	4	
MLT 1000	*Medical Laboratory Principles	3		
MLT 1110	*Clinical Microscopy		3	
MLT 1210	*Immunohematology and Serology		3	
MLT 1310	*Hematology			6
SP 110	Fundamentals of Public Speaking		3	
	Computer Elective			3
	Social/Behavioral Science Elective			3
	Humanities Elective		3	
	**Mathematics Elective	3		
		17	16	12
Sophomore				
MLT 2010	*Clinical Chemistry	6		
MLT 2110	*Medical Microbiology	6		
MLT 2610	*Clinical Practices—Specimen Processing	1		
MLT 2620	*Clinical Education I	4		
MLT 2630	*Clinical Education II		4	
MLT 2640	*Clinical Education III		4	
MLT 2650	*Clinical Education IV		4	
MLT 2700	*Seminar		3	
		17	15	
Total Hours: 77				

* Cleveland State MLT courses.
 † BI 174, 175 may be substituted.
 ‡Corequisite: MA 117.
 **MA 117 recommended.

**For information telephone
 (423) 472-7141**

Medical Record Technology
 See "Health Information Management"

Nuclear Medicine Technology Certificate
 (Technical Certificate)

The Nuclear Medicine Technology Program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine. The curriculum is designed to provide specialty education for registered radiographers and prepare them to take the ARRT and/or NMTCB certification exams in nuclear medicine technology.

This is a twelve-month program which begins in the fall semester each year. Classes are conducted every other week on Monday and Tuesday with clinical experience obtained at affiliated clinical sites. Full-time status is required for those who have no previous work experience in nuclear medicine.

Applicants who have worked as nuclear medicine technologists for a minimum of two (2) years may qualify for the Non-traditional program. Interested applicants need to contact the

For list of approved Humanities, Mathematics, Natural Science, and Social/Behavioral Science Electives, see General Education section.

program for further information. After acceptance, students will be required to purchase liability insurance.

Admission Requirements

1. Graduation from a CAHEA accredited or equivalent program in radiologic technology **AND** be ARRT (American Registry of Radiologic Technologists) registry eligible
- OR
2. Interview with program director.
 3. Post-Secondary Educational Requirements

The following courses must be taken at a post-secondary institution before entering the program in order to receive a certificate in Nuclear Medicine Technology:

- Anatomy and Physiology
- Physics
- Mathematics
- Medical Terminology
- Oral and Written Communication
- General Chemistry
- Medical Ethics

Contact the Nuclear Medicine Technology Program Director to determine which of these post-secondary educational requirements have not been fulfilled.

Deadlines

All required materials must be submitted to the Nuclear Medicine Technology Program by **April 1** for priority consideration for fall admission. Applications received after the deadline will be accepted if space permits.

Applications received by April 1 will be reviewed and personal interviews will be scheduled with qualified applicants. Each applicant is evaluated on the basis of his or her previous college and Radiologic Technology Program achievement, the score from the American Registry of Radiologic Technology exam (ARRT), and a personal interview.

Applicants who are accepted into the program will be notified by May 15. A physical examination, including a drug screen test, is required prior to the beginning classes.

Continuation Policy

For progression a grade of "C" or better is required in each nuclear medicine technology course.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
NM 200	Introduction to Nuclear Medicine	2		
NM 201	Instrumentation and Statistics	2		
NM 205, 215, 225	Clinical Procedures I, II, III	2	4	4
NM 207, 227	Practicum in Nuclear Medicine I, III	11		1
NM 208	Radiopharmacology	2		
NM 212	Physics and Radiation Biology of Nuclear Medicine		4	
		19	8	5
Total Hours: 32				

Nursing Major

(Associate of Applied Science Degree)

The Chattanooga State Nursing Program prepares individuals to assume the three roles of the associate degree nurse: provider of care, manager of care, and member within the discipline of nursing. Graduates of the program are able to use critical thinking and the nursing process as the basis for providing care to culturally diverse individuals across the life span.

The nursing curriculum at Chattanooga State is offered in a day and night program. The day program is five semesters in length. It provides for full or part-time study with the majority of the classes taken during the day. New classes enroll in the fall

semester each year.

The Night Program is designed to offer a program of study that can be completed on a part-time basis during the evening. The Night Program is six semesters in length from the point of entry into the first nursing course. Students who have completed all prerequisite classes can expect to attend classes two to three nights per week during each term. New classes enroll in the fall of each even year.

Upon completion of the nursing program an Associate of Applied Science Degree in Nursing will be conferred. Information about articulation between this program and baccalaureate programs is available in the Nursing Program office.

The Nursing Program, located in the Fillauer Building on the Erlanger Medical Center campus, is approved by the Tennessee Board of Nursing and is accredited by the National League for Nursing Accrediting Commission.

The cost of registration, uniforms, nursing textbooks, liability insurance, school pin, licensing examination fee, and membership in the Student Nurses' Association averages approximately \$1500 per year. The greatest expense can be expected in the first and last semesters. Students must provide their own transportation to clinical facilities in the surrounding area.

Prospective Employers

Hospitals, Physician's Offices, Home Health Care Agencies, Nursing Homes

Application Procedures

1. Complete all admissions procedures for Chattanooga State.

Note: It is the responsibility of the applicant to:

- verify with the Records Office the receipt of any transcript and/or transfer credit.
 - request evaluation of transfer credits by the Records Office. Transcripts will be evaluated only after college admission requirements are complete.
 - provide a copy of transfer credits approved by the Records Office as part of the official Nursing Program application prior to the application deadline.
2. Complete Nursing Program application process:
 - Submit Nursing/Allied Health Application Form to the Nursing Program Office (Fillauer) or the Allied Health Division Office (Amnicola campus) prior to the **March 15** deadline.
 - Provide NLN Preadmission test scores. (Must have been taken within the past three years.) Test must be taken by March 15 and scores received by April 15 to meet the deadline.
 - Provide copy of approved transfer credits.
 - Provide copy of high school transcript if chemistry prerequisite has been met by completion of high school chemistry with a grade of "B" or better.

Admissions Requirements

To be eligible for admission into the Nursing Program, students must have completed, or be scheduled to complete during the summer prior to enrollment, the prerequisite courses listed below.

Prerequisites for the Nursing Program:

1. Chemistry — A grade of "B" or better in high school chemistry, a "C" or better in college chemistry, or CH 104 at Chattanooga State.
2. Completion of all remedial/developmental requirements, if applicable.

Additional prerequisites for the Night Nursing Program:

1. BI 174 and BI 175 or equivalent
2. BI 143 or equivalent
3. BI 234 or equivalent

Note: A minimum grade of "C" or better is required for all science courses. Anatomy and Physiology and Microbiology must have been taken within five years of admission into the Nursing Program.

Once the prerequisite requirements have been met, students are encouraged to take other science and general education courses. However, completion of the application process and any/all science and general education courses does not guarantee acceptance into the Nursing Program.

Admission into the Nursing Program is a competitive process utilizing an objective point system. Selection into the Nursing Program is based on an evaluation of test scores, transcripts, and other application information. Points are awarded for the NLN test score, science and general education courses required in the nursing curriculum that have been completed, and the grades received in these courses. Since the application deadline is March 15, the Admissions Committee considers only courses completed up to and including the Fall semester prior to the March deadline. Composition of the class will reflect diversity based on age, gender and race.

New classes for the day program begin each year in the fall semester. The Night Nursing Program enrolls new classes in the fall of each even year.

Nursing Program Policies

The following policies are specific to the Chattanooga State Nursing Program and are described more extensively in the Nursing Program Handbook.

ATTENDANCE — Punctual and regular attendance is vital.

Students are responsible for all assigned work in a course. Absences, excused or unexcused, do not absolve the student of this responsibility. Clinical attendance is mandatory to achieve nursing course competencies. In the event of absence, the student and instructor will decide what action is necessary to insure that the clinical time is made up and the clinical objectives are met.

NURSING COURSE SEQUENCE — Nursing core courses must begin with NS 119. All first level courses must be completed prior to enrollment in second level courses. Core nursing courses are: NS 119, NS 128, NS 238, and NS 249.

COURSE GRADE — In addition to a grade of "C" in each nursing course, students must receive 70% on the nursing examinations in each course to progress. This policy is outlined more extensively in each course syllabus.

CLINICAL EVALUATION — A student must receive a safe evaluation in the clinical setting for progression. An unsafe evaluation will result in the student not being able to progress regardless of the academic average.

REPEAT POLICY AND TERMINATION — Students are allowed to repeat only one nursing course. Subsequent failure of the repeated course or any other nursing course will result in termination from the program. After the second unsuccessful attempt, the student will not be eligible for re-entry into the program. Students who withdraw from the program, or who are terminated for academic or other reasons, must have an exit interview to be eligible for readmission.

PROGRESSION REQUIREMENTS — Second level students will be required to demonstrate attainment of stated program competencies by achieving a predetermined score on a standardized exit examination. Students not achieving this score will be required to successfully complete remedial work prior to completion of the

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

program.

GRADUATION REQUIREMENTS — All general education requirements must be completed or in progress at the time of registration for NS 249 to insure eligibility to write the National Council Licensure Examination (NCLEX-RN) upon graduation.

Additional Expectations for Nursing Students:

1. Prior to enrollment, students must provide proof of current CPR certification for health professionals. This must be maintained throughout the Nursing Program.
2. Prior to enrollment, students must provide evidence (through a health verification form and all required tests, including a drug screen) that they are in good health and free from communicable diseases prior to the beginning of the Fall term. Because nursing involves the direct care of clients, it is strongly recommended that students receive the Hepatitis B vaccination series.
3. In compliance with the Americans with Disabilities Act, students must be, with reasonable accommodation, physically and mentally capable of performing the essential functions of the program. The Core Performance Standards for Admission and Progression developed by the Southern Council on Collegiate Education for Nursing and adopted by all nursing programs in the Tennessee Board of Regents system include:
 - A. Critical thinking ability sufficient for clinical judgement.
 - B. Interpersonal abilities sufficient to interact with individuals, families and groups.
 - C. Communication abilities sufficient for interaction with others in verbal and written form.
 - D. Physical abilities sufficient to move from room to room and maneuver in small spaces.
 - E. Gross and fine motor abilities sufficient to provide safe and effective nursing care.
 - F. Auditory abilities sufficient to monitor and assess health needs.
 - G. Visual abilities sufficient for observation and assessment necessary in nursing care.
 - H. Tactile ability sufficient for physical assessment.

Any student who may require accommodation should schedule an appointment with the Nursing Program Director.

4. Because the College seeks to provide, in as much as possible, a reasonably safe environment for its students and clients in the clinical practice setting, students may be required during the course of the program to demonstrate their physical and/or emotional fitness to meet the essential requirements of the program. Such requirements may include freedom from communicable diseases, the ability to perform certain physical tasks, and suitable emotional fitness.
5. Individuals who have been convicted of a crime other than a minor traffic violation could be ineligible for registered nurse licensure in the State of Tennessee, even though they have successfully completed a nursing program. Individuals with a question concerning this should schedule an appointment with the Nursing Program Director.

Readmission/Transfer

Applicants seeking readmission or admission by transfer from an accredited nursing program should be aware that such requests are considered on an individual, space available basis.

TRANSFER STUDENTS

1. Students requesting transfer into the Nursing Program must submit a Nursing/Allied Health application form, an official transcript and nursing course descriptions from the previous nursing program to the Nursing Program Director. In addition,

a letter of recommendation from the director of the previous nursing program must be submitted. Granting of transfer credit for any nursing course will be considered on an individual basis.

2. In the event that direct transfer of credit is not possible, the NLN Mobility Profile I examination is considered to be the challenge exam for granting credit for nursing courses, pending approval of the Nursing Program Director. As such, a student is eligible to challenge a specific course one time. Enrollment in a nursing clinical course relinquishes the right of the student to challenge that clinical course for credit.
3. Students who received failing grades in two nursing courses in another nursing program are not eligible for transfer, except on an individual basis through “academic fresh start.”
4. Any student transferring into the Nursing Program after receiving one failing grade in a nursing course from another nursing program will not be allowed to repeat any nursing course. The failure in the previous nursing program counts as the first failure.

READMISSION

Students are eligible for re-entry into the course for which they were enrolled at the point of exit.

1. Applicants for readmission into the Nursing Program must submit a written request to the Nursing Program Director by March 15 for summer and fall courses and October 15 for spring courses. Included in the request should be an explanation of factors that contributed to the unsuccessful initial attempt and actions taken to enhance the chances for success if the opportunity for readmission were to be granted.
2. Students requesting readmission to the Nursing Program may be required to participate in remediation and/or validation of previous nursing course content. The specific plan will be determined on an individual basis and may include such activities as auditing designated courses, competency testing of theoretical knowledge (including drug calculations), or validation of clinical practice skills.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
BI 143	Nutrition	3		
BI 174,175	Human Anatomy and Physiology I, II	4	4	
EN 110	Composition I			3
NS 119,128	Nursing I, II	9	8	
PY 101	General Psychology I		3	
PY 217	Human Growth and Development	3		
	*Mathematics Elective			3
		19	15	6
Sophomore				
BI 234	Microbiology	4		
NS 238, 249	Nursing III, IV	8	9	
SP 110	Fundamentals of Public Speaking	3		
	Computer Elective		3	
	Humanities Elective		3	
	Unrestricted Elective	1		
		16	15	
	Total Hours: 71			

**Recommended: MA 143 or MA 153.*

MA 163 not acceptable for Nursing/Allied Health programs.

LPN Transition Program

The purpose of the LPN Transition Program is to offer an accelerated curriculum track for LPNs who wish to pursue the Associate of Applied Science Degree in Nursing and RN licensure for upgrading of both degree and professional skills. The LPN Transition Program is an adaptation of the associate degree nursing curriculum that recognizes the knowledge and skills of the licensed practical nurse. LPNs accepted into the Transition Program must successfully complete NS 024 (Nursing Transition) in order to receive credit for the first two semesters in the nursing curriculum (NS 119 and NS 128). LPNs then complete the final two nursing courses in the program of study (NS 238 and NS 249). (*Note: Placement testing using the NLN Mobility Profile is no longer required.*)

Application Procedures

1. Complete all admissions procedures for Chattanooga State.

Note: It is the responsibility of the applicant to:

- verify with the Records Office the receipt of any transcript and/or transfer credit.
- request evaluation of transfer credits by the Records Office. Transcripts will be evaluated only after college admission requirements are complete.
- provide a copy of transfer credits approved by the Records Office as part of the official Nursing Program application prior to the application deadline.

2. Complete Nursing Program application process:

- Submit Nursing/Allied Health Application Form or Update Form to the Nursing Program Office (Fillauer) or the Allied Health Division Office (Amnicola campus) prior to the **March 15** deadline.
- Provide copy of approved transfer credits, if applicable.
- Provide copy of high school transcript if chemistry prerequisite has been met by completion of high school chemistry with a grade of "B" or better.
- Provide proof of current licensure as an LPN in the state of Tennessee.
- Provide documentation of at least one year of relevant work experience within the past five years.

Admission Requirements

Admission into the LPN Transition Program is a competitive process utilizing an objective point system. Points are awarded for science and general education courses required in the nursing curriculum that have been completed and the grades received in these courses. Since the application deadline is March 15, the Admissions Committee considers only courses completed up to and including the Fall semester prior to the March deadline. Composition of the class will reflect diversity based on age, gender and race.

Prerequisites for LPN Transition Program:

To be eligible for consideration, applicants must have completed or be scheduled to complete during the summer prior enrollment in NS 024, all required prerequisites. These include:

1. Chemistry — A grade of "B" or better in high school chemistry, or a "C" or better in college chemistry, or CH 104 at Chattanooga State.
2. Completion of all remedial/developmental requirements, if applicable.
3. General education courses normally completed during the first two semesters in the Nursing curriculum:
 - BI 174,175 Human Anatomy and Physiology I, II
 - BI 143 Nutrition
 - BI 234 Microbiology (Night Program only)

- PY 101 General Psychology
- PY 217 Human Growth and Development

Note: A minimum grade of "C" is required for all science courses. Anatomy and Physiology and Microbiology must have been taken within five years of admission to the Nursing program.

Upon acceptance into the LPN Transition Program, students must provide proof of current CPR certification and a completed "Health Verification Form" before the first clinical nursing course.

Any student who fails or withdraws failing from NS 024 is not eligible for readmission through the LPN Transition Program.

Basic Education Courses Related to Nursing Programs

Chattanooga State offers basic education courses which may constitute requirements in an RN nursing education program. Special counseling, as well as academic advisement regarding various programs, is available. Students are encouraged to obtain information regarding a nursing education program in which they may be interested. Since the various types of programs leading to RN licensure (Associate Degree and Baccalaureate Degree) will have specific requirements, planning is essential.

Physical Therapist Assistant Major (Associate of Applied Science Degree)

Physical Therapist Assistants (PTAs) are health care workers who work under the direction and supervision of a Physical Therapist. PTAs perform physical therapy procedures and related tasks which have been selected and delegated by the supervising Physical Therapist. The PTA Program consists of a combination of classroom, laboratory and clinical practice designed to prepare the student in the use of exercise, physical therapy modalities, clinical communication skills, and special treatment procedures. The goals of these techniques are to improve patient function by increasing strength, coordination, and functional abilities and/or by decreasing pain. Program content is based on recommended guidelines as established by the American Physical Therapy Association and the Commission on Accreditation of Physical Therapy Education.

Places of Employment

Hospital, Rehabilitation Center, Extended Care Facility, Home Health Agency, Private Practice, School System

This Allied Health curriculum is designed for those interested in pursuing a career as a Physical Therapist Assistant. A student completing the academic and clinical requirements will be eligible:

1. For an Associate of Applied Science Degree.
2. To sit for the board examination for Physical Therapist Assistants administered by the state.
3. To apply for licensure to practice in Tennessee as a PTA. (State licensure requirements vary slightly from state to state, but most states will allow transfer of licensure by reciprocity. This would have to be dealt with on an individual basis.)

This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Application Procedures

1. Complete all admissions procedures for Chattanooga State, including submission of official high school and/or college transcripts to the Records Office.

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

2. Obtain an application packet to the PTA Program from the Division of Nursing/Allied Health. The packet includes all necessary forms and information for application to the program.
3. All program applications and forms must be submitted to the Health Applications Office located in the Division of Nursing/Allied Health. The following information should ALL be submitted at the same time with the copy of the Admissions checklist attached:
 - Nursing/Allied Health application.
 - Copies of high school and/or college transcripts. (College transcripts only are required for students who are currently in college.)
 - Clinical Observation form documenting at least 16 hours of observation at a physical therapy facility.
 - Two Student Recommendation forms in sealed envelopes from the persons providing the recommendation.
 - Copy of Allied Health Aptitude Test (AHAT) scores and/or date when test was or will be taken.
4. Students must have completed all developmental courses to meet minimal eligibility requirements for program courses. For students who have not had college level courses, ACT test results or the AAPP (college assessment test) results must also be submitted.

Admission/Acceptance Procedure

1. Students who submit their admission materials by **the first Monday in March** of the year in which Fall admission is sought will have their applications reviewed by a screening committee. (Only if there were not enough qualified applicants to fill the 20 available spaces in the class would applications be accepted after the March deadline.)
2. It is the student's responsibility to be sure all admission information is sent to the appropriate location.
3. Personal interviews will be scheduled for those who best meet and/or exceed admission requirements. Criteria of overall grades and science grades (high school and/or college), knowledge of Physical Therapy, Allied Health Aptitude Test scores, maturity, professional presentation, communication skills, problem solving skills, etc. will be evaluated and rated in the screening/interview process by an interview committee. This committee may consist of a team of members from Chattanooga State's division of Nursing/Allied Health, academic and clinical faculty, or current PTA students.

Additional Requirements (for those students offered acceptance into the program)

1. Students accepted into the program must also complete and submit a "Health Verification Form" signed by a medical doctor.
2. Prior to entering the clinical phase of the program, students must produce evidence of current CPR certification and maintain certification throughout the program.
3. The student must assume total responsibility for transportation to and from the College and to the various hospitals or health agencies that are utilized for clinical experiences.
4. Students must purchase liability insurance coverage. (Available for purchase through Chattanooga State for a minimal cost.)
5. Students are strongly encouraged to have personal medical insurance. Chattanooga State does not assume liability for accidents/injuries which occur during clinical or class time.
6. If Human Anatomy and Physiology or Physics were taken prior to entering the PTA program, courses must be current within the past five years.

7. Students must take the PTA, BI, and PH courses in the sequence provided in the catalog unless the courses were taken prior to being admitted into the program.

Continuation/Retention Policy

Chattanooga State's faculty will make every effort to assist students who are accepted into the PTA Program to successfully complete the program. The student must, however, assume some of the responsibility for his/her success. The following criteria have been established for this purpose:

1. All courses with PT prefixes must be passed with a grade of "C" or better in order to proceed to the next PT course in the sequence. A student who does not meet this grade requirement is dropped from the program until the course is offered again in the program sequence. At this time, a student who wishes to re-enter the program will be evaluated by the PTA faculty and offered re-entry if a vacancy exists in the class, and the faculty is convinced that the reasons for previous academic failure no longer exist. After three years, the student will not be given the option to re-enter the program without a complete re-application process.
2. Each Anatomy/Physiology and Physics course must be passed with a grade of "C" or better in order to proceed to the next sequenced course in the PTA curriculum. A student who does not meet this grade requirement is dropped from the program. Any science course re-taken must be passed with a "C" or better before the student may be considered for possible re-entry into the program. Re-entrance will be evaluated by the PTA faculty and be based on updated GPA and vacancies in the program.
3. A minimum overall semester grade point average of 2.0 must be maintained. A student who does not meet this requirement is dropped from the program.
4. Students who develop significant physical limitations or emotional distress during the course of the program, may be asked to undergo additional physical or psychological evaluations to determine their ability to continue in the program.
5. The program courses follow an attendance policy. Excessive unexcused absences, as defined in the student handbook and course syllabi, will result in lowering the student's final grade.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BI 174,175	Human Anatomy and Physiology I, II	4	4
EN 110	Composition I		3
PH 110	Concepts of Physics	4	
PT 104	Introduction to Physical Therapy	2	
PT 111	Clinical Practice I		2
PT 112	Pathological Conditions		3
PT 115,125	Physical Therapy Procedures I, II	5	4
PT 123	Functional Anatomy	4	
	Humanities Elective		3
		<hr/>	<hr/>
		19	19
Sophomore			
PT 201	Physical Therapy Seminar		2
PT 205	Therapeutic Exercise	5	
PT 210, 221	Clinical Practice II, III	4	10
SP 110	Fundamentals of Public Speaking	3	
	Computer Elective	3	
	*Mathematics Elective	3	
	Social/Behavioral Science Elective		3
	Unrestricted Elective	1	
		<hr/>	<hr/>
		19	15

Total Hours: 72

**MA 163 not acceptable for Nursing/Allied Health programs.*

Radiation Therapy Technology Certificate
(Technical Certificate)

The Radiation Therapy Technology Program (accredited by the Joint Review Committee on Education in Radiologic Technology) is a 12 month program designed to provide specialty education for registered radiographers and prepare them to take the ARRT certification exam in radiation therapy technology. Classes are conducted every other week on Thursday and Friday with clinical experience obtained at affiliated clinical sites. Full-time status is required for those who have no previous work experience in radiation therapy.

Applicants who have worked as radiation therapy technologists for a minimum of two (2) years may qualify for the Non-traditional program. Interested applicants need to contact the division for further information.

A class will be accepted each Fall semester. After acceptance, students will be required to purchase liability insurance.

Admission Requirements

1. Graduation from a JRCERT accredited or equivalent program in Radiologic Technology [equivalent program status will be determined by program officials] **AND** be ARRT (American Registry of Radiologic Technologists) registry eligible

OR

1. Be a current ARRT Registered Radiologic Technologist.
2. Interview with program Admissions Committee.
3. Math/Physics Pre-test.

Continuation Policy

1. For progression a grade of "C" or better is required in each radiation therapy technology course.
2. Registry eligible students must successfully complete the national examination in Radiologic Technology before completing the Radiation Therapy Program.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
HS 123	Introduction to Radiation Oncology	3		
HS 172	Anatomy and Imaging	2		
HS 214, 224	Radiation Physics I, II	4	4	
HS 220, 240	Clinic I, III	9		1
HS 223, 233	Radiation Oncology I, II		3	3
HS 243	Radiation Biology and Hyperthermia			3
Total Hours: 32		18	7	7

Radiologic Technology Major
(Associate of Applied Science Degree)

The Radiologic Technology Program begins fall semester and is a 24-month program. Full-time student status is required. The program is accredited by the Joint Review Committee on Education in Radiologic Technology. Individuals successfully completing the Radiologic Technology Program may apply as candidates for certification by the American Registry of Radiologic Technologists.

Preparatory High School Courses

- Math through algebra II required (advanced mathematics preferred)
- Science through chemistry required (physics preferred)
- Biology (strongly recommended)
- Typing (strongly recommended)

Places of Employment

Hospitals, Clinics, Private physicians' offices, Industry, Civil service, Public health facilities, College/university, Experimental laboratory, Commercial sales

Affiliates

- Erlanger Medical Center
- Parkridge Medical Center
- Bradley Memorial Hospital
- Memorial Hospital
- North Park Hospital
- East Ridge Hospital

Clinical assignments for each student, totaling approximately 2,000 clock hours, are required. Therefore, clinical schedules may include semester breaks and summer breaks. Students are responsible for transportation to and from the College and the affiliated hospitals. Student liability insurance is required.

This program is designed for the student who does not intend to transfer to a baccalaureate degree program. However, educational programs in Nuclear Medicine, Radiation Therapy, Ultrasound, Special Procedures, Magnetic Resonance Imaging, and Computerized Axial Tomography, as well as baccalaureate degree programs in Radiologic Technology, usually accept our graduates as transfer students.

The following policies are specific to the Chattanooga State Radiologic Technology Program:

Progression Policy

A grade of "C" or better in the following courses is required for progression:

1. All RT prefixed courses
2. X-Ray Physics I, II (HS 145, HS 155)
3. Human Anatomy and Physiology I, II (BI 174, BI 175)
4. Radiation Protection and Radiologic Health Administration (NU 104)
5. Computer Elective
6. Radiation Biology (HS 184)

Clinical Evaluation

1. A mean average of 85 in all overall performance evaluations.
2. An academic score of 85 percent in each category competency evaluation.
3. An academic score of 90 percent in each final category competency evaluation.
4. A grade of "C" or better in each clinical education course.

Students who do not meet the clinical education criteria may be given an "I" (incomplete) grade. A grade of "I" will be given to any student in a clinical course who does not complete the minimum hours of clinical attendance as specified for that course. An "I" becomes an "F" if work is not completed before the last two (2) weeks of the next semester.

Repeat Policy and Termination

Students who do not meet the progression criteria or who receive a grade of "F" in any course in the program will immediately be withdrawn from the program. Such individuals will be allowed to re-apply and will be given consideration for articulation back into the program. Re-admitted students who do not meet the progression criteria or who receive a grade of "F" in any course in the program will be permanently terminated from the program and advised to pursue another course of study. Chattanooga State does provide academic counseling.

NOTE: Many of these courses transfer to four-year schools. Consult your adviser for more specific information.

Graduation Requirements

All general education requirements must be completed with a minimum cumulative GPA of 2.0 before the student is eligible to receive the degree and to write the American Registry of Radiologic Technology Certification Examination.

Admission Requirements

In addition to the admission requirements of Chattanooga State, the applicant must meet the following requirements to be considered for acceptance into the Associate Degree Radiologic Technology Program:

1. Complete Nursing/Allied Health Division Application Form.
2. Submit official high school and college transcripts.
3. Complete Academic History Form.
4. Submit Allied Health Aptitude Test score report. (In general, a composite of 70% or greater is required.)
5. Submit ACT score report. In general, the evaluation of the ACT will require that the student:
 - a. achieve a minimum score of 20 on English or complete in one semester, Developmental Writing (EN 081 or equivalent) with a grade of "B" or better
 - b. achieve a minimum score of 19 on Math or complete in one semester, Intermediate Algebra (MA 081 or equivalent) with a grade of "B" or better
 - c. achieve a minimum score of 19 on Reading or complete in one semester, Reading Analysis and Reasoning (RE 081 or equivalent) with a grade of "B" or better
 - d. achieve a minimum score of 20 on Science Reasoning or complete in one semester, Principles of Chemistry (CH 104 or equivalent) with a grade of "B" or better
6. Attend a Radiologic Technology Program Information Session.

Note: Because of the heavy work load in the Radiologic Technology program, **preference** for acceptance is usually given to students who have taken courses which apply to the curriculum. Completion of the following courses (with a grade of "C" or better) prior to entering the program reduces the academic load and stress and provides more opportunity for success. However, completion of the application process and any/all science and general education courses does not guarantee acceptance into the Radiologic Technology program.

- All required developmental courses (as determined by AAPP placement)
- High school chemistry or CH 104 (4)
- BI 174, 175 Human Anatomy and Physiology I, II (4,4)
- MA 117 College Algebra (3)
- Any course in the curriculum that does not have an HS or RT prefix

Deadlines

All required materials must be submitted to the Health Applications Office in the Division of Nursing/Allied Health by **April 15**, for priority consideration. After this date, applications will be processed as they are received. It is the student's responsibility to see that all application materials are received prior to the deadline date.

Applicants who have completed and submitted their admission materials by April 15 will have their materials reviewed, and personal interviews will be scheduled with qualified applicants. Each applicant is evaluated on the basis of his or her previous high school and college achievement, the scores from the ACT and AHAT, and a personal interview designed to determine the level of the applicant's skill in communication and

problem solving, relevant work experience, and true desire to become a Radiologic Technologist. Selection into the Radiologic Technology Program is based on a comparative evaluation of all applicants.

Applicants who have completed the admission criteria will be notified of the decision by the Radiologic Technology Admission Committee by June 15. Upon acceptance into the Radiologic Technology Program, students must provide proof of current CPR training (American Heart Association "Course C" or American Red Cross "CPR for the Professional Rescuer"), a completed "Health Verification Form" and other required health screening tests, including the drug screen, before the start of fall classes.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
BI 174,175	Human Anatomy and Physiology I, II	4	4	
HS 145,155	X-Ray Physics I, II	4	4	
MA 117	College Algebra	3		
RT 110	Introduction to Radiologic Technology	3		
RT 112,114	Clinic I, II			4
RT 115	Medical Terminology		3	
RT 124,125	Radiographic Exposure I, II	3	3	
RT 134,135	Radiographic Positioning– Film Critique I, II			
		<u>3</u>	<u>3</u>	<u>4</u>
		20	19	4
Sophomore				
EN 110	Composition I		3	
HS 184	Radiation Biology		3	
NU 104	Radiation Protection and Radiological Health Administration	4		
RT 143	Radiographic Positioning–Film Critique III	3		
RT 172	Radiologic Pathology		3	
RT 202, 212, 224	Clinic III, IV, V	2	2	3
RT 223	Special Procedure Radiography–Nursing	3		
RT 232	Introduction to Pararadiologic Imaging Modalities and Radiation Therapy	3		
RT 234, 235	Radiology Seminar I, II	4	4	
SP 110	Fundamentals of Public Speaking			3
	Computer Elective		3	
	Humanities Elective			3
	Social/Behavioral Science Elective		3	
	Unrestricted Elective			1
		<u>19</u>	<u>21</u>	<u>10</u>
Total Hours: 93				

ADVANCED STANDING PROGRAM

Certified RT's may receive up to 61 semester hours of college credit for previous certified instruction and/or experience. Such students will be given "advanced standing" and need only complete the core curriculum outlined below.

Requirements

1. Certified transcript from approved school of Radiologic Technology. (School must have JRCERT/CAHEA approval at the time the student graduated.)
2. Proof of registration by ARRT.

Course No.	Course Title	SUMMARY OF REQUIRED HOURS		
		Semester Hours		
CS 101	Computer Literacy			3
EN 110	Composition I			3
HS 184	Radiation Biology			3
MA 117	College Algebra			3
NU 104	Radiation Protection and Radiological Health Administration			4
RT 172	Radiologic Pathology			3
RT 232	Introduction to Pararadiologic Imaging Modalities and Radiation Therapy			3
SP 110	Fundamentals of Public Speaking			3
	Humanities Elective			3
	Social/Behavioral Science Elective			3
	Unrestricted Elective			1
Total Hours: 32				

Respiratory Care Major

(Associate of Applied Science Degree)

The Respiratory Care Program is two years (six semesters) and qualifies graduates to take the Entry Level Examination to become a Certified Respiratory Therapy Technician (CRTT) and the written and simulation portions of the Registry Examination to become a Registered Respiratory Therapist (RRT). These tests are administered by the National Board for Respiratory Care. Through a combination of classroom and laboratory instruction and clinical practice, students gain knowledge and skills in cardiopulmonary testing and therapy. Graduates of the Respiratory Care Program will meet the requirements to practice as a respiratory therapist as defined in the Tennessee Respiratory Care Practitioner's Act. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

Admission Requirements

1. Students must apply and be accepted to Chattanooga State.
2. Students must apply to the Respiratory Care Program specifically. Completed application should include:
 - a. Nursing/Allied Health application.
 - b. Two letters of reference from employers, teachers, or professional acquaintances.
 - c. Copies of high school and college transcripts sent to the Health Applications Office in the Division of Nursing/Allied Health.
3. Student must take the Allied Health Aptitude Test (AHAT).
4. Student must take the ACT or AAPP as required by college admissions criteria.
5. Student **must** be college level in math, English and reading skills.
6. Application deadline is **April 15** for priority consideration.
7. Students are selected for interviews based upon academic achievement and AHAT scores. Interviews are to assess poise and communication skills, the applicant's knowledge about the field, and his/her interest and dedication. Tours of respiratory care departments in clinical affiliates may be scheduled for those with little or no exposure to respiratory care.
8. Selection is based on faculty evaluation of past academic performance, test scores, and interview.

Retention

1. Students who achieve a grade of "D" or "F" in a respiratory care course may retake that course the following year when it is offered in sequence.
 - a. A student failing a respiratory care course will not be permitted to take any additional respiratory care courses until he/she re-enters the course sequence beginning with the course failed.
 - b. A student failing a respiratory care course must re-apply to the program for the following year. Acceptance is subject to all admission and selection criteria, and availability of clinical positions. Readmission is not automatically assured.
 - c. A student failing two respiratory care courses or failing a respiratory care course twice will be dropped from the program and not considered for readmission.
2. Students who achieve a grade of "D" or "F" in a microbiology or anatomy and physiology course must retake that course.
 - a. If it is possible to retake the failed course and still complete all first year courses, the student may remain in respiratory care courses.

- b. If it is not possible to retake the failed course and still complete all first year courses, the student may not remain in respiratory care courses. He/she will take any non-respiratory care courses that will allow him/her to return to the respiratory care sequence on schedule the following year. He/she must re-apply to the program for the following year.
3. Students must have a cumulative Chattanooga State GPA of 2.0 to advance to the second year of the program. Students who do not have a GPA of 2.0 may take or retake courses to raise their GPA and re-apply for admission to the second year the following year.
4. Students must have a physical examination prior to the start of the clinical portion of the program (start of second year).

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
BI 174,175	Human Anatomy and Physiology I, II	4	4	
BI 234	Microbiology			4
EN 110	Composition I	3		
RC 111,112,113	Principles of Respiratory Care Procedures I, II, III	3	3	4
RC 141,142,143	Technical Foundations of Respiratory Care I, II, III	3	3	3
	Chemistry Elective		4	
	Computer Elective	3		
	*Mathematics Elective		3	
		<hr/>	<hr/>	<hr/>
		16	17	11
Sophomore				
RC 210, 212, 213	Fundamentals of Respiratory Care I, II, III	3	3	3
RC 221, 222, 223	Clinical Practicum I, II, III	6	6	7
RC 241, 242	Clinical Pathophysiology I, II	3	3	
RC 243	Pediatric/Perinatal Respiratory Care		3	
SP 110	Fundamentals of Public Speaking		3	
	Social/Behavioral Science Elective	3		
	Humanities Elective	3		
	Unrestricted Elective			1
		<hr/>	<hr/>	<hr/>
		18	18	11

Total Hours: 91

**MA 163 not acceptable for Nursing/Allied Health programs.*

Ultrasound

See "Diagnostic Medical Sonography"

X-Ray Technology

See "Radiologic Technology"

1998-99 Transfer Programs

Contents

	Page No.		Page No.
GENERAL INFORMATION			
Degrees:		Journalism	49
Associate of Arts	42	Management	49
Associate of Science	42	Marketing	49-50
General Education	42-43	Mass Communications, see	
Foreign Language Placement	42	Broadcasting	45
Math Placement	43	Journalism	49
Removal of Entrance Deficiencies	43	Mathematics	50
CURRICULUM GUIDES			
Accounting	44	Mathematics Education, see "Secondary Education: Mathematics"	54-55
Art	44	Music	50-51
Art Education	44	Nutrition	51
Biology	44-45	Philosophy	51
Broadcasting	45	Physical Education, see	
Business Administration	45	Health & Physical Education	48
Chemistry	45-46	Wellness/Fitness Leadership	56
Communications, see		Physics	51
Broadcasting	45	Political Science	51
Journalism	49	Pre-Cytotechnology	51
Drama	46	Pre-Dentistry	52
Early Childhood Education	46	Pre-Engineering	52
Education, see		Pre-Law	52
Art Education	44	Pre-Medical Technology	52
Early Childhood Education	46	Pre-Medicine	52-53
Elementary Education	47	Pre-Occupational Therapy	53
Secondary Education: English	54	Pre-Optometry	53
Secondary Education: Mathematics	54-55	Pre-Pharmacy	53
Secondary Education: Science	55	Pre-Physical Therapy	53
Secondary Education: Social Sciences	55	Pre-Veterinary Medicine	54
Economics	46-47	Psychology	54
Elementary Education	47	Religion	54
English	47	Science Education, see "Secondary Education: Science"	55
English Education, see "Secondary Education: English"	54	Secondary Education: English	54
Environmental Studies	47	Secondary Education: Mathematics	54-55
Foreign Language, see		Secondary Education: Science	55
French	47	Secondary Education: Social Sciences	55
German	48	Social Science Education, see "Secondary Education: Social Sciences"	55
Spanish	56	Social Work	55
Forestry, Fisheries, or Wildlife	47	Sociology	55
French	47	Spanish	56
Geography	48	Theatre Arts	56
German	48	Wellness/Fitness Leadership	56
Graphic Design	48		
Health & Physical Education	48		
History	48		
Humanities	49		
Information Systems	49		

Associate of Arts and Associate of Science Degrees

Students who desire to earn a Bachelor of Arts or Bachelor of Science degree at a four-year college or university may complete the first two years at Chattanooga State by enrolling in the Associate of Arts or Associate of Science degree programs. The advantages in taking the first two years of a Bachelor's degree program at Chattanooga State are: (a) Chattanooga State's maintenance fees are among the lowest charged by any public college or university in Tennessee; (b) Chattanooga State's faculty specialize in the first two years; (c) Chattanooga State is student-oriented; and (d) at Chattanooga State, students may begin at their own level of competence.

Chattanooga State works closely with students and sister institutions of higher education to ensure smooth transfer. Both course-by-course

Equivalency Tables and program articulation agreements have been developed between Chattanooga State and other colleges or universities such as The University of Tennessee at Chattanooga, The University of Tennessee, Knoxville, and Tennessee Technological University. Student copies of both program articulation agreements and Course Equivalency Tables for these and other institutions are available in the Advising Center.

If no program articulation agreement is available for a particular school or major, students may follow one of the Curriculum Guides found on the following pages. The Curriculum Guides are suggested courses of study designed to include general education and foundation courses needed for a major in a given field at the bac-

calaureate level. Because every school has different requirements, the Curriculum Guides are not intended to represent requirements for any particular college or university. Students should secure a copy of the catalog of the senior institution to which they plan to transfer and use it during advisement and registration to make sure that the courses selected meet the first two years' requirements at the receiving institution. Substitutions to meet unique requirements at a specific institution do not require special permission, provided the requirements for the Associate of Arts or Associate of Science degrees shown in the SUMMARY OF REQUIRED HOURS are met.

All Chattanooga State students are encouraged to complete the Associate Degree prior to

SUMMARY OF REQUIRED HOURS
(Associate of Arts Degree)

	Semester	Credit Hours
English 110, 111	6	
Speech 110	3	
* Computer Elective	3	
* Fine Arts Elective	3	
Foreign Language	6	
* Humanities Elective	3	
* Literature Elective	3	
* Mathematics Elective	3	
* Natural Science Electives	8	
† Physical Education Activities	2	
* Social Science (History Sequence)	6	
‡ Electives	18	
Total Hours:	64	

* See "General Education" for list of approved courses.

† Two different Physical Education activity courses are required to satisfy this requirement.

‡ Completion of the second year of foreign language is highly recommended. Other electives should be selected in consultation with the student's adviser and/or the institution to which the student wishes to transfer.

SUMMARY OF REQUIRED HOURS
(Associate of Science Degree)

	Semester	Credit Hours
English 110, 111	6	
Speech 110	3	
* Computer Elective	3	
* Fine Arts Elective	3	
* Humanities Elective	3	
* Literature Elective	3	
* Mathematics Elective	3	
* Natural Science Electives	8	
† Physical Education Activities	2	
* Social Science (History Sequence)	6	
‡ Electives	24	
Total Hours:	64	

* See "General Education" for list of approved courses.

† Two different Physical Education activity courses are required to satisfy this requirement.

‡ Electives should be selected in consultation with the student's adviser and/or the institution to which the student wishes to transfer.

Note: Credit hours earned in developmental or remedial courses are institutional credit; they are not applicable to credit hours required for an associate degree.

The goal of general education is to provide students with a common set of learning experiences which will develop the attitudes, knowledge, and skills to enable them to function effectively in society and enjoy enriched personal lives. The general education component of the curriculum focuses on a broad understanding of the past and present and includes course work from Written and Oral Communication (English Composition and Speech), Computers, Mathematics, Natural Science (Biology, Chemistry, Environmental Science, Geology, Physics), Humanities (Art, Humanities, Literature, Music, Philosophy), and Social and Behavioral Science (Economics, Geography, History, Political Science, Psychology, Sociology).

APPROVED GENERAL EDUCATION COURSES

The lists below indicate courses which have been approved for use in the various General Education categories. Because these are foundation courses on which more advanced work in the major may need to build, the Curriculum Guide for the student's Area of Emphasis may indicate that a specific course should be taken to satisfy a given General Education requirement. Otherwise, the student may select any course from the list; however, care should be taken to

GENERAL EDUCATION

choose courses which are appropriate for the four-year college to which the student intends to transfer.

Note: If the student selects a course carrying more credit hours than the minimum specified to satisfy that requirement, the excess hour(s) will count as elective credit toward graduation.

WRITTEN AND ORAL COMMUNICATION
(9 HOURS)

EN 110 Composition I
EN 111 Composition II
SP 110 Fundamentals of Public Speaking

COMPUTER ELECTIVE (3 HOURS)

Any course in Information Systems (CS prefix)

Note: CS 101, Computer Literacy, is the course most commonly used to satisfy this requirement. However, certain baccalaureate majors may specify other computer courses more appropriate to the major. Students should consult with the four-year institution to which they plan to transfer to select an appropriate computer course.

FOREIGN LANGUAGE (6 HOURS)

Six hours of the same foreign language is required for the Associate of Arts. If an eight-hour sequence is used to satisfy this requirement, the extra hours will count as elective credit toward graduation.

FR 110, 111 Elementary French I, II
FR 210, 211 Intermediate French I, II
GR 110, 111 Elementary German I, II
GR 210, 211 Intermediate German I, II
SH 110, 111 Elementary Spanish I, II
SH 210, 211 Intermediate Spanish I, II

Foreign Language Placement

Students who have completed two or more years of the same foreign language in high school may be able to skip one or both of the elementary level courses. No credit is given for the elementary level course(s) from which the student has been exempted. Those credits may be replaced with general electives.

HUMANITIES ELECTIVES (9 HOURS)

Must include 3 hours from Fine Arts, 3 hours from Literature, and 3 additional hours from Fine Arts, Literature, or Other Humanities.

Fine Arts (3-6 HOURS)

AR 112 Introduction to Art History
AR 212 Art Structure
DR 111 Introduction to the Theatre
MU 110 Music Appreciation

Literature (3-6 HOURS)

EN 210 Literature of the Western World I
EN 211 Literature of the Western World II
EN 213 American Masterpieces I
EN 214 American Masterpieces II
EN 218 English Masterpieces I
EN 219 English Masterpieces II
EN 237 Literature by Women
EN 261 African-American Literature
EN 265 Literature in Culture: World Perspectives

Other Humanities (0-3 HOURS)

HU 110 Introduction to the Humanities
HU 120 Philosophy of Science and Technology

- HU 210 Religions of the World
- HU 213 Mythology
- HU 220 Religion in America
- HU 230 Contemporary Women Artists and Writers
- HU 238 Folklore and Native Culture
- HU 265 Literature in Culture: World Perspectives
- PL 111 Introduction to Western Philosophy
- PL 220 Philosophy of Religion: Old Testament
- PL 221 Philosophy of Religion: New Testament

MATHEMATICS ELECTIVES (3 HOURS)

- MA 117 College Algebra
- MA 118 Pre-Calculus
- MA 135 Calculus I with Analytic Geometry
- MA 136 Calculus II with Analytic Geometry
- MA 143 Contemporary Mathematics
- MA 153 Introductory Statistics
- MA 163 Structure of Number Systems I
- MA 164 Structure of Number Systems II
- MA 170 Statistics I
- MA 171 Statistics II
- MA 193 Calculus for Management, Life, and Social Sciences

Math Placement

Students pursuing majors for which the math requirement would normally be calculus or pre-calculus may begin their college math at a higher level than College Algebra if they meet the criteria listed below. All degrees at Chattanooga State require at least one college level mathematics course. Meeting the criteria to place into a higher level course does not exempt the student from this requirement, nor is any credit granted for the course(s) the student is able to skip.

- | | |
|--|--|
| Criteria | Advanced Placement Course |
| 1. Three (3) high school mathematics credits above the Algebra I level and a Math subscore of 25 on the ACT or corresponding SAT score. | Calculus I with Analytic Geometry, MA 135 |
| 2. Two (2) high school mathematics credits above the Algebra I level and a Math subscore of 21 on the ACT or corresponding SAT score. | Pre-Calculus, MA 118 or Calculus for Management, Life, and Social Sciences, MA 193 |

NATURAL SCIENCE ELECTIVES (8 HOURS)

- BI 100 Essentials of Life Science
- BI 134 General Biology I
- BI 135 General Biology II
- BI 205 Plant Morphology
- CH 134 General Chemistry I
- CH 135 General Chemistry II
- ES 150 Environmental Science I
- ES 151 Environmental Science II
- GE 111 Physical Geology
- GE 112 Historical Geology
- PH 109 The Physical Environment
- PH 110 Concepts of Physics
- PH 114 Physics I
- PH 115 Physics II
- PH 154 Astronomy
- PH 254 General Physics with Calculus I
- PH 255 General Physics with Calculus II

PHYSICAL EDUCATION ELECTIVES (2-4 HOURS)

Two different one- or two-hour Physical Education activity courses are required. If a two-hour course(s) is

used to satisfy this requirement, the extra credit hour(s) will count as elective credit toward graduation.

- PE 103 Self-Defense for Women
- PE 105 Beginning Table Tennis
- PE 116 Golf
- PE 118 Concepts of Wellness
- PE 119 Beginning Tennis
- PE 121 Intermediate Tennis
- PE 122 Volleyball
- PE 124 Step Aerobics
- PE 125 Aerobics
- PE 126 Social Dance
- PE 127 Walking for Fitness
- PE 128 Fitness for Living
- PE 131 Racquetball
- PE 140 Skin and Scuba Diving
- PE 141 Bicycling
- PE 142 Canoeing
- PE 143 Backpacking and Hiking
- PE 150 Elementary Ballet Technique
- PE 151 Line Dance
- PE 152 Basketball
- PE 153 Self-Defense for the Disabled
- PE 160 Beginning Snow Skiing
- PE 164 Beginning Self-Defense
- PE 165 Advanced Self-Defense

SOCIAL AND BEHAVIORAL SCIENCE ELECTIVES (6 HOURS)

One approved History sequence is required in all AA and AS degree programs. Approved History sequences are: U.S. History (HI 203-204); Western Civilization (HI 205-206); and World History (HI 207-208).

Tennessee History (HI 271) may be substituted for either course in the U.S. History sequence (HI 203 or 204). This is the only substitution that is allowed in any of the History sequences.

- EC 110 Introduction to Economics
- EC 211 Principles of Economics I—Macro
- EC 212 Principles of Economics II—Micro
- GO 101 Physical Geography
- GO 103 World Geography
- HI 203 United States History to 1865
- HI 204 United States History from 1865
- HI 205 Western Civilization to 1715
- HI 206 Western Civilization from 1715
- HI 207 World History to 1500
- HI 208 World History from 1500
- HI 261 Afro-American History
- HI 271 Tennessee History
- PO 110 Introduction to American Government
- PO 120 Introduction to Political Science
- PY 101 General Psychology I
- PY 251 Psychology of Personal Adjustment
- SO 110 Introduction to Sociology
- SO 120 Social Problems
- SO 215 Marriage and Family
- SO 216 Cultural Anthropology

REMOVAL OF ENTRANCE DEFICIENCIES

Students who do not meet the entrance requirements for regular admission listed in "General Information/Admission Procedures" section must remove the deficiencies before receiving an associate degree. Credit hours earned in college (100- and 200-level) courses taken to remove entrance deficiencies may count as electives toward the 64 hours required for graduation, but may not be used to satisfy general education or major requirements. [Example: If a student takes DR 111 to remove a Visual/Performing Arts Deficiency, he/she would need to take AR 112, AR 212, or MU 110 to satisfy the Fine Arts requirement.] Entrance deficiencies must be removed prior to completion of 30 semester hours of college-level work. A grade of "C" or better is required.

Requirement	Course	Exam
English	*	*
Algebra I and II	*	*
Geometry	MA 090	No
Natural/Physical Science I	BI 134, CH 104, CH 134, ES 150, PH 109, PH 110, or PH 114	CLEP
Natural/Physical Science II	BI 135, CH 135, ES 151, or PH 115	CLEP
Social Studies**	HI 205, HI 206, HI 207, HI 208 or GO 103	CLEP
U.S. History	HI 203 or HI 204	CLEP
Foreign Language I	FR 110, GR 110, or SH 110	CLEP
Foreign Language II	FR 111, GR 111, or SH 111	CLEP
Visual/Performing Arts †	AR 103, DR 111, DR 212, or MU 111	No

* Entrance deficiencies in English, Algebra I and Algebra II will be handled through the mandatory AAPP assessment, placement, and removal of deficiency at the remedial or developmental level.

**The following courses are acceptable for removal of a Social Studies deficiency only if the student graduated from high school prior to Spring 1993: EC 211, PO 120, PY 101, SO 110, SO 216.

† Not required for students who graduated from high school prior to Spring 1993.

NOTICE

Students who plan to transfer to one of Tennessee's state-supported institutions should be aware of the following:

American History Requirement

Effective July 1, 1978 and afterwards, all students receiving bachelor's degrees from any of Tennessee's state-supported colleges or universities must have completed one unit of American History on the high school level or six semester hours (nine quarter hours) of college-level American history as required by the General Assembly of the State of Tennessee (Tennessee Code Annotated 49-7-110).

Notes:

- The law allows one course in Tennessee History to be substituted for one of the required American history courses.
- Students who hold a GED Certificate are not considered to have satisfied this requirement automatically. Unless American History was completed in high school prior to receiving the GED, the student has a deficiency which must be removed in order to receive a baccalaureate degree from any of Tennessee's state-supported colleges or universities.
- Although college-level American History may be used to remove a high school History deficiency, the reverse is not true. High school American History cannot substitute for college-level history required as part of an associate or baccalaureate degree program. A student who has taken American History in high school may be required to take American History in college as well.

Students who have not completed a full year of American History in high school are strongly encouraged to remove this deficiency before transferring to a senior institution. For students not subject to the 1989 Admission Requirements, completion of six hours from HI 203, HI 204, HI 271 (in any combination) will remove this deficiency and also count as the approved History sequence required for the AA or AS degree or, if the student prefers to take a non-U.S. history for the History sequence, as elective credit toward graduation. For students subject to the 1989 Admission Requirements, all three courses (nine hours) must be completed in order to satisfy the AA/AS requirement for a History sequence because one of the U.S. History courses must be used to remove the high school unit deficiency and can only count as an elective toward graduation.

Note: The Curriculum Guides on the following pages show how to combine Chattanooga State's degree requirements with the courses typically required during the first two years of the baccalaureate major corresponding to each Area of Emphasis. They are not intended to represent requirements for any particular college or university. Students should consult articulation agreements, the catalogs of the school to which they intend to transfer, and their advisers for information on requirements specific to the senior institution of their choice.

Degree: Associate of Arts
Major: General
Area of Emphasis: Accounting

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
MA 135	Calculus I w/Analytic Geometry	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Foreign Language (Intermediate Level)	6
	Humanities	3
	Literature	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Accounting. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
EC 211, 212	Principles of Economics I, II	6
MA 170	Statistics I	3
MA 136	Calculus II w/Analytic Geometry	4

64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

AA 106	Design	4
AR 103, 105	Life Drawing I, II	8
AR 231, 232	Painting and Composition I, II	8

Degree: Associate of Science
Major: General
Area of Emphasis: Art

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Art. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

AA 106	Design	4
AR 103, 105	Life Drawing I, II	8
AR 231, 232	Painting and Composition I, II	8

Degree: Associate of Science
Major: General
Area of Emphasis: Accounting

Course No.	Course Title	Semester Credit Hours
CS 101	Computer Literacy	3
EN 110, 111	Composition I, II	6
MA 117	College Algebra	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Fine Arts	3
	Humanities	3
	Literature	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Accounting. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
EC 211, 212	Principles of Economics I, II	6
MA 170, 171	Statistics I, II	6
MA 193	Calculus for Management, Life, and Social Sciences	3

Degree: Associate of Science
Major: General
Area of Emphasis: Art Education

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Art Education. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

AA 106	Design	4
AR 103, 105	Life Drawing I, II	8
AR 231, 232	Painting and Composition I, II	8
ED 201	Foundations of Education	3

Degree: Associate of Arts
Major: General
Area of Emphasis: Art

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Foreign Language	6
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Art. (Students who complete all of these courses will have credits in excess of the

Degree: Associate of Science
Major: General
Area of Emphasis: Biology

Course No.	Course Title	Semester Credit Hours
BI 134, 135	General Biology I, II	8
EN 110, 111	Composition I, II	6
*MA 135	Calculus I w/Analytic Geometry	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3

Humanities	3
Literature	3
Two Physical Education Activity Courses	2
Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Biology. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

CH 134, 135	General Chemistry I, II	8
CH 210, 211	Organic Chemistry I, II	8
*MA 136	Calculus II w/Analytic Geometry	4
PH 114, 115	Physics I, II	8

*MA 117, 193 may be substituted.

Degree: Associate of Arts
Major: General
Area of Emphasis: Broadcasting

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	*Foreign Language (Elementary Level)	6
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Broadcasting. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

CO 110	Introduction to Mass Communications	3
CO 204 or	TV Production or	
CO 202	Broadcast Announcing	3
CO 205	Radio and Television News	
	Writing and Editing	3
	*Foreign Language (Intermediate Level)	6

*Two years of same foreign language.

Degree: Associate of Science
Major: General
Area of Emphasis: Broadcasting

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Broadcasting. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

CO 110	Introduction to Mass Communications	3
CO 204 or	TV Production or	
CO 202	Broadcast Announcing	3
CO 205	Radio and Television News	
	Writing and Editing	3
	Social/Behavioral Science Electives	6

Degree: Associate of Arts
Major: General
Area of Emphasis: Business Administration

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
MA 135	Calculus I w/Analytic Geometry	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Foreign Language (Intermediate Level)	6
	Humanities	3
	Literature	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Business Administration. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
EC 211, 212	Principles of Economics I, II	6
MA 136	Calculus II w/Analytic Geometry	4
MA 170	Statistics I	3

Degree: Associate of Science
Major: General
Area of Emphasis: Business Administration

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
MA 117	College Algebra	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Business Administration. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
EC 211, 212	Principles of Economics I, II	6
MA 170, 171	Statistics I, II	6
MA 193	Calculus for Management, Life, and Social Sciences	3

Degree: Associate of Arts
Major: General
Area of Emphasis: Chemistry

Course No.	Course Title	Semester Credit Hours
CH 134, 135	General Chemistry I, II	8
CS 144	FORTAN Programming	4
EN 110, 111	Composition I, II	6
*FR 110, 111 or	Elementary French I, II or	
* GR 110, 111	Elementary German I, II	6
MA 135	Calculus I w/Analytic Geometry	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Fine Arts	3
	Humanities	3
	Literature	3
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Chemistry. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

CH 210, 211	Organic Chemistry I, II	8
MA 136	Calculus II w/Analytic Geometry	4
PH 254, 255	General Physics w/Calculus I, II	8

*Substitute FR 210 and 211 or GR 210 and 211 if the student has had the equivalent of Elementary French or Elementary German on the secondary level.

Degree: Associate of Science

Major: General

Area of Emphasis: Chemistry

Course No.	Course Title	Semester Credit Hours
CH 134, 135	General Chemistry I, II	8
CS 144	FORTRAN Programming	4
EN 110, 111	Composition I, II	6
MA 135	Calculus I w/Analytic Geometry	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Fine Arts	3
	Humanities	3
	Literature	3
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Chemistry. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

CH 210, 211	Organic Chemistry I, II	8
CH 217	Quantitative Analysis	4
MA 136	Calculus II w/Analytic Geometry	4
PH 254, 255	General Physics w/Calculus I, II	8

Degree: Associate of Arts

Major: General

Area of Emphasis: Drama

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Foreign Language	6
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Theatre. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

DR 111	Introduction to the Theatre	3
DR 126	Voice and Diction for the Stage	2
DR 131	Movement I	2
DR 204	Performance and Production	2
DR 212, 213,		
DR 222	Acting I, II, III	3-9 *
DR 220, 221	Technical Theatre I, II	3-6**
DR 241	Musical Theatre	2

*Nine hours recommended for performance emphasis.
 **Six hours recommended for technical theatre emphasis.
 NOTE: DR electives should be selected based on the requirements of the school to which the student intends to transfer. Not all DR courses transfer to all four-year institutions.

Degree: Associate of Science

Major: General

Area of Emphasis: Drama

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate

major in Theatre. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

DR 111	Introduction to the Theatre	3
DR 126	Voice and Diction for the Stage	2
DR 131	Movement I	2
DR 204	Performance and Production	2
DR 212, 213,		
DR 222, 223	Acting I, II, III, IV	3-12*
DR 220, 221	Technical Theatre I, II	3-6**
DR 241	Musical Theatre	2

*Twelve hours recommended for performance emphasis.
 **Six hours recommended for technical theatre emphasis.
 NOTE: DR electives should be selected based on the requirements of the school to which the student intends to transfer. Not all DR courses transfer to all four-year institutions.

Degree: Associate of Science

Major: General

Area of Emphasis: Early Childhood Education

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
HI 203, 204	United States History	6
MA 163	Structure of Number Systems I	3
MU 110	Music Appreciation	3
SP 110	Fundamentals of Public Speaking	3
	Computer Elective	3
	Humanities	3
	Literature	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Elective hours should include the following courses:

ED 201	Foundations of Education	3
MA 164	Structure of Number Systems II	3

Degree: Associate of Arts

Major: General

Area of Emphasis: Economics

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
MA 117	College Algebra	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	*Foreign Language (Elementary Level)	6
	Humanities	3
	Literature	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Economics. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

EC 211, 212	Principles of Economics I, II	6
MA 193	Calculus for Management, Life, and Social Sciences	3
	*Foreign Language (Intermediate Level)	6

*Two years of same foreign language.

Degree: Associate of Science

Major: General

Area of Emphasis: Economics

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
MA 117	College Algebra	3	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Economics. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8	
EC 211, 212	Principles of Economics I, II	6	
MA 170, 171	Statistics I, II	6	
MA 193	Calculus for Management, Life, and Social Sciences	3	

Degree: Associate of Science

Major: General

Area of Emphasis: Elementary Education

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
MA 163	Structure of Number Systems I	3	
MU 110	Music Appreciation	3	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Humanities	3	
	Literature	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Elective hours should include the following courses:

ED 201	Foundations of Education	3	
MA 164	Structure of Number Systems II	3	

Degree: Associate of Arts

Major: General

Area of Emphasis: English

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	*Foreign Language (Elementary Level)	6	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in English. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

*Foreign Language (Intermediate Level)	6	
Literature Elective	3	
Social/Behavioral Science Electives	6	

*Two years of same foreign language.

Degree: Associate of Science

Major: General

Area of Emphasis: Environmental Studies

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
ES 150, 151	Environmental Science I, II	8	
MA 135	Calculus I w/Analytic Geometry	4	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Environmental Studies. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BI 134, 135	General Biology I, II	8	
CH 134, 135	General Chemistry I, II	8	
MA 136	Calculus II w/Analytic Geometry	4	

Degree: Associate of Science

Major: General

Area of Emphasis: Forestry, Fisheries, or Wildlife

Course No.	Course Title	Semester	Credit Hours
BI 134, 135	General Biology I, II	8	
EN 110, 111	Composition I, II	6	
MA 135	Calculus I w/Analytic Geometry	4	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Forestry, Fisheries, or Wildlife. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

CH 134, 135	General Chemistry I, II	8	
MA 136	Calculus II w/Analytic Geometry	4	

Degree: Associate of Arts

Major: General

Area of Emphasis: French

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
*FR 110, 111	Elementary French I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Elective hours should include the following courses:

FR 210, 211	Intermediate French I, II	6	
	Second foreign language (recommended)	6-12	

*Students with adequate high school preparation may be able to begin at a higher level.

Degree: Associate of Science
Major: General
Area of Emphasis: Geography

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
HU 210	Religions of the World	3	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Geography. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

GO 101	Physical Geography	3
GO 103	World Geography	3
SO 216	Cultural Anthropology	3
	Social/Behavioral Science Electives	6

Degree: Associate of Science
Major: General
Area of Emphasis: Graphic Design

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Graphic Design. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

AA 106	Design	4
AR 103, 105	Life Drawing I, II	8
AR 231, 232	Painting and Composition I, II	8

Degree: Associate of Arts
Major: General
Area of Emphasis: German

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
*GR 110, 111	Elementary German I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Elective hours should include the following courses:

GR 210, 211	Intermediate German I, II	6
	Second foreign language (recommended)	6-12

*Students with adequate high school preparation may be able to begin at a higher level.

Degree: Associate of Science
Major: General
Area of Emphasis: Health & Physical Education

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which students majoring in the field of health and physical education may be required to take in their first two years of college. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

ED 201	Foundations of Education	3
PE 210	Introduction to Physical Education	3
PE 211	Personal and Community Health	3
PY 101	General Psychology I	3

Degree: Associate of Arts
Major: General
Area of Emphasis: Graphic Design

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Foreign Language	6	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Graphic Design. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

AA 106	Design	4
AR 103, 105	Life Drawing I, II	8
AR 231, 232	Painting and Composition I, II	8

Degree: Associate of Arts
Major: General
Area of Emphasis: History

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
HI 203, 204	United States History	6	
SP 110	Fundamentals of Public Speaking	3	
	Computer Elective	3	
	Fine Arts	3	
	*Foreign Language (Elementary Level)	6	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in History. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

HI 205, 206	Western Civilization	
	or	
HI 207, 208	World History	6
	*Foreign Language (Intermediate Level)	6
	Social/Behavioral Science Elective	3

*Two years of same foreign language.

Degree: Associate of Arts
Major: General
Area of Emphasis: Humanities

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
PL 111	Introduction to Western Philosophy	3	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	*Foreign Language (Elementary Level)	6	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Humanities. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

HU 110	Introduction to the Humanities	3
HU 210	Religions of the World	3
HU 213	Mythology	3
	*Foreign Language (Intermediate Level)	6

*Two years of same foreign language.

Degree: Associate of Arts
Major: General
Area of Emphasis: Management

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
MA 135	Calculus I w/Analytic Geometry	4	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Foreign Language (Intermediate Level)	6	
	Humanities	3	
	Literature	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Management. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
EC 211, 212	Principles of Economics I, II	6
MA 136	Calculus II w/Analytic Geometry	4
MA 170	Statistics I	3

Degree: Associate of Science
Major: General
Area of Emphasis: Information Systems

Course No.	Course Title	Semester	Credit Hours
CS 114	Concepts of Programming	2	
CS 185	C++ Programming Language	3	
EN 110, 111	Composition I, II	6	
MA 135	Calculus I w/Analytic Geometry	4	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Information Systems. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
CS 254	Advanced Algorithms	3
EC 211, 212	Principles of Economics I, II	6
MA 136	Calculus II w/Analytic Geometry	4

Degree: Associate of Science
Major: General
Area of Emphasis: Management

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
MA 117	College Algebra	3	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Management. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
EC 211, 212	Principles of Economics I, II	6
MA 170, 171	Statistics I, II	6
MA 193	Calculus for Management, Life, and Social Sciences	3

Degree: Associate of Arts
Major: General
Area of Emphasis: Journalism

Course No.	Course Title	Semester	Credit Hours
CS 101	Computer Literacy	3	
EN 110, 111	Composition I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Fine Arts	3	
	*Foreign Language (Elementary Level)	6	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Journalism. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

CO 110	Introduction to Mass Communications	3
EN 225	Journalism: News Writing and Editing	3
OF 113	Keyboarding/Document Processing I	3
	*Foreign Language (Intermediate Level)	6
	Literature Elective	3

*Two years of same foreign language.

Degree: Associate of Arts
Major: General
Area of Emphasis: Marketing

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
MA 135	Calculus I w/Analytic Geometry	4	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Foreign Language (Intermediate Level)	6	
	Humanities	3	
	Literature	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Marketing. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
EC 211, 212	Principles of Economics I, II	6
MA 136	Calculus II w/Analytic Geometry	4
MA 170	Statistics I	3

Degree: Associate of Science
 Major: General
 Area of Emphasis: Marketing

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
MA 117	College Algebra	3	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Marketing. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BU 114, 115	Principles of Accounting I, II	8
EC 211, 212	Principles of Economics I, II	6
MA 170, 171	Statistics I, II	6
MA 193	Calculus for Management, Life, and Social Sciences	3

Degree: Associate of Science
 Major: General
 Area of Emphasis: Mathematics

Course No.	Course Title	Semester	Credit Hours
CS 144	FORTRAN Programming	4	
EN 110, 111	Composition I, II	6	
MA 135	Calculus I w/Analytic Geometry	4	
PH 254, 255	General Physics w/Calculus I, II	8	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Mathematics. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

MA 136	Calculus II w/Analytic Geometry	4
MA 210	Linear Algebra	3
MA 245	Calculus III w/Analytic Geometry	4
MA 246	Differential Equations	3

Degree: Associate of Arts
 Major: General
 Area of Emphasis: Mathematics

Course No.	Course Title	Semester	Credit Hours
CS 144	FORTRAN Programming	4	
EN 110, 111	Composition I, II	6	
FR 110, 111 or GR 110, 111	Elementary French I, II or Elementary German I, II	6	
MA 135	Calculus I w/Analytic Geometry	4	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Mathematics. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

FR 210, 211 or GR 210, 211	Intermediate French I, II or Intermediate German I, II	6
MA 136	Calculus II w/Analytic Geometry	4
MA 210	Linear Algebra	3
MA 245	Calculus III w/Analytic Geometry	4
MA 246	Differential Equations	3

Degree: Associate of Arts
 Major: General
 Area of Emphasis: Music

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Foreign Language	6	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. The courses listed below are typically required in the first two years of a Music major. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

MU 112, 113	Beginning Harmony I, II	6
MU 147, 148	Fundamental Sightreading and Ear Training I, II	2
MU 212	Advanced Harmony	3
MU 213	Advanced Harmony and Form	3
MU 247, 248	Sightreading and Ear Training III, IV	2

NOTE: Students must also register for MU 001, applied music instruction, and music ensemble each semester.

Degree: Associate of Science
 Major: General
 Area of Emphasis: Music

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II	6	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Mathematics	3	
	Natural Science	8	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Music. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

MU 112, 113	Beginning Harmony I, II	6
MU 147, 148	Fundamental Sightreading and Ear Training I, II	2

MU 212	Advanced Harmony	3
MU 213	Advanced Harmony and Form	3
MU 247, 248	Sightreading and Ear Training III, IV	2

NOTE: Students must also register for MU 001, applied music instruction, and music ensemble each semester.

Literature	3
Two Physical Education Activity Courses	2
Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Physics. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for that school.

MA 136	Calculus II w/Analytic Geometry	4
MA 210	Linear Algebra	3
MA 245	Calculus III w/Analytic Geometry	4
MA 246	Differential Equations	3
PH 254, 255	General Physics w/Calculus I, II	8
PH 286	Optics and Modern Physics	4

Degree: Associate of Science

Major: General

Area of Emphasis: Nutrition

Course No.	Course Title	Semester Credit Hours
CH 134, 135	General Chemistry I, II	8
CS 101	Computer Literacy	3
EN 110, 111	Composition I, II	6
MA 153	Introductory Statistics	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Fine Arts	3
	Humanities	3
	Literature	3
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Nutrition. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BI 143	Nutrition	3
BI 174, 175	Human Anatomy and Physiology I, II	8
BI 234	Microbiology	4
PY 101	General Psychology I	3

Degree: Associate of Science

Major: General

Area of Emphasis: Political Science

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
HI 203, 204	United States History	6
SP 110	Fundamentals of Public Speaking	3
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Political Science. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

PO 110	Introduction to American Government	3
PO 120	Introduction to Political Science	3
PO 219	State and Local Government	3
PY 101	General Psychology I	3
	Social/Behavioral Science Electives	6

Degree: Associate of Arts

Major: General

Area of Emphasis: Philosophy

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
HU 210	Religions of the World	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	*Foreign Language (Elementary Level)	6
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Philosophy. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

HU 213	Mythology	3
PL 111	Introduction to Western Philosophy	3
PL 211 or PL 212	Logic or Ethics	3
	*Foreign Language (Intermediate Level)	6

*Two years of same foreign language.

Degree: Associate of Science

Major: General

Area of Emphasis: Pre-Cytotechnology

This course of study covers the first two years of preprofessional work for students preparing for the study of cytotechnology. An additional year of college-level study will be required at a senior institution to meet the minimum requirement for admission to the Cytotechnology Program at The University of Tennessee, Memphis. Students interested in other cytotechnology programs should consult the catalogs of those institutions for information on admission requirements.

Course No.	Course Title	Semester Credit Hours
BI 134, 135	General Biology I, II	8
EN 110, 111	Composition I, II	6
MA 117	College Algebra	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Literature	6
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the 64 semester hour minimum for graduation. The following courses are required for admission to Cytotechnology and should be included in the student's elective hours.

BI 234	Microbiology	4
CH 134, 135	General Chemistry I, II	8
	Social/Behavioral Science Electives	12

Degree: Associate of Science

Major: General

Area of Emphasis: Physics

Course No.	Course Title	Semester Credit Hours
CH 134, 135	General Chemistry I, II	8
CS 144	FORTTRAN Programming	4
EN 110, 111	Composition I, II	6
MA 135	Calculus I w/Analytic Geometry	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Fine Arts	3
	Humanities	3

For list of approved Fine Arts, Humanities, Literature, Mathematics, Natural Science, and Social/Behavioral Science Electives, see General Education section.

Degree: Associate of Science
Major: General
Area of Emphasis: Pre-Dentistry

This course of study covers the first two years of preprofessional work for students preparing for the study of dentistry. At least one additional year of college-level study will be required at a senior institution to meet the minimum requirements for admission to dental school. Most students accepted into the study of dentistry have the baccalaureate degree before admission. Therefore, the pre-dental student should plan his/her course of study in such a way that prerequisite and foundation courses for a baccalaureate major are also included.

Course No.	Course Title	Semester Credit Hours
BI 134, 135	General Biology I, II	8
EN 110, 111	Composition I, II	6
MA 118	Pre-Calculus	5
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the 64 semester hour minimum required for graduation. The courses listed below are typically required for admission to dental school and are usually taken by pre-dental students during their first two years of college. Consult the dental school of choice for information on the exact requirements for admission to that particular school.

CH 134, 135	General Chemistry I, II	8
CH 210, 211	Organic Chemistry I, II	8
PH 114, 115	Physics I, II	8

Degree: Associate of Science
Major: General
Area of Emphasis: Pre-Engineering

This course of study is designed for the student who plans to transfer to a senior institution to pursue a baccalaureate degree in an engineering field.

Course No.	Course Title	Semester Credit Hours
CS 144	FORTRAN Programming	4
EN 110, 111	Composition I, II	6
MA 135	Calculus I w/Analytic Geometry	4
PH 254	General Physics w/Calculus I	4
PH 255 or CH 134	General Physics w/Calculus II or General Chemistry I	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Fine Arts	3
	Humanities	3
	Literature	3
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Some or all of the courses listed below may be required during the first two years of a baccalaureate Engineering degree program. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the catalog of the receiving institution to determine which of these courses are required for the field of Engineering desired.

CH 134, 135	General Chemistry I, II	8
CS 231	Numerical Methods	3
EG 211	Descriptive Geometry	3
EG 274	Engineering Mechanics	3
EG 284	Mechanics of Solids	3
EG 285	Mechanics of Materials Laboratory	2
EG 294	Dynamics	3
MA 136	Calculus II w/Analytic Geometry	4
MA 210	Linear Algebra	3
MA 245	Calculus III w/Analytic Geometry	4
MA 246	Differential Equations	3
PH 255	General Physics w/Calculus II	4

See a pre-engineering adviser for specific articulation agreements with four-year engineering schools.

Degree: Associate of Science
Major: General
Area of Emphasis: Pre-Law

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Law schools generally do not prescribe a definite pre-law curriculum for prospective applicants. Instead, law schools seek to attract applicants possessing a broad educational background. Since there is no single major required for admission to law school, pre-law students may major in any undergraduate field. The electives for the associate degree should be chosen based on the requirements of the baccalaureate major the student plans to pursue and should include courses which strengthen reasoning and writing skills. Some recommended courses are listed below.

PL 211	Logic	3
PO 110	Introduction to American Government	3
PO 219	State and Local Government	3
PY 101	General Psychology I	3
SO 110	Introduction to Sociology	3
	Literature Elective	3

Degree: Associate of Science
Major: General
Area of Emphasis: Pre-Medical Technology

This course of study is designed for the student who plans to apply for admission to the Medical Technology Program at The University of Tennessee, Memphis. Students interested in other medical technology programs should consult the catalogs of those institutions for information on admission requirements.

Course No.	Course Title	Semester Credit Hours
BI 134, 135	General Biology I, II	8
EN 110, 111	Composition I, II	6
MA 117	College Algebra	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Students who complete the Medical Technology admission requirements listed below will have credits in excess of the 64-hour minimum.

BI 174, 175	Human Anatomy and Physiology I, II	8
CH 134, 135	General Chemistry I, II	8
CH 210, 211	Organic Chemistry I, II	8

Degree: Associate of Science
Major: General
Area of Emphasis: Pre-Medicine

This course of study covers the first two years of preprofessional work for students preparing for the study of medicine. At least one additional year of college-level study will be required at a senior institution to meet the minimum requirements for admission to medical school. Most students accepted into the study of medicine have the baccalaureate degree before admission. Therefore, the pre-medical student should plan his/her course of study in such a way that prerequisite and foundation courses for a baccalaureate major are also included.

Course No.	Course Title	Semester Credit Hours
BI 134, 135	General Biology I, II	8
EN 110, 111	Composition I, II	6
MA 135	Calculus I w/Analytic Geometry	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6

Computer Elective	3
Fine Arts	3
Humanities	3
Literature	3
Two Physical Education Activity Courses	2
Electives	+

*Sufficient courses to meet the 64 semester hour minimum required for graduation. The courses listed below are typically required for admission to medical school and are usually taken by pre-medical students during their first two years of college. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the medical school of choice for information on the exact requirements for admission to that particular school.

CH 134, 135	General Chemistry I, II	8
CH 210, 211	Organic Chemistry I, II	8
MA 136	Calculus I w/Analytic Geometry	4
PH 114, 115	Physics I, II	8

Degree: Associate of Science

Major: General

Area of Emphasis: Pre-Occupational Therapy

This course of study is designed for the student who plans to apply for admission to the Occupational Therapy Program at The University of Tennessee, Memphis. Students interested in other occupational therapy programs should consult the catalogs of those institutions for information on admission requirements.

Course No.	Course Title	Semester	Credit Hours
BI 134, 135	General Biology I, II	8	
EN 110, 111	Composition I, II	6	
MA 118	Pre-Calculus	5	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the 64 semester minimum requirement for graduation. Students who complete the Occupational Therapy admission requirements listed below will have credits in excess of the 64-hour minimum.

BI 174, 175	Human Anatomy and Physiology I, II	8
CH 134	General Chemistry I	4
PH 114	Physics I	4
PY 101	General Psychology I	3
PY 213	Abnormal Psychology	3
PY 217	Human Growth and Development	3
SO 110	Introduction to Sociology	3

Degree: Associate of Science

Major: General

Area of Emphasis: Pre-Optometry

This course of study is designed for students preparing for the study of optometry. At least one additional year of college-level study will be required at a senior institution to meet the minimum requirements for admission to optometry school. Although a baccalaureate degree may not be required for admission, most students accepted into the study of optometry have the baccalaureate degree before admission. Therefore, the pre-optometry student should plan his/her course of study in such a way that prerequisite and foundation courses for a baccalaureate major are also included.

Course No.	Course Title	Semester	Credit Hours
BI 134, 135	General Biology I, II	8	
EN 110, 111	Composition I, II	6	
MA 135	Calculus I w/Analytic Geometry	4	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the 64 semester hour minimum requirement for graduation. The courses listed below are typically required for admission to optometry school and are usually taken by pre-optometry students during their first two years of college. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the

associate degree.) Consult the optometry school of choice for information on the exact requirements for admission to that particular school.

CH 134, 135	General Chemistry I, II	8
CH 210, 211	Organic Chemistry I, II	8
PH 114, 115	Physics I, II	8

Degree: Associate of Science

Major: General

Area of Emphasis: Pre-Pharmacy

This course of study is designed for the student who plans to apply for admission to pharmacy school. Some pharmacy programs may require additional work at a senior institution as a requirement for admission. Students should consult the catalogs of the schools to which they intend to apply.

Course No.	Course Title	Semester	Credit Hours
BI 134, 135	General Biology I, II	8	
EN 110, 111	Composition I, II	6	
MA 135	Calculus I w/Analytic Geometry	4	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Humanities	3	
	Literature	3	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the 64 semester hour minimum requirement for graduation. The courses listed below are typically required for admission to pharmacy school and are usually taken by pre-pharmacy students during their first two years of college. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Consult the pharmacy school of choice for information on the exact requirements for admission to that particular school.

BI 234	Microbiology	4
CH 134, 135	General Chemistry I, II	8
CH 210, 211	Organic Chemistry I, II	8
MA 153	Introductory Statistics	4
PH 114, 115	Physics I, II	8

NOTE: Students who plan to attend the College of Pharmacy at The University of Tennessee, Memphis should take 6 hours of electives from psychology, sociology, economics, or political science.

Degree: Associate of Science

Major: General

Area of Emphasis: Pre-Physical Therapy

The course of study suggested below shows how to combine Chattanooga State's degree requirements with the courses required prior to admission to physical therapy at The University of Tennessee, Memphis. Students interested in other physical therapy programs should consult the catalogs of those institutions for information on admission requirements.

Course No.	Course Title	Semester	Credit Hours
CH 134, 135	General Chemistry I, II	8	
EN 110, 111	Composition I, II	6	
HU 210	Religions of the World	3	
MA 118	Pre-Calculus	5	
SP 110	Fundamentals of Public Speaking	3	
	Approved History Sequence	6	
	Computer Elective	3	
	Fine Arts	3	
	Literature	3	
	Two Physical Education Activity Courses	2	
	Electives	+	

*Sufficient courses to meet the 64 semester hour minimum requirement for graduation. Students who complete the Physical Therapy admission requirements listed below will have credits in excess of the 64-hour minimum.

BI 134, 135	General Biology I, II	8
BI 174, 175	Human Anatomy and Physiology	8
PH 114, 115	Physics I, II	8
PY 101, 102	General Psychology I, II	6
PY 241	Psychology of Individual Differences	3
MA 153	Introductory Statistics	3

NOTE: Recommended choices for the additional Social Sciences and electives required for admission are courses offered by senior institutions. Consult a Pre-Physical Therapy adviser for more information.

Degree: Associate of Science
 Major: General
 Area of Emphasis: Pre-Veterinary Medicine

This course of study covers the first two years of preprofessional work for students preparing for the study of veterinary medicine. At least one additional year of college-level study will be required at a senior institution to meet the minimum requirements for admission to veterinary medicine. Most students accepted into the study of veterinary medicine have the baccalaureate degree before admission. Therefore, the pre-veterinary medicine student should plan his/her course of study in such a way that prerequisite and foundation courses for a baccalaureate major are also included.

Course No.	Course Title	Semester	Credit Hours
BI 134, 135	General Biology I, II		8
EN 110, 111	Composition I, II		6
MA 135	Calculus I w/Analytic Geometry		4
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		3
	Fine Arts		3
	Humanities		3
	Literature		3
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the 64 semester hour minimum requirement for graduation. The courses listed below are typically required for admission to veterinary medicine and are usually taken by pre-veterinary medicine students during their first two years of college. (Students who complete all of these courses will have credits in excess of the 64-hour minimum required for the associate degree.) Students should consult the college of veterinary medicine to which they intend to apply for information on the exact requirements for admission to that particular school.

CH 134, 135	General Chemistry I, II	8
CH 210, 211	Organic Chemistry I, II	8
MA 136	Calculus II w/Analytic Geometry	4
PH 114, 115	Physics I, II	8

Degree: Associate of Arts
 Major: General
 Area of Emphasis: Psychology

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II		6
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		3
	Fine Arts		3
	*Foreign Language (Elementary Level)		6
	Humanities		3
	Literature		3
	Mathematics		3
	Natural Science		8
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Psychology. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

PY 101, 102	General Psychology I, II	6
SO 110	Introduction to Sociology	3
	*Foreign Language (Intermediate Level)	6

*Two years of same foreign language.

Degree: Associate of Science
 Major: General
 Area of Emphasis: Psychology

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II		6
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		3
	Fine Arts		3
	Humanities		3
	Literature		3
	Mathematics		3
	Natural Science		8
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Psychology. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

ate major in Psychology. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

PY 101, 102	General Psychology I, II	6
SO 110	Introduction to Sociology	3
	Psychology Electives	6

Degree: Associate of Arts
 Major: General
 Area of Emphasis: Religion

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II		6
HU 210	Religions of the World		3
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		3
	Fine Arts		3
	*Foreign Language (Elementary Level)		6
	Literature		3
	Mathematics		3
	Natural Science		8
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Religion. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

HU 213	Mythology	3
PL 111	Introduction to Western Philosophy	3
PL 220	Philosophy of Religion: Old Testament	3
PL 221	Philosophy of Religion: New Testament	3
	*Foreign Language (Intermediate Level)	6

*Two years of same foreign language.

Degree: Associate of Science
 Major: General
 Area of Emphasis: Secondary Education: English

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II		6
EN 213, 214	American Masterpieces I, II		6
	or		
EN 218, 219	English Masterpieces I, II		6
CS 101	Computer Literacy		3
MU 110	Music Appreciation		3
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Mathematics		3
	Natural Science		8
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Students wishing to teach English at the secondary level may be required to take the following courses during their first two years of college. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

ED 201	Foundations of Education	3
	Literature Electives	6

Degree: Associate of Science
 Major: General
 Area of Emphasis: Secondary Education: Mathematics

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II		6
MA 135	Calculus I w/Analytic Geometry		4
PH 254, 255	General Physics w/Calculus I, II		8
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		4
	Fine Arts		3
	Humanities		3
	Literature		3
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Students wishing to teach mathematics at the secondary level may be required to take the following courses during their first two years of college. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

ED 201	Foundations of Education	3
MA 136	Calculus II w/Analytic Geometry	4
MA 210	Linear Algebra	3
MA 245	Calculus III w/Analytic Geometry	4
MA 246	Differential Equations	3

school to school, it is unlikely that any given program requires all of these courses. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

HR 101	Introduction to the Field of Social Welfare	4
HR 210	Methods of Human Service Practice	3
HR 219	Family Dysfunction	3
HR 220	Human Services Practicum	6
PO 110	Introduction to American Government	3
PY 101	General Psychology I	3
SO 110	Introduction to Sociology	3
SO 216	Cultural Anthropology	3

NOTE: Chattanooga State also offers a Human Services Specialist program which articulates with Social Work at some universities. Students should consult with the Human Services Coordinator or a Social Work adviser to determine the course of study which will best enable them to meet their educational and career objectives.

Degree: Associate of Science

Major: General

Area of Emphasis: Secondary Education: Science

Course No.	Course Title	Semester Credit Hours
CH 134, 135	General Chemistry I, II	8
EN 110, 111	Composition I, II	6
MA 135	Calculus I w/Analytic Geometry	4
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3-4
	Fine Arts	3
	Humanities	3
	Literature	3
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Students wishing to teach science at the secondary level may be required to take the following courses during their first two years of college. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BI 134, 135	General Biology I, II	8
ED 201	Foundations of Education	3
MA 136	Calculus II w/Analytic Geometry	4
PH 114, 115	Physics I, II	8

Degree: Associate of Science

Major: General

Area of Emphasis: Secondary Education: Social Sciences

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Students wishing to teach social science at the secondary level may be required to take the following courses during their first two years of college. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

EC 211, 212	Principles of Economics I, II	6
ED 201	Foundations of Education	3
PO 110	Introduction to American Government	3
PY 101	General Psychology I	3
SO 110	Introduction to Sociology	3

Degree: Associate of Science

Major: General

Area of Emphasis: Social Work

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Mathematics	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Social Work. However, since the requirements for Social Work vary greatly from

Degree: Associate of Arts

Major: General

Area of Emphasis: Sociology

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
MA 153	Introductory Statistics	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	*Foreign Language (Elementary Level)	6
	Humanities	3
	Literature	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Sociology. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

PY 101	General Psychology I	3
SO 110	Introduction to Sociology	3
SO 120	Social Problems	3
SO 216	Cultural Anthropology	3
	*Foreign Language (Intermediate Level)	6

*Two years of same foreign language.

Degree: Associate of Science

Major: General

Area of Emphasis: Sociology

Course No.	Course Title	Semester Credit Hours
EN 110, 111	Composition I, II	6
MA 153	Introductory Statistics	3
SP 110	Fundamentals of Public Speaking	3
	Approved History Sequence	6
	Computer Elective	3
	Fine Arts	3
	Humanities	3
	Literature	3
	Natural Science	8
	Two Physical Education Activity Courses	2
	Electives	+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Sociology. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

PY 101, 102	General Psychology I, II	6
SO 110	Introduction to Sociology	3
SO 120	Social Problems	3
SO 215	Marriage and Family	3
SO 216	Cultural Anthropology	3
	Social/Behavioral Science Elective	3

Degree: Associate of Arts
 Major: General
 Area of Emphasis: Spanish

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II		6
*SH 110, 111	Elementary Spanish I, II		8
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		3
	Fine Arts		3
	Humanities		3
	Literature		3
	Mathematics		3
	Natural Science		8
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Elective hours should include the following courses:

SH 210, 211	Intermediate Spanish I, II	6
	Second foreign language (recommended)	6-12

*Students with adequate high school preparation may be able to begin at a higher level.

Degree: Associate of Arts
 Major: General
 Area of Emphasis: Theatre Arts

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II		6
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		3
	Fine Arts		3
	Foreign Language		6
	Humanities		3
	Literature		3
	Mathematics		3
	Natural Science		8
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Theatre. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

DR 111	Introduction to the Theatre	3
DR 126	Voice and Diction for the Stage	2
DR 131	Movement I	2
DR 204	Performance and Production	2
DR 212, 213, DR 222	Acting I, II, III	3-9 *
DR 220, 221	Technical Theatre I, II	3-6**
DR 241	Musical Theatre	2

*Nine hours recommended for performance emphasis.
 **Six hours recommended for technical theatre emphasis.
 NOTE: DR electives should be selected based on the requirements of the school to which the student intends to transfer. Not all DR courses transfer to all four-year institutions.

Degree: Associate of Science
 Major: General
 Area of Emphasis: Theatre Arts

Course No.	Course Title	Semester	Credit Hours
EN 110, 111	Composition I, II		6
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		3
	Fine Arts		3
	Humanities		3
	Literature		3
	Mathematics		3
	Natural Science		8
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which may be required in the first two years of a baccalaureate major in Theatre. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

DR 111	Introduction to the Theatre	3
DR 126	Voice and Diction for the Stage	2
DR 131	Movement I	2
DR 204	Performance and Production	2
DR 212, 213, DR 222, 223	Acting I, II, III, IV	3-12*
DR 220, 221	Technical Theatre I, II	3-6**
DR 241	Musical Theatre	2

*Twelve hours recommended for performance emphasis.
 **Six hours recommended for technical theatre emphasis.
 NOTE: DR electives should be selected based on the requirements of the school to which the student intends to transfer. Not all DR courses transfer to all four-year institutions.

Degree: Associate of Science
 Major: General
 Area of Emphasis: Wellness/Fitness Leadership

Course No.	Course Title	Semester	Credit Hours
BI 134, 135	General Biology I, II		8
EN 110, 111	Composition I, II		6
SP 110	Fundamentals of Public Speaking		3
	Approved History Sequence		6
	Computer Elective		3
	Fine Arts		3
	Humanities		3
	Literature		3
	Mathematics		3
	Two Physical Education Activity Courses		2
	Electives		+

*Sufficient courses to meet the minimum requirement for graduation of 64 semester hours. Listed below are some courses which students majoring in the field of wellness may be required to take in their first two years of college. Consult the catalog of the receiving institution to determine which of these courses are required for that school.

BI 143	Nutrition	3
PE 118	*Concepts of Wellness	1
PE 128	*Fitness for Living	2
PE 154	First Aid and Safety Education	3
PE 210	Introduction to Physical Education	3
PE 211	Personal and Community Health	3
PE 220	Care and Prevention of Athletic Injuries	3
SO 215	Marriage and Family	3

*These courses may be used to satisfy Chattanooga State's Physical Education Activity requirement.

1998-99 Industrial Technology Programs

Contents

	Page No.		Page No.
Air Conditioning and Refrigeration.....	58	Machine Tool Technology.....	60
Auto Body Repair	58	Marine Engine Technology.....	60
Automotive Technology.....	58	Mechanic, see	
Commercial Truck Driving	58	"Automotive Technology".....	58
Computer Repair, see "Industrial Electronics".....	59	"Diesel Equipment Mechanics".....	59
Cosmetology.....	58	"Marine Engine Technology".....	60
Diesel Equipment Mechanics	59	Medical Office Assisting.....	60
Drafting, see "Technical Drafting"	61	Ornamental Horticulture, see "Landscaping and Turf Management"	60
Electrician, see "Industrial Electricity"	59	Practical Nursing	60-61
Greenhouse, see "Landscaping and Turf Management"	60	Surgical Technology.....	61
Horticulture, see "Landscaping and Turf Management"	60	Technical Drafting	61
HVAC, see "Air Conditioning and Refrigeration".....	58	Truck Driving, see "Commercial Truck Driving"	58
Industrial Electricity	59	Welding	61
Industrial Electronics.....	59	Academic Retention/Attendance Policies.....	62
Industrial Maintenance Mechanics	59	Industrial Technology Certificate/AAS Degree Articulation ...	62
Landscaping and Turf Management	60		

Air Conditioning and Refrigeration

(Certificate)

Air Conditioning and Refrigeration classroom and shop learning experiences are concerned with domestic, commercial and industrial air conditioning and refrigeration systems. The course includes theory, application, operation and maintenance of air conditioning and refrigeration systems. Instructional units covered are: electrical theory, mechanical theory, basic air conditioning/refrigeration systems and advanced air conditioning/refrigeration systems.

Career Opportunities

Air Conditioning/Refrigeration Technician, Sales, Retail and Wholesale, Air Conditioning/Refrigeration Installer, Air Conditioning/Refrigeration Maintenance, Air Conditioning/Refrigeration Service, Air Conditioning/Refrigeration Engineer Helper, Air Conditioning/Refrigeration Operator

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
AC 000	Air Conditioning/Refrigeration Technology	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for AC 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Auto Body Repair

(Certificate)

This course provides complete and current coverage of the practices and procedures used in the field of automotive body repair and refinishing. The program covers automobile construction and progresses through how each part of the car is repaired and refinished. Major emphasis will be placed on hands-on activities which are essential to the development of knowledge and skills required to become a qualified technician. Due to the wide variety of collision damage, instruction will be provided in diagnosing damages and estimating the cost of repairs. This course covers the subjects included in the National Institute for Automotive Service Excellence (NIASE) certification tests "Body Repair and Painting and Refinishing."

Career Opportunities

Auto Body Metal Straightener, Insurance Adjuster, Painter, Repair Cost Estimator

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
AB 000	Auto Body Repair Technology	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for AB 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Automotive Technology

(Certificate)

This ASE certified training program covers automotive electronics, engine performance, steering and suspension, manual transmissions and drive trains, automatic transmissions and transaxles, heating, ventilation and air conditioning, brakes, and engine repair and rebuilding. Specialized electronics are taught throughout as well as the proper use of tools and equipment.

Career Opportunities

Technician, Shop Foreman, Service Advisor, Service Manager

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
AM 000	Automotive Technology	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for AM 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Commercial Truck Driving

(Certificate)

This eleven (11) week program provides basic training in the principles and skills of commercial truck operations. It focuses on developing driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices and proper record keeping. On the road, safe operating practices are integrated into the development of driving skills.

Admission Requirements

Applicants must be at least 23 years of age in order to be eligible to enter this program.

Career Opportunities

Truck Driver, Dispatcher, Operations Manager, Safety Supervisor, Terminal

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
CD 000	Commercial Truck Driving			330

Total Clock Hours: 330

Computer Repair

See "Industrial Electronics"

Cosmetology

(Certificate)

It is the objective of the Cosmetology Program to develop the talents and capabilities of cosmetology students so that, upon graduation, they are fully prepared to take both practical and written examinations administered by the State Board of Cosmetology. Through the years of development, the main goal of the Chattanooga State Cosmetology Program has always been to prepare students for successful and rewarding careers in the beauty profession.

Career Opportunities

Color Technician, Esthetician, Hair Stylist, Manicurist, Make-up Artist, Shop Manager

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours			
		FALL	SPR	SUM	FALL
CY 000	Cosmetology	450	450	390	*

Total Clock Hours:1500*

**1500 clock hours required for State Board licensure*

Diesel Equipment Mechanics

(Certificate)

This program is designed to train diesel engine mechanics. Its basic purpose is to help prepare the student for job entry into the work force of maintaining large diesel engine-powered fleets of on-highway and off-highway vehicles. Diesel mechanics in smaller shops usually are general mechanics qualified to perform a variety of repair jobs. In larger diesel shops mechanics specialize in particular types of repair work. For example, some may specialize in repairing only power transmissions, torque converters, diesel engines, or brakes. Usually such specialists have an all-around knowledge of diesel repair, and may occasionally be called upon to do other types of work.

Career Opportunities

Diesel Mechanic, Heavy Diesel Equipment Repair, Mechanic Helper, Truck Mechanic

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
DM 000	Diesel Mechanics	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for DM 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Drafting

See "Technical Drafting"

Electrician

See "Industrial Electricity"

Greenhouse

See "Landscaping and Turf Management"

Horticulture

See "Landscaping and Turf Management"

HVAC

See "Air Conditioning and Refrigeration"

Industrial Electricity

(Certificate)

This program will prepare a student to install, maintain and repair electrical systems and equipment such as motors, transformers, wiring, switches, alarm and control systems. He/she will be able to locate and determine electrical malfunctions through the use of voltmeters, ammeters, oscilloscopes and other technical test equipment. The student will further accomplish competencies in the repair of circuitry by replacement of burned-out elements, bypassing defective units and/or the replacement of defective wiring and switches. He/she will be able to install fixtures, motors and other electrical equipment and make the necessary adjustments using the tools of the trade. He/she will be capable of inspecting circuits and repair or rewire systems in accordance with building and electrical safety codes.

Career Opportunities

Apprentice Electrician, Cable TV Installer, Electrician's Helper, Electric Motor Repairer, Electrical Technician, Journeyman Electrician, Satellite Antenna Installer

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
IE 000	Industrial Electricity	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for IE 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Industrial Electronics

(Certificate)

This program prepares persons for employment in businesses and industries utilizing the latest "state of the art" equipment and techniques of electronics technology. Graduates of this program will have received adequate training for entry into telecommunications, computer maintenance and repair, radio and television repair, micro-processors, two-way radio systems, electronic controls systems in industry, and industrial instrumentation.

This program provides adequate classroom theory instruction and sufficient laboratory time and experiences to develop the knowledge and physical skills necessary to become a qualified technician. All laboratory courses in this program are competency based.

Career Opportunities

Computer Maintenance, Industrial Controls System Specialist, Radio and Television Repair, Industrial Instrumentation Specialist, Telecommunications Technician

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
ER 000	Industrial Electronics	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for ER 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Industrial Maintenance Mechanics

(Certificate)

The Industrial Maintenance Mechanics Program is designed to prepare qualified maintenance personnel for institutional, industrial and commercial plants. The student completing the program will be prepared to do a variety of types of maintenance, utilizing skills attained in electricity, welding, machine shop, hydraulics, pneumatics, air conditioning and general building maintenance. This program will also prepare the student for entry into such high technology fields as robotics installation, maintenance and repair.

Career Opportunities

Electrical Equipment Maintenance Technician, Repair Welder, Robotics Maintenance Technician, Maintenance Foreman Assistant, Maintenance Machinist, Maintenance Technician

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
ID 000	Industrial Maintenance Technology	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for ID 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

1998-99 INDUSTRIAL TECHNOLOGY PROGRAMS

Landscaping and Turf Management

(Certificate)

This is a one-year certificate program designed to assist the employment opportunities of students in such areas as greenhouses, golf courses, public grounds, and residential landscaping.

Instructional Units

Arboriculture, Chemicals, Fertilizers, Flowering Plants, Greenhouse Management, Landscape Mechanics and Design, Landscape Skill Development, Nursery Management, Plant Tissues and Processes, Soils, Turfgrass Management

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
LM 000	Landscaping and Turf Management	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for LM 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Machine Tool Technology

(Certificate)

The Machine Tool Technology Program gives students experience in machine tools, such as engine lathes, vertical and horizontal milling machines, pedestal and surface grinders and shapers. It also offers training in the safe and efficient operation and programming of CNC Machining Centers and Turning Centers, the same as used in manufacturing industries.

Instruction is also given in mathematics, blueprint reading, and precision measuring instruments.

Career Opportunities

CNC Operator, CNC Programmer, Machine Tool Operator, Maintenance Machinist, Manufacturing Machinist, Tool and Die Maker Apprentice

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
MT 000	Machine Tool Technology	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for MT 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Marine Engine Technology

(Certificate)

This program leads to employment in the growing field of marine engine repair. Students study engine electrical systems, hydraulics, gasoline engines, power transfer systems and rigging. Approximately sixty percent of the student's class time will be spent in the laboratory acquiring skills required for employment as a marine engine mechanic.

Career Opportunities

Marine Mechanic, Parts Salesman, Service Manager, Shop Foreman

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
SE 000	Marine Engine Technology	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for SE 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Mechanic

See "Automotive Technology"
See "Diesel Equipment Mechanics"
See "Marine Engine Technology"

Medical Office Assisting

(Certificate)

The Medical Office Assisting Program is designed for the student to develop the entry level knowledge and skills required to perform the duties that are necessary for the safe and efficient operation of a physician's office. The program consists of classroom instruction as well as clinical/laboratory sessions in which the student gains a basic knowledge of both the administrative and clinical operations of a medical office. The student is then provided with a hands-on learning experience under the supervision of a physician and the office staff during the latter portion of the program.

A class of twenty students is admitted in the fall semester.

Career Opportunities

Hospital Clinics, Private Physician Offices, Private Medical Clinics

Admission Procedures

In addition to fulfilling general admission requirements, entry into the Medical Office Assisting Program requires completion of the following:

1. Application to Medical Office Assisting Program.
2. Submission of a high school transcript or GED transcript.
3. Demonstration of typing skills of at least 25 words per minute.
4. Personal interview.
5. Upon acceptance into the program, submission of a completed physical examination form.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
MO 000	Medical Office Assistant	450	450	390

Total Clock Hours:1290

Additional admission procedures are required for this program. Please contact the program office at 697-4433.

Ornamental Horticulture

See "Landscaping and Turf Management"

Practical Nursing

(Certificate)

The Practical Nursing Program is a three-semester program. The curriculum provides the theoretical knowledge and clinical practice experiences needed to prepare the student to be able to give competent and safe direct patient care at the practical nursing level. Upon completion of the program, a certificate is awarded. The graduate is eligible to write the National Council Licensure Examination for Practical Nursing (NCLEX-PN). **Individuals who have been convicted of a crime other than a minor traffic violation could be ineligible for licensure in the State of Tennessee, even though they have successfully completed a nursing program.**

A class of thirty-five students is admitted in the fall and spring semesters. Applications are available twice each year on a first-requested basis.

Admission Procedures:

In addition to fulfilling general admission requirements, entry into the Practical Nursing Program requires completion of the following:

1. Application to Practical Nursing Program.
2. Three letters of recommendation.
3. Submission of a high school transcript or GED transcript.
4. Achievement of a minimum score of 70 on the California Achievement Test (Level 20).
5. Personal interview.
6. Upon acceptance into the program, a completed physical examination form must be submitted. Applicants must be free of any physical or emotional condition that might adversely affect performance in any of the clinical practice requirements.

Expenses

Additional expenses include nursing textbooks, liability insurance, student uniform, achievement tests, school pin, state board examination and other supplies, and average approximately \$2151.

Progression

A student will not earn clock hours toward graduation when an unsatisfactory grade occurs.

Career Opportunities

Doctor's Office, Home Health Care Agencies, Hospital, Long-Term Care Facility, Nursing Home

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
LP 000	Practical Nursing	487	487	383

Total Clock Hours:1357*

**Classes meet 32.5 clock hours per week for 15 weeks during Fall and Spring semesters and for 12 weeks during the Summer.*

Surgical Technology

(Certificate)

Accredited by the Commission on Accreditation of Allied Health Education Programs

The Surgical Technologist is the member of the surgical team whose primary function is to prepare and maintain a sterile environment and make instruments and equipment available to the surgeon during the surgical procedure. The training program is three semesters in length. The students receive a combination of classroom study, practice in the campus laboratory and clinical practice experiences in the surgery department of local hospitals that provides them with the knowledge and skills needed to function effectively as Surgical Technologists. Upon completion, a certificate is awarded. Graduates are eligible to write the National Certification Examination for Surgical Technologists.

A class of eighteen students is admitted in the fall semester.

Admission Procedures:

In addition to fulfilling general admission requirements, entry into the Surgical Technology Program requires completion of the following:

1. Application to Surgical Technology Program. Applications are available once each year on a first-requested basis.
2. Three letters of recommendation.
3. Submission of a high school transcript or GED transcript.
4. Achievement of a minimum score of 70 on the California Achievement Test (Level 20).
5. Personal interview.
6. Upon acceptance into the program, a completed physical examination form must be submitted. Applicants must be free of any physical or emotional condition that might adversely affect performance in any of the clinical practice requirements.

Expenses

Additional expenses include textbooks, certification exam and other supplies, and average approximately \$1685.

Progression

A student will not earn clock hours toward graduation when an unsatisfactory grade occurs.

Career Opportunities

Doctor's Office, Hospital

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
OR 000	Surgical Technology	487	487	383

Total Clock Hours:1357*

**Classes meet 32.5 clock hours per week for 15 weeks during Fall and Spring semesters and for 12 weeks during the Summer.*

**Technical Drafting
(ARCHITECTURAL, CIVIL & MECHANICAL)**

(Certificate)

This program of study provides instruction in the processes of drafting and design technology. Two semesters are given in basic drafting procedures and mathematics. In the third semester, the student receives instruction in the emphasis he/she has chosen. As a part of the program, each student will receive a course, with theory and practice, in computer-aided design (CAD).

Career Opportunities

Architectural Draftsman, Checker, Civil Draftsman, Machine Design Draftsman, Senior Draftsman

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
DF 000	Technical Drafting	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for DF 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Truck Driving

See "Commercial Truck Driving"

Welding

(Certificate)

This program of study involves combination welding, as well as other technical aspects of welding. The processes that will be accomplished are basic oxyacetylene cutting and welding, shielded metal arc welding, metal inert gas welding and tungsten inert gas welding. In addition, the student will complete course work in mathematics and blueprint reading for welding.

Career Opportunities

Combination Welder, Maintenance Welder, MIG Welder, Pipe Welder, Structural Steel Welder, TIG Welder

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
WD 000	Welding Technology	450	450	390

Total Clock Hours:1290

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for WD 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

Academic Retention/Attendance Policies

Academic Retention Policy

Grading Policy: S = Satisfactory

U = Unsatisfactory

Grades are awarded monthly, based on the above policy. A student receiving a "U" is placed on academic probation for one month. In the subsequent month, if the student receives a "U," he or she will be suspended for a minimum of one enrollment period. Students affected within an enrollment period must wait until the end of the subsequent enrollment period to re-enter. Readmission requires the approval of the Dean of the Industrial Technology Division, and the student is readmitted on probation. Continued unsatisfactory progress may result in permanent expulsion.

If a student on academic probation for one month receives an "S" in the subsequent month, probation is removed.

Attendance Policy

1. Students are expected to attend class every day and to be on time.
2. Three unexcused tardies in one month will result in the student being placed on 30-day probation.
3. Any student missing more than nine (9) unexcused hours in any 30-day period will be placed on 30-day probation.
4. Any student who receives three (3) unexcused tardies while on probation will be suspended.
5. Any student missing over nine (9) unexcused hours while on probation will be suspended.
6. Any student missing a total of sixty (60) unexcused hours or more during the entire program will be suspended.
7. Students who miss because of illness may be required to have a doctor's excuse.
8. Students whose attendance subjects them to suspension will be reviewed by the instructors and college personnel.
9. Absences/tardies may be excused for the following reasons:
 - a. Personal illness
 - b. Disability due to accident
 - c. Exposure to a contagious disease
 - d. Emergencies beyond control of student
 - e. Illness or death of one of the following members of the immediate family:
 1. Spouse
 2. Children
 3. Parents
 4. Other members of the family who reside in the home of the student

- f. Death of one of the following relatives:
 1. Brothers/sisters
 2. Grandparents
 3. Grandchildren
 4. Daughters-in-law
 5. Sons-in-law
 6. Sisters-in-law
 7. Brothers-in-law
 8. Foster brothers/sisters
- g. Medical and dental appointments
- h. Job interviews approved or scheduled by instructor
- i. Required appearances in court
- j. Military duty – copy of orders required
10. Failure to maintain acceptable attendance based on the attendance policy will result in a one-term suspension. Re-entry is on a probationary status and subsequent violation of the attendance policy will result in a three-semester suspension.

Industrial Technology Certificate/AAS Degree Articulation

62

Industrial Technology students who have successfully completed a certificate in one of the Industrial Technology Programs listed below and who wish to pursue an Associate of Applied Science degree with a major in Applied Technology may receive 32 semester hours of advanced standing credit. These hours count toward a degree but carry no quality points, do not count in calculation of the grade point average, and cannot be used toward satisfaction of the graduation residency requirements for the Associate degree.

Procedures for admission of a student to completion of the program for AAS degree in Applied Technology are as follows:

First Year:

1. Admission to the Industrial Technology Division. Requirements of the student for admission are:
 - a. be 18 years of age or have a high school diploma or GED.
 - b. take the appropriate assessment test.
 - c. if applying for financial aid, submit official high school transcript or GED scores, or take and pass the Ability to Benefit Test (given by the Testing Center).
2.
 - a. The student must register for a specific industrial technology program and pay the clock-hour fee.
 - b. The student must successfully complete the industrial technology program and receive his/her certificate.

Second Year:

1. The student, after having received his/her certificate, must request a change in status from industrial technology to degree-seeking student at the Records Office.
2. The student must meet all admission requirements for degree seeking status:
 - a. provide an official high school transcript or GED;
 - b. undergo assessment with the ACT and/or AAPP tests;
 - c. remove Remedial or Developmental deficiencies, if necessary;
 - d. provide official college transcripts, if necessary.
3. The student must provide proper documentation consisting of:
 - a. an industrial technology certificate from Chattanooga State's Industrial Technology Division, granted after January 1, 1983; or
 - b. if the certificate was granted prior to 1983, the student must document competency by scoring no less than one standard deviation below the national mean on the Student Occupational Competency Achievement Test (SOCAT), for the areas in which he/she is requesting credit.
 - c. if the student received a certificate from another industrial technology/technical school, the student must document competency by scoring no less than one standard deviation below the national mean on

the Student Occupational Competency Achievement Test (SOCAT), for the area in which he/she is requesting credit. Students who must take the SOCAT examination in order to receive advanced standing credit may be admitted conditionally for a period of one term while they complete competency documentation.

4. The student must then complete 39 semester hours of coursework as specified for the "Applied Technology Major" (see "Career Programs" section of the catalog). *Note: Of these 39 semester hours of coursework, the last twenty (20) hours must be completed at Chattanooga State in order to meet the graduation residency requirements for the Associate degree.*

The following Industrial Technology programs have been approved as concentrations under the Applied Technology major:

Air Conditioning and Refrigeration
Auto Body Repair
Automotive Technology
Diesel Equipment Mechanics
Industrial Electricity
Industrial Electronics
Industrial Maintenance Mechanics
Landscaping and Turf Management
Machine Tool Technology
Marine Engine Technology
Medical Office Assisting
Surgical Technology
Technical Drafting
Welding

1998-99 General Information

Contents

	Page No.		Page No.
History	64	Distance Learning Program	86
Statement of Mission	64-65	Families First Program.....	87
A Community College Guarantee	65	Instructional Materials Center.....	87-88
Notice to Students	65	Library Services	88
Admission	66-71	The Business and Community Development Center.....	89
Academic Regulations	72-79	The Career Planning and Counseling Services Center	89-90
Financial Information	80	The Child Development Center	90
Financial Aid.....	81-84	The Small Business Development and Resource Center ...	90
Continuing Education and Corporate Services	85	Telephone Numbers.....	90
Disabilities Support Services.....	85-86		

CHATTANOOGA STATE

TECHNICAL COMMUNITY COLLEGE

History

The history of Chattanooga State Technical Community College illustrates the institution's commitment to the community it serves as well as its ability to adjust, to grow, and to develop along with the community around it.

When it began operating in September 1965 in downtown Chattanooga on Fourth and Chestnut Streets, the College was known as Chattanooga State Technical Institute, a two-year, coeducational, college level institution, established by the Legislature of the State of Tennessee in 1963. It was the first technical college in the state, as well as the first public institution of higher education in southeastern Tennessee. In 1967, the technical institute moved into a one-building structure at its present location; since then it has grown into a multi-million dollar complex of buildings.

The primary purpose of Chattanooga State Technical Institute was to prepare students with marketable technical skills. The curriculum and instruction were geared to produce technicians who could fill the gap between the professional engineer or scientist and the craftsman or vocational graduate. The technical programs were flexible to the extent that internal changes could occur expeditiously when the needs of the students or industry required it. Both AS and AE degree programs as well as certificate programs were made available to students.

In 1973 the community had developed to the point where there was a definite need for a community college in the immediate area. It was decided that the most expeditious way to accomplish this goal was to convert Chattanooga State Technical Institute into a community college. Accordingly, Senate Bill No. 361 of the Tennessee Legislature proposed that Chattanooga State Technical Institute become Chattanooga State Community College thereby transferring its operation from the jurisdiction of the Tennessee Board of Education to the Tennessee State Board of Regents. The proposed change became a reality effective on July 1, 1973.

Seventeen days later, as a result of local concern for the integrity of the technical component of the institution, Senate Bill No. 1010 of the Legislature amended Senate Bill No. 361, officially changing the name of the institution to Chattanooga State Technical Community College. Senate Bill 1010 further assured that the college would operate with continuous responsibility for

- providing comprehensive one and two-year occupational, college parallel, continuing education, and community service programs;
- providing quality technical and scientific occupational programs;
- serving as a regional technical school to train engineering technicians or technical workers in the fields of production, distribution, or service.

Chattanooga State's mission was expanded to include vocational education on July 1, 1981, when the State Area Vocational-Technical School merged with the College in a pilot program. That merger was made permanent by an act of the Tennessee Legislature effective July 1, 1983.

Today, with more buildings on campus, more structures planned, a growing staff and faculty, and a student enrollment that is increasing annually, Chattanooga State Technical Community College continues to place emphasis on the two-year technical programs and also on the expanded dimension of the comprehensive community college. Thus, the College is committed to meeting the needs of its service area of the city of Chattanooga and the counties of Hamilton, Rhea, Sequatchie, Marion, Bledsoe, and Grundy.

Statement of Mission

Chattanooga State Technical Community College, an institution in the State University and Community College System of Tennessee governed by the Tennessee Board of Regents, was established in 1965. The College, a comprehensive two-year institution, is widely recognized for both its effectiveness in preparing the labor force of Southeast Tennessee and in training the existing workforce to meet the challenges of the year 2000 and beyond.

Chattanooga State serves a six county area of Southeast Tennessee with a population exceeding 300,000, meeting the needs of area citizens by providing associate degree and certificate career programs, by offering a wide range of transfer curricula, and by opening pathways to personal enrichment. The College offers associate of applied science degrees and technical certificates in over 50 career areas, and the associate of arts and associate of science degrees for transfer students. Chattanooga State values diversity, affording educational opportunities to all eligible persons regardless of age, race, religion, sex, veteran status, national origin, or disability.

Chattanooga State's Center for Advanced Technology and Divisions of Business and Information Systems, Engineering and Environmental Technology, and Industrial Technology prepare competent workers for business, industry, government, and non-profit organizations. The many technical programs of these divisions are based on continuous assessment of community needs, curricula which respond to the market, faculty with experience in the fields they teach, and state-of-technology labs and equipment.

The Division of Nursing and Allied Health is a major supplier of nurses and allied health care practitioners in Southeast Tennessee. The Divisions of Liberal Arts and Mathematics and Sciences provide the basic core of general education for students from each of the technologies. They also provide transfer curricula which fully meet lower division requirements of Tennessee's public universities.

Chattanooga State, through its Instructional Materials Center, meets community needs by offering adult basic education classes, studies in preparation for the GED, and remedial and developmental studies. The Center houses a comprehensive distance learning unit as well as a wide array of tutorial services, learning labs and the library.

Community Education at Chattanooga State develops and delivers specialized non-credit courses and programs designed to meet specific training needs of employers and personal development interests of a non-traditional clientele. Corporate services include job profiling, employee assessment and training, technology transfer, management and technical consultation and support for the area's economic development activity.

The commitment to open access for citizens of all ages and backgrounds requires effective support systems which enable students to excel. Toward this end, the College offers counseling and advising services, assistance in career planning, placement and cooperative education, and co-curricular learning opportunities. The school's wellness program seeks to ensure that every employee and student has access to information and services which promote physical, social, spiritual, emotional, intellectual, occupational, and environmental well being.

The College is committed to maintaining capabilities and flexibility to meet future programming and service demands effectively and efficiently. The College recognizes that its goals can best be met through close working relations with the communities it serves and through a campus climate of openness and collegiality.

A Community College Guarantee

Refund Guarantee: Chattanooga State Technical Community College will refund the tuition of any Chattanooga State graduate for any course passed with at least a “B” grade if that earned course credit does not transfer to a college or university within two years of graduation from Chattanooga State. Such courses must be listed as transferable on the transfer equivalency table provided by the receiving institution. Transfer equivalency tables are maintained in the Records Office. **The transfer guarantee program is limited to those institutions maintaining an articulation agreement with Chattanooga State and to the courses identified in the transfer equivalency document.**

Retraining Guarantee: Any graduate of an Associate Degree Career Program judged by his/her employer as lacking in technical job skills normally expected of a job-entry level employee will be provided further skill training of up to 15 credit hours by Chattanooga State without charge.

Special Conditions

The Degree: The graduate must have earned an associate degree beginning June, 1988 or thereafter, in a college recognized program as detailed in the Chattanooga State Technical Community College catalog.

The Employment: The employment must be full-time and the job must be certified by the Career Placement Office as directly related to the graduate’s program of study.

The initial date of employment of the graduate must be within one year of the commencement date. This guarantee does not apply to graduates hired prior to the commencement date.

The employer must certify in writing that the employee is lacking the job entry level skills identified in writing at the time of initial employment, and must specify the area(s) of skills deficiency within 90 days of the graduate’s initial employment.

Affective behaviors such as attitude, judgement, interpersonal relations, etc., will be considered “technical job skills” for purposes of the guarantee provided that formal instruction in appropriate behaviors is included within the program area.

The Retraining Guarantee: Skill retraining will be limited to 15 credit hours and to enrollment in courses regularly offered at Chattanooga State.

The skill retraining must be completed in one academic year.

The employer, the graduate and a college counselor, with the advice of appropriate teaching faculty, will develop an educational plan which specifies the courses constituting the 15 credit hours of further retraining.

The graduate must meet all prerequisites, corequisites, and other admission requirements for “retraining courses.”

Failure, withdrawal, or audit of a “retraining course(s)” is creditable to the 15 hour limit.

The graduate or the employer will bear the cost of the books, supplies, uniforms, transportation, insurance, and other related costs. The college will waive tuition and fees.

Notice to Students

The course offerings and requirements of the institution are continually under examination and revision. This catalog presents the offerings and requirements in effect at the time of publication, but is no guarantee that they will not be changed or revoked. However, adequate and reasonable notice will be given to students affected by any changes. This catalog is not intended to state contractual terms and does not constitute a contract between the student and the institution.

The institution reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions.

Current information may be obtained from the following sources:

Admission Requirements — **Admissions Office**

Course Offerings — **Department or Division Offering Course**

Degree Requirements — **Academic Affairs**

Fees and Tuition — **Business Office**

Admission

General Admissions Requirements

Chattanooga State subscribes to the open door policy for admission. The College is open to all persons, regardless of race, color, religion, sex, national origin, or physical or mental handicap.

Admissions requirements and procedures vary depending on the student's goals (degree, certificate, course work to enhance job skills or for personal enrichment, etc.) and classification (first time freshman, transfer, special, etc.). Each admissions category or classification has its own requirements and procedures. In addition, the following apply to all applicants, regardless of classification:

- Applicants should be able to meet physical standards appropriate to their occupational choices. The College reserves the right to reject any applicant whose test scores, general character record, or physical condition do not predict success in the college environment.
- An application for admission to Chattanooga State is not complete until the Admissions Office has received all documents specified in the admissions requirements listed below. [For a regularly admitted (degree-seeking) student, this includes an official copy of all transcripts (high school, GED, college) and test scores (AAPP, ACT/SAT).] An applicant may be denied admission pending receipt of these documents.
- Selective Service Requirements—Male applicants between the ages of 18 and 26 must present verification that they have registered for the draft before they will be allowed to register for classes at Chattanooga State.

Note: In addition to the requirements/procedures for admission to Chattanooga State listed below, certain programs in which affiliations and/or facilities limit enrollment have extra requirements, procedures, and deadlines which must be met. See the specific program in the "Career Programs" section of this catalog for more information.

Admissions Procedures

REGULAR ADMISSION

A regularly admitted student is one who is pursuing an associate degree or Industrial Technology certificate from Chattanooga State.

ASSOCIATE DEGREE PROGRAMS

First Time Freshmen

- Submit an application to the Admissions Office (\$10.00 non-refundable fee).
- Submit an official high school transcript or GED transcript.

A transcript is considered official only when it bears the seal of the granting institution and is either mailed directly to the Records Office or hand delivered in a sealed envelope.

Graduation with a regular diploma from a regionally accredited or state approved high school or a General Education Development (GED) Certificate is required for admission to the College as a degree student. The GED score must be a minimum of 45 with no subscore lower than 40. (Subscores of 35 are still acceptable for students who completed their GED prior to 1997.) High schools transcripts must show the student's date of graduation and, for graduates of Tennessee high schools, must include a transcript entry that indicates the student passed the required proficiency test battery.

Graduates of non-regionally accredited or non-state approved high schools may be admitted on the basis of GED credit as specified above or a composite score of 19 or better on the ACT. High school transcripts must be submitted.

- Test Requirements

For applicants under 21: Submit ACT (American College Testing Program) or SAT (Scholastic Aptitude Test) test scores. These

scores are used for advising and placement purposes. Additional assessment may be required.

Note: Students who have not already taken the ACT (or SAT) may take the ACT residual test given by Chattanooga State's Testing Center. Scores from this test are valid for admission only at Chattanooga State. A fee is required.

For applicants 21 or older: Take the AAPP (Academic Assessment and Placement Program). This assessment battery is used for advising and placement purposes.

Note: See "Mandatory Placement Requirements" for additional information.

Transfer Students

- Submit an application to the Admissions Office (\$10.00 non-refundable fee).
- Submit official transcript(s) from each college or university attended.

A transcript is considered official only when it bears the seal of the granting institution and is either mailed directly to the Records Office or is presented in person in a sealed envelope.

After all transcripts have been received and the student has declared a major, transcripts will be evaluated and credit may be given for courses completed at **regionally accredited institutions** if all other admission requirements have been met. Transfer credits will not be used in computing the student's grade point average at Chattanooga State.

Students transferring from **non-regionally accredited institutions** are subject to the same application procedures as first time freshmen. However, credits from non-accredited institutions may be validated by examination. See "Alternative Sources of Credit" for information on procedures and fees.

- Testing and Placement

If transferring from a Tennessee Board of Regents (TBR) school:

Submit AAPP scores and ACT or SAT scores (where appropriate) to the Records Office prior to registration. Chattanooga State accepts assessment and placement, as well as equivalent Developmental Studies courses, from all Tennessee Board of Regents institutions.

If transferring from a non-TBR school:

Undergo assessment in accordance with the policies stated under "Mandatory Placement Requirements."

EXCEPTIONS:

- (1) As part of Chattanooga State's transfer articulation agreement with the University of Tennessee at Chattanooga, Chattanooga State will accept UTC's assessment and placement in lieu of the AAPP. Chattanooga State will also accept as equivalent UTC's Developmental Studies courses as stipulated on the UTC/CSTCC Course Equivalency Chart.
- (2) Assessment and placement from other non-TBR institutions, as well as Developmental Studies course credits, may be approved on an individual basis by the director of Chattanooga State's Developmental Studies program.

Testing not required if:

The testing requirement shall be waived for transfer students who have any of the following from a regionally accredited institution:

- credit for college level courses in both English and mathematics (grade of "D" or better)
- successful completion of 60 hours of college level courses
- associate degree
- bachelor's degree
- successful completion of a college level course at any Tennessee Board of Regents (TBR) school prior to Fall 1985

All transfer students will be held to the same placement standards as other Chattanooga State students; i.e., those transfer students who are found to be deficient in a Basic Academic Competency shall not be allowed to continue in a related college-level course until they have satisfactorily met the exit criteria of the appropriate Developmental Studies I course(s).

- Transfer students planning to pursue an Associate of Arts or Associate of Science degree must also submit official high school transcripts or GED scores. This requirement is waived for students who meet any of the following criteria:
 - graduation from high school (or GED) prior to 1989
 - transfer of 60 hours or more of college level work from a regionally accredited institution
 - baccalaureate or associate degree from a regionally accredited college or university
- Grade Point Average

Transfer students must be eligible to return to the institution from which they are transferring and must meet the academic retention standards of Chattanooga State. Students not meeting these criteria due to academic regulations may be admitted to Chattanooga State only after a period of non-enrollment in any college for at least one term (not including summer). Such students will be admitted on probation for their first term and will be subject to suspension at the end of the term if they do not meet Chattanooga State's academic retention standards. (See "Academic Retention Standards" in the "Academic Regulations" section.)

International Students

All matters pertaining to admission of international students, including Immigration Service policies, are handled by the Records Office.

- Meet all requirements for admission as a degree-seeking student
- TOEFL score of 500
- Evidence of financial capability
- Medical certificate verifying freedom from tuberculosis
- Medical and Hospitalization Insurance. Chattanooga State requires that international non-immigrant students have medical and hospitalization insurance while enrolled at the institution.

Mandatory Placement Requirements

- Students under twenty-one years of age are required to take the AAPP if their ACT (or corresponding SAT) scores fall below the cut-off points listed below:
 - If the composite score is 18 or lower, the AAPP Reading Comprehension test is required.
 - If the composite score is 25 or lower and the English subscore is 18 or lower, the AAPP Writing Sample is required.
 - If the composite score is 25 or lower and the Mathematics subscore is 18 or lower, the student must take the appropriate AAPP Mathematics tests as determined by the level of high school preparation in mathematics.

Note: No AAPP assessment is required for students who have an ACT composite score of 26 or higher (or equivalent SAT score), regardless of subscores.
- Students twenty-one years old or older must take the full battery of AAPP tests. (ACT or SAT scores, if less than three years old, may be used for screening instead of the AAPP. In such cases, students may be required to take all or part of the AAPP as well, based on the cut-off scores listed above.)
- Students under twenty-one who (1) received their GED in 1989 or thereafter **and** (2) are enrolled in an Associate of Arts or Associate of Science degree program must take all parts of the AAPP regardless of ACT/SAT scores. (Students with GED's who are in career programs, who are over twenty-one, or who received their GED prior to 1989 are subject to the same testing policies as

students with high school diplomas.)

- Students with high school unit deficiencies in English and/or Algebra must take the appropriate portions of the AAPP to determine how to remove these deficiencies. (See "High School Unit Requirements.")
- If a student enrolls in a college level course and is later found to be deficient in a Basic Academic Competency at the Development Studies I level, he/she shall be withdrawn from the class(es) with a grade of "W" and may not re-enroll until the exit criteria of the appropriate Developmental Studies I course(s) have been satisfactorily met. (This applies even if the student was initially exempt from the AAPP.)

Note: Students enrolled in technical certificate programs are admitted as Special Students. Assessment requirements are determined by the content of the program.

High School Unit Requirements (1989 Admission Requirements)

Beginning Fall semester 1989, it is recommended that any student entering Chattanooga State in a program designed for transfer to a four-year institution have the following units of credit from high school:

4 units	English
2 units	Algebra
1 unit	Advanced Math
2 units	Natural/Physical Science (1 unit must have a lab)
1 unit	Social Studies
1 unit	United States History
2 units	A single Foreign Language
1 unit	Visual/Performing Art (effective Fall 1993)

Students who do not meet the entrance requirements listed above will be admitted to Chattanooga State, but cannot be awarded an Associate of Arts or Associate of Science degree until all deficiencies are removed.

Students with deficiencies in English and/or Algebra must take the appropriate portions of the AAPP to determine how to remove these deficiencies. Students with deficiencies in any of the other subjects may remove the deficiencies with specified college courses, taken for elective credit only. See "Removal of Entrance Deficiencies" in the "Transfer Programs" section of this catalog.

Notes:

- Applicants who graduated from an accredited or approved high school or who received a GED Certificate prior to 1989 are not subject to the 1989 Admission Requirements.
- Applicants with an Honors Diploma in General Education from a Tennessee public high school are considered to have met all high school unit requirements.
- Applicants who graduated from an accredited or approved high school and have an ACT composite score of 26 or higher are considered to have met all high school unit requirements except those in foreign language and visual/performing arts.
- Applicants who received a GED Certificate in 1989 or thereafter are considered to have met all high school unit requirements except those in foreign language and visual/performing arts. (However, such students are not exempt from the "American History Requirement" mandated by the Tennessee General Assembly as a condition of receiving a bachelor's degree from one of Tennessee's state-supported colleges or universities.)
- For applicants holding a baccalaureate degree or an associate degree designed for transfer from a regionally accredited institution, all high school deficiencies will be waived upon presentation of a transcript verifying completion of the degree.
- Handicapped Applicants—The qualifications and needs of applicants who volunteer information about a handicapping condition will be assessed on an individual basis. Assessment will include an evaluation of the applicant's potential for success in college

1998-99 GENERAL INFORMATION

and the determination of any exceptions which may be warranted.

- **Out-of-State Applicants**—Applicants who are residents of states other than Tennessee are subject to the same admission requirements as in-state applicants.
- **The 1989 Admission Requirements do not apply to students enrolled in career programs (Associate of Applied Science degrees or Technical Certificates).**

INDUSTRIAL TECHNOLOGY PROGRAMS

- Submit an application to the Admissions Office (\$10.00 non-refundable fee).
- Applicants must be at least eighteen (18) years old or have a high school diploma or GED in order to be admitted to an Industrial Technology program.
- Testing
 - Practical Nursing and Surgical Technology applicants must take the California Achievement Test (CAT).
 - Applicants for all other programs must take the Industrial Technology Division's standard entrance examination. (This test is waived for applicants who hold a baccalaureate or associate degree from a regionally accredited institution.) Students deficient in basic mathematics or reading skills will be required to take and complete successfully appropriate remedial or developmental courses prior to enrollment in the program.
- If applying for financial aid, submit one of the following:
 - Official high school transcript or GED transcript
 - OR
 - Official transcript(s) from each college or university attended
 - OR
 - A passing score on the Ability to Benefit Test (given by the Testing Center by appointment only)

Note: A transcript is considered official only when it bears the seal of the granting institution and is either mailed directly to the Records Office or is hand-delivered in a sealed envelope.

TECHNICAL CERTIFICATE PROGRAMS

- Submit an application to the Admissions Office (\$10.00 non-refundable fee).
- Be admitted as a Special Student (see below).
- Testing requirements, if any, will be determined by the content of the program.

If a student enrolled in a technical certificate program later seeks regular admission, he/she will be assessed and placed by the AAPP and must meet all other requirements for regular admission. Likewise, a regularly admitted student pursuing an associate degree may concurrently pursue a technical certificate, but this provision does not alter any requirements for regular admission.

● Additional Admission Requirements

Some technical certificate programs have additional requirements, procedures, and deadlines which must be met. See the specific program in the "Career Programs" section of this catalog for information.

Note: Because students enrolled in technical certificate programs are classified as Special Students, they are not eligible to receive financial aid.

SPECIAL STUDENTS

A Special Student is one who is taking college credit courses but not working toward a degree. Students in technical certificate programs are classified as Special Students. To be admitted as a Special Student, one must:

- Submit an application to the Admissions Office (\$10.00 non-refundable fee).
- Meet one of the following criteria:

- be at least twenty-one years old
- if under twenty-one, hold a regular high school diploma (from a regionally accredited or state-approved high school) or GED, or have an ACT composite score of 19 or better (or equivalent SAT score)

● Testing:

Testing is required for admission to certain technical certificate programs. Testing may also be required if the student wants to take courses in English and/or mathematics or courses which have English or mathematics prerequisites.

Although Special Students are not required to complete normal assessment procedures, it is their responsibility to make sure they possess the requisite knowledge and skills needed to be successful in the course(s) they take.

LIMITATIONS:

- Special Students cannot receive financial aid.
- Special Students are not permitted to enroll in a college level English or mathematics course or in a course which has an English or mathematics prerequisite until they (1) satisfy the Mandatory Assessment Requirements appropriate for the course(s) they wish to take; or (2) provide evidence of successful completion of a college level course in English and/or mathematics, as appropriate.
- Special Students are not subject to any additional restrictions on the number of credits which may be carried per term. The maximum course load per term for any student is 19 semester hours unless special permission is granted in advance by the Vice President for Academic Affairs. (See "Academic Load" in the "Academic Regulations" section.)
- There are no restrictions on the total number of credits a Special Student may earn. However, if the student changes to degree-seeking status, credit hours accumulated as a Special Student are not applicable to the final twenty-four (24) semester hours required for the associate degree.

If a Special Student chooses to change to degree-seeking status at some later time, he/she must meet ALL requirements for regular admission (regardless of the number of credit hours earned as a Special Student).

TRANSIENT STUDENTS

A transient student is one who is regularly enrolled in another collegiate institution and who desires admission for a limited period. A student admitted in transient student status who later wishes to become a degree-seeking student must complete all requirements for regular admission. To be admitted as a transient student, the applicant must:

- Submit an application to the Admissions Office (\$10.00 non-refundable fee).
- For each semester of attendance, submit a letter of good standing from the college regularly attended.

LIMITATIONS:

1. Transient students are not permitted to enroll in a college level English or mathematics course or in a course which has an English or mathematics prerequisite until they (1) satisfy the Mandatory Assessment Requirements appropriate for the course(s) they wish to take; or (2) provide evidence of successful completion of a college level course in English and/or mathematics, as appropriate.
2. Transient students must meet any other prerequisite requirements for course work attempted at Chattanooga State.

EARLY ADMISSION

During Regular School Day

1. **Early admission** is available only to the student from a state

approved high school who has distinguished him/herself by high academic achievement in the 9th, 10th, and 11th grades by earning at least a 3.0 grade point average on a 4.0 maximum basis. Further, only those students who earn a composite score of 19 or above in the American College Testing Program can be considered. Before a student may participate in this program, an official high school transcript must be presented showing a GPA of 3.0 computed by a high school official, written endorsements from the principal, counseling staff and the participating institution of higher learning and written agreements from the student and his/her parents must be placed on file in the office of the principal and the Joint Enrollment Office.

The remainder of this rule is quoted below for convenience.

- The student will leave his/her high school at the end of his/her junior year and will matriculate in the participating institution of higher learning. The freshman coursework taken at the participating institution will substitute for the courses which the student needed for graduation from high school. The high school principal, or designee, will determine appropriateness of the content of these courses prior to the student's matriculation in college.
 - A student is to be awarded credit for his/her senior year only after having successfully completed his/her freshman year in college. Inasmuch as 4 units of English language arts are required for graduation from high school, each student will be enrolled in freshman English. Each participating student will be enrolled in American History and Economics if he/she has not already completed these courses in high school.
2. **Joint Enrollment** — College-level courses, for which an institution of higher learning may grant credit, may be offered to qualified students. Such courses may be conducted during the school day and may be conducted on the high school campus by properly certified and appropriately endorsed employees of the local board of education or by credentialed Chattanooga State instructors. These courses are to be considered a part of the school program with content and instruction subject to the supervision of the principal of the school and the local board of education. Advanced Placement Programs of the College Entrance Examination Board would qualify under this option, as would courses of college level content for which entrance requirements for students are consistent with those specified above. Students can be admitted to joint enrollment with an overall GPA of 3.0 or with a 3.0 GPA in the same discipline as the desired class, if all other requirements are met.
 3. **Technical Preparation Education (Tech Prep)** — Chattanooga State recognizes and may grant credits awarded by high schools to high school students through the national Technical Preparation Education (Tech Prep) program. The College receives appropriate Tech Prep credits upon the student's admission to the College. Depending upon their type, Tech Prep credits may be applied to advanced placement in the College's Industrial Technology programs or as academic credit for selected technical courses. High school students interested in earning Tech Prep credits should contact either the high school guidance counselor or the Tech Prep Coordinator at Chattanooga State.
 4. **Academically talented/gifted** students enrolled in grades 9, 10, 11, or 12 in state-approved high schools in Tennessee may, with the recommendation and approval of the high school principal and appropriate higher education institutional personnel, enroll in and receive regular college degree credit from a Tennessee postsecondary institution if such a student presents an official high school transcript showing a GPA of at least 3.0 and if such placement is a part of the student's planned

Individual Education Program (IEP) as established by the multi-disciplinary team process.

Outside Regular School Day

A qualified student enrolled in grades 9, 10, 11, or 12 in a state-approved high school (presenting an official high school transcript showing a 3.2 grade point average on a 4.0 maximum basis and written permission of parents and high school principal) may enroll in courses offered by an institution of higher learning which are conducted at times other than the regular school day, and which may not substitute for any required course or elective pursuant to graduation from high school. The student will receive no high school credit for participating in such courses.

Note: Credits accrued as an early admission student may be applied to a certificate or degree when regular admission requirements are met.

AUDIT

A student may audit (enroll on a non-credit basis) any college level or Industrial Technology course with payment of the regular credit hour or clock hour fee. The student is expected to attend classes and participate in class activities but is not required to complete assignments or take examinations. Enrollment for audit may be limited or denied based on available space. Audit hours may not be converted to credit at a later date, nor can an audit be used to replace a previously earned grade.

Note: Students are not allowed to audit remedial or developmental courses.

Current students may enroll in courses for audit or credit in any combination through the regular registration process or by drop/add. New students must submit an application and pay the \$10.00 fee. Former students must submit a reapplication.

SENIOR CITIZENS AND PERSONS WITH DISABILITIES

Senior citizens and permanently disabled persons may take courses at Chattanooga State for a reduced rate.

Audit — To receive a waiver of maintenance fees on courses taken for AUDIT (no grade, no credit), a person must:

- be over sixty (60) years of age or permanently disabled
- be domiciled in Tennessee
- provide proof of age or disability prior to registration
- register for AUDIT on a space available basis after the regular registration period
- pay all other applicable fees

Credit — To receive discounted maintenance fees (maximum charge: \$45) on courses taken for credit, a person must:

- be over sixty-five (65) years of age or permanently disabled
- be domiciled in Tennessee
- provide proof of age or disability prior to registration
- have completed all prerequisites or met any admissions criteria required for the course(s) in which the student enrolls
- pay all other applicable fees

Audit and/or Credit — First time Chattanooga State students must also submit an application to the Admissions Office and pay the \$10.00 non-refundable application fee. Former students must submit a reapplication.

NON-RESIDENTS

Procedures for admission of non-residents are the same as for residents. Additional requirements for international students are listed above.

READMISSION

A student previously enrolled at Chattanooga State who did not attend the immediately preceding term (summer excluded) must:

1998-99 GENERAL INFORMATION

- Submit a reapplication form to the Records Office (no fee)
- Submit official transcripts from any college attended since leaving Chattanooga State (if applying for regular admission status)
- Complete any admission requirements which may still be lacking

Alternative Sources of Credit

College credit for prior learning may be granted to students who can demonstrate satisfactory achievement and proficiency. Such credit may be obtained in the following ways:

CREDIT BY NATIONAL EXAMINATION

Chattanooga State awards credit for successful completion of the following nationally recognized college-level examinations offered by the College Entrance Examination Board (CEEB):

Advanced Placement (AP)

AP scores must be 3 or above for credit to be given. AP examinations are administered by the CEEB to high school students, usually during their junior or senior year.

College Level Examination Program (CLEP)

CLEP scores must be at the 50th percentile for credit to be given. Students may make arrangements to take CLEP examinations through Chattanooga State's Testing Center. Students who have taken CLEP exams elsewhere should have official scores sent from CEEB to the Records Office for evaluation for possible credit.

Credits earned by examination are identified on the student's transcript by a grade of "CE," which carries no quality points and is not used in computing the student's grade point average.

No limit is set on the maximum number of hours for AP or CLEP other than the restrictions imposed by the Graduation Residency Requirement.

Note: Students in transfer programs should consult with the college or university to which they wish to transfer about the acceptability of AP and/or CLEP credit.

CREDIT BY DEPARTMENTAL EXAMINATION

Upon recommendation by the appropriate instructor and dean and with the approval of the Vice President for Academic Affairs, a student may be permitted to earn full credit for certain college-level courses through successful completion of a special examination(s). Procedures for initiating a request to challenge a course are available in division offices.

Conditions and Restrictions:

- The student must be currently enrolled in credit work at Chattanooga State and have a minimum cumulative grade point average of 2.5.
- The student must present evidence to the academic department that he/she has acquired the requisite knowledge, skills, and/or competencies covered by the course. Permission to take a proficiency exam may be denied if the department determines that the student does not have a valid basis for the request. The decision of the department is final.
- Proficiency examinations may be used to validate credits for courses taken at unaccredited institutions. Students must verify by official transcript that the credits have been earned previously when arranging to take the examination.
- The regular course fee will be charged for each examination. This fee is in addition to maintenance fees paid for courses in which the student is actually registered (even if the student is full-time).
- Credits earned by examination are identified on the student's transcript by a grade of "CE," which carries no quality points and is not used in computing the student's grade point average.
- Proficiency exams may not be used to repeat coursework or to remove a grade of "I" or "F."

- A student may take the proficiency examination for a specific course only one time.
- Credits earned by examination may not be used to satisfy the Graduation Residency Requirement.
- No limit is set on the maximum number of hours that may be earned by examination other than the restrictions imposed by the Graduation Residency Requirement.
- Proficiency examinations are not available for all courses.

Note: Students in transfer programs should consult with the college or university to which they wish to transfer about the acceptability of credit by proficiency examination.

CREDIT FOR LIFE EXPERIENCE

Assessment by portfolio for experiential credit is reserved for knowledge and competencies which do not readily fit into the credit examination or CLEP options. Credit for Life Experience may not be requested by a student who has previously taken the course(s) but failed to achieve a minimum grade of "C" (or equivalent).

Option 1: Credit for Courses offered by Chattanooga State
Credit for Life Experience may be granted by:

- Verification of College Credit Recommendation in the *Directory of the National Program on Noncollegiate Sponsored Instruction* (published by the University of the State of New York and the State Education Department of New York).

-OR-

- Up to nine (9) semester hours may be granted upon submission of a portfolio documenting professional experience that directly relates to the content of specific courses offered by Chattanooga State AND approval of this portfolio by a Faculty Committee. The nine hours are not considered as part of the College's Graduation Residency Requirements (last 20 hours).

Option 2: Elective Credit

- Up to six (6) semester hours of ELECTIVE CREDIT may be granted upon submission of a portfolio documenting work or other experience that is worthy of college credit but does not match existing credit courses at Chattanooga State AND approval of this portfolio by a Faculty Committee. These six hours are not considered as part of the College's Graduation Residency Requirements (last 20 hours).

Application Procedure for Credit for Life Experience

Students interested in pursuing credit for experiential learning must contact the department head in the appropriate area of study no later than two terms prior to graduation. The department head assigns faculty to meet with the student to determine that the student has suitable credentials. The faculty will then submit the Request Form to the appropriate division dean to begin the process.

Upon approval for pursuing the credit, a faculty committee of one to three faculty members from the area(s) in which the credit is being sought will be appointed to provide guidance to the student during the gathering and preparing of supporting evidence. This faculty committee assesses the portfolio, conducts a final interview with the student, and forwards the portfolio and recommendation to the division dean. Upon approval by the dean, the portfolio is sent to the Credit for Life Experience Committee. The Credit for Life Experience Committee, which consists of faculty representatives from all disciplines, confirms that the process was correctly followed and that the petition is valid. The recommendation is forwarded to the Vice President for Academic Affairs for final approval and credit recommendation to the Records Office.

Credit for Life Experience Fee—A non-refundable portfolio assessment fee (paid upon approval of Request to Pursue Credit for Life Experience) is required. An additional fee is charged for credit awarded above three hours. (See "Financial Information.")

MILITARY SERVICE CREDIT

Chattanooga State may grant credit for military science to students with six or more months of honorable active service in the Armed Forces of the United States or in a service academy. Chattanooga State policy permits granting credit for appropriate educational experience in the armed services in accordance with evaluation in the American Council on Education, *Guide to the Evaluation of Education Experience in the Armed Services* or by the commission on the accreditation of service experiences evaluation service. Chattanooga State also grants credit for many correspondence courses completed through USAFI. Veterans should apply to the Records Office with supporting documents of their previous training.

Also, students who have received honorable discharge after having served on active duty with the armed forces may upon request and submission of a valid DD 214 form receive physical education activity credit. One credit is allowed for each six months of service to a maximum of two credits.

AMERICAN COUNCIL ON EDUCATION (ACE)

Chattanooga State may grant credit for appropriate educational experience listed in *The National Guide to Credit Recommendations for Non-collegiate Courses* sponsored by the American Council on Education. The program is national in scope, and the Tennessee Higher Education Commission is a participating agency.

Each request will be considered on its own merit and must have the approval from the appropriate division.

Orientation

Chattanooga State conducts an orientation program prior to registration each semester to familiarize new students with the purposes and programs of the College. Special orientation sessions are also conducted during the summer for new students accepted for Fall. At that time, the student will meet with an adviser to discuss his/her educational interests and preregister for the coming term.

Residency Classification

The following are rules for determination of "in-state" or "out-of-state" status for fees and tuition purposes as defined by the State University and Community College System of Tennessee:

- Every person having his or her domicile in this State shall be classified "in-state" for fee and tuition purposes and for admission purposes.
- Every person not having his or her domicile in this State shall be classified "out-of-state" for said purposes.
- The domicile of an "unemancipated person"* is that of his or her parent. "Parent" shall mean a person's father or mother. If there is a non-parental guardian or legal custodian of an unemancipated person, then "parent" shall mean such guardian or legal custodian provided that there are not circumstances indicating that such guardianship or custodianship was created primarily for the purpose of conferring the status of an "in-state" student on such unemancipated person.
- The domicile of a married person shall be determined independent of the domicile of the spouse.
- A recent graduate of any "out-of-state" high school must supply evidence of Tennessee residency before receiving in-state tuition status.
- Unemancipated students of divorced parents shall be classified "in-state" when one parent, regardless of custodial status, is domiciled in Tennessee.
- The spouse of a student classified as "in-state" shall also be classified as "in-state".
- International students will pay out-of-state tuition.

- Students classified by Immigrations as a Permanent Resident, Resident Alien, Refugee, or Immigrant may be charged in-state fees if domiciled in Tennessee.
- Part-time students (under 12 semester hours) who are not domiciled in Tennessee but who are employed full-time in Tennessee shall be classified out-of-state but shall not be required to pay out-of-state tuition. The student must provide proper documentation each semester.
- Students who are stationed at Fort Campbell pursuant to military orders, shall be classified out-of-state but shall not be required to pay out-of-state tuition. The student must provide proper documentation each semester.

* "Emancipated person" shall mean a person who has attained the age of eighteen years, and whose parents have entirely surrendered the right to the care, custody, and earnings of such person and who no longer are under any legal obligation to support or maintain such deemed "emancipated person."

Veterans

All matters pertaining to veterans are handled by the Office of Veterans Affairs. All questions concerning veterans should be directed to that office.

- Meet all requirements for admission as a degree-seeking or Industrial Technology student. In order to receive benefits, veterans must be enrolled in an associate degree program or in a full-time Industrial Technology certificate program.
- Submit a certified copy of DD 214. Reservists also need a DD 2384 from their Commanding Officer.
- Register for classes and pay fees.

Certification

Upon completion of all admission requirements and receipt of a Certificate of Admission, veterans may request the Veterans Affairs Office to complete an advance certification form to be included with the Application for Benefits to the Veterans Administration. Requests for advance pay must be processed 30–45 days prior to the date of Registration in order to expedite the veteran's first check. Certification of enrollment cannot be sent to the Veterans Administration until all admission requirements are met and the enrollment process is complete, including payment of fees.

Qualifying Courses

A veteran can only be paid for courses listed in the catalog as required for his/her designated major.

Industrial Technology Programs

Veterans enrolled in full-time Industrial Technology programs are certified for clock-hour certificates. (Veterans enrolled in part-time Industrial Technology programs do not qualify for benefits.) Credit may be given for previous education or training as determined by the instructor and approved by the Vice President for Academic Affairs at the time of the initial enrollment of the student.

Class Attendance

Veterans attendance requirements are detailed in the brochure for Veterans.

Full-time Status

The Veterans Administration accepts as full-time students who meet either of the following criteria:

- degree-seeking students taking 12 or more credit hours per semester.
- Industrial Technology students enrolled in clock hour programs meeting at least 30 hours per week.

Academic Fresh Start

Veterans are not eligible for Academic Fresh Start.

Veterans Brochure

A brochure with detailed information for veterans is available in the Office of Veterans Affairs.

Academic Regulations

Any exceptions to the Academic Regulations which follow must have the recommendation of the Vice President for Academic Affairs and the approval of the President.

General Expectations

The College reserves the right to make changes in calendars, curricula, degree requirements, course offerings, and all academic regulations at any time when in the judgment of the faculty, the President, or the Tennessee Board of Regents, such changes are in the best interests of the students and the College.

Upon his/her registration at the College, a student assumes his/her acceptance of all published academic regulations, including both those which appear in this catalog and all others found in any official announcement.

A student may choose to obtain a degree in accordance with the requirements set forth in the catalog in force when he/she entered the College or under a subsequent catalog in effect while a student. (However, a student is restricted in his/her choice to the requirements of one specific catalog, and there is a time limitation. See "Graduation Requirements" for details.)

Right of Petition. A student who considers that he/she is entitled to relief from, or any deviation in, the academic regulations of the College may submit his/her case for consideration by the Appeals and Review Committee. A petition form may be obtained from the office of the Vice President for Student Affairs.

Academic Calendar and Credit System

Chattanooga State operates on the semester system. The regular academic year is divided into two terms, each consisting of 15 weeks of class plus a final examination period.

The semester hour is the basic unit of academic credit. Each hour of credit represents 50 minutes of class time per week for 15 weeks for a lecture course. Non-lecture courses (laboratory, clinic, Physical Education activity, etc.) meet two or more hours per week for each hour of credit. (During accelerated terms, such as Summer, classes meet longer each week in order to have an equivalent amount of class time.)

EXAMPLES:

1. A standard lecture class meeting for 50 minutes three times a week carries three semester hours credit.
2. A class with a laboratory typically has three hours of lecture and two or three hours of laboratory per week and carries four semester hours of credit.
3. A Physical Education activity course meeting two hours per week carries one hour of credit.

Industrial Technology Programs

The unit of credit for programs in the Division of Industrial Technology is the clock hour. Fall and Spring semesters are 15 weeks each. Summer semester is 13 weeks, but time in class is not extended to compensate for the shortened term.

Academic Fresh Start

Academic Fresh Start is a plan of academic forgiveness provided for students who did not realize their full academic potential during their first attempt at the college experience and are being given a second chance to meet their educational goals without penalty. Academic Fresh Start allows all previously taken courses to be disregarded when calculating current academic statistics for the student. Although the courses will not be removed from the student's transcript, they will no longer be used in calculating the grade point average and will not apply toward the fulfillment of any college requirement.

Eligibility Requirements for Academic Fresh Start

To be eligible for Academic Fresh Start, the student must:

- Not have been enrolled in a college or university for a period of at least four (4) years.
- Be readmitted (or admitted) to Chattanooga State as a degree-seeking student. Only students pursuing an associate degree are eligible for Academic Fresh Start.
- File a formal application for Academic Fresh Start with the Records Office at the time of readmission or admission as a degree-seeking student. Include an academic plan for completion of the degree.
- Complete at least fifteen (15) semester hours of earned degree coursework with a minimum GPA of 2.0 for all work attempted.

Once the student has satisfied the above requirements, the request for Academic Fresh Start will be submitted for approval to the Vice President for Academic Affairs.

Terms of the Academic Fresh Start

- Academic Fresh Start may be granted only once and is irrevocable.
- The student's permanent record will remain a record of all work; however, the student will forfeit the use for degree or certification purposes all college or university degree credit earned prior to the four-year separation.
- Previously satisfied remedial/developmental requirements will not be forfeited. Students who did not complete their remedial/development requirements at the time of their previous enrollment must meet current requirements; however, these courses do not count toward the 15 hours of coursework required to be eligible for Academic Fresh Start.
- The student's transcript will note the Academic Fresh Start and carry a statement indicating that the grade point average and credit totals are based only on the work beginning with the date of the Academic Fresh Start.
- A student who plans to transfer to another institution should contact that institution to determine the impact of Academic Fresh Start prior to implementing the program at Chattanooga State. If assistance is needed, the student should contact the Records Office.

Note: Veteran students are not eligible for benefits as Academic Fresh Start participants.

Academic Honors

COMMENCEMENT HONORS

Chattanooga State recognizes students who have attained a high level of achievement during their academic careers by conferring honors distinctions at graduation as follows:

Summa cum laude	4.0 GPA
Magna cum laude	3.75–3.99 GPA
Cum laude	3.50–3.74 GPA

Honors categories are based on the grade point average in all college level courses as of the end of the fall term preceding the term of graduation. The average of the work for the spring term will not be computed to determine the honors categories for graduates. However, any student whose spring term of study raises his/her grade point average to the level required for honors recognition may request in writing and receive a new diploma indicating the honors category. The first diploma must be returned in exchange for the new one.

DEAN'S LIST

Students taking twelve hours or more of work for any given semester and making a college-level grade point average of 3.5 or better for that semester will be listed on the Dean's List. (Dean's List

recognition is based on calculations made at the end of the semester and cannot be updated later to reflect grade changes, such as removal of incompletes.)

HONORS PROGRAM

The Chattanooga State Honors Program provides an enriched curriculum and related informal educational experiences to meet the needs of able and highly motivated students. Honors students participate in special academic and social activities. Students enrolled in the Honors Program who complete at least 12 hours of honors courses and maintain a 3.5 GPA or better will receive special recognition at graduation.

The Honors Program is open to new and currently enrolled students who meet the following criteria:

- New students must have a minimum composite score of 25 on the ACT or high school grade point average of 3.5 with sufficient high school course work in the honors subject area.
- Enrolled students must complete 15 semester hours of college-level work, attain a 3.5 grade point average, and be nominated by a faculty member.

For more information, contact the Honors Program coordinator.

WHO'S WHO AMONG STUDENTS IN AMERICAN JUNIOR COLLEGES

The faculty are requested to nominate students from a list supplied by the Records Office of all full-time students (12 hours) who have completed 30 hours with a minimum GPA of 3.0 or better. Nominated students are then requested to complete an information form. This form is submitted to a faculty committee which recommends candidates to the President for selection. This selection is based on cumulative grade point average, active campus organization membership, and activity in community and civic affairs.

PHI THETA KAPPA

Phi Theta Kappa is the international honor society of the two-year college. Membership in the Alpha Beta Mu chapter of Phi Theta Kappa recognizes outstanding academic achievement in students and provides them opportunities for developing leadership, service, and fellowship and for continuing their academic excellence and recognition on the chapter, regional, and international levels.

All full-time and part-time students who have completed 15 credit hours (at Chattanooga State) toward an associate degree and have maintained an overall minimum 3.5 grade point average are eligible to be invited into membership. Invitations are extended during Fall and Spring semesters. Members must enjoy full rights of citizenship, must pay a one-time induction fee, and must maintain a 3.5 or better grade point average. Numerous membership benefits and opportunities are available to all members.

PSI BETA

Psi Beta is the National Honor Society for Psychology in Community and Junior Colleges. Membership in Psi Beta recognizes the academic excellence of students and provides them with opportunities to acquire important leadership skills, to learn more about professional and educational choices, and to interact with professionals in their field. Membership is limited to students with an overall grade point average of 3.25 who have completed two psychology courses with a 3.5 or who have completed one psychology course with a 3.5 or better and are enrolled in a second course. Invitations are extended to eligible students.

MERIT AWARDS

The key to the Student Merit Award is that the student recipient be truly exceptional not only in academic areas but also in community and campus service.

A list of eligible students in each academic division, drawn from the selected history of all students who filed an intent to graduate form with the Records Office, is submitted to all Deans and

Department Heads. The faculty in each division recommend to the Deans and President recipients for this award. All merit awards are contingent upon approval by the Vice President for Academic Affairs and the President.

Academic Load

Definition: The total semester hours of credit for all courses taken during the semester. Also referred to as "credit load," "course load," or "class load."

Full-time Students

Recommended credit load: 16-18 hours.

Minimum credit load: 12 hours.

Maximum credit load: 19 hours.

Overload: 19-22 hours. Enrollment in more than 19 credit hours must be approved in advance by the Vice President for Academic Affairs. Normally a student requesting an overload should have a cumulative grade point average of 3.0. The maximum number of hours permitted cannot exceed 22.

Part-time Students

A student who carries an academic load of less than 12 hours is considered to be part-time.

Industrial Technology Students

A full-time load for an Industrial Technology student is 30 clock hours per week (or more).

Industrial Technology students who wish to take credit courses while enrolled in an Industrial Technology program may do so subject to the following restrictions:

- All course prerequisites, including any mandatory testing, must be met and appropriate course fees paid.
- Credit load limitations: Six (6) credit hours per semester if the student is enrolled in an Industrial Technology program on a full-time basis; three (3) credit hours per semester if part-time.

Academic Retention Standards

The minimum college-level grade point average required to achieve the associate degree is 2.0.

In order to be eligible for continued enrollment in good standing and to progress toward degree completion, a student must have earned the minimum cumulative combined Grade Point Average set forth below for the total number of semester credit hours attempted.

*Semester Quality Hours Attempted	Required Cumulative GPA
0.0-14.0	No Minimum
14.1-26.0	1.0
26.1-40.0	1.4
40.1-48.0	1.7
48.1-56.0	1.9
above 56	2.0

*Quality hours attempted are shown on the Chattanooga State transcript under the heading *QHRS*.

Note: The following grades are shown on the transcript under the heading of *Attempted Hours (AHRS)* but are not used in the calculation of GPA for probation/suspension purposes: *W* (withdrawal), *WP* (withdrawal passing), *WD* (R/D withdrawal), *E* (extension), *S* (satisfactory), *N* (no credit), and *AU* (audit).

ACADEMIC PROBATION

Students who fail to attain the grade point averages specified above will be placed on academic probation for the subsequent term.

ACADEMIC SUSPENSION

At the end of the next term of enrollment, a student on academic probation who has failed to attain either the above cumulative standard or a 2.0 combined GPA for that term will be suspended as follows:

1. Students receiving their first suspension at the end of the fall semester will not be eligible to re-enroll at Chattanooga State

1998-99 GENERAL INFORMATION

until the following summer semester.

- Students receiving their first suspension at the end of the spring semester will not be eligible to re-enroll at Chattanooga State until the following spring semester.
- Students receiving their first suspension at the end of the summer semester will not be eligible to re-enroll at Chattanooga State until the following spring semester.

When students re-enroll at Chattanooga State following their first suspension their status shall be considered post-suspension probation, in which case the following apply:

- Students who attain the cumulative standard shall be in good standing.
- Students who attain a 2.0 GPA for that term but are still below the cumulative standard shall remain on probation.
- Students who do not attain a 2.0 GPA for that term and are still below the cumulative standard shall be placed on twelve month suspension.

Appeal of Academic Suspension

A student may appeal his/her suspension for failure to meet college retention standards based on grade point average. Suspension appeal forms, which include the procedures for an appeal, are available in the Career Planning and Counseling Services office. Appeals hearings are usually held the first day of registration for each semester; additional times for appeals hearings may or may not be scheduled. Students are encouraged to inquire about suspension appeals as early as possible.

If an appeal is granted, the student will be enrolled that semester on a probationary status and must meet the conditions set forth by the appeals committee. Should the conditions not be met, the student will be suspended for one full year.

DEVELOPMENTAL SUSPENSION (TWO-ATTEMPT RULE)

Students who have twice previously attempted a remedial or developmental course and failed to meet the minimum standards for progression, resulting in a grade of W, E, or F, will be suspended from the College for one semester. (Summer term cannot count as the term of suspension.) Grades of I or WD are considered legitimate exceptions to the Two-Attempt Rule and, therefore, do not count as attempts. Students who fail to meet course exit criteria (i.e., grade of A, B, or C) after a third attempt will be suspended for one full year.

Appeal of Developmental Suspension

Students suspended from the College because of the Two-Attempt Rule may appeal that decision by contacting the Chairperson of the Appeals Committee. A letter asking for a hearing and detailing reasons why the suspension should be lifted, along with two letters of recommendation from faculty or staff, and a copy of the student's transcript should be submitted promptly before the hearing.

INDUSTRIAL TECHNOLOGY PROBATION/SUSPENSION

Information on Industrial Technology probation/suspension can be found at the end of the "Industrial Technology Programs" section of this catalog.

Change of Name or Address

It is the obligation of every student to notify the Records Office of any change in name or address. Failure to do so can cause serious delay in the handling of student records and in notification of emergencies at home. A Change of Status Form may be obtained from the Records Office.

Note: If mail is returned indicating insufficient address, a registration hold is placed on the student's records until the address is corrected with the Records Office.

Change of Registration (Add/Drop)

A change in registration involves adding or dropping a course, changing from one course section to another, or changing course registration from audit to credit or from credit to audit. Students may not withdraw from remedial or developmental courses except for extraordinary reasons and with special permission from the Department Head or his/her representative. Students may not use the Change of Registration Form to completely withdraw from school. (See "Withdrawal From College.")

DEADLINES

Deadlines for making changes in registration are indicated on the student calendar published by the Records Office each semester. In order to add or drop after the official deadline, the student must have approval of the appropriate administrators.

The consequences of withdrawing from a class depend on when the class is dropped. The deadlines/consequences for dropping a class (or completely withdrawing from school) are established in accordance with the following policies:

- No indication on transcript*
Dropping a class within the two-week period beginning with the first official day of classes shall result in no indication on the student's transcript.
- "W" Period*
A grade of "W" shall be recorded for class(es) dropped during the third through eighth weeks of the term.
- "WP"/"WF" Period*
If a student drops a class from the beginning of the ninth week up until two weeks preceding the first day of finals, the instructor will award a "WP" or "WF" based on whether the student was passing or failing at the time of the withdrawal.
- Drop Deadline*
The deadline for dropping a class shall be two weeks prior to the first day of final exams. No withdrawals will be allowed during the last two weeks of class. Any request for an exception to this deadline must be submitted in writing, along with supporting documentation, to the Vice President for Academic Affairs.
- Industrial Technology
A grade of "W" shall be recorded for Industrial Technology class(es) dropped at any point in the semester prior to the Drop Deadline.

Note: If a student stops attending class and does not officially withdraw, he/she will receive a failing grade ("F") for that course.

**During the summer or other shortened terms, this schedule is adjusted appropriately to fit the condensed time frame.*

Change of Status

Any change in the student's status (such as major) should be made through the Records Office in order that his/her records will be correct. When such changes are made, the proper college personnel will be notified.

Class Attendance

When a student enrolls in a course, he/she obligates him/herself for all the work that may be assigned. Punctual and regular attendance is vital to the discharge of this obligation. The student is responsible for all assigned work in the course, and absences, excused or unexcused, do not absolve him/her of this responsibility.

It is the prerogative of the individual instructor to set the attendance requirements for a particular class. At the beginning of the term, the instructor will distribute information on his/her class attendance policy, including an explanation of grade penalties that result from failure to comply with the policy. An unsatisfactory attendance record may adversely affect the final grade recorded for the course.

It is the responsibility of each student to know the attendance policy of each instructor in whose class he/she is enrolled.

Unsatisfactory attendance may result in a repayment of any financial aid received. Financial Aid students **must attend all** classes for which they register. *Note: If a student withdraws on or after the first day of class, but never attends the class, that class will not count when calculating financial aid eligibility and the student's financial aid will be adjusted accordingly.*

All veterans will be reported to the Office of Veterans Affairs when they have been absent an excessive amount of time.

Class Cancellation

The College reserves the right to cancel any class with fewer than the minimum number of students enrolled as set forth by the institutional guidelines; however, all courses will be given the opportunity to make according to the schedule listed in the catalog.

Classification

For administrative purposes, a student is classed as a freshman until he/she completes 33 semester hours in college level courses. Transfer credits may be combined with credits earned at Chattanooga State for classification purposes.

Co-op Credit

College credit may be earned through participation in Chattanooga State's Cooperative Education program and applied as credit toward graduation subject to the following restrictions:

1. Co-op courses may be used as Unrestricted Elective credit in career programs (Associate of Applied Science degree).
2. A course substitution approved by the appropriate dean is required for co-op credit to be used to satisfy degree requirements other than "Unrestricted Elective."
3. Co-op credit may not be used to satisfy General Education requirements.
4. Co-op credit may not be used as elective credit in transfer programs (Associate of Arts or Associate of Science degrees).

Correspondence Credit

A maximum of six semester hours of correspondence work from a regionally accredited college or university will be accepted for credit toward graduation at Chattanooga State. A maximum of three semester hours of transfer credit, including correspondence credit, may be applied toward a technical certificate.

Course Substitutions

Only under unavoidable and exceptional circumstances will the College permit substitution for or exemption from the prescribed curricula. When it becomes necessary to request a deviation from the prescribed course of study, the student should consult with his/her assigned faculty adviser to determine the appropriateness of the request and to obtain a Course Substitution Form. All requests for course substitutions or other deviations from catalog requirements must be submitted in writing, clearly stating the substitution or exemption sought and the reason for such a request. Course substitutions must be approved by the student's adviser, the appropriate department head and dean, and the Vice President for Academic Affairs.

Diplomas

Unclaimed diplomas will be held in the Records Office for one (1) academic year after each graduation.

Grading Policy

Chattanooga State employs a grading system which has been designed to indicate the level of mastery a student has achieved in acquiring the knowledge, skills, and attitudes taught in a course of study. Minimum acceptable achievement is that standard deemed necessary to enter the next level course, or at the program level to enter a four-year college, or to be qualified for employment in a specific career area. The letter grades described below are based upon documented mastery of a set of specific instructional competencies. The competencies and objectives for each course are listed in each course syllabus.

Letter Grade	Quality Points per semester hour	Description
A	4.0	Indicates consistently superior performance. Mastery level should be at least 70 for each competency with an average of 90.
B	3.0	Indicates consistently above-average performance. Mastery level should be at least 70 for each competency with an average of 80.
C	2.0	Indicates satisfactory performance. Mastery level should be at least 70 for each competency with an average of 70.
D	1.0	Indicates less than mastery level performance with a minimum of 65 achievement on each competency with an average of 65. A student receiving a grade of D in a particular course is urged to repeat that course if it is a prerequisite for another course in the student's program. <i>Note: Some programs require a grade of C or better in specified courses.</i>
F	0.0	Indicates failure to achieve minimum standards.
I	0.0	Incomplete. Given at the discretion of the instructor to those students who have not fulfilled all course requirements at the end of the grading period. A student must complete the course in which an "I" grade is received no later than two weeks before the end of the following semester, subject to the instructor's approval. An exception to this rule is that anyone graduating in May or completing in the summer semester, will be required to finish all "I" grades within the first two weeks of the semester. The "I" grade is computed as an "F" in the GPA until it is completed. If requirements are not satisfied, the student receives an "F."
WF	0.0	Withdrawal/Failing. Indicates the student is failing at the time of withdrawal. The WF grade is treated as an F in computing the grade point average (GPA).
WP		Withdrawal/Passing. Indicates the student is passing at the time of withdrawal. The WP grade will not be counted in the grade point average (GPA).
W		Withdrawal. Indicates the student has withdrawn from the course prior to the drop deadline. The W grade will not be counted in the grade point average (GPA).
WD		Withdrawal/Developmental. Indicates the student has been granted special permission to withdraw from a remedial or developmental course. Such permission is granted by the Director of Developmental Studies only under extenuating circumstances. The WD grade will not count in the grade point average (GPA) and does not count as

an attempt for purposes of the Developmental Studies “Two-Attempt Rule.”

- E Extension. Available only for developmental courses and for courses taken by independent study (including VIP courses), the grade of E is given when the course work has not been completed, but the quality of work done has been satisfactory. A maximum of 10 hours of E grades is allowed in any term. An overall maximum of 17 hours of E’s is allowed. The grade of E will not be counted in the GPA. A student receiving a grade of E in a particular course is not entitled to use that course as a prerequisite for any course. A maximum of one E will be given in any particular course unless recommended by the appropriate dean. A student repeating a course for which he/she has received a grade of E must register for the course again and pay the regular maintenance fee. Out-of-state students must pay tuition for a repeated course for which they have received an E grade.
- AU Audit. Indicates that the student elected to enroll in the course for no grade or credit. Audits do not replace grades previously issued.
- CE Credit by Examination. This designation is used for both institutional and national examinations, such as AP and CLEP.
- CL Credit for Life Experience. The CL is not counted in the grade point average (GPA).
- S/N Satisfactory/No Credit. The institution may offer selected courses on a competency based grading system. If the student satisfactorily meets the minimum competencies, credit (S) will be awarded. Students not meeting minimum competencies will not receive credit (N).

CALCULATION OF GRADE POINT AVERAGE (GPA)

Chattanooga State transcripts will indicate two grade point averages—a “college only” average and a “combined” average. The college only GPA will be comprised of hours taken in college level courses. The combined GPA will be comprised of hours taken in college level courses and remedial/developmental courses. The college only GPA will be used in calculating the required GPA for graduation, in determining graduation honors and in determining term honors. The combined GPA will be used in determining suspension, probation, eligibility for financial aid, and eligibility for athletic participation.

Note: Grades of “W,” “WP,” and “E” are shown on the transcript under the heading of Attempted Hours (AHRS) but are not used in the calculation of GPA. However, they may affect a student’s eligibility for financial aid. They are also considered as attempts under the Developmental Studies “Two-Attempt Rule.”

REPEATING A COURSE

For the purpose of increasing mastery in a course when such is necessary for successful performance in another course or for the purpose of increasing the grade point average (and only for these purposes), students may repeat courses in which their final grades are “C” or lower.

Students may be permitted to repeat a course in which a grade of “B” or higher was earned only with the approval of the chief academic officer as an exception to this policy.

When a course is repeated, only the last grade received will be calculated in the cumulative GPA. However, if a course is repeated more than twice (three attempts), the third and all subsequent grades will be included in computing the cumulative GPA.

APPEAL OF A GRADE

Grades assigned by faculty members are final unless there is evidence that the grade was influenced by consideration of race, color, religion, sex, marital status, handicap or national origin, arbitrary or capricious action or other reasons not related to the academic performance of the student. In all cases the complaining student shall assume the burden of proof with respect to the allegations.

Steps For Appeal of a Grade:

1. The student has thirty (30) calendar days from the day grades were due in the Records Office of the term in which the grade was earned to consult with the instructor in an effort to provide a satisfactory resolution of the complaint. In the event the student cannot schedule a meeting with the instructor, the student may contact the instructor’s supervisor who will schedule the meeting between the instructor and the student. The only exception to this procedure is the case where the instructor is no longer employed by the College or is unavailable so that it is impossible to complete Step 1 within the allotted thirty (30) calendar days. In this case, the student may proceed directly to Step 2.
2. If the complaint is not resolved in Step 1, the student may begin the appeals process by contacting the office of the Vice President for Student Affairs where a Student Grade Appeal Form may be obtained. To continue an appeal, the student must present the completed Student Grade Appeal Form to the dean of the division in which the course was offered within forty-five (45) calendar days from the end of the term during which the grade was received. The division dean will attempt to resolve the appeal in consultation with the instructor and the student within a fifteen (15) calendar day period dating from the formal presentation of the Student Grade Appeal Form.
3. If the complaint cannot be resolved at the level of Step 2 within the prescribed fifteen (15) calendar day period, the student, within five (5) calendar days following the end of such period, may appeal further by presenting to the Vice President for Academic Affairs a copy of the complete Student Grade Appeal Form which clearly explains the basis of the appeal, the evidence for the appeal, and any supporting data. The division dean must also forward a copy of all correspondence and records to the Vice President for Academic Affairs. The Vice President for Academic Affairs may utilize any resources available to resolve the grade conflict within a twenty-one (21) calendar day period. If the Vice President for Academic Affairs finds that the request does not have merit, the Vice President for Academic Affairs shall so notify the student, the instructor, and the division dean. If the Vice President for Academic Affairs determines that the student’s request has merit, the Vice President for Academic Affairs will refer the student to the Academic Appeals Committee.
4. The written request for a hearing before the Academic Appeals Committee shall state the factual basis for the grade appeal. The committee shall notify the student, the instructor, the Vice President for Academic Affairs, and the President of Chattanooga State of the time and location of the hearing. The Academic Appeals Committee shall function as a review board. Acting on behalf of the President, and after thorough review of the case, the Committee shall make the final decision. It shall have the power to allow the assigned grade to stand or to raise or lower the assigned grade. Its decision must be formally announced to all parties. The time schedule allowed for completion of the action by the Committee shall be twenty-one (21) calendar days.

Pending resolution of the appeal, consequences of the contested grade will stand.

Graduation Requirements

APPLICATION AND FEE

A student must submit an application for degree or certificate (technical or Industrial Technology) and pay the application fee on or before the designated deadline before he/she can be considered as a candidate for a degree or certificate. (Students who complete graduation requirements during the summer semester may participate in the commencement exercises during the spring of that year. The same application for graduation deadline applies.)

APPLICABLE CATALOG

A student may choose to obtain a degree or certificate in accordance with the requirements set forth in the catalog in force when he/she entered the College or under a subsequent catalog in effect for any term that he/she is enrolled as a student. However, a student is restricted to the requirements of one specific catalog, i.e., requirements from different catalogs cannot be mixed.

Time Limitation. The student must complete all degree requirements within the period of time that the requirements in the selected catalog are in effect. Counting from the first term covered by the catalog, associate degree and technical certificate requirements remain in effect for a period of five years and Industrial Technology certificates for two years.

DOUBLE DEGREE

A student may earn, simultaneously or consecutively, multiple degrees only when the majors completed lead to different degrees, e.g., one leads to the A.A.S. and the other to the A.S. All requirements for both degrees must be met, and the student must complete at least 20 semester hours (with a 2.0 cumulative college level grade point average) not included for the first degree.

DOUBLE MAJOR

A double major is the completion by a student of two or more majors leading to the same degree. All requirements for each major must be met. The second major must include at least 20 hours (with a 2.0 cumulative college level grade point average) not applied to the first major.

DEGREE/TECHNICAL CERTIFICATE

Students who wish to receive both a degree and a Technical Certificate must complete the requirements for both as listed in the SUMMARY OF REQUIRED HOURS for each. (A 2.0 cumulative college level grade point average is required for both the degree and the certificate.)

DOUBLE CERTIFICATE

All requirements for both Technical Certificates must have been met and at least one-third of the hours required for the second certificate must not have been required for the first certificate. (A 2.0 cumulative college level grade point average is required for each certificate.)

GRADUATION RESIDENCY REQUIREMENTS

Associate Degree — The final twenty (20) semester credit hours preceding graduation must be completed at Chattanooga State. (Only credits earned in college level courses apply toward satisfying this requirement.)

Note: Credit hours accumulated as a Special Student are not applicable to the final twenty-four (24) semester hours required for an associate degree.

Technical Certificate — All required hours for a technical certificate must be completed at Chattanooga State with the exception that a maximum of three (3) semester hours transferred from another regionally accredited institution or three (3) semester hours of Credit for Life Experience may be applied toward the certificate.

Industrial Technology Certificate — Credit for students in

Industrial Technology programs may be given for previous education or training as determined by the instructor and approved by the Vice President for Academic Affairs at the time of the initial enrollment of the student.

GRADE POINT AVERAGE

The cumulative grade point average (GPA) for all college level work must be 2.0 or better. In addition, a 2.0 cumulative college level GPA is required for the last twenty (20) semester hours of a degree program.

EXIT TESTING

Any or all candidates for a degree may be required to take one or more tests designed to measure general education achievement and/or achievement in selected areas as a prerequisite to graduation for the purpose of evaluation of academic programs. Participation in testing may be required for all students, for students in selected programs, or for students selected on a sample basis.

Indebtedness

It is expected that every student will discharge any indebtedness to the College as quickly as possible. No diploma, certificate, or academic transcript will be issued to a student who has not made satisfactory settlement with the Vice President for Business and Finance for all of his/her indebtedness to the College. (A student may be prohibited from attending classes or taking final examinations after the due date of any unpaid obligation.)

Industrial Technology Certificate/AAS Degree Articulation

Industrial Technology Division students who have successfully completed a certificate in one of the division's approved programs (see number 4 below) and who wish to pursue an Associate of Applied Science degree with a major in Applied Technology may receive 32 semester hours of advanced standing credit. Forms are available from either the Records Office or the Industrial Technology Division Office for official conversion of clock-hours to semester credit hours. After completing a Change of Status Form and meeting all admission requirements for degree status, the credit hours are then entered as part of the permanent record. These hours count toward an Associate of Applied Science degree but carry no quality points, do not count in calculation of the grade point average, and cannot be used toward satisfaction of the graduation residency requirements for the Associate degree.

Procedures for admission to the AAS degree in Applied Technology are as follows:

FIRST YEAR:

1. Admission to the Industrial Technology Division. Requirements of the student for admission are:
 - a. be 18 years of age or have a high school diploma or GED.
 - b. take the appropriate assessment test.
 - c. if applying for financial aid, submit official high school transcript or GED scores, or take and pass the Ability to Benefit Test (given by the Testing Center).
2. The student must register for a specific Industrial Technology program and pay the clock-hour fee.
3. The student must successfully complete the program and receive his/her certificate.

SECOND YEAR:

1. The student, after having received his/her certificate, must request a change in status to that of degree seeking student at the Records Office.
2. The student must meet all admission requirements for degree seeking status:

1998-99 GENERAL INFORMATION

- a. provide an official high school transcript or GED scores;
 - b. undergo assessment with the ACT and/or AAPP tests;
 - c. remove Remedial or Developmental deficiencies, if necessary;
 - d. provide official college transcripts, if necessary.
3. The student must provide proper documentation consisting of:
- a. a certificate from Chattanooga State's Industrial Technology Division, granted after January 1, 1983; or
 - b. if the certificate was granted prior to 1983, the student must document competency by scoring no less than one standard deviation below the national mean on the Student Occupational Competency Achievement Test (SOCAT) for the areas in which he/she is requesting credit.
 - c. if the student received a certificate from a vocational/technical school, the student must document competency by scoring no less than one standard deviation below the national mean on the Student Occupational Competency Achievement Test (SOCAT) for the area in which he/she is requesting credit.
- Students who must take the SOCAT examination in order to receive advanced standing credit may be admitted conditionally for a period of one term while they complete competency documentation.
4. The student must then complete 39 semester hours of coursework as specified for the "Applied Technology Major" (see "Career Programs" section of the catalog). *Note: Of these 39 semester hours of coursework, the last twenty (20) hours must be completed at Chattanooga State in order to meet the graduation residency requirements for the Associate degree.*

The following Industrial Technology programs have been approved as concentrations under the Applied Technology major:

Air Conditioning and Refrigeration
Auto Body Repair
Automotive Technology
Diesel Equipment Mechanics
Industrial Electricity
Industrial Electronics
Industrial Maintenance Mechanics
Landscaping and Turf Management
Machine Tool Technology
Marine Engine Technology
Medical Office Assisting
Surgical Technology
Technical Drafting
Welding

Privacy Rights of Students

A. Definitions: Educational Records. "Educational records" is defined as those records, files, documents, and other materials which (1) contain information directly related to a student, and (2) are maintained by Chattanooga State or by a person acting for the College. These records do not include (1) personal notes, (2) records available only to law enforcement personnel, (3) employment records.

Student. A student is any person who is or has been enrolled at Chattanooga State. Wherever "student" is used in reference to personal rights, an eligible parent of a dependent student has similar rights. This "eligible" parent is one who has satisfied Section 152 of the Internal Revenue Code of 1954, and who presents proof of such to the Records Office. Normally, this will be a written affirmation by the student and the parent declaring that the student is a dependent for Federal Income Tax purposes.

Directory Information. "Directory Information" is defined as "the student's name, address, telephone listing, date and place of birth, major field of study, participation in officially recognized activi-

ties and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student." At the time the student registers for courses, the student may notify the Records Office, in writing, that directory information for that student may not be released. This notification is effective only for the semester for which the student is then registered and a new written request must be submitted for subsequent semesters. (This notification must be received within ten (10) days of registration.)

Access. To have access to an educational record is to be allowed to see the original record. It also implies the right to obtain copies of that record.

B. Release of personally identifiable student educational records: Chattanooga State shall not permit access to, or the release of any information in the educational records of any student that is personally identifiable, other than directory information, without the written consent of the student, to any party other than the following:

1. Chattanooga State officials and staff who have legitimate educational interests, including the support of honor societies and academic excellence.
2. Officials of schools in which the student seeks admission.
3. Appropriate persons in connection with a student's application for, or receipt of, financial aid.
4. Federal or State officials as defined in paragraph 99.31 of the regulations concerning this law.
5. State and local officials authorized by state statutes.
6. Organizations or persons conducting studies for, or on behalf of Chattanooga State for the purpose of assisting in accomplishing the College's stated goals, when such information will be used by such organizations or persons and subsequently destroyed when no longer needed for the intended purpose.
7. Accrediting organizations, to carry out their functions.
8. Parents of a student as defined in section 152 of the Internal Revenue Code of 1954 (written consent may be allowed from either of these separated or divorced parents subject to any agreement between the parents or court order). In the case of a student whose legal guardian is an institution, a party representing that institution may have access to the records.
9. In compliance with judicial order or subpoena, providing that student is notified in advance of the compliance, or,
10. Appropriate persons in connection with an emergency if such knowledge is necessary to protect the health and safety of a student or other persons.

Note: With the exception of Chattanooga State officials and staff who have been determined by the College to have legitimate educational interests, all individuals and agencies who have requested or obtained access to a student's record will be noted in a record which is kept with each student's educational record. A request must be in writing stating the purpose of the request. This record will also indicate specifically the legitimate interest that the person or agency had in obtaining the information.

C. Procedure for Accessing Educational Records: The student requests the custodian to allow him/her to pursue the educational record. The student may ask for an explanation and/or a copy of the given educational record. After consultation with the custodian, errors may be corrected at that time by that custodian. Thereafter, if the student believes the record to be accurate in content, he should acknowledge with his signature and the date; if the student believes the record content to be inaccurate, he then may submit a request for an informal hearing before the Appeals Committee. The request, and the challenge, must be presented in writing to the Records Office which will request a meeting of the Appeals Committee. The Appeals Committee Chairperson will

acknowledge receipt of the challenge and notify the student of time and place for the first meeting convenient to the student. The Appeals Committee will convene with the student within forty-five (45) days from the date of the request allowing the student to present relevant evidence, and allowing the student to be represented by an individual of his/her choice at his/her own expense, including an attorney if so desired. The student will be afforded all of his/her rights under Due Process as delineated in the *Student Handbook*. The decision rendered by the Appeals Committee shall be based solely upon the evidence presented at the hearing. The decision must include a summary of the evidence and the reasons for the decision.

Note: This procedure does not provide for a hearing to contest an academic grade.

D. Right of Access Does Not Include:

1. Financial records of parents or any information therein.
2. Confidential letters and statements of recommendation which were placed in the educational records prior to January 1, 1975.
3. Records to which access has been waived by the student. (This applies only if a student, upon request, is notified of the names of all persons making confidential recommendations and, if such recommendations are used solely for the purpose they were intended.)

E. Educational Records may be destroyed except that a student shall be granted access prior to destruction if such is requested.

Probation/Suspension

See "Academic Retention Standards" in this section.

Retention of Records

The Records Office is required to maintain certain student records permanently. However, the following documents will be maintained for only one calendar year after date submitted: Change of Registrations (Drop/Add), Registration forms, and Transcript requests.

Transcripts

An official transcript will be sent to another institution or organization only upon the written request of the student. An unofficial transcript (student copy) may be obtained in the Records Office with proper identification.

Transcript Evaluations

Chattanooga State Technical Community College accepts transfer credits only from colleges or universities accredited by the appropriate regional accrediting agency. A grade of "D" or better is required.

Note: A maximum of three (3) semester hours of transfer credit may be applied toward a technical certificate.

If a student has taken a course at a regionally accredited college but does not have the number of hours required for the equivalent course at Chattanooga State, he/she may be given credit for that course; however, he/she must make up the hour shortage. Approval for course substitution(s) for credit hour make-up must be obtained from the appropriate dean and the Vice President for Academic Affairs. Fractions are not rounded to the next highest number.

Students may validate by examination credits earned at a college not regionally accredited. Examinations are arranged through the appropriate dean. Completed examinations are forwarded to the Vice President for Academic Affairs for approval.

Transcripts will be evaluated only after an official copy has been received from EACH college a student has attended.

Official evaluation must be completed prior to applying for a degree or certificate.

Undecided Majors

Although most students declare a major upon admission to Chattanooga State, some students are "undecided" at that point in their academic careers. Those students may remain in "undecided" status until the end of their freshman year. Upon completion of thirty-three (33) semester hours of college level courses, students must declare a major by completing a Change of Status Form in the Records Office. Students may change their major at any time by using the same procedure.

Students are encouraged to declare a major as early as possible so that their records can be properly evaluated for a particular course of study and they can be assigned to an adviser who specializes in their area of interest. This is especially important if the major is in a transfer program and the student has high school entrance deficiencies which need to be removed.

Video Independent Study Courses

Chattanooga State offers over seventy independent study courses through the Video Instruction Program (VIP). These courses offer the same transferability, course requirements and general content as the courses with the same designation offered through traditional lecture methods. Students in these courses do the course work at home with a minimal number of visits to campus. All courses taught through the program include videotaped materials and a detailed study guide. Materials may be picked up on campus or received through the mail. There is no restriction on the total number of course credits that may be earned through the Video Instruction Program. As with all other courses at Chattanooga State, a student may not enroll for more than 19 hours of credit in any given semester, whether through VIP courses alone or through a combination of VIP courses and on-campus courses, without special permission. For more information about the program, contact the Learning Resources Center.

Withdrawal from College

A release from enrollment from all classes becomes official only after completion of an official withdrawal form in the Records Office. Failure to attend class or discontinued attendance is NOT considered an official withdrawal. Failure to withdraw officially will result in the student's receiving a failing grade for the course(s) involved and may jeopardize eligibility to re-enroll in subsequent terms.

The consequences of completely withdrawing from school depend on when the student withdraws. For more information on deadlines and consequences, see "Change of Registration (Add/Drop)." For specific deadline dates for a given term, see the student calendar published by the Records Office.

Note: Students are encouraged to explore all options in order to complete their courses. It is strongly recommended that students confer with a counselor in the Counseling Center for assistance in identifying resources or strategies which may enable them to persist.

Notification to Students Regarding Testing as a Degree Requirement

Any or all students may be required to take one or more tests designed to measure general education achievement and/or achievement in selected areas as a prerequisite to graduation for the purpose of evaluation of academic programs. Participation in testing may be required for all students, for students in selected programs, or for students selected on a sample basis.

Exit exams must be taken before the Records Office can post the degree or issue a diploma. Until the degree is posted, a student is not considered to have graduated.

Financial Information

Fee Policy

All fees are payable in full when the student registers or pre-registers. Registration is not complete until fees are paid or when the initial minimum payment under the deferred payment plan has been paid. The Tennessee Board of Regents reserves the right to change fees. Fees for 1997-98 were as follows.

Fee Schedule

The estimated fee schedule per academic semester for credit students is:

Cost Per Semester Hour	In-State	Out-of-state*
Maintenance Fee	\$ 48.00	\$ 48.00
Tuition		142.00
Total Per Semester Hour	\$ 48.00	\$ 190.00
Maximum Charge		
Maintenance Fee	\$543.00	\$ 543.00
Tuition		1,628.00
Maximum Maintenance & Tuition Per Student	\$543.00	\$2,171.00

Note: The regular maintenance fee and tuition, not to exceed the maximum, will be charged for repeating a course for which a grade of "E" has been received in a previous term.

Industrial Technology Division fees for 1997-98 are \$300 per semester for full-time and \$180 per semester for part-time.

**Out-of-state residents who work full-time in Tennessee may attend classes part-time at in-state maintenance fee rates, upon completion of an out-of-state employment form. This form must be completed for each term of enrollment before registering for classes.*

Fees Charged in Addition to Maintenance and Tuition

Application Fee — \$10.00. Non-refundable. This is a one-time fee paid by an individual who applies for admission to the College.

Changes of Course or Section Fee — \$5.00 per form. Non-refundable. If the change is caused by the College, there will be no charge for the change.

Credit by Examination Fee — The regular course fee is charged for each special examination and must be paid prior to taking the examination. Non-refundable. (See Academic Regulations.)

Assessment Fee for Experiential Learning — \$45.00.

Experiential Learning Credit — \$15.00 credit hour in excess of 3.0 credit hours. \$90.00 maximum.

Graduation Fee — \$25.00. Non-refundable.

Placement Test Fees — ACT - \$19.00.

Refer to section on Admissions Policy.

Handicapped Parking Violations — \$100.00 for each offense.

Parking Violations — No registration decal: \$10.00.

Parking in wrong area: \$10.00.

Campus Access Fee — \$6.00 per semester per student.

Student Activity Fee — \$12.00 per semester.

Special Course Fees — In courses using facilities for which the College must pay, such costs will be assessed as a laboratory fee in the appropriate amount.

Private Music Fee — \$55.00 per semester hour. This fee is charged for all individual instruction music classes.

Technology Access Fee — \$2.00 per credit hour or a maximum of \$25.00 per semester for credit courses. \$20.00 per semester for Industrial Technology courses.

VIP Fee — \$5.00 per video class.

Late Registration Fee — \$10.00. This fee will be charged during the entire period of late registration. The effective date of the late registration fee will be determined by the College.

ID Card Replacement Fee — \$2.00 per replacement. Non-refundable.

GED Testing Fee — \$25.00.

Dental Lab Fees

14 years of age or above (prophylaxis)	\$10.00
Under 14 years (prophylaxis)	\$ 5.00
Fluoride	\$ 2.00
X-Rays	\$10.00
Bite-wings (x-rays)	\$ 4.00
Sealants	\$ 3.00
Periodontal fee to be determined.	

Returned Check Fee — \$20.00.

Child Development Center Fees

Monthly Rates	Full-time	Part-time
6-24 months	\$300.00	\$230.00
2-4 years	\$275.00	\$215.00
4 years & up	\$260.00	\$200.00

Fees exclude five (5) holidays and the Christmas break.

Refund Policies*

No refunds will be made during the period between registration and first day of class! 75% of fees will be refunded for drops or withdrawals for a period of 14 calendar days beginning with and inclusive of the first official day of classes or within an equivalent period for a short term course. 25% of fees will be refunded following expiration of the 75% period, for a period of time extending 25% of the time period covered by the term. No refunds will be made beyond the 25% period.

100% of fees will be refunded for classes cancelled by the College.

100% of fees will be refunded for drops or withdrawals prior to the first day of class for the regular academic term and prior to the beginning of summer term and intersession classes.

100% refund in case of the death of a student occurring anytime during the term.

**Under extenuating circumstances, the Vice President for Academic Affairs, at his/her discretion, may grant an exception to these policies. Requests for exceptions should be submitted in writing, along with supporting documentation, directly to the Vice President for Academic Affairs or his/her designee.*

STOPPING PAYMENT ON A CHECK DOES NOT CONSTITUTE PROPER WITHDRAWAL

Dishonored Checks

Checks tendered in payment of fees are normally deposited immediately by the College and should be drawn only against accounts with sufficient balances. Every effort will be made to collect on checks dishonored for any reason. A \$20.00 fee will be charged for dishonored checks.

A STUDENT IS NOT REGISTERED UNTIL ALL FEES ARE PAID

Books and Supplies

Books and supplies may be purchased in the College Bookstore. Costs vary with programs of study from a few dollars for a single textbook to a first semester cost of \$200.00 for some technical programs. In the health science programs, the initial cost of the uniforms, instruments, insurance, and textbooks can approximate \$300.00. In the Advertising Arts Program, the initial cost of supplies can cost approximately \$200.00–\$250.00 in the first semester. In the Dental Hygiene Program, dental instruments are estimated to cost \$420.00.

Financial Aid

Chattanooga State extends specific individual aid to those students who, without such additional help, would be unable to continue their education beyond high school. This coordinated program of individually tailored help includes merit scholarships, work scholarships, part-time employment, low-interest student loans, Federal Supplemental Educational Opportunity Grant, Federal Pell Grant, and Tennessee Student Assistant Grant.

Current and prospective students seeking information or counseling on financial aid are encouraged to write or visit the College's Financial Aid Office.

Applicants seeking financial aid should request the Free Application for Federal Student Aid (FAFSA). Results of this confidential form assist in evaluating each applicant's need on an impartial basis. All applications for financial assistance should be completed and submitted by the July 1 priority date.

All students seeking financial aid must have obtained a high school diploma or GED (General Education Diploma), or have passed an Ability to Benefit (ATB) test.

QUALITY ASSURANCE PROGRAM

Chattanooga State participates in the Department of Education's Quality Assurance Program. The mission of the Quality Assurance Program is to assure that the delivery of student aid funds is conducted accurately, expediently, and with integrity. Institutions are empowered to examine current processes and develop new approaches that seek the highest quality standards, while demonstrating a commitment to the needs of the student.

Scholarships

CHATTANOOGA STATE ACADEMIC PERFORMANCE SCHOLARSHIP

These scholarships are awarded annually to entering freshmen who are classified as in-state for fee payment purposes and who graduated in the upper 25% of their senior class with a minimum cumulative GPA of 2.9. These students must be enrolled for 12 credit hours. The scholarship waives the maintenance fees and provides an allowance of \$150.00 for books and supplies. In return, the student is required to complete a work assignment as mandated by the Tennessee Board of Regents. This scholarship will be renewed for a second year if the student completes the work obligation, successfully completes twenty-four credit hours and maintains a cumulative grade point average (GPA) of 2.5 with no semester below 2.5.

Although priority for this scholarship is given to entering freshmen, these awards are available for continuing students. To be eligible, the student must be classified as in-state for fee payment purposes, have successfully completed at least 12 semester hours and have a cumulative grade point average of 2.5 or higher. A student may count transfer hours from an accredited postsecondary institution toward the 12-hour requirement. However, the student may not have a bachelor's or an associate degree. Applications are available in the Financial Aid Office.

All students receiving aid under the Academic Performance Scholarship program should report to the same assignment each semester if the student has maintained satisfactory progress. New awardees will receive work assignments in the mail once the award has been accepted.

CHATTANOOGA STATE FOUNDATION SCHOLARSHIPS

The Chattanooga State Foundation provides scholarships through a fund endowed by area businesses, industries, and individuals. Scholarships are awarded annually to Chattanooga State students who qualify. To qualify a student must:

- Complete a scholarship application.
- Declare a major and seek an associate degree in the program where the scholarship applies.

- Have a minimum of a 2.9 high school grade point average or a minimum GED score of 285.
- A composite score of 19 on the ACT (students under age 21). AAPP test scores should be college level in both English and Reading and at a minimum of the 081 level in Mathematics (students over 21).
- Recipients must meet all criteria specified by the scholarship, including the minimum grade point average and number of attempted hours successfully completed.

Scholarship applications are available in the Financial Aid Office.

THE MINORITY GRANT

The African American and Native American Grant is available to first-time freshmen with a minimum high-school grade point average of 2.0. Currently enrolled/continuing students and transfers with a minimum semester and combined/cumulative grade point average of 2.5 will be awarded on a funds available basis. Students must enroll at least half-time and satisfactorily complete attempted hours (no I's, E's, F's or W's). Students may not have a bachelor's or an associate degree.

OTHER SCHOLARSHIPS

A number of local businesses, civic and professional organizations, and Chattanooga State organizations award scholarships annually to Chattanooga State students. They are usually based on academic excellence, leadership and other outstanding qualities of the student. For information, contact the Financial Aid Office.

Many companies also sponsor programs for their employees by paying their fees. Employed students are encouraged to check with their employers about tuition-refund programs.

Federal Financial Aid

FEDERAL PELL GRANT

This grant is awarded to students with financial need who are enrolled in an eligible program and who do not already have a bachelor's degree. The amount of the grant varies depending on financial need, cost of education and enrollment status.

The Financial Aid Office offers assistance to students to help them with their financial aid paperwork. Beginning February 1st of each year, the Financial Aid Office will begin accepting the student's completed FAFSA. The Financial Aid Office can process the student's FAFSA in 7 to 10 working days instead of the previous 4 to 6 weeks. The student will be notified after this time of the financial aid award. Additional information may be necessary for complete processing and before awarding of financial aid may be possible.

To take advantage of this program, the student must have already made application for admission to Chattanooga State. The student must also submit the completed FAFSA with all signatures required.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)

This grant is awarded on a limited basis to students with exceptional financial need who are enrolled in an eligible program. This grant is available only to those students who do not have an undergraduate degree.

TENNESSEE STUDENT ASSISTANCE AWARD (TSAA)

This grant is available to residents of Tennessee with demonstrated need who are enrolled or have been accepted for admission as a student at an eligible institution in Tennessee. TSAA awards change each academic year. Students will be notified of the amount of the award by T.S.A.C.

A student may receive the Tennessee Student Assistance Award for a maximum of four semesters.

FEDERAL WORK STUDY PROGRAM

This program is designed to assist students in meeting their cost of education by providing part-time work opportunities. At Chattanooga State, work study positions are on and off campus. Hours worked per week are determined by the student's Federal Work-Study award and class schedule for a particular semester. Students must be enrolled on at least a half-time basis. To apply, complete the Free Application for Federal Student Aid (FAFSA) and an application for student employment. Beginning salary is minimum wage. New awardees will be contacted about job placement.

Federal Family Educational Loans

FEDERAL SUBSIDIZED STAFFORD LOAN

This need based program enables students enrolled at least half-time to borrow from a bank, credit union, or lending institution for educational expenses. The student *may* borrow up to \$2,625 as a freshman, \$3,500 as a sophomore, per academic year at a variable rate for new borrowers. Students must complete the FAFSA and other forms as requested before a Federal Stafford Loan application will be processed. Loan applications may be obtained in the Financial Aid Office or any lending institution. First-time student loan borrowers who are first year undergraduates will not be able to receive the first disbursement of the loan proceeds until thirty (30) days after the first day of class. At the time of check release, the student must be still enrolled and maintaining satisfactory progress. Repayment of the Federal Stafford Loan begins six (6) months after graduation or withdrawal from school. All Federal Stafford loans are multiply disbursed.

FEDERAL UNSUBSIDIZED STAFFORD LOAN

The unsubsidized Federal Stafford Loans are for middle-income borrowers who do not qualify for federal interest subsidies under the Federal Stafford Loan program. The student may borrow up to \$2,625 as a freshman and \$3,500 as a sophomore per academic year at a variable rate. Students must complete the FAFSA and other forms as requested before an Unsubsidized Federal Stafford Loan application will be processed.

The combination of Subsidized and Unsubsidized Federal Stafford loans for a borrower may not exceed the annual and aggregate limits for loans under the Federal Stafford Loan program.

FEDERAL PLUS LOANS

This program enables the parent of a dependent student enrolled on at least a half-time basis to borrow from a bank, credit union, or lending institution. The parent may borrow up to the cost of attendance, less other aid per academic year. The interest rate is variable. The parent must begin repayment within 60 days. FPLUS applications may be obtained in the Financial Aid Office or any lending institution. Checks from FPLUS are co-payable to the institution and the parent borrower.

LOAN INFORMATION

- As a preventive measure to reduce default on student loans, the federal government requires all first time borrowers to attend an Entrance Interview (even if one was attended at another school) before the first check can be disbursed.
- For students who are receiving a Federal Stafford Loan for the first time at Chattanooga State, Federal regulations require the school to delay delivery of Federal Stafford loan funds until thirty days after classes begin. Students who fall into that category will be notified by mail.
- All Federal Stafford Subsidized and Unsubsidized loans are mandated by federal regulations to have two disbursements—the beginning and midway of the semester for one term loans; and the beginning of each semester for two term loans.

Financial Aid Policies and Procedures

The following information explains policies and procedures regarding financial aid awards. All students are responsible for knowing their rights and responsibilities as financial aid recipients. Students should review this information carefully and make inquiries about any item that is unclear.

YOUR AWARD NOTIFICATION

When you receive your award letter you should:

- Read it carefully. (Review your awards.)
- Contact the Financial Aid Office for an appointment if you would like to discuss your award.

HOW YOUR AWARD WAS CALCULATED

You were awarded based on the following factors:

- Your financial need, based on information provided on the FAFSA.
- Your timely submission of all documents needed to complete your file.
- The availability of funds.

REGISTRATION

Keep in mind that:

- Payment of fees is the student's responsibility.
- Students who have been awarded financial assistance will be allowed to charge tuition and fees if they have registered in a degree program.
- Students enrolled as "Special" or in a technical certificate program are **not** eligible for financial aid.

REMEMBER!

- Financial aid has been awarded at a full time status and will be pro-rated if enrollment status is different through the Census Date.

INSTITUTIONAL WORK PROGRAM

Students who are interested in working on campus should complete an institutional work program application and return it to Financial Aid. Students will be notified of placement as soon as possible.

DEFAULT LOANS/REPAYMENTS

No financial assistance will be paid to a student who owes a repayment on any grant or loan, who is in default on any loan, and/or who has borrowed in excess of the loan limits, under Title IV programs, at any institution.

CASH MANAGEMENT

All students receiving Federal Financial Aid will be required to sign and submit a Cash Management Statement to the Financial Aid Office before money will be released to the student.

Financial Aid Repayment Policies

Chattanooga State and the Title IV Financial Aid Programs consider 6–8 credit hours as half-time, 9–11 credit hours as three-quarter time and 12 credit hours or more as full-time. Financial aid monies will be adjusted through the Census Date. If a student drops a class during this time frame, the student may be required to repay Federal Pell monies given for the dropped class. If a student adds a class during this time frame, Financial Aid may adjust Pell monies for this class. After this time period no adjustments will be made.

REFUND

The College will refund to a student who officially withdraws or is dismissed, any unused portion of the maintenance, tuition, and/or laboratory fees. To be eligible for this refund a written notice of withdrawal or dismissal must be presented to the Records Office. The refund is computed in the following manner:

REFUND PROCEDURES — 75% of fees will be refunded for drops or withdrawals for a period of 14 calendar days beginning with and inclusive of the first official day of classes or within an equivalent period for a short term course. Twenty-five percent of fees will be refunded following expiration of the 75% period, for a period of time extending 25% of the time period covered by the term. No refunds will be made beyond the 25% period.

Students on Title IV Financial Aid (Pell Grant, SEOG and Loans) will not receive refunds until funds representing financial aid awards have been applied to the respective accounts. Funds returned to the Title IV programs may not exceed those disbursed from that program.

The following formula is used to determine the portion of the refund that must be returned:

$$\text{Chattanooga State refund} \times \frac{\text{Title IV aid}^*}{\text{Total aid}^*} = \text{Amount Returned to Title IV programs}$$

*Minus college work-study earnings

In the event the direct costs were paid totally from one account, only that account would receive credit for the refund.

All refunds for students receiving only the Stafford Loan will be made to the responsible lending institution.

PRO-RATA REFUND

Pro-rata refund calculations apply for any student who:

- is a first time student. (Preliminary guidance at this time is that a "first time student" is one who is enrolled for the first time at *this institution*. It does include transfer students.) The designation as a "first time student" will probably last until the end of the student's first term at CSTCC.
- withdraws up to the 60% point in time for which the student was charged.
- received Title IV aid.

If all of the above conditions apply to the student, the institution shall perform a pro-rata calculation using the following steps:

1. Determine the pro-rata percentage using the statutory formula $\frac{\text{\# of weeks remaining in the period for which the student was charged}}{\text{\# of weeks in the period for which the student was charged}}$ or $\frac{\text{\# of clock hours remaining in the period for which the student was charged}}{\text{\# of weeks in the period for which the student was charged}}$
2. Determine the total charges assessed the student for the period charged (No answer on whether or not to include bookstore charges at this time.)
3. Multiply the percentage (X) the total charges assessed to arrive at a preliminary refund amount
4. Subtract from this preliminary amount
 - unpaid charges owed by the student for the period, AND
 - an administrative fee of the lesser 5% of tuition, fees, room and board, and other charges assessed, or \$100 maximum.
5. Apply the distribution formula in 668.22 to determine how much of the refund goes back to Title IV

$$\text{REFUND} \times \frac{\text{Title IV Aid Awarded (minus FWS)}}{\text{All Aid Awarded (minus work earnings)}}$$

6. Allocate the specified Title IV amounts back to the Title IV programs

The HEA specifies the order in which monies will be refunded to Title IV. The institution will credit refunds in the following order:

- a. FFEL programs (the Part B loans)
- b. Pell
- c. SEOG
- d. Other Title IV assistance
- e. Student

REPAYMENT

All students receiving Title IV Funds may be required to repay a portion of their semester funding should they withdraw from classes. The amount of the repayment will be based on the following formula:

$$\text{Total Repayment or Over-payment} \times \frac{\text{Total amount of Title IV aid (minus FWS earnings and Stafford/PLUS loans and Byrd Scholarships) awarded for the payment period}}{\text{Total amount of aid from all sources (minus all work earnings and Stafford/PLUS loans) awarded for the payment period}} = \text{Amount to be returned to Title IV programs}$$

*Expense money – Money given directly to the student after tuition, 50% of books and supplies are deducted.

ALLOCATION POLICY

Funds will be returned to the federal aid program charged, not to exceed the amount awarded. If more than one account is charged, the repayment distribution priority will be:

1. Pell
2. SEOG
3. FFEL programs
4. Other Title IV assistance
5. Scholarship

Appeals

Any termination of financial assistance that occurs as a result of our policy may be appealed by the student when he/she feels that there are mitigating circumstances involved. This appeal should be in writing to the Financial Aid Appeals Committee.

Policies and Procedures of Financial Aid Appeals Committee

1. The purpose of the appeals committee is to allow the students to document their case when they have been terminated from financial aid because of failure to make satisfactory progress.
2. Any student terminated from financial aid has the right and privilege to appeal that decision.
3. The decisions of the Financial Aid Appeals Committee can be appealed to the Director of Financial Aid.
4. The Financial Aid Appeals Committee is scheduled to meet before classes begin and throughout the semester at called meetings as the need demands.
5. Students are encouraged to submit in writing, any significant circumstances that would effect their ability to make satisfactory academic progress.
6. Consideration will be given to a student's illness or hospitalization, death in family, or other exceptional mitigating circumstances which can be documented.
7. Any appeal that is approved is applicable for only one semester.

Satisfactory Academic Progress Standards

Satisfactory academic progress is reviewed and monitored when grades are posted for each semester of attendance. Satisfactory academic progress standards are outlined below.

DEGREE SEEKING STUDENTS

Qualitative Standards

Financial aid recipients must maintain the following cumulative grade point average:

Cumulative Quality Hours	Required Quality GPA
0.0 – 14.0	No Minimum
14.1 – 26.0	1.4
26.1 – 33.9	1.7
34.0 and above	2.0

Quantitative Standards

Students must successfully complete a minimum of 67% of all credit hours attempted. This minimum percentage is based on passing grades. I's, E's, F's, W's (of any kind), and audits do not count as passing grades. Students' percentages are evaluated at the end of each semester. A student who is unsuccessful in completing 67% of the semester credit hours attempted will then be reviewed for cumulative percentage. If a student's cumulative percentage of completed courses is below 67%, then the student will be ineligible for financial aid until the 67% completion rate is obtained.

Time Frame

Students pursuing an associate degree who have attempted more than 102 credit hours, excluding 30 remedial hours, will be ineligible for financial aid. All credit hours (minus up to 30 remedial/developmental credit hours) attempted are counted to reach the 102 credit hour maximum. Credit hours which were transferred from another institution **will** be counted in the 102 credit hour maximum. In addition, students seeking a **second** associate degree from Chattanooga State **will** have credit hours taken for the first associate degree program counted towards the 102 time frame.

Appeal Process

Students who are ineligible for financial aid will be notified in writing. The student may appeal if there were **unusual** circumstances which led to the student's failure to meet satisfactory academic progress. Appeals are usually reviewed within one week by the Financial Aid Appeals Committee. The student will receive written notification of a decision within two weeks. If a student has not received written notification, he/she should call the Financial Aid Office to determine if a decision has been reached or if the committee needs additional information.

Academic Fresh Start

Former students returning to Chattanooga State who have not attended Chattanooga State or any other institution for a period of four years and who, upon re-enrolling, maintain a 2.5 cumulative grade point average after completing 15 hours of college level work, may petition to have grades on all prior course work disregarded in calculating cumulative grade point average.

INDUSTRIAL TECHNOLOGY STUDENTS

Industrial Technology Division students seeking Financial Aid must be able to demonstrate an ability to benefit from the vocational training. This may be demonstrated by:

1. Having obtained a high school diploma, or
2. Having passed the (GED) General Education Diploma, or
3. passing the Ability to Benefit Test (administered through the Chattanooga State Testing Center).

Qualitative Standards

- The student must receive an "S" (satisfactory) in programs which are graded on the basis of student progress. Students enrolled in programs where letter grades are received must receive passing grades (No I's, F's, W's).
- A grade of "U" (unsatisfactory), "W" (complete withdrawal), or "F" (failing) will cause the student to be ineligible.
- Students must be enrolled for a minimum of 30 clock hours per week to be considered for financial aid.

Quantitative Standards

Chattanooga State defines all Industrial Technology programs as one academic year in length (except Cosmetology, which requires more than one year to complete the minimum number of clock hours required for graduation). However, because these are competency based programs, some students may need to complete additional clock hours in order to achieve the level of competency required for the certificate.

An Industrial Technology student must complete 91% of the scheduled hours for which the student enrolls in order to remain eli-

gible for subsequent financial aid payments. Only excused absences as defined in Industrial Technology's "Academic Retention/Attendance Policies" are allowed. Unexcused absences, as well as excused absences in excess of the allowed 9%, must be completed before the student will be eligible to receive aid in future payment periods.

Time Frame

The maximum time frame for an Industrial Technology student to receive financial aid is 1.5 times the number of clock hours needed to complete a certificate. This is a combined total of all programs attended.

EXAMPLE: 1290 clock hour program X 1.5 = 1935 clock hours

Appeal Process

- Any student whose financial aid has been terminated may submit an appeal to have financial aid re-instated.
- Financial Aid Appeal Forms may be obtained in the Financial Aid Office. All appeals will be reviewed by the Financial Aid Appeals Committee. Supporting documentation should be submitted with the form to aid in the committee decision. The student will receive written notification of the committee decision.
- If the appeal is denied, eligibility may be re-instated by completing any subsequent term at the student's own expense. In this term, the student must attend the required number of clock hours and receive a passing grade.

Other Financial Aid Sources**VETERANS BENEFITS**

The Veterans Administration provides benefits for both veterans who have served on active duty and for children, spouses, or survivors of disabled or deceased veterans whose disability or death was service-connected. For information, contact the Records Office at Chattanooga State or the Regional Veterans Office in Nashville.

JOB TRAINING PARTNERSHIP ACT PROGRAMS

The Southeast Tennessee Private Industry Council (PIC) and the Tennessee Board of Regents Office of Job Training support JTPA programs at Chattanooga State. Services include tuition support for dislocated workers training for new careers, economically disadvantaged individuals, and public assistance recipients in career education programs.

MILITARY ASSISTANCE

The Military provides financial assistance in the form of ROTC tuition scholarships, as well as student loan forgiveness. Contact your local military recruiter for more information.

SOCIAL SECURITY

Determination of eligibility and amount of assistance is handled by the Social Security Administration. Contact should be made with the local Social Security Office in your area.

VOCATIONAL REHABILITATION

Students who have occupational handicaps may be eligible for financial assistance through the Tennessee Department of Vocational Rehabilitation. Contact your local Vocational Rehabilitation Office to arrange an interview.

EMPLOYMENT BENEFITS

Many companies include financial assistance for education in their fringe benefits packages. Check with your employer to see if you may be eligible for financial assistance or tuition reimbursement.

Continuing Education and Corporate Services

The Division of Continuing Education

Chattanooga State offers educational opportunities that are supplemental to the college-level credit classes through the Division of Continuing Education. Short-courses, teleconferences, certification classes, and on-site training for business and industry are among the services provided through Continuing Education, 634-7700.

Corporate Services

The Corporate Services area of Continuing Education serves the needs of area business and industry through workforce development programs. Customized training is formulated and managed by the Corporate Services staff to fulfill specific requirements of area employers. Chattanooga State has facilitated training in a variety of areas, including Total Quality Management (TQM), inventory control, and supervisory skills for scores of companies in the College's six-county service area. Much of the corporate training takes place on the job site. In addition, on-campus classes are available for skill enhancement in AutoCAD and other computer software.

The Continuing Education Unit (CEU)

Continuing Education courses are offered at many sites in the College's service area. The Continuing Education Unit (CEU) is a

nationally recognized method for measuring and recording participation in continuing education programs that do not carry credit toward a degree, but do meet established administrative criteria outlined by the Southern Association of Colleges and Schools. One CEU may be awarded for every 10 hours of successful participation in an organized continuing educational activity under responsible sponsorship, capable direction, and qualified instruction. A certificate can be issued to acknowledge the successful completion of a program, or an official transcript can be provided to the participant or employer.

Through Continuing Education, area residents can take art classes at the Hunter Museum, improve communication skills, learn a foreign language, research their family genealogy, learn to play a musical instrument, or participate in other stimulating short-courses.

WorkKeys Service Center

Chattanooga State has established a WorkKeys Service Center to provide job profiling and analysis, skill assessment, and WorkKeys skill development training for area employers. WorkKeys, a workforce development program of American College Testing, is designed to help employers match the skills of potential or current employees to those required for satisfactory performance in specific jobs. Once gaps in skills needed are identified, Chattanooga State can deliver effective training programs targeted to bridge the skills gap.

Disabilities Support Services

Disabilities Support Services is located on the second floor of the Student Center. Included in these services is the Deaf and Hard of Hearing program, Adaptive Computer Lab and services for general disabilities.

The purpose of these services is to insure that all students with disabilities receive the support services needed for academic success when these services are reasonable and do not incur undue hardship on the college. Services include:

- Guidance related to matters of disability to faculty, staff and outside agencies
- Assistance to students with disabilities with class registration and parking permits
- Arrangements for testing if required
- Tutoring services
- Vocational Rehabilitation referrals
- Academic and auxiliary aids such as readers, scribes for dictation, and note taking purposes

Adaptive Computer Lab

The Adaptive Computer Lab, located on the second floor of the Student Center, provides assessment of the needs for adaptive computer assistance for persons who are blind, deaf and hard of hearing, learning disabled, or who have mobility problems. It provides training and equipment for students with disabilities who need to use adaptive computer equipment.

The Deaf and Hard of Hearing Program

Chattanooga State Technical Community College offers a program for deaf and hard of hearing students to enhance their job opportunities. It is the only full service post-secondary program for Deaf and Hard of Hearing people in the state. Program staff consists of a PEC coordinator, who is a specialist, and interpreters. The office is located on the second floor of the Student Center Building.

The Deaf and Hard of Hearing Program provides the following services:

- Accessibility & Support Services
- Interpreter in the Classroom
- Note-takers
- Special Tutoring as Needed
- Counseling
- Instructor for the Deaf
- TTY by Public Phone
- TTY Loans to Students
- Caption TV Services
- Assistive Listening Systems
- Association of the Deaf Students
- Community Education
- Workshops for the Deaf Community
- Cooperation with Regional Services for the Deaf
- Gallaudet University Entrance Exam

ADMISSION REQUIREMENTS

Tennessee and neighboring state residents who are deaf or hard of hearing may enroll in a certificate or associate degree program in a variety of career, technical, vocational, or public service programs. Admission to the Deaf and Hard of Hearing Program is open to any deaf person who has graduated from an accredited high school (regular diploma) or who has successfully completed the GED. To qualify, the student must meet all requirements for admission to Chattanooga State (see the "Admission" section) **and** must furnish evidence of a significant loss of hearing that would make it difficult to fulfill his/her college potential without supportive services offered by the program. The student's transcript from an institution for the deaf would be sufficient evidence, as would documentation of receipt of financial assistance based on a hearing disability from the Division of Vocational Rehabilitation, the Veterans Administration, or the Social Security Office.

Note: Even though they may be receiving assistance from any of the agencies mentioned above, deaf and hard of hearing students should also apply for financial aid at Chattanooga State's Financial Aid Office.

PREPARATORY PROGRAM

The Developmental Studies Program assists deaf students in

1998-99 GENERAL INFORMATION

developing improved basic English, reading, math, and study skills before moving into advanced courses. Based on the results of the Academic Assessment and Placement Program (AAPP), a student would be placed into either developmental or college-level courses.

Remedial/Developmental Course Sequence

First Semester

EN	070	Basic/Developmental Writing
RE	070	Basic/Developmental Reading
MA	070	Basic Mathematics
PY	081	Psychology of Learning

Second Semester

MA	080	Elementary Algebra
EN	081	Developmental Writing
RE	081	Developmental Reading: Reading Analysis and Reasoning

Third Semester

MA	081	Intermediate Algebra
----	-----	----------------------

Appropriate college level courses may be taken along with developmental courses during any semester.

Industrial Technology

Remedial/developmental courses may be required for Industrial Technology students based on the appropriate admissions test.

MA	000	Developmental Mathematics for Industrial Technology Programs
RE	070	Basic/Developmental Reading

Distance Learning Program

The Distance Learning Program offers 75 to 90 percent of the courses needed for the Associate of Arts or Associate of Science degree. In addition, a distance learning degree path has now been approved by the Tennessee Board of Regents for the Associate of Applied Science degree. With the exception of the Advanced Placement component in the Emergency Medical Care concentration, all three concentrations in the Fire Science Technology major—Fire Suppression, Emergency Medical Care, and Emergency Service Supervision & Administration—may be taken almost entirely by distance learning.

Some students take distance learning courses from their homes or offices via computer modem. Other students take televised independent study courses via either the Community Education channel of the Chattanooga Cable Television Company or the College's Video Instruction Program. Students in the VIP Program receive their instruction via videotaped lessons sent to them in their homes. With few exceptions, students may take these courses at home with minimal trips to campus. Some courses taught via VIP have been professionally produced. Others have been developed on campus. Whether transmitted by computer, television broadcast, or VIP, the courses taught through these modes reflect the same course content and transferability as on-campus courses. All courses have an assigned faculty facilitator. Requirements for enrolling in and completing these courses are the same as for on-campus courses.

The Division of Engineering & Environmental Technology, the Business and Community Development Center, and the Distance Learning Program offer selected training courses and certificates to employees in businesses and industries through a combination of distance learning technologies and hands-on laboratory experiences. This arrangement makes it possible for personnel who cannot easily leave the plant to take courses on campus to receive the training they need in their own locale. At present, the available training programs focus on mechanical maintenance and electrical fundamentals. However, during the academic year the number and scope of offerings are expected to increase significantly. For more information about this learning opportunity, call the Business and Community Development Center at 697-4720.

HOUSING AND TRANSPORTATION INFORMATION

There are no dormitories on the campus; however, some assistance in locating private or public housing is provided by the staff of the program. For the students who do not have their own transportation, a public bus system serves the college. For apartment listings with bus routes information and map, contact the Coordinator of the Deaf and Hard of Hearing Program.

For more information about the Deaf and Hear of Hearing Program, contact the office of Disabilities Support Services: Voice/TTY (423) 697-4452.

Emergency Medical Assistance

Emergency medical assistance is coordinated by Disabilities Support Services, which is located on the second floor of the Student Center.

- First aid is available in the Emergency Medical Assistance first response office 9:00 a.m.–3:00 p.m. Monday through Thursday and 9:00 a.m.–1:00 p.m. on Friday. The telephone number is 697-4236.
- The campus Security Office provides emergency medical services 24 hours, Monday through Friday and on weekends at 697-4467.
- Emergency medical action plans and evacuation plans are posted on bulletin boards throughout the campus.

The Distance Learning Program offers a wide variety of courses from a number of disciplines, and the number of courses increases each year. For more information on specific offerings in any given semester, call the Distance Learning Center (423) 697-4408 and request an information packet.

Students who pursue independent study should be mature, well-motivated, and highly disciplined. While courses taken by these methods may be more convenient than courses offered by more traditional means, they may prove to be more difficult.

Students enrolled in VIP courses may elect to pick up their materials in room 206 of the Instructional Materials Center, or they may have them mailed directly to their home. If materials are not picked up by the beginning of classes, they will be mailed during the first week of classes. Students who choose to receive materials by mail should be sure that the correct address is on the computer file in the Records Office. If materials are not received by the middle of the second week of classes, students should call the Distance Learning Program office at 697-4408.

Teleconferencing Services at Chattanooga State

Chattanooga State Technical Community College is a leader in the delivery of education through distance learning technologies. Those interested in college-level credit classes should explore the options available for independent learning through the VIP Program. Not-for-credit educational teleconferences are frequently held at Chattanooga State. The college has multiple down-link capabilities to bring an array of interactive satellite-delivered programs. Recent teleconferences topics have included sexual harassment, InterNet use, managing diversity, critical thinking skills, and small business management.

Chattanooga State also supports a complete video production capability, including origination of satellite-delivered programs. This service is available on a fee basis for appropriate projects of community benefit.

Families First Program

Chattanooga State offers limited financial assistance for short term training, counseling, career planning, placement, and referral services for qualified applicants under a contract with the Tennessee Department of Human Services in operation of the Families First

program. Individuals who receive Aid to Families with Dependent Children (AFDC) may qualify for education and occupational training assistance through Families First.

Instructional Materials Center

Testing Center

The Testing Center provides a wide range of services to both the College and the community. The center offers regularly scheduled tests, tests by special appointment, and unscheduled tests. In addition, through its CLEP program, the center provides an avenue by which a person may gain college credit for prior learning.

REGULARLY SCHEDULED TESTS

- Academic Assessment and Placement Program (AAPP)
- ACT Residual Test
- General Educational Development (GED)

EXAMINATIONS SCHEDULED BY SPECIAL APPOINTMENT

- California Achievement Test for LPN Program
- College Level Examination Program (CLEP)
- Dental Assisting National Board
- National League for Nursing (LPN Mobility)
- National League for Nursing (RN Program)

UNSCHEDULED EXAMS

- COPS Career Inventory
- Make-up Examinations
- Strong Interest Inventory
- 16 PF Personality Profile

Developmental Studies

Chattanooga State is committed to helping its students succeed. As a result of this commitment, the Developmental Studies Program offers foundation courses in English, mathematics, reading and Psychology of Learning for students who need additional preparation for college level courses. One of the initial keys to success is beginning at the appropriate level. According to the Tennessee Board of Regents (TBR) Guidelines, students are required to take specific courses based on the Academic Assessment and Placement Program (AAPP) test scores. These courses are designed to provide students with the competencies necessary for college work. Through small classes and a competent, caring faculty/staff, significant efforts are made to assist the student in obtaining the required competencies.

All courses in the Developmental Studies Program are designed as one-semester courses. However, provisions are made for students to progress through English, mathematics, and reading courses at different rates. For instance, some students need two semesters for the completion of a course, while others may be able to progress at a faster pace than the regular class. Upon recommendation of the instructor, arrangements can be made to accommodate students who progress at different rates.

POLICY AND PROCEDURES FOR STUDENTS IN DEVELOPMENTAL PROGRAMS

- **MANDATORY ASSESSMENT**
Students must undergo AAPP assessment prior to enrollment in any developmental studies course. This policy also applies to special, transfer and transient students; to students with revised placement from a college-level course to a developmental level course; and to students who elect to take a developmental course. Students who have taken the AAPP tests at another TBR institution must have their test scores and transcript sent to the College.

- **ENROLLMENT**
Students with developmental requirements must enroll in developmental studies courses until all developmental requirements are completed. Students carrying a full course load must include at least two of their required developmental studies courses. Part-time students taking as many as eight credit hours must take at least one course of their developmental requirement.
- **ATTENDANCE**
Attendance is required. Specific attendance requirements are discussed at the first class meeting.
- **WITHDRAWALS**
Students may not withdraw from a remedial or developmental course except for extraordinary reasons and with special permission from the Director of Developmental Studies or his/her representative. If permission to withdraw is granted, the student will receive a grade of WD and the course will not count as an attempt under the "Two-Attempt Rule." Students denied permission to withdraw may appeal.
- **DEVELOPMENTAL SUSPENSION (TWO-ATTEMPT RULE)**
Students who have twice previously attempted a remedial or developmental course and failed to meet the minimum standards for progression, resulting in a grade of W, E, or F, will be suspended from the College for one semester. (Summer term cannot count as the term of suspension.) Grades of I or WD are considered legitimate exceptions to the Two-Attempt Rule and, therefore, do not count as attempts. Students who fail to meet course exit criteria (i.e., grade of A, B, or C) after a third attempt will be suspended for one full year. A procedure has been established for appealing a developmental suspension. See the "Academic Regulations" section for details.
- **GRADING POLICY**
Final grades of A, B, C, or F are given in Remedial and Developmental Studies. If a student has made progress in a particular course but has not completed all competencies by the end of the semester, he/she may qualify for an E, or Extension grade.
- **ADDITIONAL LAB WORK**
Supplementary instructional materials are available in the Writing Center, Mathematics Center, and Reading/College Life Center. Students are strongly encouraged to take advantage of these instructional aids.
- **CREDIT TOWARD DEGREE**
Credit hours earned for developmental courses cannot be used to satisfy the requirements for an associate degree.
- **MONITORING OF STUDENT PROGRESS**
Students will receive mid-semester reports indicating their progress in developmental courses.
- **PSYCHOLOGY OF LEARNING**
Psychology of Learning is required for students who are placed in at least two subject areas at the remedial level or for students who are placed in three subject areas including either remedial or developmental levels. Beyond this mandatory placement, students who place in two different subject areas—either both developmental or one developmental and the other remedial—have the option to elect placement into Psychology of Learning. Students placing in one subject area may be permitted to enroll in Psychology of Learning with the written approval of the program

1998-99 GENERAL INFORMATION

director. Psychology of Learning course enrollment is limited to students in these categories.

COURSES IN DEVELOPMENTAL STUDIES PROGRAM

- EN 070 Basic/Developmental Writing
- EN 081 Developmental Writing I
- MA 070 Basic Mathematics
- MA 080 Elementary Algebra
- MA 081 Intermediate Algebra
- RE 070 Basic/Developmental Reading
- RE 081 Developmental Reading: Reading Analysis and Reasoning
- RE 087 Topics in Reading I
- RE 088 Topics in Reading II
- PY 081 Psychology of Learning

SPECIAL FEATURES OF THE PROGRAM

- Special Advisers
- English, mathematics, and reading tutorial labs
- Counseling and career planning
- Small classes
- Open-entry/open-exit and test-out procedures
- Peer tutoring
- Computer Assisted Instruction
- Instructional Videotapes

INSTRUCTIONAL LABS

Mathematics Center

Location: Room 225, Instructional Materials Center

Phone: 697-4432

Services provided by the Mathematics Center include:

- peer and professional tutoring for both developmental and college-level mathematics courses.
- video checkout of course tapes for many mathematics courses.
- support for many mathematics courses by providing computer software appropriate for the course.

Writing Center

Location: Room 119, Humanities Building, Phone: 697-2410

Services provided by the Writing Center include:

- peer and professional tutoring in writing skills for all students at the college.
- support for English classes by providing computer hardware and software, additional materials and testing facilities.
- word processing capability and advice on writing for all students of the college.

Reading/College Life Center

Location: Room 215, Instructional Materials Center

Phone: 697-2408

Services provided by the Reading/College Life Center include:

- support for reading classes by providing computer hardware and software, additional materials, and testing facilities.
- support for the college at large by providing services related to reading and reading problems to all students.
- personalized assessment of and recommendations related to student learning and study difficulties.
- a library that includes information on time management, test-taking skills, notetaking and other study techniques.

Adult Basic Education/GED Preparation

Adult Basic Education/GED classes are conducted by Chattanooga State throughout the Chattanooga area. These classes are held on the Chattanooga State campus during the day and evening, as well as in other community locations. All classes have individualized instruction.

Other features of Chattanooga State's ABE/GED program include:

- ABE/GED computerized instructional lab. Open Monday through Friday, 8:00 a.m.–4:30 p.m.
- Reading—special computerized instructional program.
- English as a second language (ESL) classes.
- GED practice test—given on Fridays at 8:30 a.m. Call 697-2529.
- GED test—given weekly in the Chattanooga State Testing Center. Call 697-4461 to make an appointment.

Anyone 18 or older who is interested in Adult Basic Education/GED preparation should contact the ABE/GED Office at Chattanooga State at 697-2529.

Library Services

The Augusta R. Kolwyck Library is located on the first floor of the Instructional Materials Center. There is a reference library at Chattanooga State East to serve students in programs offered there. Library services to students at Chattanooga State West are provided through a cooperative agreement with Jasper Public Library. Library services to students at Chattanooga State North are provided through cooperative agreements with the Bryan College Library.

The college libraries provide materials and services to augment the instructional programs students are pursuing. The Main Library also makes available a variety of materials to broaden students' general education and support their individual interests.

The Internet address for the library is <http://www2.cstcc.cc.tn.us/library>. The catalog and several other resources can be searched through that site.

The libraries contain many computerized information databases. The traditional card catalog has been replaced by a user-friendly computer system, the "Intelligent Catalog." Books can be found using any keyword, subject, author, or title. References can be printed at the computer for use in bibliographies.

Magazine and journal articles can be located using any of several computer indexes such as InfoTrac's Magazine Index, Health Reference Center, and General Business File. Other indexes available are Applied Science and Technology, ERIC, Humanities,

CINAHL for Nursing and Allied Health, CD-Newsbank, SIRS, and *The New York Times*. References found in these indexes can also be printed.

The holdings consist of approximately 73,500 books, 700 magazine subscriptions, 5,200 videotapes, and 1,000 audio cassettes and phonograph records. The library staff provides both formal classroom instruction on how to do specific kinds of research and individual point-of-use instruction to students needing assistance finding materials. The library is open to all persons. Students, faculty and staff may check out materials. Students must present a Chattanooga State ID card to receive a library card. Non-students in Tennessee, North Georgia, or Northeast Alabama must present a current driver's license to receive a library card making them eligible to check out two books.

During the Fall and Spring semesters, the Main Library hours are Monday through Thursday, 7:30 a.m.–9:00 p.m.; Friday, 7:30 a.m.–4:30 p.m.; Saturday, 11:00 a.m.–6:00 p.m.; Sunday, 1:00 p.m.–6:00 p.m. The East Library hours are Monday through Thursday, 8:00 a.m.–8:30 p.m.; Friday, 8:00 a.m.–2:00 p.m. Library hours may vary during summer, holiday periods, and whenever classes are not in session. Hours will be posted on the Library door.

Student and faculty suggestions for Library purchases are encouraged. Gifts of books are welcome with the Library reserving the right to add those materials which are needed in the collection.

The Business and Community Development Center

Community Outreach

This center provides the business development through credit courses, and the Co-operative Education, Placement, and High School Recruitment offices. The primary functions of Business and Community Development are:

- to blend its services and the services of other campus offices as it provides general information about the College to prospective students;
- to provide opportunities for training and education to business and industry;
- to distribute information about the College to prospective students at high schools, through businesses and industries;
- to conduct scheduled tours of the campus;
- to conduct orientation for new students.

Placement Services

The Placement Office is a vital link between the College and the world of work, serving as a liaison between students or alumni and employers. Placement services available include:

- Maintaining placement files (resumés, references, and grade transcripts) on graduates and alumni seeking employment. Students should register with the office the semester prior to graduation. Files are maintained for review by companies interested in Chattanooga State graduates.
- Job bank of current part-time and full-time off-campus employment listings. The file is constantly being updated and is available during regular hours.
- Resumé groups. Tips on resumé writing. Interview and job search information.
- Campus interviews by employers wishing to visit the campus for recruitment.
- Workshops and special events. Free Job Search workshops for graduates are held each semester. Career Days during which employers are invited on campus to speak with students about their company are held in the fall and spring semesters. Dates and times for these events may be obtained by contacting the Placement Office.

Cooperative Education

Co-op is a structured academic strategy combining on-campus study with a planned and supervised work experience related to the student's field of study. Through Co-op the student is allowed to explore career goals while working in a structured environment to enhance employment opportunities and develop confidence, interpersonal skills and personal growth.

Co-op allows the student to apply classroom theory through the work experience, earn academic credit, earn supplemental income, and increase employability by acquiring marketable skills.

To participate in Cooperative Education a student should:

- Be enrolled full-time or part-time at Chattanooga State.
- File an application with the Co-op office.
- Interview with the Co-op coordinator.
- Complete at least one (1) semester of college level courses prior to co-oping with a GPA of 2.5 being maintained throughout the Co-op experience.
- Attend Co-op orientation and seminars.
- Complete and sign a Learning Contract.

The selection of the student to participate in the Cooperative Education work experience is that of the employer, after a recommendation has been made through the Co-op office. The student will sign a Learning Contract and application for which agreements are made for placement in a Co-op position. Co-op may be used as substitutive or elective credit toward the major with prior approval from the academic department head. Cooperative Education may also be used as the student's Unrestricted Elective in all majors.

The Co-op grades become part of the student's grade point average. Failure to meet requirements can cause the student to be dropped from the program.

High School Recruitment

High School Recruitment serves city, county, and all outlying areas by providing information regarding admissions to Chattanooga State.

The Career Planning and Counseling Services Center

The Career Planning and Counseling Services Center, located on the second floor of the Student Center, is open 7:30 a.m. to 5:30 p.m. Monday through Thursday and 7:30 a.m. to 4:30 p.m. on Friday.

CAREER PLANNING

The Career Planning Center provides services to help students decide on a college major at Chattanooga State's main campus and each of its off-campus locations. The center also assists people in the community who are changing careers, retraining, or are making the decision to come to college for the first time. Career and Life Planning Services include the following:

- Career counseling which includes discussions of appropriate career assessments which help in the choice of college major or career choice.
- Assistance to students who are taking developmental courses in selecting their class schedules and in making the transition into their college majors.
- A Woman's component...Women's services
- Referral to agencies on and off campus.
- A support organization, the Adult Connection (formerly called College Bound Adults), to assist returning adult students with re-entry skills.

- An extensive Career and Life Planning Library including information on careers, jobs, job trends, job descriptions, job search, salaries, non-traditional careers, adults re-entering the work force and re-careering.
- A Multi-media Lab which includes a "friendly" computerized career planning program called SIGI-Plus designed for the beginner or more experienced computer user which allows the user to determine ways that different careers match his/her values in the world of work. Also included is Tennessee vocational information, preliminary computer career assessment, and videos targeting career change and choice.
- Placement Office and Cooperative Education collaboratives.

Career inventories (tests) available to assist in pinpointing career interests, abilities, work personality and/or work values are: the Strong Interest Inventory, the COPs Interest Inventory, the Personality Mosaic, CAPs (the Career Ability Placement survey), and the career component of the 16PF personality profile. Inventory interpretation sessions are scheduled with a counselor to discuss the results of all inventories taken by clients of the Career Center. Results are not discussed by phone nor mailed without interpretation.

The Adult Connection (formerly called College Bound

Adults) is a student activity group for all returning students which assists its group members with re-entry information and skills. Many returning students lack self-confidence only initially, and these programs provide information regarding study skills, use of the library, and time management. Notices listing the date, place, and time of meetings, which are held during student activity periods as well as monthly, are posted on bulletin boards across campus.

College: Not For Kids Only workshops are held at all Chattanooga State locations throughout the school year to provide information to people who are considering returning to college or going to college for the first time. These informational workshops assist participants with the process of entering college, including information on financial aid, developmental courses, college majors and tracks, and the gaining of self-confidence for success in the classroom.

COUNSELING SERVICES

A variety of counseling services is available to meet the personal and academic needs of students to help enable them to succeed in college life and to help deal with the issues which are barriers to their learning or being able to remain in college.

Services provided include:

- Personal counseling
- Academic counseling
- Career counseling
- College level tutoring
- Crisis intervention
- Issues-related workshops—Depression, Eating Disorders, Family Violence, Relaxation
- Referrals to community services and agencies
- Academic suspension appeals (college level)
- Financial Aid suspension appeals
- Drug awareness activities and information about self-help groups, including:
 - AA – Alcoholic Anonymous
 - ACOA – Adult Children of Alcoholics
 - OA – Overeaters Anonymous
 - NA – Narcotics Anonymous
 - CODA – Co-Dependency Anonymous

For free, confidential personal counseling, contact the Counseling Center at 697-4421.

The Child Development Center

The Chattanooga State Child Development Center is operated as a service to Chattanooga State employees and students on a space-available basis. The Center also serves as a demonstration and

observation area for academic programs in Early Childhood Education, Psychology, and Nursing and Allied Health.

The Small Business Development and Resource Center

Chattanooga State, in partnership with the Small Business Administration, Cleveland State Community College, RiverValley Partners, TVA, and local financial institutions operates a Small Business Development and Resource Center for Hamilton County. The Center exists to promote entrepreneurial education, support small business start-ups, provide access to capital, and enhance the success of new and existing small businesses. Services provided

include business counseling, business planning assistance, the First Tennessee Small Business Computing Center, a comprehensive resource library, the TVA Small Business Video Center, seminars and courses, and access to potential lenders. The Center is located at 100 Cherokee Blvd. in Suite 201. For more information, call 752-1774.

Telephone Numbers

Chattanooga State Downtown	634-7700
Chattanooga State East	697-4797
Chattanooga State North (Dayton)	365-5010
Chattanooga State West (Kimball)	837-1327
Admissions.....	697-4401
Adult Basic Education (GED).....	697-2529
Career Planning	697-4421
Counseling Services	697-4421
Financial Aid.....	697-4402
Records.....	697-4401
The Business and Community Development Center	697-4720

Academic Departments

Allied Health.....	697-4450
Business & Information Systems	697-4441
Developmental Studies	697-4443
Engineering & Environmental Technology	697-4434
Industrial Technology	697-4433
Instructional Materials Center	697-4443
Liberal Arts Division	697-4440
Licensed Practical Nursing/Surgical Technology	697-4447
Mathematics & Sciences	697-4442
Nursing Program/Erlanger	778-8080

1998-99 Course Descriptions

Contents

Accounting	BU	Financial Planning	FP	Mechanics, Automotive, see "Automotive Technology"	AM
Advertising Arts	AA	Fire Science	FI	Mechanics, Diesel, see "Diesel Equipment Mechanics"	DM
Air Conditioning/Refrigeration	AC	Foreign Language, see		Mechanics, Marine, see "Marine Engine Technology"	SE
American Sign Language Studies	HP	French	FR	Medical Office Assisting.....	MO
Arboriculture	AL	German	GR	Medical Office Management	OM
Art (Fine Art and Graphic Design).....	AR	Japanese, see "Humanities"	HU	Medical Records, see "Health Information Management".....	MR
Auto Body Repair	AB	Spanish	SH	Medical Terminology, see "Health Science"....	HS
Automotive Technology	AM	Forestry	FO	Music	MU
Aviation	AV	French	FR	Nuclear Medicine Technology	NM
Banking	BK	Freshman Orientation.....	FC	Nursing Assistant	NA
Biology	BI	Geography	GO	Nursing (RN).....	NS
Broadcasting, see "Mass Communications"....	CO	Geology	GE	Nutrition, see	
Business Accounting, see "Accounting"	BU	German.....	GR	Biology.....	BI
Business Law, see "Accounting"	BU	Graphic Design, see "Art"	AR	Dietary Manager	ND
Business Management, see "Management"	MG	Greenhouse, see "Landscaping and Turf Management"	LM	Occupational Safety	OS
Cardiopulmonary Resuscitation (CPR), see "Emergency Medical Services"	EA	Hazardous Materials.....	HZ	Office Systems.....	OF
Chemical Technology.....	CT	Health and Physical Education.....	PE	Ornamental Horticulture, see "Landscaping and Turf Management" ...	LM
Chemistry.....	CH	Health Information Management	MR	Paralegal, see "Legal Assisting"	LA
Civil Engineering Technology	CI	Health Physics.....	NU	Paramedic Training, see "Emergency Medical Services"	EA
Commercial Truck Driving.....	CD	Health Science	HS	Pharmacy Technician	PC
Communications, see "Mass Communications"....	CO	History.....	HI	Philosophy.....	PL
Computer-Aided Design Technology	DD	Horticulture, see "Landscaping and Turf Management"	LM	Phlebotomy	PB
Computer Programming, see		Hospitality Management	HM	Physical Education Activity Courses.....	PE
"Information Systems"	CS	Human Services.....	HR	Physical Therapist Assistant	PT
Computer Repair, see "Industrial Electronics"	ER	Humanities.....	HU	Physics.....	PH
Computer Science, see "Information Systems" ...	CS	HVAC, see "Air Conditioning and Refrigeration".....	AC	Plant Systems Administration (BOMA)	SA
Cooperative Education	CP	Industrial Electricity.....	IE	Political Science.....	PO
Cosmetology	CY	Industrial Electronics.....	ER	Practical Nursing.....	LP
Court Reporting	OF	Industrial Hygiene	IH	Psychology.....	PY
Creative Writing, see "English"	EN	Industrial Maintenance Mechanics.....	ID	Public Speaking, see "Speech"	SP
Dental Assisting.....	DA	Industrial Management.....	IM	Quality Technology	QA
Dental Hygiene	DH	Information Systems	CS	Radiation Therapy Technology, see "Health Science"	HS
Diagnostic Medical Sonography.....	US	Insurance	IS	Radiologic Technology.....	RT
Diesel Equipment Mechanics	DM	Interdisciplinary Studies	IY	Reading	RE
Dietary Manager	ND	Japanese, see "Humanities"	HU	Real Estate	RS
Disabilities Support	DB	Job Skills Development.....	JS	Religion, see	
Drafting, see "Technical Drafting"	DF	Landscaping and Turf Management.....	LM	Humanities.....	HU
Drama	DR	Leadership, see		Philosophy.....	PL
Early Childhood Education, see "Education" ...	ED	Humanities	HU	Respiratory Care.....	RC
Economics.....	EC	Interdisciplinary Studies	IY	Secretarial Science, see "Office Systems"	OF
Education	ED	Management.....	MG	Sociology.....	SO
Electrical/Electronic Engineering Technology... EE		Psychology	PY	Sonography, see "Diagnostic Medical Sonography"	US
Electrical/Electronic Engineering Technology (DuPont).....	EZ	Legal Assisting	LA	Spanish.....	SH
Electrician, see "Industrial Electricity"	IE	Literature, see "English"	EN	Speech	SP
Electronics, Industrial, see "Industrial Electronics"	ER	Machine Tool Technology	MT	Surgical Technology	OR
Emergency Medical Services.....	EA	Machine Transcription, see "Office Systems" ...	OF	Technical Drafting.....	DF
Engineering Technology	ET	Maintenance Technology.....	MN	Theatre, see "Drama"	DR
See also:		Magnetic Resonance Imaging, see "Radiologic Technology"	RT	Truck Driving, see "Commercial Truck Driving"	CD
Civil Engineering Technology	CI	Mammography.....	MY	Ultrasound, see "Diagnostic Medical Sonography"	US
Computer-Aided Design Technology	DD	Management	MG	Welding	WD
Electrical/Electronic Engineering Technology	EE, EZ	See also:		Wellness, see	
Maintenance Technology.....	MN	Hospitality Management.....	HM	Health and Physical Education	PE
Mechanical Engineering Technology.....	MD, MZ	Industrial Management.....	IM	Physical Education Activity Courses.....	PE
Plant Systems Administration (BOMA)	SA	Medical Office Management.....	OM	X-Ray Technology, see "Radiologic Technology"	RT
Quality Technology	QA	Marine Engine Technology	SE		
Engineering Transfer (Pre-Engineering).....	EG	Marketing, see "Management"	MG		
English.....	EN	Mass Communications	CO		
Environmental Science.....	ES	Mathematics	MA		
Environmental Technology, see "Hazardous Materials"	HZ	Mechanical Engineering Technology	MD		
Financial Management	FM	Mechanical Engineering Technology (DuPont)	MZ		

Note: This section is arranged alphabetically by subject name as shown above. If only the two-letter course abbreviation is known, please refer to the chart on the next page to assist you in locating the desired courses.

Course Abbreviations

AA Advertising Arts	ID Industrial Maintenance Mechanics
AB Auto Body Repair	IE Industrial Electricity
AC Air Conditioning and Refrigeration	IH Industrial Hygiene
AL Arboriculture	IM Industrial Management
AM Automotive Technology	IS Insurance
AR Art	IY Interdisciplinary Studies
AV Aviation	JS Job Skills Development
BI Biology	LA Legal Assisting
BK Banking	LM Landscaping and Turf Management
BU Accounting	LP Practical Nursing (LPN)
CD Commercial Truck Driving	MA Mathematics
CH Chemistry	MD Mechanical Engineering Technology
CI Civil Engineering Technology	MG Management
CO Mass Communications	MN Maintenance Technology
CP Cooperative Education	MO Medical Office Assisting
CS Information Systems	MR Health Information Management
CT Chemical Technology	MT Machine Tool Technology
CY Cosmetology	MU Music
DA Dental Assisting	MY Mammography
DB Disabilities Support	MZ Mechanical Engineering Technology (DuPont)
DD Computer-Aided Design Technology	NA Nursing Assistant
DF Technical Drafting	ND Dietary Manager
DH Dental Hygiene	NM Nuclear Medicine Technology
DM Diesel Equipment Mechanics	NS Nursing (RN)
DR Drama	NU Health Physics
EA Emergency Medical Services	OF Office Systems
EC Economics	Court Reporting
ED Education	OM Medical Office Management
EE Electrical/Electronic Engineering Technology	OR Surgical Technology
EG Engineering Transfer (Pre-Engineering)	OS Occupational Safety
EN English	PB Phlebotomy
ER Industrial Electronics	PC Pharmacy Technician
ES Environmental Science	PE Health & Physical Education
ET Engineering Technology	Physical Education Activity Courses
EZ Electrical/Electronic Engineering Technology (DuPont)	PH Physics
FC Freshman Orientation	PL Philosophy
FI Fire Science	PO Political Science
FM Financial Management	PT Physical Therapist Assistant
FO Forestry	PY Psychology
FP Financial Planning	QA Quality Technology
FR French	RC Respiratory Care
GE Geology	RE Reading
GO Geography	RS Real Estate
GR German	RT Radiologic Technology
HI History	SA Plant Systems Administration (BOMA)
HM Hospitality Management	SE Marine Engine Technology
HP American Sign Language Studies	SH Spanish
HR Human Services	SO Sociology
HS Health Science	SP Speech
HU Humanities	US Diagnostic Medical Sonography
HZ Hazardous Materials	WD Welding

ACCOUNTING**BU 110 Business Tax Reporting (3) (F)**

The course surveys local, state, and federal taxes on small business. Tax form preparation and reporting will be emphasized for payroll taxes, business taxes, excise taxes, sales taxes, and simple proprietorship, partnership, and corporate reporting.

BU 114 Principles of Accounting I (4) (F,S,Su)

An introduction to the principles, practices and techniques of accounting with special emphasis on the basic accounting functions for proprietorship and partnership.

BU 115 Principles of Accounting II (4) (F,S,Su)

A continuation of BU 114 with emphasis on partnership, corporation and managerial accounting and analysis of financial statements. Prerequisite: BU 114.

BU 173 Business Law I (3) (F,S,Su)

An introduction to business law with emphasis on the principles of law governing contracts, sales and agency.

BU 175 Business Law II (3) (F,S,Su)

A continuation of BU 173 with emphasis on business organizations, real and personal property laws, commercial paper, secured transactions, and the legal environment of business. Prerequisite: BU 173.

BU 185 Federal Taxes I (3) (F)

A study of the development of tax implications regarding individuals as to returns, rates, credits, gross income exclusions and inclusions, capital gains and losses, business and personal deductions and losses.

BU 186 Federal Taxes II (3) (S)

A continuation of BU 185, including a study of corporations, partnerships, estates, trusts, withholdings and estimated taxes. Prerequisite: BU 185. Corequisite: BU 115.

BU 201 Accounting Internship (3) (S)

This course is designed to help the student gain work experience in a variety of career specialties related to accounting technology. This opportunity is provided at one of several approved local businesses where the student will work nine (9) hours per week (without compensation) for one semester.

BU 204 Intermediate Accounting I (3) (F)

A study of the theory and structure of financial statements with the emphasis on generally accepted accounting principles. Prerequisite: BU 115.

BU 205 Intermediate Accounting II (3) (S)

A continuation of the study of the theory and structure of financial statements with the emphasis on generally accepted accounting principles. Prerequisite: BU 204.

BU 224 Cost & Budgeting (3) (F)

A study of cost accounting principles and procedures. The use of accounting as a managerial tool; emphasis on methods of cost determination. Topics include job order and process cost systems and the use of standard costs. Prerequisite: BU 115.

BU 233 Auditing (3) (S)

An introduction to independent and internal auditing. Includes philosophy and objectives of auditing, generally accepted auditing standards, audit procedures, the preparation of audit working papers and

formal audit reports, and the professional code of ethics for independent auditors. Prerequisite: BU 204.

BU 240 Practical Accounting Applications (3) (S)

This course is designed to give the student a practical and technical emphasis in accounting with exposure to several specialized areas. Some of the topics and/or skills taught in the course will be special management reports, not-for-profit accounting, calculator use and applications, overview of practical statistical application to accounting, and management and supervision techniques in the accounting office. Prerequisite: BU 115.

BU 244 Advanced Accounting (3) (on demand)

A study of advanced general accounting in accounting concepts as they apply to special problems involving partnerships, special sales procedures, home office and branch relationships, and governmental accounting. Prerequisite: BU 115.

BU 250 Accounting Information Systems I (3) (F)

Fundamental concepts of accounting information systems and their relationship to computer hardware, software and various data processing systems. Projects utilizing various application software on the microcomputer integrated with course topics. Prerequisites: BU 115, CS 101.

BU 251 Accounting Information Systems II (3) (S)

A continuation of BU 250. Internal controls as they relate to EDP. Accounting Information Systems for managerial planning decision-making. Projects involving microcomputer application software, such as electronic spreadsheets and accounting software, integrated with course topics. Prerequisite: BU 250.

BU 255 Professional Review in Accounting and Taxation (3) (S)

An intense, advanced course in accounting involving a condensed professional review of financial and managerial accounting topics and topics in income taxation. Prerequisites: BU 114, BU 115, BU 185, BU 204, BU 224. Corequisite: BU 205.

BU 297 Special Topics in Accounting I (1) (on demand)

Selected accounting and accounting-related topics of current and special interest are studied. Prerequisite: BU 115 and/or permission of the Accounting Faculty.

BU 298 Special Topics in Accounting II (2) (on demand)

Selected accounting and accounting-related topics of current and special interest are studied. Prerequisite: BU 115 and/or permission of the Accounting Faculty.

BU 299 Special Topics in Accounting III (3) (on demand)

Selected accounting and accounting-related topics of current and special interest are studied. Prerequisite: BU 115 and/or permission of the Accounting Faculty.

ADVERTISING ARTS**AA 106 Design (4) (F)**

An introduction to the elements and principles of design. A study is made of space, balance, line,

shape, texture, value, color, contrast, emphasis and rhythm, using geometric and organic form. Basic and experimental techniques and media are used.

AA 107 Illustration I (3) (S)

A study of advanced drawing dealing with rendering three-dimensional forms within the advertising context. Drawing systems such as linear perspective, isometric and human figure indication for advertising will be studied. Line art, black and white, and color media will be investigated. Prerequisite: Permission of instructor.

AA 108 Advertising Concepts (3) (F)

A study of the relationship between verbal and graphic communication is explored. Students are made aware of techniques used to create strong advertising concepts. They write copy, slogans for print, radio/TV. Study and analysis of the great advertising campaigns, art directors, and copywriters.

AA 109 Production Art (4) (F)

An introduction to the basic skills of the production artist through simulated on-the-job work projects. Deals with tools of the trade, craftsmanship, nomenclature, graphic arts history, production planning, materials and processes, keylining and color separation for offset lithography. Covers both traditional and digital production methods.

AA 116 Typography (4) (S)

A study of typography from its beginnings to the modern technology of photo and computer composition. Students learn to distinguish the characteristics of various typefaces and become skillful in measuring, specifying and designing with type. Trips to service bureaus and production houses. Prerequisite: Permission of instructor.

AA 209 Graphic Design I (4) (F)

An introduction to creative problem-solving. The student will learn to organize complex information into a simpler and more direct expressive communication. Work will include such areas as poster design, trademark development, and design history. Prerequisite: Permission of instructor.

AA 210 Graphic Design II (4) (S)

A study of advanced problems in Graphic Design. (Preparation of professional portfolio.) Areas of investigation include package design, exhibition design, signage, and computer graphics. Prerequisite: Permission of instructor.

AA 215 Advertising Design I (3) (F)

An introduction to advertising design. A detailed study of the basic tools, terminology and kinds of advertising art. Development of advertising assignments from conception through thumbnails, digital proofs and prepress production. Assignments incorporate typography, photography and illustration to fit the specific needs of clients. Prerequisite: Permission of instructor.

AA 217 Advertising Design II (3) (S)

A study of advanced problems in advertising design. The development of advertising campaigns incorporating print, television, and related media. Individually planned projects for development of portfolios to include comprehensive layouts, mechanicals and computer graphics. Prerequisite: Permission of instructor.

AA 218 Airbrush Illustration (3) (S)

A course to introduce the airbrush as an important medium in illustration and photo retouching. Instruction will cover preparation, the use of friskets and shields, maintenance and handling techniques.

AA 219 Illustration II (4) (F)

A study of the development of illustration concepts as a form of self-expression. Mastery of a variety of techniques, incorporating watercolor, acrylic, and/or oil media. All forms of illustrations are discussed, such as editorial, cartoon, product, medical, and advertising. Professional orientation with industry-related problems and deadlines. Prerequisite: Permission of instructor.

AA 221 Design Internship (3) (F,S,Su)

This course provides on-the-job training in advertising design, graphic design, illustration or related commercial art discipline with Chattanooga area business or industrial firms. Laboratory nine hours. Prerequisite: Approval of faculty adviser.

AA 222 Portfolio (2) (S)

The study of visual presentation techniques; editing, formatting, organizing, presenting the professional design portfolio. Oral exit exam with select panel of design professionals and preparation for entry into job market. Includes resumé preparation, interview techniques and job search pointers.

AA 245 Computer Applications for Graphic Design (3) (F)

A study of the basics of computer image generation and page layout. Introduction to various art, typography and layout programs. Emphasis on graphic design relative to advertising and production art. Prerequisite: OF 127 or permission of instructor.

AA 246 Computer Illustration (3) (S)

A course designed to provide knowledge and skills in the creation of computer generated illustration. Emphasis on concept, design and production of commercially usable images. Students will develop a portfolio of illustrations using software current in the advertising profession. Prerequisite: AA 107 or permission of instructor.

AIR CONDITIONING/REFRIGERATION**AC 000 Air Conditioning/Refrigeration Technology (F,S,Su)**

Theory, application, operation and maintenance of air conditioning and refrigeration systems. Instruction in safety, DC electrical theory, Ohms Law, electrical test meters, series circuits, parallel circuits, series-parallel circuits, AC electrical theory, electrical switches, electrical timers, electrical solenoids, electrical relays, contactors, magnetic start starters, time delay relays, capacitors, electrical blueprints, electrical motors, refrigeration tools, refrigeration cycle, compressors, refrigerant oils, condensers, receivers, metering devices, evaporators, refrigeration cycle controls, refrigeration accessories, refrigerants, refrigerant recovery, recycling, and reclaiming, soldering, brazing, welding, piping, test equipment, wiring, window units, domestic and commercial refrigeration, gas heat, oil heat, electric heat, heat pumps, ice machines, water coolers, humidifiers, dehumidifiers, electronic air cleaners, pneumatic control systems, and industrial electrical controls. Introduction to solid state devices, load calculation, and public relations and communications. Also covers mathematical skills necessary to meet and accept the responsibilities of being successful technicians (problems reflect the practical and realistic situations air conditioning/refrigeration technicians must handle as part of trade requirements). 30 clock hours per week.

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for AC 000 each term until all competencies are mastered. Some students may need

more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

AMERICAN SIGN LANGUAGE STUDIES**HP 120 American Sign Language I (3) (F)**

A study of the American Sign Language of the Deaf including both on the manual alphabet and the language of "signs" with skill development at a basic level. Consideration given to ASL sentence structure, a variety of question forms, verb usage, classifiers, negatives, locational relationships, time measurements, and plurals with emphasis on ASL and the Deaf Community.

HP 121 American Sign Language II (3) (S)

An intensive study of manual communication as used by Deaf people with an emphasis on continued development of the student's vocabulary, language concepts, use of sign language idioms, and expressive/receptive skills; review of basic signs, fingerspelling, and numbers with introduction to ASL conversational regulators. Prerequisite: HP 120 or equivalent.

HP 130 Orientation to Deafness (3) (F)

Overview of deafness including the use of an audiometer, interpretation of an audiogram and discussion of different types of hearing losses; study of treatment of Deaf persons including educational and social aspects from early times to present day; and study of specific laws concerning the civil rights of Deaf persons, use of telecommunication devices, and consideration of oral and manual modes of communication for Deaf persons.

HP 132 Psychology of Deaf People and Their Culture (3) (S)

Study of the psychological processes, behavior, emotional and social maturity, and the adjustments of the handicap of deafness, and social patterns of the Deaf individual, family status, socialization in groups and in the Deaf Community, and the economic status of Deaf persons in general. Discussion of the normal process of language development in children with a comparison of Deaf children, both pre-lingually and post-lingually Deaf, will be included from readings.

HP 135 Special Topics in American Sign Language (1-3) (on demand)

A study of the use of ASL in the workplace. Specific topics and course emphasis will be published at the beginning of each term. May be repeated for credit on different topics.

HP 220 American Sign Language III (3) (F)

A continuation of the intensive study of American Sign Language as used by Deaf people with emphasis on communication of everyday experiences and activities, spatial agreement, storytelling, and general conversation regulators. Prerequisites: HP 120, HP 121 or equivalent.

HP 221 American Sign Language IV (3) (S)

A continuation of the study of American Sign Language with emphasis on important language concepts and syntax, vocabulary review, conversational patterns, numbers, fingerspelling, songs, poetry, and storytelling techniques. Prerequisites: HP 120, HP 121, HP 220.

HP 222 Fingerspelling (2) (S)

A comprehensive study of fingerspelling, a skill utilizing the twenty-six letters of the alphabet; use of drills designed to develop the student's ability to

read full-speed fingerspelling and to develop fluency in expressing oneself in fingerspelling. Prerequisites: HP 120, HP 121 or equivalent.

HP 236 English Sign Systems (3) (on demand)

Study of various sign systems used in educational programs for Deaf students stressing Signing Exact English (SEE2) to clarify and to describe the different systems' rationale and criterion for teaching English to Deaf students. Detailed study of the SEE2 system with instruction of the specific "signs" unique to this system.

HP 246 Oral Interpreting Techniques (3) (on demand)

Intensive study of oral interpreting skills and the techniques for expressive oral interpreting, voicing, use of support mechanisms, facial expression, natural gestures, visibility of speech sounds, speechreading, and ethical issues; role play activities and problem solving techniques will be utilized. Prerequisite: HP 130.

ARBORICULTURE**AL 110 Fundamentals of Tree Biology and Identification (4) (F)**

An introduction to the field of arboriculture, this course focuses on the scope of the field, fundamental principles of tree biology and environmental interactions, and methods of tree identification with an emphasis on native and introduced species of the southeastern United States. Specific topics include tree anatomy and physiology, plant classification, nomenclature and identification, chemical, physical, biological soil properties, and soil moisture and plant growth. Three class hours, three laboratory hours.

AL 116 Tree Management I (4) (F)

Applying the fundamental principles learned in AL 110, this course covers water management, tree nutrition and fertilization, tree selection, and tree installation and establishment. Specific areas addressed are irrigation, mulching, water retention methods and materials, drainage, fertilization techniques and nutrient testing, selection of appropriate trees for a particular site, selection of nursery stock, manual and mechanical tree installation, transplanting, and post-planting care. Three class hours, three laboratory hours.

AL 126 Tree Management II (4) (S)

The second of three tree management courses, this course introduces the student to pruning concepts and techniques, cabling, bracing and lightning protection, and problem diagnosis and management. Specific topics include pruning reasons, effects, timing and techniques, cable and bracing installation and materials selection, lightning protection techniques, pest and disease identification, environmental injuries, and management of problems. Three class hours, three laboratory hours. Prerequisites: AL 110, AL 116.

AL 136 Tree Management III (4) (S)

This course covers construction management, climbing techniques, working in the tree, and safety. Students learn how to prevent and manage damage resulting from construction activities around trees, tree and gear inspection prior to climbing, necessary techniques for climbing and working in trees, aerial rescue techniques, first aid procedures, problems due to overheating, and poisonous plant and insect

bite prevention and treatment. Three class hours, three laboratory hours. Prerequisites: AL 110, AL 116. Corequisite: AL 126.

AL 236 Applications in Arboriculture (2) (Su)

This course will focus on tree installation techniques, problem assessment and management, pruning techniques and equipment, climbing techniques and working in the tree, safety measures, and emergency extraction and treatment techniques. It will include an intensive "hands-on" experience taking place in a concentrated forty (40) hours of instruction and practice time. Training sites and personnel will be provided by the Electric Power Board of Chattanooga. Appropriate gear and equipment will be provided by the Electric Power Board and Chattanooga State Technical Community College. Prerequisites: AL 110, AL 116, AL 126, AL 136.

ART (FINE ART AND GRAPHIC DESIGN)

AR 101 Drawing Basics (1) (F,S)

A basic drawing course. Introduction to the elements of drawing: line, shape, value, space, and texture through studies from landscape and still life objects. Introduction to composition and to the purposes of drawing.

AR 103 Life Drawing I (4) (F,S)

A basic drawing course. Beginning to advanced studies from figure and still life objects. Emphasis on observation and accurate spatial and proportionate rendering through line and value studies. Introduction to composition.

AR 104 Beginning Photography (1) (F,S)

A beginning photography course. Introduction to the understanding of photography as an art. The course will emphasize camera work, the aesthetics of an image and an introduction to significant historical and contemporary photographs. Introduction to the darkroom. (Students must provide their own 35 mm camera.)

AR 105 Life Drawing II (4) (F,S)

A continuation of AR 103. Focus on sustained studies, composition, value modeling, and detail rendering. Practice in working from live models and still life. In-depth exploration of various drawing media. Introduction to personal imagery and contemporary concepts. Prerequisite: AR 103.

AR 107 Three Dimensional Design (4) (F,S)

A study of the elements of design as they operate in three-dimensions. Projects deal with real space and three-dimensional materials. They may involve both relief and free-standing forms.

AR 112 Introduction to Art History (3) (F,S,Su)

Study of significant works of art throughout history to heighten perception and enjoyment of the visual arts. Consideration of formal elements of artistic production in works representative of a broad range of styles, forms, and periods.

AR 212 Art Structure (4) (F,S)

A broad spectrum art course integrating slides, lecture, demonstration, studio hands-on experiences, and oral and written subjective/objective exercises to convey a sense of art appreciation across a broad range of cultures and periods, with an emphasis on the contemporary. Introduction to a variety of mate-

rials, methods, and concepts employed by artists, including drawing, painting, sculpture and other visual arts.

AR 216 Art Education (4) (S)

A course emphasizing an understanding of child art as basic to good teaching and parenting. Introduces a range of art materials and procedures appropriate to both preschoolers and learners in grades one through six, and presents techniques for teaching art appreciation at the elementary level.

AR 220 Intermediate Studio (1-4) (F,S)

Studio designed to continue practice in technical expertise while expanding compositional and expressive components in the studio area of the student's choice: drawing, painting, ceramics, or sculpture. May be repeated for credit. Prerequisite: Advanced standing in the media of emphasis and consent of the instructor.

AR 231 Painting and Composition I (4) (F,S)

Painting techniques in oils and/or acrylics. Focus on developing color relationships and spatial and composition skills. Studies may incorporate varying subject matters such as abstraction, still life, landscape, and figurative. Prerequisites: AR 103. (AR 105 recommended).

AR 232 Painting and Composition II (4) (F,S)

A continuation of AR 231 stressing technical skills in sustained personal image composition. Some assigned problems but focused on the student's choice between non-objective, abstract, surreal, pop, or realistic direction. Prerequisite: AR 231.

AR 240 Photography and Darkroom I (4) (F,S)

A fine art approach to black and white photography and printing in historical perspective. Emphasis on image, avant garde composition, personal symbolism, content, and the creation of photographs as art statements. Extensive darkroom work and regular oral critiques required. (Students must provide their own 35mm cameras.)

AR 241 Photography and Darkroom II (4) (F,S)

A course designed to extend the study and exploration of photography as a means of expressive communication and art. Study and creative manipulation of alternate methods of lighting, camera use, paper use, film type, developing, enlarging, and mounting, with emphasis on personal imagery and content. Extensive darkroom work and regular oral critiques required. (Students must provide their own 35mm cameras.) Prerequisite: AR 240.

AR 260 Ceramics I (4) (F,S)

Studio class in beginning techniques in ceramic skills. Focus on design and creative handbuilding with an introduction to glazing and wheel-throwing.

AR 261 Ceramics II (4) (F,S)

Intermediate studio in ceramics. Focus on basic wheel-throwing techniques to produce a variety of forms on the potter's wheel. Continued work on glazes and decoration. Prerequisite: AR 260. Corequisite: AR 103.

AUTO BODY REPAIR

AB 000 Auto Body Repair Technology (F,S,Su)

Complete and current coverage of the practices and

procedures used in the field of automotive body repair and refinishing. Automobile construction and basic operations in collision repair. Repair and refinishing of each part of the car. Automobile welding, sheet metal repair, body and frame straightening. Painting and refinishing the car body and the interior and exterior parts attached to it. Typical paint jobs and their problems. Preparing the written estimate of damage. Mathematical skills necessary to meet and accept the responsibilities of being an auto body repairman (problems reflect the practical and realistic situations auto body technicians must handle as part of trade requirements). Requirements for running a successful body shop. Major emphasis on hands-on activities. 30 clock hours per week. *Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for AB 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.*

AUTOMOTIVE TECHNOLOGY

AM 000 Automotive Technology (F,S,Su)

ASE certified training program. Covers the eight areas required for certification. (1) Automotive Electronics: Fundamentals of microprocessors, charging & starting systems, lighting, wiring and DC motors. (2) Engine Performance: Engine fundamentals, ignition systems, diagnosis and repair, use of oscilloscopes and hand held scanners. (3) Steering & Suspension: Fundamentals of steering and suspension, including shocks, struts, rack & pinion, and recirculating ball; front end geometry; front end and four wheel alignment. (4) Manual Transmission & Drive Train: Drive train theory, torque, ratio, types of gears, planetary gear sets, bearings, clutches, sliding gear and synchromesh transmissions. (5) Automatic Transmission & Transaxles: Hydraulic fundamentals, pressure regulating valves, hydraulic systems, fluid couplings and torque converters, electronic transmission controls, dynamometer testing. (6) Heating, Ventilation & Air Conditioning: Principles of refrigeration, heat transfer, states of matter, pressure temperature relationships, basic refrigeration cycle, refrigeration system components, diagnosis of problems, procedures for reclaiming and recycling refrigerant. (7) Brakes: Hydraulic fundamentals, vacuum boost, hydroboost, wheel and master cylinder service, bleeding and diagnosis; anti-lock brake systems (ABS) components, operation, special service tools, diagnostic and service procedures. (8) Engine Repair & Rebuilding: Theory of engine operation, including cylinder arrangement and type of valve train; cooling, lubrication, fuel, and ignition systems; measuring tools, including compression testers and cylinder leakage testers; diagnosis and repair. *Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for AM 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.*

AVIATION

AV 101 General Aeronautics (3) (on demand)

A study of the history of aviation and aerospace, fundamentals of flight theory, Federal Aviation Regulations, Airman's Information Manual, physiol-

ogy of flight, meteorology, and navigation. This course is open to all students who desire a general and practical knowledge of aviation, especially on the level of the private pilot.

AV 111 Flight Theory (3) (F)

A study of aeronautics, the basic principles of flight and aerodynamics, airplane components and their functions, flight control systems, forces acting on aircraft in flight, materials used in aircraft construction, powerplants, stability, performance, and instruments.

AV 112 Navigation (3) (F)

A study of the principles of pilotage, dead reckoning, and radioelectronic methods of navigation as applied to cross-country flight planning.

AV 113 FAA Regulations (3) (F)

A study of federal and international laws that govern aviation operation, source of those laws, enforcement and purpose. Emphasis on laws or regulations concerning airmen, aircraft, air agencies, air operation, air traffic control, and flying safety. The Airman's Information Manual and its application also included.

AV 123 Meteorology (3) (S)

A study of weather and its influence on aerospace operations. The course provides a basic understanding of the atmosphere, measurement of meteorological elements and effects of these on air operations in the lower atmosphere.

AV 141 Flight Instruction I (3) (F,S)

A study of flight instruction and discussion to provide the student with the opportunity to become familiar with the airplane and its systems and to apply the material covered in other AV courses. One class hour, four laboratory hours.

AV 142 Flight Instruction II (3) (F,S)

A continuation of AV 141 with emphasis on more advanced flight and technical instruction in precision flight techniques. One class hour, four laboratory hours. Prerequisite: AV 141 or permission of instructor.

AV 143 Flight Instruction III (3) (F,S)

A continuation of AV 142 with emphasis on more advanced flight and technical instruction in precision flight techniques. One class hour, four laboratory hours. Prerequisite: AV 142 or permission of instructor.

AV 144 Flight Instruction IV (3) (F,S)

A continuation of AV 143 with emphasis on instrument flight operations and weather flying. One class hour, four laboratory hours. Prerequisite: AV 143 or permission of instructor.

AV 201 Aerospace Internship (3) (F,S)

A course designed to employ the student by an acceptable fixed base operator, airline, airport director, or aerospace industry for field work. This work provides job training and experience for the student desiring employment in various segments of the aerospace industry. Course emphasis is upon the educational experiences to be gained by the student and not upon salaried employment. Credit is given for actual work with the employer. Nine laboratory hours.

AV 221 Aviation Management (3) (S)

A course designed to acquaint the student with the principles of aviation management. Topics include aviation needs, economics, finance, public relations, maintenance, insurance, and general operating procedures.

AV 231 Instrument Flight (3) (S)

A study of instruments, FAA regulations, ATC procedures, radio navigation, meteorology, physiology, and aircraft operation and performance as applied to instrument flying and flight planning. Prerequisite: AV 112 or permission of instructor.

BANKING

BK 106 Regulatory Management (2) (on demand)

This course provides the resources and information available to implement, monitor, and audit a valid compliance program and includes a general overview of the regulations for which a compliance officer is typically responsible.

BK 109 Product Knowledge (1) (on demand)

This course introduces the basics of selling and the concepts of cross-selling and outlines the most important products in the three primary areas of commercial banking: consumer, corporate, and trust.

BK 110 Principles of Banking (3) (F,S)

This course touches on nearly every aspect of banking, providing a comprehensive introduction to the diversified services and operations of the banking industry today. This course presents the fundamentals of bank functions in the broad perspective needed to assist bank personnel in career advancement.

BK 112 Money and Banking (3) (F)

A fundamental but scholarly treatment of money and how it functions in the U.S. and world economies. Students are introduced to the concept of money supply and the role of banks as money creators and as participants in the nation's payments mechanism.

BK 118 Commercial Lending (3) (F)

This course explains the role of the commercial lending function within the banking industry as well as within the total economy. The course provides commercial lending officers and trainees with the skills needed to service corporate clients in today's competitive environment.

BK 120 Selling Bank Services (1) (on demand)

This course provides customer-contact personnel with skills that will help sell bank services and meet customer needs. The course cultivates a positive attitude toward selling and develops specific selling techniques including active listening, presenting benefits, and successful closing.

BK 122 Economics for Bankers (3) (S)

An introduction to the fundamental principles of economics. Emphasis on economic theory and its application to banking.

BK 127 Supervisory Training (2) (on demand)

This course is designed to provide first-line supervisors with the skills to perform their job, by integrating sound managerial concepts with practical experience.

BK 130 Consumer Lending (3) (F)

This course provides a thorough presentation of the consumer credit function and the role of consumer credit in overall banking operations. Emphasis on evaluating credit risks, structuring, servicing, and collecting loans.

BK 133 Residential Mortgage Lending (2) (on demand)

Fundamentals of mortgage lending and the mortgage lending industry, including customer base, market participants, regulations governing the industry, and alternative mortgage instruments.

BK 134 Real Estate Documentation (1) (on demand)

Processes, procedures, and documentation involved in the various stages of mortgage lending, from origination to closing.

BK 136 Problem Loans (1) (on demand)

This course is designed to present the techniques for identifying and resolving problem loans. It focuses on a structured loan evaluation process for loan underwriting, loan monitoring, and problem loan identification and resolution.

BK 138 Oral Communication for Bankers (1) (on demand)

Principles essential for effective communication within the banking industry with emphasis on application of these principles to interpersonal, group, and public speaking communications.

BK 139 Written Communication for Bankers (1) (on demand)

This course focuses on the elements that make up the communication process and the basic purposes for writing.

BK 141 Quality Customer Service (1) (on demand)

A course designed to develop better communications skills for customer contact personnel. Emphasis on customer service and effective strategies for determining customer needs and concerns.

BK 200 Special Topics in Banking (2) (on demand)

Specialized topical issues and/or problems in the financial services industry are selected and studied in detail. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

BK 204 Management Fundamentals (3) (on demand)

This course offers a variety of management theories and approaches. It is organized around the basic functions of planning, staffing, leading, and controlling. The course makes intensive use of case studies and actual banking applications.

BK 211 Marketing for Bankers (3) (S)

This course provides a thorough grounding in marketing principles and theory and their practical application to the banking industry. Emphasis is also placed on consumer motivation, buying behaviors, public relations and communications, marketing research, and marketing analysis.

BK 212 Analyzing Financial Statements (3) (F)

This course is designed to teach both basic and advanced techniques of financial statement analysis which will assist bank lenders and bank credit analysts in their job functions. Prerequisite: BU 114.

BK 213 Bank Investments and Funds Management (2) (on demand)

This course explains the nature of bank investments, the factors that influence investment decisions, and the basic principles and strategies of investment account management.

BK 219 Law and Banking Principles (3) (S)

An introduction to banking law and legal issues.

Special emphasis on the Uniform Commercial Code, contracts, bankruptcy, and implications of consumer lending.

BK 220 Supervision: Concepts and Practices of Management (3) (on demand)

A course designed to help new or potential supervisors develop the broad perspectives of interpersonal relations. Focus on the managerial process of planning, organizing, staffing, directing, and controlling.

BK 224 Personnel and the Law (1) (on demand)

A course designed to help bank personnel officers and managers understand how major laws, including the Civil Rights Act, the Equal Pay Act, and others impact the banking industry. The student will learn of potential areas in need of revision in bank personnel systems.

BK 229 Law and Banking Applications (2) (S)

An introduction to laws pertaining to secured transactions, letters of credit, and bank collection process. Case studies are used to illustrate important laws related to collateral, perfection, default, and other banking legal points.

BK 234 Contemporary Issues in Banking (2) (on demand)

This course gives students information on the major developments, issues, and topics of discussion in the banking industry. Designed to make students aware of the numerous radical changes within the industry, the course emphasizes the role of commercial banks and the challenges banks face in the industry environment.

BIOLOGY

BI 100 Essentials of Life Science (4) (on demand)

An introduction to life sciences for students with little knowledge of a rapidly changing field. This course will be helpful for those pursuing a health-related career, especially those with little or no science background. This course is also designed to fulfill the general education requirements for non-science majors. The unity and diversity of living systems will be addressed. The general organization of life will be explored, including basic biological chemistry and the structure and function of single-celled and multicellular organisms. Emphasis will be placed on the human organism. Students will be encouraged to develop critical thinking skills and problem-solving abilities. Application to current scientific issues will be emphasized. Credit will not apply toward a biology major. Three class hours, three laboratory hours.

BI 115 Introduction to Human Biology (4) (F,S)

This course teaches structure and function of the human body with emphasis on cells, tissues, and nervous, cardiovascular, circulatory, respiratory, endocrine, reproductive and digestive systems. Not available to students with prior credit in BI 174 and BI 175. Three class hours, three laboratory hours. (Same as PC 115. Credit not allowed for both courses.)

BI 134 General Biology I (4) (F,S,Su)

A study of elementary chemical concepts as related to the biological sciences: cell structure and function, photosynthesis and cellular respiration, cell division, cellular control, Mendelian and molecular

genetics, population ecology, community interactions, ecosystems, and human impact on the biosphere. Three class hours, three laboratory hours.

BI 135 General Biology II (4) (F,S,Su)

A continuation of BI 134. Covers basic evolutionary principles, survey of the Kingdoms: Monera, Protista, Fungi, Plantae, and Animalia, basic plant tissues, plant and animal reproduction and development, nutrition and water transport, animal tissues, nervous systems, sensory reception and response, animal hormones, circulatory systems, gas exchange, digestion and nutrition, homeostasis, and immunity. Three class hours, three laboratory hours. Prerequisite: BI 134.

BI 143 Nutrition (3) (F,S,Su)

A study of nutrients and their relationship to human growth, development and maintenance. Special emphasis is given to the role of foods and the nutrients they contain with regard to the physiological, psychological, and sociological well-being of the individual. Practical analysis of food records and application of nutritional knowledge will be included.

BI 174 Human Anatomy and Physiology I (4) (F,S,Su)

A study of the structure and function of the human body as seen in its various levels of organization. Detailed study of the integumentary, skeletal, muscular, and nervous systems emphasize clinical applicability. Elementary biological chemistry, dissections, physiological experimentation, and certain clinical tests form an integral part of the course. Three class hours, three laboratory hours.

BI 175 Human Anatomy and Physiology II (4) (F,S,Su)

A study of anatomy and physiology as related to the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems in humans. Special emphasis is placed on cardiovascular physiology, general body metabolism, fluid-electrolyte dynamics, development and inheritance. Dissections, certain clinical tests and relationships between systems are emphasized. Three class hours, three laboratory hours. Prerequisite: BI 174.

BI 205 Plant Morphology (4) (F)

An analysis of the structure, reproductive processes, and evolutionary relationships of the principal non-vascular and vascular plant groups. Three class hours, three laboratory hours. Prerequisite: BI 134 or equivalent.

BI 234 Microbiology (4) (F,S,Su)

A study of microbial morphology and physiology with special emphasis upon energy relationships, genetics, microbial control, immune responses, and human pathogens using a portal of entry approach. Exercises complementary to lecture topics above form the laboratory. Three class hours, three laboratory hours. Prerequisites: BI 134 or 174.

BI 299 Special Topics in Biology (1-4) (on demand)

A course designed to allow students to conduct a detailed study of a specific topic in the biological sciences. Topics will vary each semester or will be individualized according to the student's needs. May be repeated for credit on different topics. Topics will be announced each semester. Prerequisite: Consent of instructor and department head.

BROADCASTING, SEE "MASS COMMUNICATIONS"

BUSINESS ACCOUNTING, SEE "ACCOUNTING"

BUSINESS LAW, SEE "ACCOUNTING"

BUSINESS MANAGEMENT, SEE "MANAGEMENT"

CARDIOPULMONARY RESUSCITATION (CPR), SEE "EMERGENCY MEDICAL SERVICES"

CHEMICAL TECHNOLOGY

CT 110 Laboratory Methods and Techniques (4) (F,S)

This course is designed to provide the student with the basic laboratory knowledge required by the chemical technician. It will provide competence in all phases of laboratory work including planning, experiment design, record keeping, safety practices, handling equipment and chemical reagents, making measurements, collecting and analyzing data, identification of compounds, and chromatography. Class three hours, laboratory three hours. Prerequisite: CH 104 or equivalent.

CT 120 Quality Systems (3) (F)

This course is designed to provide the student with a working overview of quality systems. Includes coverage of basic statistical tools, the nature of variations and various philosophies employed to enhance the quality of processes.

CT 130 Industrial Chemistry I (3) (F)

This course covers common processes employed in production of products by chemical manufacturing facilities. Plant operations of numerous chemical manufacturers will be used as examples to demonstrate how products are generated in bulk quantities. Corequisite: CH 134.

CT 131 Industrial Chemistry II (3) (S)

This course covers a variety of chemical concepts and how they relate to operation of a chemical manufacturing plant. Topics include: mass balances, system heat, heats of reactions, pressure-volume-temperature relationships, fractional distillation, solvation, colligative properties, and intermolecular interactions. Prerequisites: CH 134. (CT 130 recommended.)

CT 150 Unit Operations I (4) (S)

This course covers the majority of materials handling and storage systems found in a chemical plant. Topics include tanks, pumps, piping, conveyors, and mixing operations. General characteristics and operation of these systems will be discussed along with operator checks and maintenance requirements. Three class hours, three laboratory hours. Prerequisite: CT 130.

CT 211 Instrumental Analysis I (4) (F)

Basic theory and practical applications of spectroscopy. Analytical instrumentation used in laboratory experiments includes UV-Visible, fluorescence, atomic absorbance/atomic emission, total organic carbon, and fourier transform infrared spectrometry.

ters. Standard methods of chemical analysis also covered. Class hours two, laboratory six hours. Prerequisites: CH 134, CT 110.

CT 212 Instrumental Analysis II (4) (S)

Basic theory and practical applications of chromatographic methods. Analytical instrumentation used in laboratory experiments includes high performance liquid chromatography, gas chromatography, gas chromatography coupled mass spectrometry. Standard methods of chemical analysis also covered. Class hours two, laboratory hours six. Prerequisite: CT 211.

CT 220 Unit Operations II (4) (F)

A continuation of CT 150. Covers the most common processes and equipment used to convert raw materials into chemical products. Includes discussion of different types of reactors, energy input/output, and reactor control methods. Three class hours, three laboratory hours. Prerequisite: CT 150.

CT 225 Unit Operations III (4) (S)

A continuation of CT 220. Covers the most commonly employed processes and equipment used to purify or enhance the quality of products from chemical reactors. Topics include distillation, liquid solid separation techniques, drying operations, and liquid/liquid extractions. Three class hours, three laboratory hours. Prerequisite: CT 220.

CT 230 Environmental Control Systems (3) (S)

This course covers process equipment and pollution control devices which are commonly employed at chemical plants. Techniques to limit emission of air borne contaminants and the management of liquid and solid wastes are discussed. Basic requirements for handling hazardous waste are included. Prerequisites: CT 220, HZ 120.

CT 235 Process Control Systems (3) (S)

This course covers the most common hardware and software used in process control at chemical manufacturing facilities. Control systems will be discussed with regard to applicability, operation, and maintenance. Corequisite: CT 225.

CT 240 Plant Operations Practicum (3) (F,S)

This course is designed to acquaint students with constraints encountered in implementation of process change. Material covered will include case studies from local facilities. Projects encountered in chemical manufacturing will be assigned for in-depth study with results and recommendations submitted in both written and oral reports. Prerequisite: Consent of instructor.

CHEMISTRY

CH 104 Principles of Chemistry (4) (F,S,Su)

This course is designed as an introduction to the study of chemistry. Topics covered include atomic and molecular structure, bonding, equation writing and stoichiometry, classification and naming of compounds, gas laws, liquid and solid states, solutions, acids and bases, oxidation and reduction, kinetics and equilibria. Credit may not be applied toward a chemistry major. Three class hours, three laboratory hours. Prerequisite: RE 081. Corequisite: MA 081. (Same as PC 104. Credit not allowed for both courses.)

CH 105 Survey of Organic and Analytical Chemistry (4) (S)

This course will be a second semester of principles of chemistry to give the student an elementary understanding of organic and analytical chemistry.

Topics include families of organic compounds, their preparation, and reactions. Both qualitative and quantitative analytical methods will be covered.

Three class hours, three laboratory hours.

Prerequisite: CH 104 or equivalent.

CH 106 Introduction to Organic and Biochemistry (3) (on demand)

This course will be a second semester of principles of chemistry to give the student an elementary understanding of organic and biochemistry. Topics include families of organic compounds, their preparation and reactions, as well as biological compounds and their functions. The information presented will also give the student a greater understanding of the biochemical principles which are presented in biological and health related courses. Students may not receive credit for both CH 105 and CH 106. CH 105 may substitute for CH 106, but CH 106 may not substitute for CH 105. Prerequisite: CH 104 or equivalent.

CH 134 General Chemistry I (4) (F,S,Su)

A course designed for students in the fields of science, medicine or engineering. Topics include properties of matter as related to the atomic and molecular structure, elements, compounds and equations, stoichiometry, kinetics, measurement techniques and calculations, and the reactions of types of elements and compounds. (Two-semester sequence course.) Three class hours, three laboratory hours.

Prerequisite: CH 104 or equivalent. Corequisite: MA 117 or MA 121.

CH 135 General Chemistry II (4) (F,S,Su)

The continuation of CH 134. The laboratory includes qualitative analysis. Three class hours, three laboratory hours. Prerequisite: CH 134 or equivalent, MA 117.

CH 210 Organic Chemistry I (4) (F,Su)

A course designed for science and preprofessional majors. Subjects covered are aliphatic and aromatic hydrocarbons, stereo-chemistry, monofunctional compounds, and some polyfunctional compounds. Basic techniques of separation, purification, identification and synthesis are emphasized in the laboratory. (Two-semester sequence course.) Three class hours, three laboratory hours. Prerequisite: CH 135 or equivalent.

CH 211 Organic Chemistry II (4) (S,Su)

A continuation of CH 210. Three class hours, three laboratory hours. Prerequisite: CH 210 or equivalent.

CH 217 Quantitative Analysis (4) (F)

A study of analytical chemistry covering gravimetric and volumetric analysis, chemical and ionic equilibria, complex ion formation and introduction to electrochemistry. Three class hours, three laboratory hours. Prerequisite: CH 135 or equivalent.

CH 299 Special Topics in Chemistry (1-5) (on demand)

This course is designed to allow detailed study of a specific topic in chemistry. Topics may vary each semester or may be individualized according to student needs. Course topics and emphases will be published prior to each semester. May be repeated for credit on different topics. Prerequisite: Consent of instructor and department head.

CIVIL ENGINEERING TECHNOLOGY

CI 101 Construction Business Management (2) (on demand)

An introduction to the fundamental concepts and practices of the construction business. The basic ele-

ments of the construction business will be examined with emphasis on project contracts, elementary blueprint reading, scheduling, field operations, construction law, purchasing and cost control.

Satisfactory/No Credit grading.

CI 110 Construction Safety (3) (on demand)

This course is designed to provide the information the professional needs in order to function effectively in the work-place. Includes an overview of safety professionals as well as a description of typical workplace accidents and injuries. The topic of preventive measures will be discussed. Also discussed will be information on initiating, developing, and evaluating a safety training program. Credit not allowed for both CI 110 and OS 125.

CI 116 Construction Planning and Scheduling (3) (on demand)

This course is designed to provide the student with a working knowledge for the planning and scheduling of a construction project. Topics of study will be C.P.M., Precedence Method, PERT, Bar Charts, arrow diagrams, and computer applications.

CI 164 Construction Methods & Estimating (3) (F)

This course is designed to present and demonstrate applications and techniques related to construction estimating. It is directed toward the technical aspects required to make quantity takeoffs in the preparation of a construction estimate. It is also to familiarize the student with the numbering sequence of divisions of the MASTERFORMAT system of the Construction Specifications Institute. Computer applications may be covered. Corequisite: MA 081.

CI 174 Surveying I (4) (S)

An introduction to the fundamental concepts and practices of surveying. Discusses the theory of measurements and field notes, methods of obtaining horizontal and vertical distances, methods of obtaining angles and directions, and construction surveying, curves, and volumes. Class two hours, laboratory four hours. Corequisite: MA 125.

CI 201 Construction Blueprint Reading, Estimating, and Proposal Writing (2) (on demand)

A course designed to present the fundamentals of writing a proposal in the construction industry based on sound estimates and takeoffs from a set of budget grade project prints. The Construction Specification Institute numbering sequence of the master format system will also be covered. Prerequisite: CI 101 or consent of instructor.

CI 202 Construction Financial and Cost Analysis (2) (on demand)

An in-depth study of financial and cost accounting means and methods related to small and medium sized construction companies, general contractors, and subcontractors. Prerequisite: CI 101 or consent of instructor.

CI 224 Hydraulics (3) (F)

This course introduces the students to principles of fluid statics and dynamics, including flow of incompressible ideal fluids, flow of real fluid in pipes, multiple pipe-line systems, liquid flow in open channels, and fluid measurements. Laboratory work consists of fluid-flow measurements and computations that parallel the work in the classroom. Class two hours, laboratory two hours. Corequisite: MD 134.

CI 231 Construction Materials Testing (3) (F)

An introduction to laboratory practices in measuring properties of construction materials such as soil, con-

crete, steel, timber, asphalt, and wood. All tests based on ASTM standards. Class two hours, laboratory two hours. Corequisite: MD 134.

CI 233 Contracts and Specifications (3) (S)
This course is concerned with the business, legal, and ethical phases of engineering and the study of engineering contracts and specifications, including competitive bidding, contracting procedures, the general and technical provisions of specifications, and inspection procedures for contract enforcement. Prerequisite: RE 081.

CI 242 Structures I (3) (S)
An in-depth study of the analysis, design, and detailing of elementary steel structures. Emphasis on structural components rather than entire structures. Prerequisite: MA 125. Corequisite: MD 242.

CI 243 Structures II (3) (S)
An in-depth study of the analysis, design, and detailing of elementary concrete structures. Emphasis is placed on entire structures. Prerequisite: MA 125. Corequisite: MD 242.

CI 274 Surveying II (4) (F)
A continuation of the principles and practices of surveying. Covers the theory and use of an E.D.M.; the practice of traversing and methods of adjusting, computing the area, and plotting a plat; and the practice of making a topographic map. Other topics include State Plane coordinates, Public Land surveys, Photogrammetry and satellite surveying. Class two hours, laboratory four hours. Prerequisites: CI 174, MA 125 or consent of instructor.

CI 298 Special Topics in Civil Engineering Technology (1-4) (on demand)
Specialized topics and/or problems in civil engineering technology are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

CI 299 Special Topics in Civil Engineering Technology with Lab (1-4) (on demand)
Specialized topics and/or problems in civil engineering technology are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

COMMERCIAL TRUCK DRIVING

CD 000 Commercial Truck Driving (F,S,Su)
Basic training in the principles and skills of commercial truck operations, proper load and vehicle documentation, safe operation, and compliance with all federal, state and local laws. Minimum age of 23 required for admission to the program. Course is 11 weeks long, 30 clock hours per week.

COMMUNICATIONS, SEE "MASS COMMUNICATIONS"

COMPUTER-AIDED DESIGN TECHNOLOGY

DD 100 Introduction to CAD (1) (on demand)
A course designed to give the student an introduc-

tion to a PC based Computer Aided Design (CAD) system. Assignments using the CAD system will be required. Satisfactory/No Credit grading.

DD 101 Microcomputer Drafting I (3) (F,S)
An intensive overview of AutoCAD's microcomputer based drafting software. The concepts of geometric construction and editing will be covered. The AutoCAD language and syntax will be emphasized. Class two hours, laboratory two hours. Prerequisite: MD 114 or consent of instructor.

DD 110 CAD Architectural Drafting and Design (3) (on demand)
A course designed to provide the student with an overview of basic architectural drafting and design principles using CAD as a tool. AutoCAD's AEC package will be emphasized, and topics such as floor plan layout, structural design, electrical systems, plumbing systems, door and window schedules, and elevations will be covered. Prerequisite: DD 101 or MD 124.

DD 116 CAD for Electronics (3) (S)
An introductory course in mechanical and electrical/electronic drafting practices and procedures. Pictorial and electronic drawings using computer-aided design (CAD) will be emphasized. Lecture two hours, laboratory two hours. Prerequisite: ET 115 or consent of instructor.

DD 118 Introduction to Intergraph Microstation (3) (S)
An intensive introduction to the Intergraph Microstation drafting and design software. The concepts of geometric construction and editing will be covered. The Microstation language and syntax will be emphasized. Class two hours, laboratory two hours. Prerequisites: MD 114 or consent of instructor.

DD 204 Computer-Aided Design/Modeling (3) (S)
This course is designed to provide an extensive study of computer-aided design principles and practices. The concepts of 3-D geometric construction and solids modeling using the AutoCAD software will be emphasized. Class two hours, laboratory two hours. Prerequisites: MD 124 or DD 101 or consent of instructor.

DD 209 CAD Applications (3) (F)
A course designed to explore advanced applications of the AutoCAD Software. Topics of study include DOS, Bills of Material generation, script files, slides, menu customization, importing and exporting data, computer networks, and CAD peripherals. Class two hours, laboratory two hours. Prerequisites: MD 124 or DD 101 or consent of instructor.

DD 210 AutoLISP Programming (3) (S)
A course designed to extend the flexibility and functionality of AutoCAD through using the programming interface language AutoLISP. AutoLISP functions and their applications will be covered with special emphasis on parametric programming. Class two hours, laboratory two hours. Prerequisite: DD 209, ET 115, or consent of instructor.

DD 226 Advance Intergraph Microstation (3) (on demand)
An intense study of the advanced features in Intergraph Microstation. The concepts of customization, three-dimensional modeling, and rendering will be covered. Class two hours, laboratory two hours. Prerequisite: DD 118 or consent of instructor.

DD 298 Special Topics in CAD (1-4) (on demand)
Specialized topics and/or problems in computer-aided design (CAD) are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

DD 299 Special Topics in CAD with Lab (1-4) (on demand)
Specialized topics and/or problems in computer-aided design (CAD) are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

COMPUTER PROGRAMMING, SEE "INFORMATION SYSTEMS"

COMPUTER REPAIR, SEE "INDUSTRIAL ELECTRONICS"

COMPUTER SCIENCE, SEE "INFORMATION SYSTEMS"

COOPERATIVE EDUCATION

CP 101 Cooperative Education Work Experience I (1-3)
A course designed to allow the student to explore a career, work in a structured environment while acquiring marketable job skills, and develop interpersonal skills and self-confidence. This is accomplished by combining on-campus study with off-campus work. Lectures, guest speakers, work experiences, discussion, written report. Credit based on hours worked. Approved for unrestricted elective credit in career programs (AAS).

CP 102 Cooperative Education Work Experience II (1-3)
A continuation of CP 101. Lectures, guest speakers, discussion of work experiences, and written report. Credit based on hours worked. Approved for unrestricted elective credit in career programs (AAS).

CP 103 Cooperative Education Work Experience III (1-3)
Work experience number three. Lectures, guest speakers, discussion of work experience, and written report. Credit based on the number of hours worked. Approved for unrestricted elective credit in career programs (AAS).

CP 104 Cooperative Evaluation Work Experience IV (1-3)
A continuation of CP 103.

CP 105 Cooperative Education Work Experience V (1-3)
A continuation of CP 104.

CP 106 Cooperative Education Work Experience VI (1-3)
A continuation of CP 105 and the final evaluative work experience.

COSMETOLOGY

CY 000 Cosmetology (F,S,Su)

Personal and shop safety rules, and rules for sanitation and sterilization. Use of equipment and implements used in the salon. Scalp and hair care, hair shaping, finger waving, hair styling, permanent waves, thermal waving, blow-dry styling, relaxers, pressing and thermal straightening, color, manicuring and facials. Nature of electricity, types of current, safety precaution and practices dealing with electricity. Introduction to the various organs and systems of the body and how they function as well as the difference between organic and inorganic chemistry. Principles and practices of good selling, basics of sales psychology and rules of first aid. 30 clock hours per week.

Note: 1500 clock hours required for State Board licensure.

COURT REPORTING

OF 175 Medical and Technical Dictation (3) (Su)

This course is designed to familiarize the student with terminology encountered in medical malpractice, chemical, construction, patent, and other complex litigation with emphasis on the use of special reference materials. Prerequisite: OF 230.

OF 210 Court Reporting I (5) (F)

An introduction to the principles and theory of reading and writing machine shorthand. Emphasis on machine operation and phonetics. Prerequisites: EN 070, RE 070.

OF 220 Court Reporting II (4) (S)

A continuation of machine shorthand with an emphasis on brief forms, phrases, and development of student's ability to take dictation. Speed required for course completion is 100 words per minute. Prerequisite: OF 210.

OF 230 Court Reporting III (4) (Su)

A continuation of machine shorthand with an emphasis on speedbuilding. Speed required for course completion is 130 words per minute. Prerequisite: OF 220.

OF 240 Court Reporting IV (4) (F)

A continuation of machine shorthand with an emphasis on speedbuilding. Speed required for course completion is 170 words per minute. Prerequisite: OF 230.

OF 250 Court Reporting V (4) (S)

A continuation of machine shorthand with an emphasis on speedbuilding, accuracy, and dictation of various types of legal proceedings. The student must pass at least two five-minute timed writings in keyboarding from unfamiliar material at a minimum of 60 net words per minute or 70 gross words per minute with a maximum of 5 errors. Machine shorthand speed required for course completion is 200 words per minute. Prerequisite: OF 240.

OF 255 Court Reporting VI (4) (F,Su)

A continuation of machine shorthand with an emphasis on speedbuilding and all aspects of court reporting using machine shorthand. The student must pass one five-minute test at 96% and two five-minute tests at 95% accuracy at each of the following speeds: 225 words per minute testimony (two-voice), 200 words per minute jury charge, and 180 words per minute literary. Prerequisite: OF 250.

OF 260 Court Reporting Procedures I (4) (F)

A study of the methods and procedures for the production of a transcript of legal proceedings with emphasis on format, punctuation, dictation of machine shorthand notes, general use of reference materials, computer transcription of notes including real-time reporting. Prerequisite: OF 210.

OF 270 Court Reporting Procedures II (4) (S)

A study of procedures followed in the freelance field of court reporting with emphasis on the taking and transcription of depositions, sworn statements, arbitrations, and procedures followed in the practice of official court reporting with emphasis on courtroom procedures, duties of an official reporter, and production of appeal transcripts. This course will include an internship with a practicing court reporter. The student shall complete at least 50 verified hours of internship of which a minimum of 40 hours shall be in actual writing time. Prerequisite: OF 260.

CREATIVE WRITING, SEE "ENGLISH"

DENTAL ASSISTING

DA 120 Basic Sciences I (2) (F)

The first of two courses designed to provide the dental assisting student with familiarity in the basic sciences with emphasis on anatomy and physiology, microbiology, oral anatomy, histology, and embryology. Prerequisite: Acceptance into the Dental Assisting Program.

DA 121 Basic Sciences II (1) (S)

The second of two courses designed to provide the dental assisting student with familiarity in the basic sciences with emphasis on oral pathology, nutrition, pharmacology and pain control. Prerequisites: DA 120, DA 124, DA 125, DA 130.

DA 124 Dental Materials (3) (F)

A course designed to prepare the dental assistant to perform laboratory skills, including manipulation of materials, fabrication of models and other devices, and operation of laboratory equipment. Emphasis is on laboratory and materials safety in compliance with OSHA guidelines. Prerequisite: Acceptance into the Dental Assisting Program.

DA 125 Dental Radiology (3) (F)

This course studies the theory and practice in dental radiology, emphasizing the technical aspects of x-ray production, exposure techniques, film processing, preliminary interpretation, and radiation biology and safety. Prerequisite: Acceptance into the Dental Assisting Program.

DA 128 Dental Office Management (3) (S)

A course designed to prepare the student to serve as a dental receptionist/dental office manager. Prerequisites: DA 120, DA 124, DA 125, DA 130.

DA 130 Clinical Skills I (5) (F)

A course designed to prepare the Dental Assistant to assist in all aspects of dental clinical procedures, performing tasks as specified by the Tennessee State Dental Practice Act. Students will assist in the on-campus clinic and will be assigned to two or more off-campus clinical sites. Students must provide their own transportation. Students must submit valid

CPR card before the start of the externship rotation requirements. Prerequisite: Acceptance into the Dental Assisting Program.

DA 131 Clinical Skills II (9) (S)

A course designed to perfect the Dental Assistant's skills in assisting in all aspects of dental clinical procedures, performing tasks as specified by the Tennessee State Dental Practice Act. Students will be assigned to off-campus clinical sites. Students must provide their own transportation. Includes in-depth study of dental specialties, ethics and jurisprudence, preparation for State and National Board Exams, and professional organizations. Prerequisites: DA 120, DA 124, DA 125, DA 130.

DA 134 Communications for Dental Assistants (2) (S)

A course designed to provide students with written and oral communication skills and familiarity with applied psychology as they relate to the dental profession. Prerequisites: DA 120, DA 124, DA 125, DA 130.

DENTAL HYGIENE

DH 140 Dental Hygiene Science I (4) (F)

An integrated approach to the presentation of the dental sciences including tooth morphology, head, neck and oral anatomy, oral embryology and histology, oral pathology, radiology, periodontology, pharmacology, pain control and dental materials. Relevant information will be presented within a framework of five human responses to pathological stimulating factors including malformations, degenerations, cardiovascular responses, inflammation and the immune response, and neoplasms. The course is designed to promote critical thinking and decision making by the student through multidiscipline associations. Prerequisite: Acceptance into the Dental Hygiene Program. Corequisites: DH 141, DH 142.

DH 141 Dental Hygiene Theory I (4) (F)

An integrated approach to the presentation of theory of client care including diagnostic services, oral health education and preventive counseling, client management including those with special needs, dental hygiene instrumentation, community dental health services, medical and dental emergencies including basic life support, and infection and hazard control management. Critical thinking and effective decision making will be stressed utilizing a multidisciplinary approach to problem solving. Prerequisite: Acceptance into the Dental Hygiene Program. Corequisites: DH 140, DH 142 or consent of instructor.

DH 142 Dental Hygiene Applications I (4) (F)

The application of dental hygiene theory through the provision of dental hygiene services in a supervised setting on a partner, a laboratory manikin or a client. Determination of appropriate services through accurate decision making will be stressed. Laboratory 11 hours. Prerequisite: Acceptance into the Dental Hygiene Program. Corequisites: DH 140, DH 141 or consent of instructor.

DH 143 Dental Hygiene Science II (4) (S)

A continuation of DH 140. Prerequisite: DH 140 or consent of instructor. Corequisites: DH 144, DH 145.

DH 144 Dental Hygiene Theory II (4) (S)

A continuation of DH 141 with emphasis on special

needs patients. Prerequisite: DH 141 or consent of instructor. Corequisites: DH 143, DH 145 or consent of instructor.

DH 145 Dental Hygiene Applications II (4) (S,Su)

A continuation of DH 142 with emphasis on integration of preventive, educational and therapeutic concepts when treating clients. Laboratory 12 hours. Prerequisite: DH 142. Corequisites: DH 143, DH 144 or consent of instructor.

DH 160 Dental Hygiene Seminar I (1) (F,S,Su)

A course designed to further a student's interest in a specific aspect of dental hygiene which may include, but is not limited to a survey of dentistry, clinical applications of intraoral imaging, management of the modern dental office, advanced research concepts, gerodontology, and health care marketing. A course of study will be designed by the student and the instructor to best meet the needs of the student. Prerequisite: Consent of instructor.

DH 246 Dental Hygiene Science III (3) (F)

A continuation of DH 143. Prerequisite: DH 143 or consent of instructor. Corequisites: DH 247, DH 248 or DH 249 or consent of instructor.

DH 247 Dental Hygiene Theory III (2) (F)

A continuation of DH 144 with emphasis on patient care problem solving. Prerequisite: DH 144 or consent of instructor. Corequisites: DH 246, DH 248 or DH 249 or consent of instructor.

DH 248 Dental Hygiene Applications III (4) (F,Su)

A continuation of DH 145 with emphasis on treatment planning and integration of preventive, educational and therapeutic concepts when treating clients with gingivitis and slight to moderate periodontal conditions. Laboratory 14 hours. Prerequisite: DH 145 or consent of instructor. Corequisites: DH 246, DH 247 or consent of instructor.

DH 249 Dental Hygiene Applications IV (4) (F,S)

A continuation of DH 248 with emphasis on treatment planning and integration of preventive, educational and therapeutic concepts when treating clients with severe gingivitis and moderate to severe periodontal conditions. Laboratory 14 hours. Prerequisite: DH 248 or consent of instructor. Corequisites: DH 246, DH 247 or consent of instructor.

DH 255 Dental Hygiene Clinical Enhancement (2) (on demand)

A course designed for practicing dental hygienists or dental hygiene students who wish to further develop their clinical skills. Individual attention will be given to each participant with special emphasis on scaling and curettage techniques. Laboratory seven hours. Satisfactory/No Credit grading. Prerequisite: Consent of instructor.

DH 261 Dental Hygiene Seminar II (1) (F,S,Su)

A continuation of DH 160. Students will choose an area of interest and develop, with instructor guidance, a course of study that best meets the student's needs. Prerequisite: DH 160 or consent of instructor.

DH 270 Advanced Dental Concepts (1) (F,S,Su)

Treatment modalities will be studied which are presently available but are beyond the level of the student's expertise. Emphasis will be placed on

journal research and case presentations and current issues and trends in dentistry. Prerequisite: Consent of instructor.

DH 271 Principles of Dental Research (1) (F,S,Su)

A concentrated study of the principles of dental research and how they apply to community (public) health dentistry. The student will explore the role a dental hygienist may appropriately assume as a dental health researcher and facilitator of change and will plan and conduct a dental research project. Prerequisite: Consent of instructor.

DH 272 Community Dental Care (1) (F,S,Su)

A series of visitations to community agencies offering dental services to the dentally underserved. In addition visitations are made to agencies that directly affect the dental health of the community. Students will also be required to complete a community health project using acceptable methodology. Laboratory three hours. Prerequisite: Consent of instructor.

DIAGNOSTIC MEDICAL SONOGRAPHY

US 200 Introduction to Diagnostic Medical Sonography (1) (F)

This course provides the student with the fundamental principles of ultrasound instrumentation, and introduces the student to basic terminology which will be utilized in the clinical setting. Cross-sectional and sagittal anatomy, as seen on sonograms, will also be reviewed. Other topics discussed are the rules and regulations of the Diagnostic Medical Sonography program and its clinical affiliates, a brief history of diagnostic ultrasound and responsibilities of the students and instructors in the clinical settings. (Liability insurance fee required.) Prerequisite: Admission to Diagnostic Medical Sonography Program.

US 201 Ultrasound Physics I (2) (F)

The first of a two-course sequence; an introduction to the physical principles of diagnostic medical sonography, correlation being made to the instrumentation procedures introduced in US 200. An understanding of the physical principles involved in the creation of the ultrasound image will begin to evolve in this course. Topics covered include the fundamentals and characteristics of sound waves, the interaction of ultrasound with matter, and basic instrumentation knowledge. Class 2.5 hours, laboratory 1.5 hours. Prerequisite: Admission to Diagnostic Medical Sonography Program. Corequisite: US 200.

US 202 Obstetrics and Gynecology I (3) (F)

The first of a three-course sequence; the role of ultrasound in evaluation of the female pelvis will be the main focus. Normal pelvic anatomy will be taught, along with physiological processes affecting its imaging. Pathological processes of the female pelvis and their sonographic appearances will be discussed. First trimester obstetrical imaging will be introduced. Class three hours, laboratory one hour. Prerequisite: Admission to Diagnostic Medical Sonography Program, US 200 (to be completed the same semester, prior to the beginning of US 202).

US 203 Abdominal and Small Parts I (3) (F)

The first of a three-course sequence; the student will become familiar with abdominal cross-sectional and sagittal anatomy, including the muscular system and abdominal vascular structures. The organs of the abdomen will be introduced, as they relate to one another and by normal sonographic presentation and

physiologic process. The student will learn metabolic functions and the importance of laboratory data and patient clinical history as related to the sonographic scanning procedure. Class four hours, laboratory two hours. Prerequisite: Admission to Diagnostic Medical Sonography Program, US 200 (to be completed the same semester, prior to the beginning of US 203).

US 205 Clinic I (8) (F)

An introduction to the sonographic imaging process. The student will become familiarized with the clinical setting, the actual operation of ultrasound instrumentation, indications and the required protocol for sonography exams. Case studies and imaging critiques will be performed on a monthly basis as group study with the clinical instructor(s). The student's performance shall be evaluated through clinical competencies in each related category by technician and instructor evaluations. 360 clinic hours. Prerequisite: Admission to Diagnostic Medical Sonography Program. Corequisites: US 200, US 201, US 202, US 203.

US 210 Departmental Management (1) (S)

This course is designed to assist the student in placement into a department where there has been no existing ultrasound or where the ultrasound department has had little or no emphasis on proper Quality Assurance. Emphasis will be placed on performing QA reports for an ultrasound department and proper usage of the AIUM device and other instrumentation which measures the operation of equipment. The student will be required to submit a complete set of detailed protocol for the simulated department. A research paper and oral report will be due at the end of the semester on an appropriate subject of study. Prerequisites: Completion of all Fall US courses. Corequisites: US 211, US 212, US 213.

US 211 Ultrasound Physics II (2) (S)

The second of a two-course sequence; a continuation of the physical principles of diagnostic medical sonography first introduced in US 201. Topics covered include the characteristics of real-time ultrasound transducers, Doppler ultrasound physics and spectral analysis, and image processing and display. Laboratory experiments are used to demonstrate clinical applications of the theoretical principles and concepts. Class two hours, laboratory two hours. Prerequisite: US 201. Corequisites: US 210, US 212, US 213.

US 212 Obstetrics and Gynecology II (2) (S)

The second of a three-course sequence; the role of ultrasound in the evaluation of fetal anatomy will be the main topic of discussion. The student will learn to estimate gestational age through fetal biometry techniques. Detection of fetal anomalies and intrauterine growth retardation and their management are addressed. The student will learn transabdominal and transvaginal techniques for assessing early intrauterine and ectopic pregnancies. Prerequisite: US 202. Corequisites: US 210, US 211, US 213.

US 213 Abdominal and Small Parts II (2) (S)

The second of a three-course sequence; the student will increase knowledge of the abdominal anatomy introduced in US 203. Pathologic patterns of the various organs will be discussed and related to sonographic appearance, physiologic changes, and laboratory findings. Anatomic variations of the organs will be described. The role of Doppler and color-flow techniques in the evaluation of vascular

anatomy will be introduced to the student.
Prerequisite: US 203. Corequisites: US 210,
US 211, US 212.

US 220 Ultrasound Seminar (1) (Su)

This course presents an integrated coverage of ultrasound physics, equipment operation and assessment, image production and evaluation, ultrasound procedures, and patient care and management. Emphasis is placed on the development of skills, attitudes and knowledge necessary to exercise independent judgment and discretion in the performance of ultrasound imaging procedures. Primary focus is placed on non-routine procedures in each exam category area, and the evaluation of the performance of ultrasound systems to effect the best diagnostic results with the least cost to the patient. Prerequisite: Completion of Spring US courses. Corequisites: US 221, US 222, US 223, US 225.

US 221 Physical Instrumentation Applications (2) (Su)

A continuation of the knowledge gained in US 201 and US 211, with application to the instrumentation and clinical environment expanded upon. Topics introduced are image analysis with explanations of causes and corrections of artifacts, Quality Control measurements and observations, and the biological effects of ultrasound. All of the previously discussed physical principles will be reviewed at the completion of this course. Class two hours, laboratory two hours. Prerequisite: US 211 with a minimum grade of "C." Corequisites: US 220, US 222, US 223, US 225.

US 222 Obstetrics and Gynecology III (2) (Su)

The third of a three-course sequence; advanced fetal and pelvic sonographic techniques will be the main focus. Multiple gestations, antenatal syndromes, fetal disorders, placental, umbilical cord and membrane evaluation techniques and management will be demonstrated to the student. The student will become familiar with maternal disorders during pregnancy. Gynecologic infertility studies will be introduced. The student will learn to evaluate and recognize uncommon pathological processes in the nongravid pelvis. Prerequisite: US 212. Corequisites: US 220, US 221, US 223, US 225.

US 223 Abdominal and Small Parts III (2) (Su)

The third of a three-course sequence; a continuation of US 213 in the anatomic appearance and pathologic patterns of the abdominal organs. The student will also gain knowledge in the demonstration of anatomy and pathology of superficial structures (small parts) and neonatal cephalography. Prerequisite: US 213. Corequisites: US 220, US 221, US 222, US 225.

US 225 Clinic III (1) (Su)

A continuation of US 205; the student will have the opportunity to further increase sonographic knowledge and skills. The student will continue performance of sonographic examinations under clinical supervision. Weekly case studies and imaging critiques with the clinical instructor will continue. Special emphasis will be given to final category evaluations and completion of all clinical objectives in the categories of: (1) Abdominal and Small Parts, (2) Obstetrics and Gynecology, and (3) Ultrasound Physics and Instrumentation. Sonographer and instructor evaluations will be used for assessment of student performance. Forty-five clinic hours. Prerequisite: Completion of Spring US courses. Corequisites: US 220, US 221, US 222, US 223.

DIESEL EQUIPMENT MECHANICS

DM 000 Diesel Mechanics (F,S,Su)

Covers knowledge and skills necessary to perform the job requirements of a diesel engine mechanic. Diesel assembly and disassembly, safety regulations, proper operation of shop equipment. Cylinder block, camshaft, crankcase and oil pan. Cylinder head and valves, timing and valve mechanism, air intake system components, and other support systems and components. Diesel fuel, governors, fuel-injection, nozzles and holders, CAT fuel systems, Cummins fuel system, Detroit fuel system. Relays, batteries, electric and hydraulic starting systems, voltage regulators, instrument gauges, trouble shooting and tune-ups. Also covers mathematical skills necessary to meet and accept the responsibilities of being a diesel technician (problems reflect the practical and realistic situations diesel technicians must handle as part of trade requirements). 30 clock hours per week.

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for DM 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

DIETARY MANAGER

ND 110 Practical Diet Therapy (3) (F)

A study of the principles of normal nutrition and nutrition therapy and its relationship to health and disease. Special emphasis is given to the roles of foods and the nutrients they contain, with regard to specific diet modifications. Includes practical planning of diets and identification of patients with special dietary needs, nutritional assessments, care plans and quality assurance for clinical nutrition services will be included. Corequisite: ND 111 required for students in the Dietary Manager Program.

ND 111 Practical Diet Therapy Practicum (1) (F)

A series of visitations to area non-commercial food service agencies. Application of diet therapy principles in work settings. Includes menu planning for normal therapeutic diets throughout the life cycle. Clinic four hours. Corequisite: ND 110.

ND 120 Food Service Sanitation (2) (F)

A study of the principles of food service sanitation and safety. Practical planning of a food service safety system, inventory control procedures, sanitation inspection sheets, protection of food during preparation and service, equipment safety and sanitation, and cleaning will be included. This course includes new information on Hazard Analysis Critical Control Point (HACCP) food safety systems, emerging pathogens that cause foodborne illness, and the Hazard Communication Standard (HCS) required by the Occupational Safety and Health Administration (OSHA). The Natural Restaurant Association's SERVSAFE Certification Examination will be administered at the end of the course. Corequisite: ND 121 required for students in the Dietary Manager Program.

ND 121 Food Service Sanitation Practicum (1) (F)

A series of visitations to area non-commercial food service agencies and/or a study of the principles of food service, sanitation and safety in the student's work facility. Practical planning of food service safety systems, inventory control procedures, sanitation

inspection sheets, protecting food in preparation and service, equipment safety and sanitation, and cleaning will be included. Laboratory three hours. Corequisite: ND 120.

ND 130 Food Service Management (2) (S)

A study of the principles of food procurement, production and service. Covers practical methods of food service departments organizing/planning, menu planning including computer applications, food production/productivity, work simplification methods, inventory control, equipment procurement, and continuous quality improvement methods will be included. Corequisite: ND 131 required for students in the Dietary Manager Program.

ND 131 Food Service Management Practicum (1) (S)

A series of visitations to area non-commercial food service agencies. Application of the principles of food procurement, production and service. Covers practical methods of food service department organizing/planning, menu planning including computer applications, work simplification methods, food production/productivity, inventory control, equipment procurement, and continuous quality improvement methods. Clinic four hours. Corequisite: ND 130.

ND 140 Food Service Administration (3) (Su)

A study of the principles of food service administration and personnel management. Special emphasis is given to human relations, institutional development and operations management. Includes practical problem solving, interpersonal skills, systems analysis principles, dietary policies and procedures, departmental budgeting, marketing and computer applications will be included. Corequisite: ND 141 required for students in the Dietary Manager Program.

ND 141 Food Service Administration Practicum (1) (Su)

A series of visitations to area non-commercial food service agencies and application of the principles of food service administration and personnel management. Special emphasis is given to human relations, institutional development and operations management. Includes practical problem solving, interpersonal skills, systems analysis procedures, department budgeting, marketing and computer applications. Clinic four hours. Corequisite: ND 140.

ND 240 Diet Therapy (3) (on demand)

A study of the principles of medical nutrition therapy and its relationship to health and disease. Special emphasis is given to the roles of foods and the nutrients they contain with regard to specific diet modifications. Practical planning of diets and identification of patients with special dietary needs, nutritional assessments, care plans and quality assurance for clinical nutrition services will be included. Prerequisite: BI 143.

ND 245 Food Systems Management (3) (on demand)

A study of the principles of supervision and food preparation. Special emphasis is given to food service, sanitation and safety. Practical planning of menus, personnel supervision, patient/client food service, food and supply procurement and production will be included. Prerequisite: BI 143.

ND 250 Food Systems Administration (3) (on demand)

A study of the principles of food service administration and personnel management. Special emphasis is given to human relations, institutional develop-

ment and operations management. Practical problem-solving, interpersonal skills, system analysis principles, types of food service facilities, dietary policies and procedures, department budgeting, marketing and computer applications will be included. Prerequisites: ND 240, ND 245.

DISABILITIES SUPPORT

DB 100 Computer Access Evaluation (1) (on demand)

This course is designed to provide a means for in-depth computer access evaluation in order to determine an appropriate access environment for a student with one or more disabilities. During this course, range of motion and keyboard access evaluations will be performed, access methods identified, special systems configured, and a preliminary introduction to equipment usage begun. Satisfactory/No Credit grading.

Note: This is a course for which institutional credit is given. It is not accepted toward any degree program at Chattanooga State.

DB 101 Adaptive Keyboarding (1) (on demand)

This course is designed to teach keyboarding basics to disabled students who must use adaptive technologies for successful access to the keyboard or screen and/or are unable to compete successfully in mainstream keyboarding classes. Satisfactory/No Credit grading. May be substituted for OF 107.

DB 102 Computer Access I (3) (on demand)

Designed for students with physical or visual impairments, this course provides training in the use of adaptive computer technologies which enhance a disabled student's ability to access and use micro-computers. Each student is introduced to the use of adaptive computer technologies appropriate to his or her disability within the context of word processing. Students will learn to use the appropriate adaptive hardware and/or software necessary to perform basic word processing skills including creating, modifying, printing, storing, and retrieving documents. DB 100 and/or DB 101 may be prerequisite.

DB 103 Computer Access II (3) (on demand)

This course is designed for students who have successfully completed Computer Access I. Students will enhance their computer access skills through the completion of course work relevant to their educational/vocational objectives such as advanced word processing, electronic spreadsheets, database managers, accounting systems, or computer assisted design. Prerequisite: DB 102.

DRAFTING, SEE "TECHNICAL DRAFTING"

DRAMA

DR 111 Introduction to the Theatre (3) (F)

A representative survey of the forms of drama and stagecraft involved in human culture from its beginning to the present. Analysis of significant plays from outstanding periods of theater history, with emphasis on enhancement of students' understanding and appreciation of the theatrical experience.

DR 126 Voice and Diction for the Stage (2) (on demand)

An introduction to vocal production for the stage. This course is designed to give the student fundamental knowledge of vocal production and dialects using the Lessac approach; good vocal quality, clear articulation, and standard pronunciation patterns with special focus on vocal needs for the stage.

DR 131 Movement I (2) (on demand)

This course is designed to give the student fundamental knowledge of movement vocabulary necessary for auditioning and performing in musical theatre dance. Basic techniques in jazz, tap, ballet and modern dance as applied to choreography for musical theatre will be presented.

DR 204 Performance and Production (2) (on demand)

A laboratory course dealing with all aspects of theatrical performance and production. Students will be given specific assignments as functioning members of a production or a performance company. Repeatable for credit. A maximum of two hours may be applied toward a degree. Laboratory four hours.

DR 212 Acting I (3) (on demand)

A course in the fundamentals of formal stage performance, stressing both voice and movement.

DR 213 Acting II (3) (on demand)

A continuation of the basic concepts and principles introduced in DR 212. Designed for students interested in Theatre Arts as a major emphasis, this course focuses on building characters in acting and auditioning techniques for the stage and screen. Prerequisite: DR 212.

DR 220 Technical Theatre I (3) (on demand)

This course is designed to give the student a fundamental knowledge of vocabulary, principles and techniques employed in major technical areas of theatrical production. Basic principles and techniques of stagecraft, lighting, costuming and sound will be presented. Students will have the opportunity for hands-on application in actual theatrical productions.

DR 222 Acting III (3) (on demand)

This second-year course is designed to build upon the concepts of acting techniques developed in DR 212 and DR 213. Acting styles will be explored as they relate within different theatrical genres. The in-depth study of acting techniques continues, including the analysis and development of character using monologues and scene study. Prerequisites: DR 126, DR 131, DR 204, DR 212, DR 213, DR 222.

DR 223 Acting IV (3) (on demand)

A continuation of DR 222. The advanced acting technique, as applied to specific theatrical genres, will be expanded to include applied study in the performance and production of scenes, including self-direction. This course will also explore acting styles within theatrical historical periods. Prerequisites: DR 126, DR 131, DR 204, DR 212, DR 213, DR 222.

DR 241 Musical Theatre (2) (on demand)

A course designed to give the student fundamental knowledge of the performance techniques used in modern musical theatre productions/auditions. Voice production, acting, and movement for the stage will be presented in various scene study projects from the standard musical theatre repertory. Prerequisites: DR 126, DR 212.

EARLY CHILDHOOD EDUCATION, SEE "EDUCATION"

ECONOMICS

EC 110 Introduction to Economics (3) (on demand)

A course designed for the two-year student who will need no further credits in economics. Fundamentals of macroeconomics and microeconomics. Application of decision-making to the student's major.

EC 113 Consumer Economics (3) (on demand)

This course is designed to provide students with the knowledge of "what to look for" and "where to look" to make rational decisions when purchasing clothing, food, housing, consumer durables, and insurance; in using credit; in saving and investing; and in preparing for retirement and the distribution of property. Lifestyles, impulse buying, budgeting, leasing versus purchasing, credit-card and auto-repair fraud, bad buys, insurance scams, wills, bankruptcy, insurance settlement procedures, health care, easing tax burden and shopping by mail are among the numerous topics that will be covered.

EC 211 Principles of Economics I—Macro (3) (F,S)

A study of national income and its determination, fiscal and monetary policy, money and banking, economic growth, and international economics.

EC 212 Principles of Economics II—Micro (3) (F,S)

A study of the market system. Covers the price system, labor and the distribution of income, government and business, and forms of business organization.

EC 235 Special Topics in Economics (1-3) (on demand)

A study of specific topics of current economic interest. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

EDUCATION

ED 117 Principles of Childhood Education (3) (F)

A course introducing the beginning Early Childhood student to the field on a pragmatic basis. Preparation for student teaching with emphasis on the physical, emotional, cognitive, creative, and social aspects of young children and of school-age children in groups.

ED 126 Creative Expression (3) (F)

A course dealing with theories, teaching techniques, and basic program components of early childhood art instruction. Emphasizes value of art in physical-mental and social-emotional growth of young children. Explores use of art media, creative play activities, and methods of incorporating creativity into other curricular areas.

ED 199 Practicum I (4) (F,S)

A course combining teaching with a methods component. Students perform daily tasks under supervision in the College's two child development centers, using skills and techniques learned in previous

courses. Methods component requires the student to teach directed lessons to small groups of children and to develop curriculum units, weekly lesson plans, and resource files. Requires twice-weekly meeting with course instructor in seminar setting. Class two hours, laboratory six hours. Prerequisite: Approval of instructor.

ED 201 Foundations of Education (3) (F,S)
An introduction to the history, philosophies, and present practices of elementary and secondary education in America. Includes field work experience in early childhood and elementary education.

ED 212 Drug and Alcohol Abuse Awareness (3) (on demand)
A course designed to provide knowledge of the stages and dynamics of drug and/or alcohol addiction. Includes prevention and intervention techniques, and development and implementation of support groups. Information is provided concerning treatment centers and the treatment process.

ED 219 Family Dynamics/Parent Educator (3) (S)
Course deals with parent-teacher relations, parental involvement in education, and effective parenting behaviors. Child abuse and neglect, societal influences on parenting, and changes in the American family structure are examined.

ED 220 Development of the Exceptional Child (3) (S)
A survey of the exceptionalities encountered in classrooms and society. The significance of PL 94-142 and current data on prevalence and treatment of a variety of exceptionalities are featured. Includes consideration of the intellectually and physically challenged.

ED 221 Supervision and Administration of Preschool Centers (3) (S)
A course designed for Early Childhood Education majors and for experienced preschool teachers and directors who wish to improve their skills. Emphasizes program planning, selection and use of staff, the role of the supervisor, in-service training, and community resources for supplementing a center's services. Special guest lecturers and field trips are an added feature, and licensing requirements are a primary focus. Prerequisite: Permission of instructor.

ED 222 Educating the Culturally Different (3) (F)
A course providing insight into the special problems and needs of children whose ethnic, religious, or cultural heritage is different from the majority culture group. The effects of poverty and prejudices on classroom performance are examined, as well as classroom practices to help overcome these handicaps.

ED 223 Language Arts for Young Children (3) (S)
Techniques and methods for encouraging the development of language skills in the young child. Focus on strategies for stimulating speech, discussion, vocabulary development, and reading readiness. Includes emphasis on prose and verse for young children and techniques for story-telling, finger plays, and the use of audio-visual materials.

ED 235 Special Topics in Education (1-3) (on demand)
Study of specific topics of traditional and current interest, including relevant social developments and

issues. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics.

ED 240 Infant and Toddler Care (3) (F)
A course in methods of providing safe, competent individual and group care, as well as a warm and secure emotional atmosphere for infants and toddlers. Includes procedures for stimulating the intellectual and physical development of infants and toddlers in addition to basic caregiving skills. Course open to non-majors (i.e., parents, parents-to-be, babysitters).

ED 245 Principles of Effective Teaching (3) (on demand)
A course designed to assist the instructor in making the best possible use of classroom time, including procedures and suggestions for planning, management, and instruction based on current and past research and practice in teaching and learning. Pre/Corequisite: ED 201.

ED 298 Methods of Early Childhood Teaching (3) (F)
A course introducing a variety of concepts and techniques appropriate to teaching in an early childhood center. Methods component requires the student to develop lesson plans, arrange a classroom, create labels for interest centers, create prop boxes and developmental activities. Field trips are an added feature. Prerequisites: ED 117, ED 126, ED 219, ED 223, ED 240, PE 213, PY 215, or approval of instructor.

ED 299 Practicum (5) (S)
Students are required to perform a minimum of 15 hours per week as a teacher assistant with supervision in an approved program. Students will be able to apply and demonstrate appropriate knowledge and skills required for employment in an early childhood program. Students must complete 150 hours within the semester. Prerequisite: ED 298 or approval of instructor.

ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY

EE 100 Introduction to Electronics (1) (on demand)
This course is designed to develop techniques, procedures, and skills necessary for electronics circuit board assembly. Students will choose, with the approval of the instructor, an electronics parts kit which they will assemble, test, and demonstrate. Satisfactory/No Credit grading.

EE 110 Electrical Circuits I (5) (F,S)
A study of the relationships between current, voltage, resistance, and power for direct current circuits. Analysis of series, parallel and series-parallel circuits, and investigation of capacitance, magnetism, inductance and DC transients. Analysis of sinusoidal alternating waveform series and parallel AC circuits. Theory and use of laboratory experiments support and verify component and circuit concepts. Class four hours, laboratory three hours. Corequisite: MA 121.

EE 113 Introduction to Power Plant Instrumentation (4) (TVA)
This course is a study of the theory involved in the operation, design, construction, and application of nuclear power plant instrumentation systems.

EE 121 Electronics I (4) (S,Su)
This course deals with the characteristics and

parameters of semiconductor devices, including diodes, bipolar transistors, optoelectronic devices, and field effect transistors. It covers the basic physics of these devices, biasing methods, and application of diodes in elementary rectifier/filter circuits. It covers the characteristics of small signal and power amplifiers utilizing both bipolar and field effect transistors. Class three hours, laboratory three hours. Prerequisite: EE 110.

EE 140 Digital Circuits (4) (F,S)
An introduction to the fundamentals of digital circuitry. Topics include systems and codes, Boolean algebra, logic circuit design, and analysis and types of logic circuits. Also introduced are logic storage devices, arithmetic circuits, counters, registers, and MSI (medium-scale integration) logic circuits. The laboratory experiments emphasize the design and analysis of logic circuits. Class three hours, laboratory three hours. Corequisite: MA 081.

EE 141 Microcomputer Circuits (4) (S,Su)
An intensive study of computer systems, permanent storage devices, registers, input-output control and programming a typical computer system. Computer circuitry is analyzed in the laboratory. Topics range from the internal architecture of a microprocessor through the interfacing of microcomputers to real world systems. Emphasis is on the design, analysis and testing of a basic microcomputer consisting of MPU, RAM, EPROM, clock, control circuits, and standard input/output interface devices. Also emphasized are applications of micro-processor devices. Class three hours, laboratory three hours. Prerequisite: EE 140.

EE 200 Networking Technology I (4) (F)
A course in local area networks with emphasis on wiring, cables, telephone networks, modems, cable modems, protocol and local area networks. Class three hours, laboratory three hours.

EE 201 Networking Technology II (4) (S)
A continuation of EE 200 moving from cable specifications and one server LAN's to larger LAN's and their connections and operations. Topics include: network architectures and standards, TCP/IP, Ethernet, 10 Base T, Novell, Macintosh servers, ISDN and multimedia technology. Class three hours, laboratory three hours. Prerequisite: EE 200 or consent of instructor.

EE 212 Electrical Circuits II (4) (F)
A study of sinusoidal currents, voltages, phasors and impedances. AC power, series, parallel circuits are analyzed. Resistance and impedance networks and circuit theorems applied to both DC and AC circuits are thoroughly investigated. Resonance, transformers and three phase circuits are analyzed. Advanced practices with laboratory instruments is covered in both lecture and laboratory sessions. Laboratory experiments support and verify component and circuit concepts. Class three hours, laboratory three hours. Prerequisites: EE 110, MA 125.

EE 221 Electronics II (4) (S)
This course is a continuation of EE 121 with emphasis on linear integrated circuit technology. The course begins with an introduction to decibels and frequency effects and proceeds to the study of differential amplifiers, operational amplifiers, voltage regulators, and applications of operation amplifiers. Topics include comparators, summers, integrators, differentiators, oscillators, and others. Class three hours, laboratory three hours. Prerequisite: EE 121.

EE 250 Microcomputer Systems (4) (F)
This course includes a thorough treatment of DOS, DOS EDIT, DOSSHELL, DOSKEY, RAMDRIVES

and Batch files. Formatting, reconfiguring, and re-partitioning of the hard drive is also covered. Advanced techniques in Turbo Basic are covered, including graphical display of data and objects, basic object motion, and the use of interrupts. Parallel output of data to external devices such as indicator lights, relays, electronic devices, etc. and parallel data input from switches, keyboards, and various electronic devices are used to illustrate interface techniques that can be applied to computer control and supervision of equipment and electro-mechanical devices. Serial communication (RS-232) to terminals and other computers demonstrates methods available to interconnect equipment using a minimum of conductors to transmit large quantities of data. Prerequisites: EE 110, EE 141, ET 115.

EE 251 Microcontrollers Applications (4) (S)

A course on microcontroller interfacing and applications. The course covers single chip microcontrollers and single board computers in stand-alone applications. Assembly level programming, program downloading, and debugging are also covered. Interfaces to various I/O devices such as keyboards, switches, sensors, solid state power devices and appropriate control software will be developed. Timing waveforms generated by the microcontroller using programmable interrupts will be used to control servos, stepper motors, and DC motors. The on-chip analog-to-digital converter and multiplexer will be used to acquire, store, and process analog signals. Class three hours, laboratory three hours. Prerequisites: EE 110, EE 141, and ET 115 or EE 250.

EE 260 Programmable Logic Controllers (4) (F)

Description of the PLC system and its components. Program functions including sequential on-off operations, timers, counters and data comparisons. Use of PLC instructions to perform numerical, logic and move functions on both single element files and multi-element files, forcing input and output instructions. Application of program control instructions and sequencer instructions. Theory and application of SCR and triac semiconductors and triggering devices. Class three hours, laboratory three hours. Prerequisites: EE 110, EE 140.

EE 261 Automation Control Systems (4) (S)

A study of discrete and continuous automation control systems including the principle types of motors used as actuators in these systems. Motor control devices and circuits are investigated. Stepper motor and servo motor control systems are analyzed. Proportional, integral, and derivative control of servo motor control systems and of a three control loop model factory are analyzed using both theoretical discussion and laboratory investigation. Mechanical, thermal, and optical transducers are analyzed in the classroom and evaluated in the laboratory. Class three hours, laboratory three hours. Prerequisites: EE 121, EE 141, EE 212. Corequisite: EE 221 or consent of instructor.

EE 271 Robotic Systems (4) (S)

A course in the fundamental concepts and applications of robotics and computer-aided manufacturing systems. Topics include robot classification, robot arm geometry, drive methods, path control, robot controller, sensors, and end of arm tooling. Laboratory includes the programming of robots, interfacing the sensors to the robots, trouble-shooting basic hardware/software problems, and designing a project using robots, computers, sensors, and supporting devices. Robot safety is emphasized. Class three hours, laboratory three hours. Prerequisites: EE 121, EE 140, MA 121.

EE 284 Electrical Technology for Mechanical Engineering Technology (3) (F)

A course designed to teach basic electrical/electronics theory and practice to mechanical engineering technology students. Includes an introduction to electric and electronic devices. AC and DC circuits are reviewed with a special emphasis on electrical power. Transformers, generators and motors are studied for both single phase and three phase operations. Electrical machinery controls are also investigated. Class lectures are verified by laboratory experiments, videos, and tours of local companies. Class two hours, laboratory three hours. Prerequisites: ET 115, MA 125.

EE 298 Special Topics in Electronics (1-4) (on demand)

Specialized topics and/or problems in electronics are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

EE 299 Special Topics in Electronics with Lab (1-4) (on demand)

Specialized topics and/or problems in electronics are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY (DuPont)

EE 110 DC Circuits (5) (DuPont)

A study of direct current electronics fundamentals. Includes an analysis of the physics of current flow and conductors, followed by the study of voltage, resistance, Ohm's Law, Kirchhoff's Laws, theory and use of meters, power, magnetism, inductance and capacitance. Series, parallel, and series-parallel DC circuits are analyzed using Ohm's and Kirchhoff's Laws. Complex DC circuits are analyzed using loop equations and Thevenin's and Norton's theorems. Class three hours, laboratory 7.7 hours.

EE 111 AC Circuits (5) (DuPont)

A study of alternating current electronics fundamentals. This course continues the study of the fundamentals of electronics. Following an analysis of sine waves and alternating current values, students study waveform measurement (using AC meters and oscilloscopes), inductance theory and inductive circuits, transformer theory and applications, capacitance theory and capacitive circuits, series and parallel resonance theory and resonant circuits, bandwidth, and -C filters. Class three hours, laboratory 7.7 hours.

EE 115 Active Devices (4) (DuPont)

This course presents a study of the theory and application of semiconductor devices. The course begins with a description of semiconductor materials, semiconductor doping methods, and conduction in semiconductors. Subsequent instructional areas include: conventional and special purpose diodes, bipolar junction transistor characteristics and circuits, unipolar junction field effect transistors and FET and MOSFET circuits, thyristors, integrated circuits, and optoelectronic devices. Class two hours, laboratory six hours.

EE 116 Electronic Circuits (2) (DuPont)

This course presents applications of electronics theory and devices in the following analog electronic circuit configurations: Power Supplies, IC Voltage

Regulators, Audio Amplifiers, Operational Amplifiers, and Oscillators. Class one hour, laboratory three hours.

EZ 120 Electrical Theory (5) (DuPont)

A study of the fundamental concepts, principles, and skills required to become a technically competent Control Equipment Craftsman in the area of electrical plant maintenance. General areas of study include, the National Electrical Code, AC & DC fundamentals, 3-phase systems, transformers, AC & DC motors, over-current protection, fuses, circuit breakers, electrical test equipment, grounding, and wiring techniques. Class three hours, laboratory 10.3 hours.

EZ 122 Applied Electricity (6) (DuPont)

A practical study of electrical components that are common to industrial power distribution and motor control systems. Additionally, this course presents instruction on electrical symbols, drawings, and diagrams, including ladder logic diagrams, with emphasis on 2-wire and 3-wire motor control circuits and motor control devices. Class three hours, laboratory 10.3 hours.

EZ 124 Motor Control (4) (DuPont)

This course presents a practical application of circuit construction, operation, and troubleshooting of motor control centers through the use of a GE-7700 Motor Control Venter and a Rowan controller system trainer. Analyzing and troubleshooting the GE-7700 and the Rowan controller is accomplished through the use of system level drawings, schematic diagrams, and electrical test equipment. The GE-7700 is employed as a representative manual motor control center and the Rowan trainer simulates the operation of a plant installed nylon yarn wind-up system that simultaneously employs several motors. Class two hours, laboratory six hours.

EZ 130 Advanced Electronic Circuits (5) (DuPont)

A study of advanced applications of semiconductor diodes, transistors, thyristors, digital and linear integrated circuits and optoelectronic devices. The circuits in which these devices are employed in this course include audio amplifiers, DC amplifiers, logic gates, operational amplifiers, active filters, single-phase and three-phase rectifiers, thyristor control and triggering circuits, waveform generation and shaping circuits, and optoelectronic circuits. Class three hours, laboratory 7.7 hours.

EZ 131 Digital Electronic (5) (DuPont)

This course presents a study of the theory and application of digital electronics techniques and devices. The course familiarizes students with the uses and the physical and electronic characteristics of a wide range of integrated circuits. Students also receive a working knowledge of number systems, Boolean algebra, binary codes, logic circuits, memory devices, data conversion, and digital troubleshooting. Class three hours, laboratory 7.7 hours.

EZ 134 Basic Programmable Controls (5) (DuPont)

This is an entry level course on the theory, operation and maintenance of programmable logic controllers (PLC). The course presents generic fundamentals of PLCs, including: functional identification of PLC system components, PLC ladder logic diagrams, and PLC programming fundamentals. The generic training is supported by practical training in lab situations on Gould-Modicon 484 and Allen Bradley SLC-100/150 PLC systems. The practical training includes operation of the Gould-Modicon P-180/190 and Allen Bradley T-50 programming terminals. Class three hours, laboratory 7.7 hours.

EZ 136 Operational Amplifiers (4) (DuPont)
A study of the definitions, terms, electrical characteristics, and circuits associated with operational amplifiers. This course emphasizes the design, construction, and analysis of operational amplifier circuits employed in industrial electronics equipment. Class two hours, laboratory six hours.

EZ 138 DC/AC Drives (4) (DuPont)
The DC/AC Drives fundamentals course provides the trainee with the basic concepts of electronic variable speed control of DC and AC motors. Also covered in the course is an overview of drive hardware, drive operation, drive maintenance, and drive troubleshooting procedures. This course is intended to prepare the trainee for more advanced "Area Specific" training when he is assigned to a maintenance shop. Class two hours, laboratory six hours.

EZ 201 Instrumentation Theory (6) (DuPont)
The Instrumentation Theory course presents an introduction to the equipment employed in process control systems and the basic physics involved in their operation. The course includes operational demonstrations of instrumentation equipment and instruction on the skills involved in performing basic instrumentation practices and procedures. Class three hours, laboratory 10.3 hours.

EZ 203 Instrumentation Transmitters (5) (DuPont)
This course presents the construction, calibration, installation, maintenance, and application of electronic and pneumatic process transmitters. It includes installation and removal precautions and procedures for temperature and pressure sensing elements such as diaphragm seals, RTDs, and thermocouples. Class three hours, laboratory 7.7 hours.

EZ 205 Valve Operations (4) (DuPont)
Construction, calibration, installation and removal, disassembly, reassembly, and maintenance of control valves are presented with an emphasis on a hands-on approach. The different types and applications of other valves are also covered. Class two hours, laboratory six hours.

EZ 207 Flow Control (4) (DuPont)
Basic flow physics and theory are reviewed. Construction, calibration, installation and removal, disassembly, reassembly, and repair of flow transmitters and flow elements are presented with emphasis on hands-on training. The idiosyncrasies and characteristics of tuning a single loop controller in a flow loop are also covered. Class two hours, laboratory six hours.

EZ 209 Instrumentation Controllers (6) (DuPont)
This course begins with a review of automatic and manual process controls and theory. Construction, calibration, installation, and maintenance of controllers and recorders is presented with emphasis on hands-on training. The characteristics of tuning a single loop controller to control various types of process loops is also covered. Class three hours, laboratory 10.6 hours.

EZ 210 Plant Safety (3) (DuPont)
The Plant Electrical Safety Course prepares the Control Equipment Craftsman to recognize electrical safety hazards, plan and execute electrical jobs from a safety perspective, and to follow all general safety practices and protective measures as stated in the EZ DuPont Engineering Standards, the Chattanooga Plant Works Engineering Safety

Handbook, and the Chattanooga Plant Lock-Tag-Clear-Try-Release Procedures. Class two hours, laboratory 3.3 hours.

EZ 214 Advanced Programmable Controls (5) (DuPont)
A study of the Allen-Bradley PLC-5 family of programmable controllers as they are applied to manufacturing processes and advanced computer integrated manufacturing systems. Topics in this course include hardware components, addressing modes, input/output control, ICOM software instruction set, memory organization, adapter mode communications, and troubleshooting methods. Class three hours, laboratory hours 7.7 hours.

EZ 215 Batch Process Controls (6) (DuPont)
This course presents a practical application of process construction, operation, and troubleshooting through the use of a batch process simulator. The interactions of pressure, flow, and temperature are demonstrated in single and cascade process loops. Analyzing and troubleshooting a process on a system level is accomplished through the use of drawings, schematic diagrams, and instrumentation test equipment. Class three hours, laboratory 10.3 hours.

EZ 216 Distributive Control Systems (6) (DuPont)
A study of the Foxboro Intelligent Automation (I/A) Distributive Control System with emphasis on I/A series personal workstation functions, process control, equipment configuration, software instruction set, system maintenance, and on-line problem analysis and diagnostic procedures. Class three hours, laboratory 10.3 hours.

EZ 299 DuPont Plant Experience (6) (DuPont)
This course is designed to deliver a shop specific curriculum to supplement on-the-job training that each trainee receives as part of the Control Equipment Training Program. Each of the twelve Control Equipment Shops in the plant have different equipment, processes, job procedures, and safety requirements. Separate course maps have been developed to meet individual shop needs and deliver specific modules of instruction to continue the development of trainees while they are assigned to Control Equipment Supervisors. Class three hours, laboratory 10.3 hours.

ELECTRICIAN, SEE "INDUSTRIAL ELECTRICITY"

ELECTRONICS, INDUSTRIAL, SEE "INDUSTRIAL ELECTRONICS"

EMERGENCY MEDICAL SERVICES

EA 106 Emergency Medical Technician I (8) (F)
This course is the first in a series of two that can lead to eligibility to take the state of Tennessee EMT exam and the National Registry EMT Intermediate Exam. The curriculum has been organized to provide the student with knowledge of emergency care of the injured or extremely ill patient. Successful completion of this course will enable the student to progress to EA 116.

EA 116 Emergency Medical Technician II (8) (S)
This course is the second in a series of two courses that can lead to EMT Basic eligibility to take the state of Tennessee EMT exam and the National Registry EMT Exam. It is a continuation of EA 106. The student will have the opportunity to perform actual skills learned during clinical rotations at various emergency departments and ambulance services. Prerequisite: EA 106.

EA 120 CPR Training (1) (on demand)
This course offers CPR (BCLS—Basic Cardiac Life Support) training for allied health professionals and laypersons. The course consists of lecture, skill demonstration, and skill practice. The course begins with the history and relevance of CPR and the role of the American Heart Association in Emergency Cardiac Care. A detailed presentation of cardiorespiratory anatomy and function is also included, along with a review of the causes of cardiovascular disease and cardiac arrest. Special information covering other causes of sudden death are discussed. Manikin performance skills include detailed explanations of the technical aspects of CPR. Cross contamination prevention is also presented.

EA 130 CPR Instructor Training (1) (on demand)
This course offers CPR Instructor (BCLS—Basic Cardiac Life Support) training. The course consists of lecture, skill demonstration, and skill practice. The course begins with the history and relevance of CPR and the role of the American Heart Association in Emergency Cardiac Care. This course provides sufficient background information to provide in-depth comprehension of BLS subject matter, information on teaching methods, an understanding of the educational aids available for teaching provider courses and the opportunity to develop skillful presentation abilities. Prerequisite: EA 120 or proof of American Heart Association's BCLS course "C" completion within the last year.

EA 205 IV Administration (2) (on demand)
This course is designed to offer the student the knowledge and skills for IV administration, IV maintenance, and IV discontinuance. The student will also review the pathophysiology of shock as it pertains to IV administration. The State Certification Examination is offered only to Tennessee certified EMTs upon successful completion of this class. Other Allied Health professionals may take the class with instructor approval. Class two hours, laboratory ten hours.

EA 210 Paramedic Theories I (10) (F)
This course will present essential theory and provide hands-on experience based on accepted medical practices in the following areas: the pre-hospital environment, medical terminology, general patient assessment, pathophysiology of shock, respiratory system, airway and ventilation skills, anaphylaxis, and infectious diseases. Prerequisite: Acceptance as a paramedic student. Corequisites: EA 225, EA 255, EA 261.

EA 225 Emergency Pharmacology (5) (F)
This course is designed to teach students basic information related to pharmaceutical preparations. Standards and legislation pertaining to administration of medications will be presented. Accurate calculation of drug dosages will be required. Information related to antiarrhythmic, chronotropic, vagolytic, analgesic, alkalizing, vasopressor, anticonvulsive, and anticlotting agents will be introduced. Prerequisite: Acceptance as a paramedic student. Corequisites: EA 210, EA 255, EA 261.

EA 230 Paramedic Theories II (10) (S)

This course is designed to present essential theory and provide hands-on experience based on accepted medical practices. The following subjects/illnesses will be covered in depth: burns, endocrine emergencies, nervous system, anaphylaxis, toxicology, alcoholism, drug abuse, environmental emergencies, geriatrics, gerontology, and OB/GYN emergencies. Prerequisites: EA 210, EA 225, EA 255, EA 261. Corequisite: EA 260.

EA 231 Psychological Emergencies (1) (S)

This course is designed to provide the student with knowledge for handling psychological emergencies. Emphasis is on techniques of patient intervention. Prerequisite: EA 210. Corequisites: EA 230, EA 260.

EA 250 Paramedic Review (8) (Su)

This course is a comprehensive review of all paramedic course content, concentrating on cardiac life support, trauma life support, pediatric life support and neonatal emergencies. Prerequisites: EA 230, EA 231, EA 260. Corequisites: EA 262, EA 265, EA 270, EA 281.

EA 255 Advanced Trauma Care (2) (S)

This course is taught to provide pre-hospital trauma care and management in accordance with nationally accepted standards as set forth by the U.S.D.O.T. Prerequisite: Acceptance as a paramedic student. Corequisites: EA 210, EA 225, EA 261.

EA 260 Advanced Cardiac Care (2) (F)

The course is taught in accordance with standards as set forth by the American Heart Association. Prerequisite: Acceptance as a paramedic student. Corequisites: EA 230, EA 262.

EA 261 Clinical Practice I (1) (F)

This course is designed to provide supervised clinical application of skills developed in previous EMT and Paramedic courses. Emphasis is on IV administration, OB/GYN emergencies, intubation skills and handling of the neonate. Prerequisite: Acceptance as a paramedic student. Corequisites: EA 210, EA 225, EA 255.

EA 262 Clinical Practice II (2) (S)

This course is designed to provide supervised clinical application of skills developed in previous EMT and Paramedic courses. The student will concentrate on the skills involving advanced cardiac life support, advanced basic trauma life support, pediatric advanced life support and neonatal advanced life support. 196 hours of clinical rotations will be done in the following areas: Emergency Department, Cardiac Care, Intensive Care, and Pediatric Emergency. Prerequisites: EA 230, EA 231, EA 260. Corequisites: EA 250, EA 265, EA 270, EA 281.

EA 265 Pediatric Emergencies (2) (Su)

Topics include recognition of pediatric prearrest conditions, shock, BLS, oxygenation and airway control, neonatal resuscitation, essentials in pediatric resuscitation, dysrhythmia recognition and management, and vascular access. Prerequisite: Acceptance as a paramedic student. Corequisites: EA 250, EA 270, EA 281.

EA 270 Neonatal Resuscitation (1) (Su)

This course contains the information needed to carry out the various components of the neonatal resuscitation procedure. Suggestions for using resuscitation equipment, manikins, and simulated situations for practice are included in the course. Prerequisite: Acceptance as a paramedic student. Corequisites: EA 250, EA 262, EA 265, EA 281.

EA 281 Field Internship (1) (Su)

This course is designed to provide supervised clinical application of skills developed in previous EMT and Paramedic courses. The student's internship will be on an active ALS unit with an assigned preceptor. Emphasis is on IV administration, drug administration, intubation skills and patient packaging. Prerequisites: EA 230, EA 231, EA 260. Corequisites: EA 250, EA 262, EA 265, EA 270.

ENGINEERING TECHNOLOGY**ET 107 Introduction to Engineering Technology (1) (F,S)**

An introductory course for beginning engineering technology students. Topics include careers for the technician, developing good study habits, the use of hand calculators in engineering technology, the process of engineering design, and problem analysis.

ET 110 Introduction to Computer Integrated Manufacturing (3) (on demand)

This course introduces the student to the basics of Computerized Integrated Manufacturing from concept to full implementation. The position of American industry as related to world competition will be discussed and analyzed by using current case studies. The course will familiarize the student with basic manufacturing technology and material processing. Laboratory experiments and factory tours will be used to enhance the learning experience. The restructuring of the corporation, economics considerations and business management decisions will also be discussed.

ET 115 Computers in Engineering Technology (3) (F,S)

An introductory course into the world of microcomputers for the engineering technology student. Emphasis is in BASIC programming, word processing, and spreadsheet applications. It is designed to give the student a broad understanding of how the computer can be used as a tool for subsequent courses in engineering technology. Corequisite: MA 121.

ET 226 C for Technicians and Engineers (4) (on demand)

An introduction to C concepts and programming for technicians and engineers. Course material will include how to write C programs for various technical problems, how to input and output digital values, and how to read and apply analog inputs in a C program. Lecture three hours, laboratory two hours. Prerequisite: ET 115 or consent of instructor.

ET 298 Special Topics in Engineering Technology (1-4) (on demand)

Specialized topics and/or problems in engineering technology are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

ET 299 Special Topics in Engineering Technology with Lab (1-4) (on demand)

Specialized topics and/or problems in engineering technology are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

ENGINEERING TRANSFER**EG 211 Descriptive Geometry (3) (F)**

A study of points, edges, lines, planes, curved surfaces, irregular surfaces, intersections, developments, auxiliary projections, revolutions, and practical design applications. Class two hours, laboratory three hours. Prerequisites: MD 114 or two years High School Drafting, MA 125.

EG 274 Engineering Mechanics (3) (F)

A study of forces and the effect of forces acting upon rigid bodies at rest. Topics include free body diagrams, equilibrium in two and three dimensions, moments of inertia, and truss analysis. Prerequisite: MA 136.

EG 284 Mechanics of Solids (3) (S)

A study of the stress-strain relationships under plane and 3-D deformations. Topics include Hooke's Law, extension, bending, shear, torsion, and beam deflections. Castigliano's theorem, column design and buckling, combined stresses, stress concentrations, and theories of failure are also covered. Prerequisite: EG 274. Corequisite: MA 245.

EG 285 Mechanics of Materials Laboratory (2) (S)

A series of experiments which demonstrate the theory of mechanics of materials and characteristics of engineering materials. Laboratories include measurement and accuracy, hardness, impact strength, modulus of elasticity, torsion, beam bending, and buckling of columns. An individualized design project involving the analysis, design and test of a structure required. Class one hour, laboratory three hours. Corequisite: EG 284.

EG 294 Dynamics (3) (S)

Rectilinear, curvilinear, and rotary motion. Principles of work and energy, impulse and momentum. Emphasis on machine motions. Three-dimensional problems are covered. Prerequisite: EG 274.

EG 298 Special Topics in Engineering (1-4) (on demand)

Specialized topics and/or problems in engineering are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

EG 299 Special Topics in Engineering with Lab (1-4) (on demand)

Specialized topics and/or problems in engineering are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

ENGLISH**EN 069 Individualized Instruction in Writing Skills (2) (F,S,Su)**

An individualized course designed to serve students who have significant weakness in general or specific writing skills and therefore need individualized instruction and guided practice. May be taken either before or after EN 070 and/or EN 081. Laboratory four hours. Repeatable for credit. Prerequisite: Recommendation from assessment test or permission of department head.**

EN 070 Basic/Developmental Writing (4) (F,S,Su)

Emphasis on basic writing skills and review of grammar. The course will stress applying basic mechanical skills to writing sentences and paragraphs. The primary emphasis in composition will

**This is a developmental studies course and is not generally transferable. Is not accepted toward any degree program at Chattanooga State.

be writing coherent, well-developed and unified paragraphs. Upon completion the student will advance to EN 081. Prerequisite: AAPP Placement.**

EN 081 Developmental Writing (3) (F,S,Su)
Continued study and application to achieve the writing skills needed for college. The student will write unified, coherent paragraphs and essays in acceptable, standard form. Students will produce a research essay. Prerequisite: EN 070 or AAPP placement.**

EN 101 Creativity in Composing Verse (1) (on demand)
A hands-on workshop course offering an overview of the major forms of poetry and activities to stimulate artistic imitation for personal use. Completion of this course does not exempt students from AAPP. Prerequisite: Permission of Department Head.

EN 102 Writing Popular Fiction (1) (on demand)
A hands-on workshop course devoted to the writing of the popular audience romance story. Completion of this course does not exempt students from AAPP. Prerequisite: Permission of Department Head.

EN 103 Professional Writing Seminar (1) (on demand)
An overview of the strategies common to all successful professional writing whether for the medical, business, scientific or creative sector. Emphasis will be placed on the practical application of technical writing skills. Completion of this course does not exempt students from AAPP. Prerequisite: Permission of Department Head.

EN 104 Computer Skills for Writing (1) (on demand)
A hands-on beginning course in writing on the computer using IBM compatible computers. Emphasis will be placed on writing the informative essay and revising the essay. Completion of this course does not exempt students from AAPP. Prerequisite: Permission of Department Head.

EN 110 Composition I (3) (F,S,Su)
A course in writing with emphasis on exposition and argument. Focus on composition process and development of essays using a variety of rhetorical patterns. Prerequisite: Placement as required by TBR specifications or EN 081.

EN 111 Composition II (3) (F,S,Su)
A course in writing based on reading and responding to short fiction, poetry, drama, and/or non-fiction prose. A research paper is required. Prerequisite: EN 110.

EN 119 Tutoring Writing (1) (on demand)
A workshop course offering an in-depth view of the writing process, the tutoring process, and current writing center theory. Emphasis on professionalism, interpersonal skills, and collaborative learning. Repeatable for credit. Prerequisites: EN 110 and permission of Writing Center manager or R/D Language Arts department head.

EN 123 Technical Communication (3) (on demand)
A study of the grammatical, structural, and formal elements of written and oral communications as needed in medical science, business, and industry. Emphasis on career-related writing and speaking and on synthesis, presentation, and documentation of data derived from information-gathering processes.

EN 200 Advanced Grammar and Syntax (3) (on demand)

Study of advanced concepts of English grammar and syntax and specific means of their application in written and oral communication for business, industry, journalism, and general use. Emphasis on development of working vocabulary, syntactical fluency, and creative editing skills for achievement of correctness, clarity, and effective style. Prerequisite: EN110.

EN 209 Literature for Children (3) (F,S)
Survey of literature for children with special attention to literature for preschool and elementary school years. Genres studied include folk tales, myth, fantasy, fiction, poetry, biography, and non-fiction. Prerequisite: EN 110.

EN 210 Literature of the Western World I (3) (F,S)
A study of the literary, cultural, and historical contributions of the classical, medieval, and Renaissance periods to the value systems and the world view of contemporary society. Emphasizes development of aesthetic awareness and appreciation of literary art. Research project required. Prerequisite: EN 111.

EN 211 Literature of the Western World II (3) (S)
A study of selected readings from the seventeenth, eighteenth, nineteenth, and twentieth centuries. Emphasis on the cultural and aesthetic values presented by the writers, their relationship to earlier literature, and their influence on contemporary literature. Research project required. Prerequisite: EN 111.

EN 213 American Masterpieces I (3) (F)
A study of the framework and the major movements, writers, and works of American literature from its beginning to 1865. Emphasis is given to tracing the development of a national literature and to the role of literature in recording the American cultural heritage. Research project required. Prerequisite: EN 111.

EN 214 American Masterpieces II (3) (S)
A study of the framework and the major movements, writers, and works of American literature from 1865 to the present. Emphasis is given to the various attempts to portray the American response to the complexity of life in the twentieth century. Research project required. Prerequisite: EN 111.

EN 218 English Masterpieces I (3) (F)
A study of the literary, cultural, and historical aspects of British literature from its beginnings to 1798. Focus on the major genres of literature that illustrate important trends in form and thought for each historic period. Research project required. Prerequisite: EN 111.

EN 219 English Masterpieces II (3) (S)
A study of the literary, cultural, and historical aspects of British literature from 1798 to the present. Examines the major and minor works that illustrate the important literary trends of the two centuries. Research project required. Prerequisite: EN 111.

EN 225 Journalism: News Writing and Editing (3) (on demand)
An introductory course in the principles of journalism and the practice of news reporting, writing, and editing. Prerequisite: EN 110.

EN 227 Technical Reports (3) (F,S,Su)
A course in the practical application of principles of

logical organization, formatting, and stylistic conventions as appropriate in communication in business and industry. Emphasis on reader and listener-oriented communication and on collaborative planning and presentation of research-based data. Includes word processing assignments. Prerequisite: EN 110.

EN 229 Literature for the Adolescent (3) (on demand)
A study of literature for the young adult with emphasis on stages of development and the relationship of these stages to the reading experience. Prerequisite: EN 110.

EN 235 Special Studies in English (3) (F,S)
Studies of a variety of topics to include themes, genres, media, linguistic development, usage, and other areas of contemporary interest. Subjects may include Science Fiction, Regional American Writing, Utopian Literature, the Novel, Film, History of the Language, American Dialects, and others. Prerequisite: EN 110.

EN 237 Literature by Women (3) (on demand)
An historical overview of women's literary accomplishments in English. Six historical eras from the Middle Ages to the contemporary period will be covered. Genres to be surveyed include the novel, autobiography, the short story, feminist expository prose, drama, and poetry. Prerequisite: EN 111.

EN 238 Creative Writing (3) (F,S)
A course providing instruction and practice in writing poetry and/or short fiction. Students will read and discuss their own works as well as representative works by contemporary writers.

EN 240 Technical Writing/Special Projects (3) (on demand)
A course in the creation, editing, and production of business, technical, and journalistic documents. Includes assignments requiring both individual and collaborative effort in the completion of a variety of projects. Prerequisite: EN 227.

EN 242 Technical/Copy Editing (3) (on demand)
A course designed to train students in adapting technical and scientific documents to the needs of specific audiences. Emphasis on critical analysis of information and collaboration with subject matter experts, writers, other editors, and production specialists. Prerequisites: EN 200, EN 227, OF 125.

EN 245 Writing, Layout, and Design on the Computer (3) (on demand)
A course providing practical experience in developing and producing writing projects using the computer in a variety of software applications. Emphasis on comprehension of critical nature of deadlines, organization, collaborative effort, and ethical standards as required of communications professionals. Prerequisites: EN 227, OF 127.

EN 250 Technical Writing Internship (6) (on demand)
Practical experience in technical writing and editing projects at worksites provided by cooperating communications, business, or industrial organizations. Supervision by on-site personnel with regular observation by course instructor and ongoing reporting requirement. Prerequisite: Permission of instructor.

EN 261 African-American Literature (3) (F)
A study of the literature produced by African-

**This is a developmental studies course and is not generally transferable. Is not accepted toward any degree program at Chattanooga State.

American writers from the Colonial Period to the Modern Era. Readings will include written versions of traditional oral forms. Prerequisite: EN 111.

EN 265 Literature in Culture: World Perspectives (3) (on demand)

Reading and study of traditional and non-traditional literature based on an expanded canon and emphasizing multicultural values in a world perspective. Prerequisite: EN 111. (Same as HU 265. Credit not allowed for both courses.)

ENVIRONMENTAL SCIENCE

ES 150 Environmental Science I (4) (F,S,Su)

An introduction to current environmental problems at the global, national, and local levels. Topics covered include ecosystems, geochemical cycles, domestic and industrial wastes, pest control, resources, energy sources, land use, and population dynamics. The laboratory integrates the scientific approach as applied to such environmental problems as population growth and energy alternatives and provides hands-on experience in identification of abiotic and biotic factors affecting environment quality. Class three hours, laboratory three hours.

ES 151 Environmental Science II (4) (F,S,Su)

Continues the examination of environmental issues begun in ES 150, including environmental impact assessments, risk analysis and environmental health, an overview of environmental legislation, and selected high risk ecosystems such as wetlands and bottomland hardwood forests. Class three hours, laboratory three hours.

ES 240 Introduction to Soil Resources (4) (on demand)

This course covers soil genesis and formation, soil composition and classification, physical and chemical properties of soils and how these relate to soil capabilities and limitations, and soils planning and management. Field laboratory excursions and exercises will reinforce lecture topics. Class three hours, laboratory three hours.

ES 299 Special Topics in Environmental Science (1-4) (on demand)

This course is designed to allow detailed study of a specific topic in environmental science. Topics may vary each semester or may be individualized according to student needs. Course topics and emphases will be published prior to each semester. May be repeated for credit on different topics. Prerequisite: Consent of instructor and department head.

ENVIRONMENTAL TECHNOLOGY, SEE "HAZARDOUS MATERIALS"

FINANCIAL MANAGEMENT

FM 201 Financial Management I (3) (F)

A course designed to improve decision skills related to the financial resources of the firm in a two-semester sequence. Major topics include techniques of financial analysis, time value of money, valuation, and risk. The nature and scope of financial markets and investment opportunities are also included. Prerequisites: BU 114, MG 103, MG 165.

FM 204 Financial Management II (3) (S)

A continuation of FM 201; this is the second course in a two-semester sequence. Prerequisite: FM 201.

FINANCIAL PLANNING

FP 101 Fundamentals of Financial Planning (3) (F)

An introduction to the principles of financial planning with an emphasis on communication with the client. Each of the basic areas of financial planning are surveyed, i.e., tax planning, risk and insurance, investments, retirement and benefit planning, and estate planning. Individuals who are planning to take the HS 320 exam from the American College or the CFP I exam from the International Board of Certified Financial Planners may wish to take the course as a means of preparation for the exams.

FP 105 Personal/Household Financial Planning (3) (F)

A very basic course dealing with the entire area of managing household funds. The course is divided into various "decision" areas with the goal of assisting the student and the student's counselees in applying cost/benefit analysis to each area of spending and at the same time managing the overall budget. Attention will also be given to the various sources of assistance, both monetary and advisory, available in the community.

FP 201 Estate Planning (4) (F)

A thorough coverage of the estate planning process particularly suited for financial planners involved in the estate planning function. Individuals who are planning to take the HS 330 and HS 336 exams from the American College or the estate planning exam from the International Board of Certified Financial Planners may wish to take the course as a means of preparation for the exams. This is a difficult and comprehensive course and should not be taken by anyone not having the necessary prerequisites. Prerequisites: BU 185, FP 101, LA 110. Corequisite: IS 104.

FP 203 Advanced Investing (4) (on demand)

An in-depth coverage of the investment process for individuals already familiar with investment fundamentals. Individuals who are planning to take the HS 328 exam from the American College, the Course 8 exam from the Life Office Management Association, the Course VII exam from the International Board of Certified Employee Benefit Specialists, or the investment exam from the International Board of Certified Financial Planners may wish to take the course as a means of preparation for the exams. This is a difficult and comprehensive course and should not be taken by anyone not having the necessary prerequisites. Prerequisites: EC 211, FP 101, IS 104, MG 185. (BU 115 and FM 201 also recommended.)

FP 219 Computerized Financial Planning (3) (S)

An applications course in which students will become familiar with simple household budgeting and money management software as well as more extensive programs which will track investments. In addition, students will use spreadsheet software to develop their own applications. Prerequisites: BU 185, CS 101 or equivalent, FP 101, FP 201.

FP 220 Comprehensive Financial Planning (3) (S)

A capstone course which puts together the material from previous financial planning courses in a man-

ner which allows the student to solve problems using the case method. Individuals who are planning to take the HS 332 exam from the American College may wish to take the course as a means of preparation for the exam. Prerequisites: BU 185, BU 186, FP 101, FP 201.

FIRE SCIENCE

FI 111 Introduction to Emergency Services (3) (on demand)

An overview of both emergency and non-emergency operations typically provided by municipal, volunteer and industrial emergency service organizations. Topics covered include: historical perspectives, relevant statistics, current and future challenges, variety of services and operations provided, and external agencies which regulate or impact the emergency response field.

FI 113 Fire Alarm and Extinguishing Systems (3) (on demand)

The function, classification, and operating principles of fixed extinguishing systems, detection systems, alarm systems, signaling systems and portable extinguishing equipment installed for fire protection and for prevention purposes.

FI 114 Building Construction for Fire Science (3) (on demand)

An introduction to fire problems as they relate to building construction. Analysis of various methods of building construction, materials, and construction design. Special emphasis is placed upon needs and requirements of institutional, mercantile, and industrial structures previous to, during, and after construction periods.

FI 115 Fire Apparatus and Equipment (3) (on demand)

Principles of the care, maintenance, and operation of fire apparatus and pumps. Topics include pump construction and accessories, pumping techniques, power development and transmission, troubleshooting, safe driving techniques, and effective fire stream development including hydraulic calculations. NFPA standards will be stressed throughout the course.

FI 116 Fire Fighting Tactics and Strategy I (3) (on demand)

The techniques of fire control in general, and an application of these techniques to residential fires. Covered are: a survey of fire apparatus and equipment, including its operation; forcible entry; the use of ladders; the use of hose and hose stream application; various types of extinguishing agents; ventilation; and salvage and overhaul. Strategy and methods of attack are applied to a number of residential fire situations.

FI 124 Fire Fighting Tactics and Strategy II (3) (on demand)

A continuation of FI 116, with emphasis on nonresidential fires. Covers the distribution and use of personnel and equipment at commercial, industrial and nonresidential fire situations. Strategy and methods of attack to control hazards are studied.

FI 140 Emergency Laws, Standards, and SOP's (3) (on demand)

Overview of federal, state, and local laws which regulate emergency services. Covers national standards which influence emergency services as well as the role and development of Standard Operating Procedures (SOP's).

FI 142 Emergency Services Community Relations (3) (on demand)

A study of community relations for the emergency service field. Topics include services provided to the community, presenting a positive image, public information management, working with the media and developing a public relations program.

FI 146 Emergency Service Stress (1) (on demand)

A study of stress and its impact on emergency service personnel. Representative topics include unique stresses in the emergency service field, identification of excessive stress, stress survival skills, management of stress and critical incident stress debriefing (CISD).

FI 212 Emergency Service Supervision/Leadership (3) (on demand)

This course is designed to improve the student's readiness to assume a leadership position or to enhance the skills of a student currently in a leadership position through the study of supervision techniques, leadership concepts, supervisory challenges, and general responsibilities.

FI 214 Industrial and Electrical Hazards (3) (on demand)

Identification and analysis of special fire hazards in industry and an introduction to their control. Includes a study of fire fighting and prevention methods dealing with dusts, chemicals, and explosives. Also included is a study of radioactive materials, heating and refrigeration equipment, static electricity, and electricity for power and heating.

FI 215 Principles of Fire Protection Chemistry (4) (on demand)

Study of the chemical characteristics and reactions related to hazardous materials, i.e., flammable liquids, combustible solids, oxidizers, corrosive materials and radioactive compounds. Emphasis on identification labeling, storage, handling, disposal and fire fighting.

FI 217 Fire Hydraulics (3) (on demand)

Study of the basic mathematics and hydraulic formulas for fluid flow, friction loss and forces; water distribution and supply for internal and external fire protection; fluid flow in hoses; nozzle discharge and fire streams; and application of these principles to fire department operations.

FI 225 Specialized Rescue Techniques I (3) (on demand)

A study of the fundamental principles and techniques associated with emergency service response to accidents requiring specialized rescue applications. Provides a basic understanding of hazards and procedures associated with specialized rescue scenarios including confined space accidents and trench or excavation accidents. Representative topics include protective clothing, rescue equipment, OSHA and related regulations governing confined space entry and trench operations, incident command, and rescue systems.

FI 230 Certified Fire Fighter II (3) (on demand)

Credit given for completion of standards set for state or national advanced Certified Fire Fighter II.

FI 235 Fundamentals of Emergency Service Safety (3) (on demand)

A study of the application of safety during emergency and non-emergency operations. Provides a basic understanding of causes of injuries and deaths

and of how to apply that understanding to emergency and non-emergency operations. Representative topics include emergency operations safety, facility safety, vehicle and equipment safety, general safety, hazardous materials safety, wildland safety, emergency medical safety, and protective clothing and safety equipment.

FI 240 Emergency Service Instructor (3) (on demand)

A study of instructional techniques employed in technical education settings in the emergency service field. Emphasis on the development of measurable instructional objectives, lesson plans, evaluations and organization of a class. Includes production of instructional aids such as overheads, slides, and handouts. Credit given for national or state certification to NFPA 1041 Instructor Level I.

FI 255 Industrial Fire Prevention and Protection (3) (on demand)

A study of current management practices of reducing fire losses in industry. Hazard identification, risk analysis, fire prevention techniques, and protection principles will be reviewed using case studies. Topics include engineering controls, such as detection and suppression systems; fire prevention programs, such as housekeeping, flammable liquids, and hot works; and emergency response programs, including public fire departments and fire brigades.

FI 260 Fire Inspection Principles (3) (on demand)

Introduction to the objectives and techniques of fire prevention and inspection programs. Covered are: in-depth study of building and electrical codes, fire prevention codes, zoning controls, and other fire protection standards; survey of the authority and responsibilities of municipal fire inspectors, basic blueprint reading, and basic sketching and mapping.

FI 262 Fire Causes and Investigation (3) (on demand)

Analysis of the causes of fires and relationship of fire characteristics and traces to these causes; recognition of equipment failures responsible for fires, incendiary fires; collection, preservation, and documentation of evidence substantiating fire causes.

FI 265 Emergency Service Administration/Management (3) (on demand)

This course is a basic study of administration and management principles related to emergency services that reviews the evolution of emergency services, public organization theories and principles as well as management approaches as a back drop for discussing current administration and management of emergency service organizations and programs. Prerequisite: Consent of instructor.

FI 266 Basic Rope Rescue (3) (F,S)

A course designed to assist students in developing the basic skills of rope rescue. Topics include safety considerations, knots, strengths of ropes, anchor systems, basic rigging, lowering systems, belays, raising systems, mechanical advantages, rappels, self rescue, and medical packaging considerations. Students are required to be physically able to perform rope rescue work and must provide the following personal rappelling equipment: helmet with light, gloves, two carabiners, descending device (rack or figure 8 with ears), boots and appropriate clothing for varying climates. Transportation to state parks and other rappelling sites not included in course cost. Class hours two, laboratory hours two. Prerequisite: Consent of instructor.

FI 270 Emergency Service Strategic Planning & Innovation (3) (on demand)

This course presents the basic concepts and development of strategic planning and innovation for emergency services and reviews considerations and issues related to community emergency service planning, evaluation, and budgeting/cost containment. Covers alternative delivery systems and innovation management and discusses the future of emergency services. Prerequisite: Consent of instructor.

FI 275 Emergency Response to Hazardous Materials (4) (on demand)

A study of the fundamental principles and techniques associated with emergency response to hazardous materials incidents. This course provides information for the recognition, analysis and mitigation of hazardous materials incidents by emergency response personnel. Topics include regulatory considerations, detection equipment, decontamination, personal protective equipment and facility and transportation containers. Class three hours, laboratory three hours.

FI 280 Emergency Services Practicum (3) (on demand)

This course addresses real-life issues and problems within the emergency service field through a major research project, the findings of which can be applied in the work environment. Students will identify and research a contemporary emergency service problem or issue; prepare a written report based on the finding; and make a presentation to peer, faculty and guest evaluators. Prerequisite: Consent of instructor.

FI 282 Information Management for Emergency Services (3) (on demand)

This course is designed to provide the student with a wide range of tools and techniques for managing the information required in the day-to-day operations of an emergency service. Emphasis will be placed on gathering, manipulating, storing, retrieving, and dispersing relevant data in relation to emergency service operations. Understanding of the capabilities and limitations of information management systems as well as designing an effective data management system will be covered. Basic knowledge of computers and their use required. Prerequisite: Consent of instructor.

FI 299 Special Topics in Emergency Services (1-3) (on demand)

Study of specific topics of traditional and current interest in the emergency service field. Course subjects and emphasis will be published prior to the beginning of each term. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

FOREIGN LANGUAGE, SEE "FRENCH," "GERMAN," "JAPANESE, SEE 'HUMANITIES,' " "SPANISH"

FORESTRY

FO 274 Dendrology (4) (F)

An elementary study of trees, their habitats and distinguishing botanical features, forms, functions and ecological relationships. The major commercially

important forest trees of the region are examined in class and through extensive field videotaping. Three class hours, three laboratory hours.

FO 283 Forest Protection (4) (F)

A study of the major biotic and abiotic destructive agents that pose a potential threat to forested environments. Emphasis is placed on prevention and control measures, fire, insect and disease problems. Three class hours, three laboratory hours.

FO 287 Forest Mensuration (4) (S)

This course covers the basics of surveying and land area determination including the appropriate use of aerial photographs. The student will learn how to measure trees for volume determination purposes and also how to plan and carry out a timber cruise. Three class hours, three laboratory hours.

FO 291 Silviculture (4) (S)

This course covers principles for treating forest stands to achieve selected objectives. Topics covered include artificial forestation, natural reforestation, weeding, thinning, pruning, improvement cuttings and the major silvicultural systems now being implemented in the United States. Three class hours, three laboratory hours.

FO 292 Best-Management Practices (3) (on demand)

A survey of the current erosion control management practices intended for personnel who maintain right-of-ways. Emphasis is placed on the most efficient and practical ways for these management practices to be installed and implemented.

FRENCH

FR 110 Elementary French I (3) (F)

A beginning course for students with little or no prior instruction in French. Basic grammar and elementary reading. Emphasis on idiomatic conversation and French culture. Class two hours, laboratory three hours.

FR 111 Elementary French II (3) (S)

A continuation of FR 110. Grammar, reading, and writing. Emphasis on idiomatic conversation, listening and writing skills, and vocabulary building. Class two hours, laboratory three hours. Prerequisite: FR 110.

FR 210 Intermediate French I (3) (F)

An intermediate French conversation and reading course. Prerequisite: FR 111 or two years of high school French.

FR 211 Intermediate French II (3) (S)

A continuation of FR 210 with emphasis on conversation, oral drills, and pronunciation. Prerequisite: FR 210.

FRESHMAN ORIENTATION

FC 101 College Success Seminar (1)

A course designed to provide new students with an introduction to college life and expectations, career options, and skills necessary for academic success. The course is intended to improve student performance in college.

GEOGRAPHY

GO 101 Physical Geography (3) (S)

A study of the Earth's physical environment. Emphasis on the processes that determine Earth's climate, water, landforms, vegetation, and soil along with the distribution patterns of each.

GO 103 World Geography (3) (F)

A study of selected world regions. Emphasis on each region's characteristics, problems and global interrelationships.

GO 201 Geography by Computer (3) (on demand)

An introduction to powerful computer-based technologies for accessing, graphing, mapping, understanding and analyzing geographic information from a variety of sources. Prerequisite: Permission of department head.

GEOLOGY

GE 111 Physical Geology (4) (F)

Introduction to geology; age and origin of the earth; earth materials, processes, and resultant structures. Three class hours, two laboratory hours.

GE 112 Historical Geology (4) (S)

Origin of the earth and its geologic history, the concept of geologic time, the fossil record. Three class hours, two laboratory hours. Prerequisite: GE 111.

GERMAN

GR 110 Elementary German I (3) (F)

An introduction to the study of the German language. Includes basic grammatical constructions, basic vocabulary, cultural studies, and conversational practice. Class two hours, laboratory three hours.

GR 111 Elementary German II (3) (S)

A continuation of GR 110. Students write in German, study grammar, do conversational drills, and become introduced to translation. Class two hours, laboratory three hours. Prerequisite: GR 110.

GR 210 Intermediate German I (3) (F)

Intermediate German grammar and reading with oral drills and conversation in German. Prerequisite: GR 111 or two years of high school German.

GR 211 Intermediate German II (3) (S)

A continuation of GR 210 with continued emphasis on conversation. Prerequisite: GR 210.

GRAPHIC DESIGN, SEE "ART (FINE ART AND GRAPHIC DESIGN)"

GREENHOUSE, SEE "LANDSCAPING AND TURF MANAGEMENT"

HAZARDOUS MATERIALS

HZ 101 Introduction to Hazardous Materials and Safety Concepts (3) (F,S)

This course presents an overview of many of the

environmental, safety, industrial hygiene, and health problems common to the manufacturing, construction, and industrial business sectors. Topics covered include: an introduction to environmental issues and relevant legislative regulations; pollution types and sources; environmental enforcement organizations; pollution prevention strategies for businesses; hazardous chemical management; worker protection and safety programs; and environmental trends in business, education programs, and federal and state enforcement. Prerequisite: RE 081.

HZ 110 Emergency Planning and Right-to-Know Acts (2) (on demand)

This course is designed to provide the student with a working knowledge of the federal acts which require industry and government to prepare emergency response plans for hazardous chemical accidents and to advise plant employees and the surrounding community concerning the chemical hazards existing at industrial sites. OSHA standards and SARA Title II Act are emphasized.

HZ 115 Environmental Management for Maintenance Activities (3) (F,S)

Identification of those maintenance activities likely to have environmental consequences. Course topics include dealing with the hazards of PCB's, asbestos, lead, hazardous waste, and the controlling of air emissions. Presentation of each topic will include discussion of activities which may be subject to regulation, restrictions which must be observed, and approved/appropriate work practices. Class two hours, laboratory three hours.

HZ 120 Hazardous Materials Regulations (3) (F,S)

This course provides an overview of federal, state, and local regulations dealing with hazardous materials. An in-depth study of the Environmental Protection Agency, including the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Toxic Substance Control Act (TSCA), and other clean air, land, and water issues. OSHA and SARA regulations will also be emphasized.

HZ 125 Pollutant Migration (3) (S)

This course covers methods of predicting ultimate fate and concentration and principles of meteorology and geology as they pertain to the migration and dispersion of hazardous materials in the environment. Prerequisites: CH 134, HZ 120.

HZ 140 Federal Facility Compliance (3) (F,S)

This course identifies specific environmental, safety, and worker protection requirements incumbent upon Federal facilities. Compliance topics include: a review of specific Federal facility regulations; hazardous materials and hazardous waste management; community right-to-know planning; PCB management; UST records and reporting requirements; spill planning, response, and reporting; release and discharge documentation; pollution prevention strategies; worker training and safety programs; and environmental trends in federal and state compliance. Prerequisite: HZ 120.

HZ 150 Facility Compliance I (3) (F)

This course applies relevant federal, state, and local environmental, hazardous chemical, and safety compliance requirements to business, construction, and industrial operations. Highlighted are issues and solutions in RCRA, OSHA, and DOT compliances. Topics covered include: an introduction to environmental issues and key regulations; pollution types and sources; environmental enforcement organiza-

tions; conducting environmental audits; pollution prevention strategies; EPA compliance requirements; hazardous chemical management; OSHA worker protection and safety programs; and environmental trends in business, education programs, and federal and state enforcement. Prerequisite: HZ 120.

HZ 165 Maps and Mapping (3) (F,S)

An introduction to types of maps, map construction, aerial photographs, remote sensing, digital image processing, computerized cartography, computerized map applications, and geographic information systems. Class two hours, laboratory two hours.

HZ 170 Equipment Operations and Management (3) (F,S)

A concentrated study of common types of construction equipment, its operation and maintenance, and equipment management scheduling. Students will operate various types of earth-moving equipment, forklifts, various air-powered tools, and other equipment common to remediation projects. Logistical aspects of operation is emphasized. Class two hours, laboratory two hours.

HZ 200 Hazardous Materials Technician Certification (2) (on demand)

A concentrated study of critical competencies required by hazardous materials, environmental and safety technicians. Students completing this course will receive certificates of training in four areas: OSHA certification for confined space operations; OSHA 8-hour annual update training for hazardous waste operations and emergency response; basic first aid and cardiopulmonary resuscitation (CPR); and Department of Transportation hazardous materials employee general awareness and safety training certification. Repeatable for credit and certification. Class one hour, laboratory two hours. Satisfactory/No Credit grading. Prerequisite: Consent of instructor.

HZ 201 Special Topics in Hazardous Materials and Waste Management (1-4) (on demand)

A study of specific topics pertaining to hazardous materials and waste management of current industrial and business interests. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

HZ 225 Environmental Sampling (4) (F)

A systematic review of considerations essential to design and implementation of environmental sampling schemes for all media. Particular attention is paid to sampling protocols established by EPA. Class three hours, laboratory three hours. Prerequisites: HZ 120, HZ 125, MA 153.

HZ 226 Air Monitoring and Instrumentation (3) (F,S)

A concentrated study of the methodology of air monitoring and sampling, instrument use, analysis, and interpretation of the results. Emphasis on air monitoring uses for facility permit monitoring, toxic release reporting, and evaluation of airborne hazardous materials at hazardous waste sites. Topics include air monitoring and sampling programs, sampling programs, sampling techniques, equipment use and instrument calibration, exposure guidelines, air dispersion modeling, and health and safety considerations. Covers operating procedures for specific air monitoring and sampling equipment, as well as strategies for air monitoring and sampling at facilities and for accidental releases of hazardous chemicals. Class two hours, laboratory two hours. Prerequisite: HZ 225 or consent of instructor.

HZ 227 Water Monitoring and Instrumentation (3) (F,S)

A concentrated study of the methodology of water monitoring and sampling, instrument use, analysis, and interpretation of the results. Emphasis on standard water quality determination and wastewater monitoring uses for facility permit monitoring and toxic release reporting. The course prepares students to perform surface and groundwater sampling standards, prepare samples for packaging and shipping, and use various analytical instruments and devices for water sampling. Class two hours, laboratory two hours. Prerequisite: HZ 225 or consent of instructor.

HZ 230 Chemistry of Hazardous Materials (4) (F,S)

A concentrated study of chemical and physical properties of hazardous materials including concepts of matter, chemical reactions, compatibility and classification, field analysis, and a focus on the chemistry of corrosive, reactive, toxic, explosive, and oxidizing materials. Students are introduced to chemical analysis and services provided by environmental analytical laboratories. Class three hours, laboratory three hours. Prerequisites: CH 134, HZ 120.

HZ 234 Hazardous Waste Worker and Emergency Responder Certification (2) (on demand)

A concentrated program of training on the competencies required for workers at hazardous waste operations and hazardous materials response technicians required under 29 CFR 1910.120. Students completing this course will receive OSHA certification for a routine hazardous waste site worker. The course will review 29 CFR 1910.120 regulatory requirements including: safety and emergency planning, medical surveillance, confined space procedures, personal protective equipment and respiratory protection selection and use, decontamination, drum handling, and rights and responsibilities of employers and employees under applicable OSHA and EPA laws. Class one hour, laboratory two hours. Satisfactory/No Credit grading. Prerequisite: Consent of instructor.

HZ 235 Hazardous Waste Operations and Emergency Response (4) (F,S,Su)

Students are introduced to the principles and techniques that are effective in protecting workers against health and safety hazards at hazardous waste sites and at the scene of emergencies involving hazardous materials. Through simulated emergencies, students will assess the incident, respond to the emergency, supervise simulated response operations and clean-up, and provide public relations information. Class three hours, laboratory three hours. Recommended prerequisite: HZ 120.

HZ 240 Hazardous Waste Disposal (3) (S)

This course is designed to explain the methods of recovery, incineration and/or disposal of hazardous materials. Topics include: contracting qualified disposal organizations, obtaining permits, ensuring regulatory compliance of hazardous materials, and the transportation and storage of hazardous materials. Prerequisites: CH 134, HZ 120.

HZ 245 Hazardous Materials Practicum (2) (F,S,Su)

This course consists of real-life situations. The study will (1) audit an industrial facility for overall hazardous materials management and develop and present a report to plant management on findings; (2) develop a presentation of their findings for fellow students and faculty and present the findings to the class and guest evaluators. Classroom lectures

and laboratories will assist in gathering information, developing format of presentations, and presenting high quality products. Class one hour, laboratory two hours. Prerequisites: HZ 230 and consent of instructor.

HZ 250 Facility Compliance II (3) (S)

This is the second course focusing on federal, state, and local environmental, hazardous chemical, and safety compliance requirements incumbent on business, manufacturing, construction, and industrial operations. Topics covered include: an introduction to current business approaches to environmental compliance; PCB management; asbestos management and compliance requirements; water pollution compliance; oil and hazardous substance reporting and recordkeeping requirements; air pollution compliance; federal regulation of pesticides; pollution prevention programs; and a study of environmental trends in business, education programs, and federal and state enforcement. Prerequisites: HZ 120, HZ 150.

HEALTH AND PHYSICAL EDUCATION

PE 154 First Aid and Safety Education (3) (F,S)

A course designed to assist students in understanding the basic principles of accident prevention as applicable to the home, school, and community. Includes techniques for administering immediate and temporary care in the event of an injury or sudden illness with special emphasis on cardio-pulmonary resuscitation. May lead to CPR certification.

PE 155 CPR Basic Life Support and First Aid for Health Professionals (2) (on demand)

A course for the professional rescuer and healthcare provider. Contents include one-rescuer CPR, two-rescuer CPR, obstructed airway for adults, children and infants. Also included are techniques for application of modified jaw thrust and use of mask for ventilation. For Allied Health majors only. Successful completion will lead to certification through the American Red Cross or the American Heart Association.

PE 200 Coaching Basketball (3) (on demand)

Theory and practice in the fundamentals as well as instruction of offensive and defensive types of play. Emphasis on the basic aspects.

PE 210 Introduction to Physical Education (3) (S)

A course dealing with the role of physical activity in American education. Discussion focuses on understanding the historical, social, economic, and political forces affecting physical education and society.

PE 211 Personal and Community Health (3) (F)

A course presenting significant information useful in making intelligent decisions about personal health. Crucial issues of personal, family, social living, and community health are discussed.

PE 213 Health and First Aid for Young Children (3) (F)

A course designed to enable the paraprofessional practitioner, teacher, or parent to understand the physical needs of the preschool child and methods by which these are met. Emphasis on health rou-

tines, hygiene, childhood diseases, nutrition, first aid and safety as related to healthy growth and development of the child.

PE 214 Physical Education for Children (3) (S)

Practical aspects of planning, organizing, administering, and evaluating programs and playgrounds; theories of play, principles of body mechanics, activities corresponding to level of growth and development, and materials and methods of teaching.

PE 220 Care and Prevention of Athletic Injuries (3) (on demand)

The prevention, analysis, prompt diagnosis, treatment and rehabilitation of common athletic injuries. Emphasis on the practical aspects of athletic training within a theoretical framework. Laboratory experiences will be a significant phase of the course.

PE 235 Special Topics in Wellness and Health Promotion (1-3) (on demand)

Study of specific topics of interest in the fields of wellness and health promotion. Courses, subjects, and emphases will be published prior to the beginning of each term. Credit hours vary depending upon topic. May be repeated for credit on different topics. This course is an elective and will not meet the two-course Physical Education requirement for transfer programs (AA and AS degrees).

PE 240 Psychology of Coaching (3) (F)

Application of basic psychological principles to everyday coaching situations and problems. Designed to improve communication and motivation between players and coaches.

HEALTH INFORMATION MANAGEMENT

(Formerly Medical Record Technology)

MR 103 Legal Aspects of Health Records (2) (S/2000)

This course considers hospital liability from the board to departmental levels, with an emphasis on the medical record and the problems that can arise from the misuse of the information contained in the medical record. Attention is given to current court decisions, insurance, patient rights and responsibilities, trial procedures and consents.

MR 105 Maintenance of Medical Records (4) (F/1999)

An introductory course to medical record science, including past and present trends, a discussion of health professions, organizations, publications, ethics, and standards. The course introduces students to the mechanics of the medical record, its design, purpose, and content. Methods for filing, numbering, and analyzing records are practiced in laboratory. Class three hours, laboratory three hours. Prerequisite: Acceptance into the Medical Record Technology Program. (Liability insurance fee.)

MR 106 Health Data Systems (4) (S/2000)

A continuation of MR 105 with emphasis on health statistics, compilation of vital statistics, health data presentation, nomenclature and classification systems, indexes and registers, quality assurance, utilization review and computer applications for medical records. Class three hours, laboratory three hours. Prerequisites: MR 105, computer elective.

MR 110 Medical Record Directed Practice I (2) (S/2000)

Supervised learning experience in the functions of a

medical record department in general hospitals accredited by the Joint Commission on Accreditation of Healthcare Organizations.

Emphasis is placed on students to develop insight and skill in medical record procedures, to solve personnel problems, to accept responsibilities, to assure confidentiality of health information, and to exhibit professional conduct. Laboratory six hours. Prerequisite: MR 105. Corequisites: MR 103, MR 106.

MR 223 Pathophysiology (3) (F/1998)

Given medical information, the student identifies diseases according to terms that are acquired in this course. The student demonstrates ability to interpret, understand, extract, analyze, and synthesize information within the medical record. Prerequisites: BI 175, HS 114.

MR 240 ICD-9-CM Coding (4) (F/1998)

Instruction in the principles and procedures of coding according to the ICD-9-CM classification system. Class three hours, laboratory three hours. Prerequisites: BI 175, HS 114, MR 106. Corequisite: MR 223.

MR 245 Health Care Delivery Systems (3) (F/1998)

Comprehensive overview of trends in the health care field. Includes topics on maintenance of health records at long term care facilities, home health, hospice, mental health, ambulatory care facilities, Preferred Provider Organizations, and Health Maintenance Organizations. Further instruction includes maintenance of a tumor registry. Prerequisite: MR 106. (Liability insurance fee.)

MR 250 Coding for Reimbursement (3) (S/1999)

A continuation of MR 240 whereby coding skills for ICD-9-CM are enhanced. Students use an encoder in laboratory practice. Instruction is given on the Prospective Payment System, Diagnosis Related Groups, Peer Review Organizations, CPT coding system, and data quality. Class two hours, laboratory three hours. Prerequisite: MR 240.

MR 270 Medical Record Directed Practice II (2) (S/1999)

A continuation of MR 110 with emphasis on health record services in alternative health care facilities. Skills in coding and quality assurance are enhanced. Laboratory six hours. Prerequisites: MR 110, MR 240, MR 245. Corequisites: MR 250, MR 275.

MR 275 Medical Record Seminar (3) (S/1999)

Discussion of topics arising from the students' study and experience in directed practice. The role of the medical record technician as supervisor is enhanced by identifying satisfactory solutions to problems encountered in the administration of medical record services. Corequisite: MR 270.

MR 285 Medical Transcription (4) (S/1999)

The student refines his/her skills in transcribing machine dictation with special emphasis on medical terminology. Speed in transcribing medical reports from machine dictation is enhanced. Class three hours, laboratory three hours. Prerequisite: HS 114, and high school or college typing.

HEALTH PHYSICS

NU 101 Health Physics and Industrial Hygiene Seminar (1) (F)

An introduction to the disciplines of health physics

and industrial hygiene. Lectures and pertinent video presentations provide an overview of the basic features of both fields.

NU 104 Radiation Protection and Radiological Health Administration (4) (F,S)

A study of radiation dosimetry, biological effects of ionizing radiation, radiation protection standards for occupationally exposed, general public and special groups. Includes a study of the theory and application of basic radiation detection instrumentation used in radiation protection. Class three hours, laboratory three hours. Corequisites: HS 155 or NU 204.

NU 154 Atomic and Nuclear Physics (4) (S)

A study of the atomic and electrical nature of matter and the elementary theory of the nucleus, fundamental particles, natural and artificial radioactivity and nuclear reactions. Class three hours, laboratory three hours. Corequisite: MA 135.

NU 204 Introduction to Health Physics and Industrial Hygiene (4) (F,S)

Covers the concept of radiation-induced ionization, methods of measurement, and the basic elements of radiation safety. Specific topics include atomic and nuclear structure, types of ionizing radiation, radioactive decay, introductory gamma ray physics, shielding, distance/intensity relationships, instrumentation and dosimetry, health effects, waste disposal, fission and fusion. Also includes a broad discussion of occupational health issues. Class three hours, laboratory three hours. Prerequisite: MA 081.

NU 264 Health Physics (4) (S)

This course is designed to integrate all components of the student's knowledge of health physics into a concentrated study of practical radiation protection principles. Practical problems in radiation physics, radioactive decay, interactions, counting statistics, radiation units, regulations, radiation biology, instrumentation, dosimetry, personnel monitoring, waste disposal, air and water sampling, shielding, x-ray safety, and radiography and laboratory facility design are worked during the semester. Class three hours, laboratory three hours. Corequisites: NU 104, NU 204.

HEALTH SCIENCE

HS 100 Coping with Alzheimer's (1) (on demand)

This course is designed to be a general elective for students in the health sciences, for selected caregiving populations, and for lay persons in the community who deal directly with patients with Alzheimer's disease. The course presents an overview of the current scientific findings relating to the disease, provides practical "know-how" strategies for resolving caregiving problems, and offers an opportunity to discover resources in the community to support families coping with the illness.

HS 101 Health Care Ethics (1) (on demand)

A course designed to present to the student ethical principles vital to health care and to assist in the formation of a personal work ethic through presentation of ethical theories, terms and practical applications of ethical concepts. This course is open to all students.

HS 104 General Medical Terminology I (3) (F,S)

A two-semester sequence designed to assist any person actively engaged, or who plans to become

engaged, in any phase of health related work to improve his/her medical vocabulary. Class three hours, laboratory one hour.

HS 114 General Medical Terminology II (3) (F,S)

A continuation of HS 104. Class three hours, laboratory one hour. Prerequisite: HS 104.

HS 119 Caregiver Skills (9) (F)

This course provides basic theoretical principles and practical application of skills necessary to provide care to developmentally challenged individuals. Opportunity is provided for supervised demonstration of skill competency. Prerequisite: Acceptance into the program.

HS 123 Introduction to Radiation Oncology (3) (F)

An overview of radiation therapy. Includes medical ethics and the law, medical terminology, patient care, discussion of cancer, cancer management, rationale and usage of radiation therapy, basic machine usage and the physics of radiation therapy. Prerequisite: Acceptance into Radiation Therapy Technology Program. Corequisites: HS 172, HS 214, HS 220.

HS 145 X-Ray Physics I (4) (F)

First of a two-course sequence in the fundamentals of x-ray physics. The complete sequence provides the opportunity for a thorough understanding of the physical phenomena associated with x-ray production, its quantity, quality, method of measurement, dose and exposure units, and the basic theory of photographic image formation by x-rays. In addition, the basic physics of DF/DR, CT, MR, and ultrasound, as well as the fundamental principles of radiobiology are covered. This course specifically covers an introduction to the mathematics, the basic electrostatics, and basic mechanics required for a thorough understanding of x-ray physics principles. In addition, x-ray production, x-ray interaction with matter, factors which control the quantity and quality of x-ray emission, and the methods of controlling scatter radiation are covered. Class three hours, laboratory three hours. Prerequisite: Admission to Radiologic Technology Program.

HS 155 X-Ray Physics II (4) (S)

A continuation of HS 145. This course specifically covers the principles of latent and manifest image formation, DF/DR, CT, US, and MR basic physics, the factors which influence radiographic image quality, and the principles and concepts of image intensified fluoroscopy, general tomography, stereoradiography and mammography. The course also covers x-ray facility design, radiobiology, radiation effects, health physics, and radiation protection. Class three hours, laboratory three hours. Prerequisite: HS 145.

HS 172 Anatomy and Imaging (2) (F)

This course presents an in-depth study of transverse, longitudinal, sagittal and coronal cross sections of the total body. The use of computerized tomography, magnetic resonance, ultrasonography and nuclear medicine images in the localization and follow-up of tumors after radiation treatment is stressed. Prerequisites: Acceptance into the Radiation Therapy Program, college level Anatomy and Physiology course. Corequisites: HS 123, HS 214, HS 220.

HS 184 Radiation Biology (3) (S)

Unified coverage of the effects of ionizing radiation in biological systems. Radiation effects on developing embryonic systems in both plants and animals as well as acute radiation effects in whole animals

and procaryotic cells are studied. Class three hours, laboratory two hours. Prerequisite: Admission to Radiologic Technology Program.

HS 200 Clinical Education Methodology (3) (on demand)

This course is designed to help instructors or potential instructors in allied health and nursing programs develop the knowledge, skills and attitudes needed for effective teaching, supervision, and evaluation of students in the clinical setting. Special emphasis is placed on presenting real-world experience by providing the opportunity for the students to design, develop, implement and evaluate instruments and strategies which can be transferred to their clinical setting. Prerequisite: Consent of instructor.

HS 214 Radiation Physics I (4) (F)

A course designed to cover the basic classical and modern physics concepts required for a thorough knowledge of the physics involved in radiation therapy. Mathematics concepts required for the physics principles are also covered. Prerequisite: Acceptance into the Radiation Therapy Program. Corequisites: HS 123, HS 172, HS 220.

HS 220 Clinic I (9) (F)

This course presents an introduction to radiation oncology, basic radiation therapy treatment procedures, and the care and management of cancer patients. Students will be oriented to administrative structure, key personnel, operational protocol, and the radiation therapy technology profession as a whole. Clinic 480 hours. Prerequisite: Acceptance into the Radiation Therapy Program. Corequisites: HS 123, HS 172, HS 214.

HS 223 Radiation Oncology I (3) (S)

This course is an introduction to the concepts of disease, types of growths, causative factors and biologic behavior of neoplastic disease. Staging procedures are introduced. The student is presented with an introduction to the specific malignant disease entities by site of occurrence. Disease processes and the treatment planning philosophy are discussed as well as the inter-relating of treatment planning with clinical radiation therapy. Prerequisite: HS 123.

HS 224 Radiation Physics II (4) (S)

A continuation of HS 214 which will provide enhanced understanding of basic classical and modern physics concepts required for a thorough knowledge of the physics involved in radiation therapy. Prerequisite: HS 214.

HS 233 Radiation Oncology II (3) (Su)

This course is an introduction to the concepts of disease, types of growths, causative factors and biologic behavior of neoplastic disease. Staging procedures are introduced. The student is presented with an introduction to the specific malignant disease entities by site of occurrence. Disease processes and the treatment planning philosophy are discussed as well as the inter-relating of treatment planning with clinical radiation therapy. Prerequisite: HS 123.

HS 240 Clinic III (1) (Su)

A continuation of HS 220. Students work with the clinical personnel in a team approach to radiation therapy treatment. The complete sequence affords the student the opportunity to gain knowledge and develop skills in radiation protection and quality assurance, simulation and treatment planning, and treatment procedures using multiple megavoltage machines and patient care and management. Clinic 45 hours. Prerequisite: HS 220. Corequisites: HS 233, HS 243.

HS 243 Radiation Biology and Hyperthermia (3) (Su)

An introduction to the medical aspects of radiobiology, including cellular, systemic, and total body responses. The somatic and genetic effects of radiation are discussed. An understanding of how radiobiology is used in the clinical practice of Radiation Therapy is achieved. A brief discussion of the concepts of hyperthermia are also presented. Prerequisites: Successful completion of all previous courses in the Radiation Therapy Program. Corequisites: HS 233, HS 240.

HS 299 Special Topics in Allied Health (1-3) (on demand)

Study of selected topics of interest in the area of allied health. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

HISTORY

HI 118 Heroes and Villains (3) (F)

A biographical approach to world history. Personalities and their roles in shaping the modern world, to be selected from a variety of fields of human activity: politics, science, philosophy, religion, economics, war, etc. Attention given to interpretations concerning the role of individuals in history.

HI 203 United States History to 1865 (3) (F,S,Su)

Survey of United States to Reconstruction. Emphasis on the political, diplomatic, economic, social, cultural and intellectual phases of American life in its regional, national, and international aspects.

HI 204 United States History from 1865 (3) (F,S,Su)

Survey of United States history since the Civil War. Emphasis on the political, diplomatic, economic, social, cultural, and intellectual phases of American life in its regional, national, and international aspects.

HI 205 Western Civilization to 1715 (3) (F)

A general survey of the political, economic, social, cultural, and intellectual history of mankind from the Paleolithic period through the Scientific Revolution which has influenced Western Civilization.

HI 206 Western Civilization from 1715 (3) (S)

A general survey of the political, economic, social, cultural, and intellectual history of mankind since the Scientific Revolution which has influenced Western Civilization.

HI 207 World History to 1500 (3) (F)

The course studies civilizations and cultures of India, China, the Greeks and Romans, Africa, the World of Islam, Japan, Western Asia and Southeast Asia, Western Europe and the New World to 1500. Unique factors in history, art, literature, religion, philosophy, and economics are included.

HI 208 World History from 1500 (3) (S)

The course studies new world patterns in Africa, China, the Middle East, Europe, Soviet Union, Japan, Muslim Empires, and Western Hemisphere, 1500-present. Movements in religious and cultural reforms, wars, revolutions, communism, and the growth of independent countries within global perspectives are included.

HI 235 Special Topics in History (1-3) (on demand)

Study of specific topics of traditional and current historical interest, to include relevant political and social developments and issues. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics.

HI 261 Afro-American History (3) (S)

A study of black people in America from their African origins to the present. Highlights of the Black Experience in America; the unique nature of the Black Experience, the structure, problems, and potential of the Black Community, and an introduction to the contributions and thoughts of Black leaders.

HI 271 Tennessee History (3) (F)

A survey of the history of the state from its beginnings to the present including consideration of its geography, population, economy, social development, and political life.

HI 281 Women in American History (3) (on demand)

A survey of the role and contributions of women to the American experience from colonial times to the present. Emphasis on the diversity of experience of women in groups (e.g., working class, middle class, women of color, women in politics, etc.) and individual women who have distinguished themselves or made outstanding contributions to the social development of America. Corequisite: EN 110.

HORTICULTURE, SEE "LANDSCAPING AND TURF MANAGEMENT"**HOSPITALITY MANAGEMENT****HM 101 Hospitality Internship I (3) (F,S)**

This course is designed to help the student gain work experience in a variety of career specialties related to hospitality management. The opportunity will be provided at one of several approved local hospitality businesses where the student will work nine (9) hours per week for one semester. Prerequisite: HM 103.

HM 103 Introduction to Hospitality Management (3) (F,S,Su)

A study of the hospitality industry from past and present perspectives. Emphasis is placed on ownership and management, organization, front and back office operations, guest services, housekeeping, engineering, security, food and beverage operations, and marketing and sales. Field trips and guest speakers will be arranged. Trends and innovations will be discussed.

HM 201 Hospitality Internship II (3) (F,S)

This course is designed to help the student gain work experience in a variety of career specialties related to hospitality management. The opportunity will be provided at one of several approved local hospitality businesses where the student will work nine (9) hours per week for one semester. Prerequisites: HM 101, HM 103.

HM 213 Hotel/Motel Management: Front Office Operations and Administration (3) (F)

A study of hotel/motel front office operations and administration. Covers rooms, bedding and rates,

reservations, check-in and check-out, statistics and reports, and guest relations. Computer simulations in reservations availability, retrieving and updating reservations, check-in, guest accounts, charges and credits, and check-out.

HM 223 Restaurant Management (3) (F)

A study of restaurant management. Covers food and beverage organization and operations with emphasis on food service methods, beverage service methods, banquet sales and services, food and beverage accounting, and food and beverage cost controls. Computer simulations in point of sale, market reports, menu planning, vendor maintenance, accounts payable, and food and beverage reports.

HM 233 Hospitality Marketing: Sales and Marketing for Hotels, Motels, and Resorts (3) (S)

A study of hospitality marketing. Covers sales marketing for hotels, motels, and resorts. Emphasis on understanding transactions between buyer and seller, client behavior, pricing strategies, marketing organization, market research and planning, marketing communication, marketing to organizations, and personal selling. Computer simulations in market analysis, media records, advertising orders and costs, marketing budgets, group sales, and reservations pickup.

HM 243 Hotel Back Office Operations and Administration (3) (S)

A study of back office operations and administration in the motel phase of hospitality management. Emphasis on basic elements of the hotel business. Includes office organization, rooms functions and operations, basic hotel accounting, financial reports, financial planning, and human relations. Simulation exercises in guest accounts, invoices and receipts, account maintenance, accounts receivable, vendor maintenance, and accounts payable.

HM 255 Tourism and Travel (3) (F)

A study of the economic and social forces that influence the tourism and travel industry. Explores both domestic and international markets along with the services and functions of retail and wholesale establishments that attract travelers and tourists. Emphasis on examining the motivations for travel, the economic impact of tourism and the essentials of tourism marketing and research. Presentations by local tourism officials and professionals.

HM 265 Conference/Convention Management (3) (S)

This course covers the methods and techniques of providing world class service in conference/convention management. Topics include food procurement, production and service; hotel/motel selection; facility arrangement; and other necessary requirements to meet specific individual needs.

HM 274 Regional Tourist Attractions (3) (S)

Students will research the history and development of area and regional tourist attractions, and exhibit basic knowledge and understanding of the importance of each to attracting tourists. In addition, area hotels/motels, restaurants and shopping opportunities are examined. Includes field trips and guest speakers.

HM 280 Introduction to Culinary Preparation (3) (F)

A course designed to cover principles and foundation of culinary preparation through lecture and instructional demonstration. Menus, recipes and temperature application as well as seasonings,

stocks and sauces will be covered to provide the student with both a theoretical and practical basis for understanding food preparation.

HM 281 Hot and Cold Food Preparation (3) (S)

This course covers edible foodstuffs, their groups, hot and cold preparation techniques, classical foods and combinations of food for individual dishes and entire meals through lecture and instructional demonstration.

HM 282 Introduction to Professional Baking Methods (3) (S)

A course designed to cover various components of baking, encompassing sweet and savory bread, cakes, pies and pastries, their preparation and decorative presentation through lecture and instructional demonstration.

HUMAN SERVICES**HR 101 Introduction to the Field of Social Welfare (4) (F,S)**

An introduction and orientation to the field of social welfare with an emphasis on professional values and ethics and the diverse population groups served. Attention is given to historical development and present structure. A minimum of 45 hours of observation and supervised volunteer service in appropriate settings required.

HR 113 Introduction to Individuals with Developmental Disabilities (3) (F,S)

This course provides an introduction to the atmosphere in which developmentally disabled individuals live and their relationship to family, the community, caregivers, ethics and normal development.

HR 123 Requisite Skills for Direct Caregivers (3) (F,S)

This course provides the introduction to the knowledge, skills and abilities needed to offer a valid and reliable quality of care to the developmentally disabled. The course helps the caregiver to develop the knowledge, skills and abilities necessary for a minimum standard of care. Prerequisite: HR 113.

HR 125 Community Social Services (3) (S)

A survey course of community social services within the Chattanooga Metropolitan area which should be considered as resources in making effective referrals for human services. Pre- or Corequisite: HR 101 or permission of instructor.

HR 130 Substance Abuse Theories (3) (S)

A course designed to address the social, political, physiological, and behavioral implications of alcohol and drug abuse. Explores the nature of psychoactive substances and the various theories explaining the stages and dynamics of drug and/or alcohol addiction. Special emphasis on family dynamic models including co-dependency and the disease concept. Theories and methods of prevention techniques for substance abuse will be presented.

HR 135 Special Topics in Human Services (1-3) (on demand)

Study of specific topics of interest in the areas of human services and social welfare. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics.

HR 205 Human Relations and Explorations (3) (F)

An introduction to the social and psychological concepts and problems of communication in interpersonal transactions. Development of essential knowledge of affective behaviors, relations with others, and the dynamics of communication processes. Pre- or Corequisite: HR 101.

HR 210 Methods of Human Service Practice (3) (F)

A multi-disciplinary approach to the development of an understanding of the roles, treatment modalities, and practice settings in which the human services specialist may become involved. Prerequisite: HR 101.

HR 219 Family Dysfunction (3) (F)

An examination of the interpersonal interaction patterns existing in dysfunctional families and the problems experienced by these families in contemporary American society. Special emphasis is given to examining emotional and physical abuse, drug addiction, alternative life styles, and changing sex roles.

HR 220 Human Services Practicum (6) (S)

A minimum of 200 hours of supervised field instruction in social agencies which deal directly with human problems in order for the student to apply and demonstrate appropriate mastery of necessary knowledge and skills required for beginning practice. In-class activities include on-campus seminars. Prerequisites: HR 101, HR 210.

HR 235 Methods of Substance Abuse Treatment (3) (F)

A course designed to provide knowledge of the theory and practice of treatment approaches to alcohol and/or drug addiction. Emphasis is placed on developing an understanding of wellness and the whole person, the stages of recovery, assessment for discharge and community resources.

HR 240 Group Dynamics (3) (on demand)

A course designed to introduce interpersonal concepts and problems of communication in interpersonal transactions. Emphasis on understanding group processes and developing specific group process competencies. Specific attention is given to the development of the student's ability to facilitate communication between others in a group setting.

HR 245 Introduction to Counseling (3) (S)

A comparative analysis of the major theoretical approaches to the practice of counseling and psychotherapy, including psychodynamic, behavioral, cognitive behavioral, gestalt, transactional analysis, rational-emotive therapy and systems theory.

HR 250 Substance Abuse and the Law (3) (on demand)

A course designed to provide a socio-legal guide to the drug abuse problem. Examines the psychosocial dynamics and pharmacological risks attendant to misuse of psychoactive drugs and explores techniques and strategies of drug law enforcement and the alternative intervention strategies for the sentencing of the drug offender.

HR 260 Seminar (3) (on demand)

Application of the principles and procedures of various therapeutic intervention techniques. Emphasizes development of practical skills in counseling and interviewing techniques and the routine activities which take place in typical substance abuse treatment settings. Prerequisites: HR 130, HR 235, HR 240, HR 245.

HUMANITIES**HU 100 Seeking Spirituality for the Twenty-first Century (1) (F,S)**

A comprehensive introduction to religious issues specific to the end of the twentieth and beginning of the twenty-first century. A careful analysis of the movement of organized religion in the American experience coupled with intelligent speculation about directions religion may take in the near future. An understanding of the transitional moment in which American religious experience finds itself at the present time.

HU 110 Introduction to the Humanities (3) (F,S,Su)

A course surveying the creative activities of man (music, drama, painting, sculpture, architecture, literature, etc.) as reflections of the culture which produced them.

HU 115 Elementary Japanese Language and Culture (3) (on demand)

A beginning course for students in the Japanese language and culture. Emphasis on acquiring the skills to communicate in basic Japanese and on developing a comprehensive understanding of traditional and modern Japanese culture and society.

HU 120 Philosophy of Science and Technology (3) (F,S,Su)

A course tracing the history of the major scientific and technological achievements of the modern age and examining the relevance of these achievements to the world view of Western civilization.

HU 210 Religions of the World (3) (F,S,Su)

A study of the main tenets of the world's great religions, including Christianity, Judaism, Confucianism, Shintoism, Hinduism, Buddhism, and Islam. Stresses teachings common among these religions and influence of these religions on thought and action.

HU 213 Mythology (3) (F,S)

A cross-cultural survey of creation myths, hero myths, and fertility myths of diverse cultures including the Middle Eastern, European, African, Oriental, and North and South American. Includes an in-depth study of Classical Greek Mythology.

HU 220 Religion in America (3) (on demand)

A survey of the historical development of religion in the American experience. Investigates the major movements, divisions, theological issues, and personalities that have woven themselves into the mosaic of religion in America from the Puritan heritage to modern secularism and cultural pluralism.

HU 230 Contemporary Women Artists and Writers (3) (on demand)

A study of contemporary women artists and writers with an emphasis on a diversity of multicultural selections. Includes critical reviews of both the way women perceive themselves as expressed in twentieth century imagery and the impact of this vision. Prerequisite: EN 110.

HU 235 Special Topics in Humanities (3) (on demand)

Study of specific topics of traditional and current relevance in the Humanities disciplines. Course subjects and emphases will be published prior to the beginning of each term. Course may be conducted on the basis of completion of individualized projects approved by the instructor. May be repeated for credit on different topics. Prerequisite: EN 110.

HU 238 Folklore and Native Culture (3) (on demand)

A course relating basic theory and working vocabulary of folklore study to the individual student's geographical origin and personal experience, with special focus on family, community, and regional cultures.

HU 240 Leadership Development (3) (F,S)

A course designed to study leadership philosophy, practices, and skills. Emphasis will be placed on the learning and application of basic leadership concepts including decision making, empowerment, trust, conflict resolution and goal-setting. Leadership styles will be explored through selected readings in the humanities and through exposure to and critical analysis of various media including art, literature, film, and music. (Same as PY 250. Credit not allowed for both courses.)

HU 265 Literature in Culture: World Perspectives (3) (on demand)

Reading and study of traditional and non-traditional literature based on an expanded canon and emphasizing multicultural values in a world perspective. Prerequisite: EN 111. (Same as EN 265. Credit not allowed for both courses.)

HVAC, SEE "AIR CONDITIONING/REFRIGERATION"**INDUSTRIAL ELECTRICITY****IE 000 Industrial Electricity (F,S,Su)**

Orientation to school policies and the safe use of tools in the laboratory. Mathematical skills necessary to meet and accept the responsibilities of being an electrician (problems reflect the practical and realistic situations electricians must handle as part of trade requirements). Course includes the use of the National Electrical Code, information about basic electricity, AC and DC motors, generators, alternators, programmable logic controllers, hydraulics, pneumatics, symbols, line diagrams, proper use of manual contactors and manual motor starters. Installation and repair of the TVRO satellite system. Hands-on experience in residential wiring and conduit bending. 30 clock hours per week. *Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for IE 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.*

INDUSTRIAL ELECTRONICS**ER 000 Industrial Electronics (F,S,Su)**

Theory and practical application in the repair and maintenance of electronic equipment, including communications equipment, video equipment, computers, and programmable logic controllers. Covers direct current, alternating current, related mathematics, solid state electronics, digital electronics, and computer-oriented electronics. Provides hands-on experience in practical electronics, troubleshooting, and the use of diagnostic test equipment. This course prepares graduates to take the National Electronics Certification Test, which leads to the designation of Certified Electronics Technician (CET), and the Federal Communications Commission Test. 30 clock hours per week.

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for ER 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

INDUSTRIAL HYGIENE

IH 104 Essentials of Industrial Hygiene (4) (F,S)

Covers the basic elements of industrial hygiene practice, including recognition, evaluation, and control of environmental health hazards. Specific topics covered are the health effects of overexposure, exposure limits, methods of recognition of health hazards, monitoring and sampling methods, instrumentation, and hazard control techniques. Course includes on-site industrial hygiene surveys at two industrial plants. Class three hours, laboratory three hours. Prerequisite: MA 081. Corequisite: CH 134.

IH 190 Special Topics in Industrial Hygiene and Occupational Health (1-4) (on demand)

This course offers specific topics in industrial hygiene and occupational health that are of current importance or interest to business and industry. Course subjects and emphasis will be publicized before the beginning of each term. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

IH 204 Industrial Hygiene Sampling and Monitoring (4) (F)

Students are introduced to the principles, methods, and procedures used to assess human exposure to hazardous agents in the environment with emphasis on occupational hazards. Includes environmental and personal exposure monitoring for both chemical and physical agents. Also covers survey planning, calibration, dosimetry, data analysis, and record-keeping. Course includes on-site industrial hygiene surveys at two production plants. Class three hours, laboratory three hours. Prerequisite: IH 104.

IH 214 Industrial Hygiene Control Technology (4) (S)

Covers the methods used to prevent or reduce exposures to hazardous environmental agents, with emphasis on occupational hazards. Topics include engineering design for safety, process containment of chemicals, substitution of safer materials, enclosure, automation, mechanical ventilation, shielding, administrative controls, and personal protective devices. Course includes on-site industrial hygiene surveys at two production plants. Class three hours, laboratory three hours. Corequisite: IH 104.

INDUSTRIAL MAINTENANCE MECHANICS

ID 000 Industrial Maintenance Technology (F,S,Su)

A course designed to prepare qualified maintenance personnel for institutional, industrial, and commercial plants as well as entry into high technology fields such as robotics installation, maintenance and repair. Introduction to the fundamentals of blueprint interpretation as applied in the industrial maintenance trade; use of lines, views, dimensioning, specifications, structural shapes and reading blueprints. Electric arc welding, fundamentals of oxyacetylene

welding, safety practices, set-up of equipment and brazing, MIG welding methods with various joint designs and positions. Special lathe operations, layout procedures, precision measurement, drill press and thread cutting operations. Principles of voltage, current, resistance, Ohm's Law, the relationship of work and power, kilowatt hours, AC and DC current, three-phase voltage systems, transformers, AC induction motors, switch control of lighting, conduit bending, components and solenoids. Setup and operation of vertical and horizontal milling machines and surface grinding machines. Both theory and practical applications will be stressed. Also covers mathematical skills necessary to meet and accept the responsibilities of being a maintenance technician (problems reflect the practical and realistic situations technicians must handle as part of trade requirements). 30 clock hours per week.

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for ID 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

INDUSTRIAL MANAGEMENT

IM 204 Production and Inventory Control (3) (S)

A course designed to acquaint the student with concepts and techniques of production and operations management. Quantitative methods are used to solve both service and production-oriented problems. Written communication skills are also developed. Prerequisite: Consent of instructor.

IM 225 Statistical Quality Control (3) (S)

The student learns how to apply statistical methods to analyze process capability and output variability as required in a total quality management environment. The student also learns how to apply acceptance sampling plans specified in published industrial standards. Prerequisite: MA 170. Corequisite: MA 171.

IM 227 Introduction to Statistical Process Control (1) (F,S)

This elective course introduces the fundamental techniques used to analyze deviations in production processes. Interactive computer based instruction is used to introduce control charts, process capability studies and special problem solving techniques. The course is offered by independent study only and requires use of computers in the Learning Resources Center.

IM 230 Work Design and Measurement (3) (F)

A course designed to present the basic principles that underlie successful application of motion and time study to the design and measurement of work. It is designed to develop skills for increasing productivity, improving equipment utilization, conserving materials and energy, reducing human effort, and advancing the goals of the organization. Prerequisites: MD 114, MD 184 or consent of instructor.

INFORMATION SYSTEMS

CS 100 Introduction to Microcomputers (2) (on demand)

A course designed to introduce the student to basic tools available on a microcomputer. Topics include

introduction to word processing, electronic spreadsheets, databases, and disk operating system. This course is not acceptable toward any degree program.

CS 101 Computer Literacy (3) (F,S,Su)

A course designed to provide the student with enough information about the nature of a computer that he/she can understand the roles that computers play in our society. It is also intended to introduce the use and operation of microcomputers and to teach the student to use commercial applications software packages. Topics include basic components of a computer, careers in data processing, applications of computers, introduction of word processing, electronic spreadsheets, databases, and issues in computing.

CS 104 Fundamentals of Information Systems (3) (F,S)

An overview of the information systems discipline. Topics include base number systems, computer organization, data and file organization, career opportunities, and current concepts of technology.

CS 107 Database Application Level I (1) (on demand)

This course is designed to provide a basic knowledge of database software and its use as applied to business. Includes discussions of and/or exercises providing practice in concepts and operations.

CS 114 Concepts of Programming (2) (F,S,Su)

Fundamental concepts of traditional computer program design, computer program design tools, and an introduction to object technology.

CS 124 Visual BASIC I (3) (F,S)

A course designed to introduce the student to the concepts of computer program design through the use of the Visual BASIC language. Topics include use of controls, forms, code modules, functions and procedures to create Windows applications.

CS 133 Control Language, Operations, and Utilities (3) (on demand)

Designed for students who want training in operation skills, this course includes the coding and use of commands, utilities, procedures, print spools, and job queues. Prerequisite: Consent of instructor.

CS 134 RPG Programming Language (4) (F,S)

A course designed to introduce the student to the concepts of the RPG (Report Program Generator) language. Topics essential to business data processing are covered. Programming assignments include problems common to payroll, sales analysis, accounts payable, accounts receivable, and inventory control systems. Class three hours, laboratory two hours. Prerequisites: CS 104 and CS 154, or consent of instructor.

CS 144 FORTRAN Programming (4) (F)

A course designed to teach the student how to solve scientific and engineering problems using FORTRAN 77 programming language. The student is introduced to using computers and computer systems currently used in business and industry. Class three hours, laboratory two hours. Prerequisite: CS 114 or CS 124. Corequisite: MA 117.

CS 154 COBOL Programming Language I (4) (F,S)

An introductory course using the COBOL language to solve typical business problems. Designed primarily for Information Systems or Accounting Technology majors. Example programming assignments may include payroll, sales analysis, accounts

payable, accounts receivable, and inventory control. Class three hours, laboratory two hours. Prerequisite: CS 114 or consent of instructor.

CS 176 Microcomputer Operating Systems (3) (S)

A course designed to familiarize the student with microcomputers, operating systems, system commands, and machine codes. Data representation and elementary machine instructions are studied in detail. Communication codes and communication terminology are surveyed. Prerequisite: CS 104 or consent of instructor.

CS 185 C++ Programming Language (3) (S)

A course designed to introduce the student to the concepts of computer program design and development using the C++ programming language. Orientation is towards syntax, usage, modularity of program design, and development of program libraries. Prerequisite: CS 114, or experience with a block structure language, or consent of instructor.

CS 197 Spreadsheet Software Applications (3) (F,S)

A course designed for those students who have been introduced to the use and operation of a microcomputer, have a basic knowledge of the Windows environment, and wish to learn to use an electronic spreadsheet software package.

CS 198 Database Software Applications (3) (F,S)

A course designed for those students who have been introduced to the use and operation of a microcomputer, have a basic knowledge of the Windows environment, and wish to learn to use a commercial database software package.

CS 201 Assembler Language Programming (3) (F)

A course designed as an introduction to machine language, symbolic coding, assembly systems, macros, program segmentation, program linkage, and data representation. Prerequisite: Any two programming language courses.

CS 204 Microcomputer Architecture (3) (F)

A course designed to provide a background of using the microcomputer as a business tool. It deals with the fundamentals of microcomputers with emphasis on hardware components and configurations, security, and networking. Prerequisite: CS 104 or consent of instructor.

CS 205 Computer Networks (3) (F)

A course designed to prepare students with the fundamentals of data communications and networks. Topics include basic data communication concepts, standards, OSI model, local area networks and network hardware/software. Prerequisite: CS 176 or consent of instructor. Corequisite: CS 204.

CS 215 Local Area Network Management (3) (S)

A course in the management of computer local area networks. Topics include server and workstation installation, network performance management, print services, managing client services, and security. Prerequisites: CS 205 and experience with microcomputers, or consent of instructor.

CS 225 Visual BASIC II (3) (S)

A course designed to introduce advanced features of the Visual BASIC programming language. Topics include file processing, communicating with other Windows applications (including object linking and embedding), and data access. Prerequisite: CS 124.

CS 231 Numerical Methods (3) (on demand)

A course designed to develop a foundation for the basic concepts of numerical methods. The general topics of higher order equations, systems of equations, interpolation and curve fitting, numerical integration, and differential equations are developed. Consideration is given to problem solution using the computer and elementary discussion of error control. Prerequisite: CS 144. Corequisite: MA 136.

CS 233 Interactive RPG Programming (3) (on demand)

A course designed to introduce the student to menus, screen design, and interactive processing as implemented on IBM midrange systems. Topics essential to on-line business data processing are covered. Examples and programming assignments include problems common to payroll, sales analysis, accounts payable, accounts receivable, and inventory control systems. Prerequisite: CS 134 or consent of instructor.

CS 235 Systems Implementation and Documentation (3) (on demand)

Designed to train students in the skills required of programmers, the course includes the advanced features of operating commands, utilities, procedures, help screens, and documentation, and the implementation, modification, and documentation of a business system. Prerequisites: CS 133, CS 233.

CS 244 Systems Analysis and Design (3) (S)

A course designed to integrate manual and data processing techniques with applications in business and science. Complex application areas are studied with a view toward analysis and development of systems and procedural improvements. The case study approach is emphasized. Prerequisite: Advanced standing or consent of instructor.

CS 248 Survey of Computer Topics (1) (on demand)

Specialized topics and/or problems in information data processing are selected and studied at an introductory level. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

CS 249 Topics in Computer Applications (3) (on demand)

Specialized topical issues and/or problems in computer data processing are selected and studied in detail. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

CS 254 Advanced Algorithms (3) (F)

This course is designed to familiarize the student with a variety of sorting algorithms, binary trees, parsing, stacks, queues, linked lists and recursive techniques. Prerequisite: CS 185.

CS 280 COBOL Programming Language II (3) (F,S)

A continuation of CS 154. A problem solving course using advanced features of the COBOL language to solve typical problems encountered in a business environment. Prerequisite: CS 154 or consent of instructor.

CS 293 Microcomputer Software Applications (4) (F,S)

Course designed for persons who will be using a suite of commercial software applications in the office setting. Students must have excellent prerequisite keyboarding/document formatting skills and a working knowledge of word processing software applications. Although designed for Office Systems Technology majors, this course is open to anyone

desiring to become proficient in the use of integrated software applications. Prerequisites: OF 114, OF 126, or consent of instructor.

CS 296 Principles of Database Management Systems (3) (F)

A course designed to acquaint the student with the basic concepts of database management systems (DBMS). Topics include terminology, types of systems, user interface, report generators, large and small system implementation. Prerequisite: At least one programming language course.

CS 299 Special Projects (3) (S)

Integrates the concepts and skills learned in previous programming courses with emphasis placed upon solutions to typical problems encountered in a business environment. Consideration is given to case studies in systems and programming. May be repeated for credit with different programming languages. Prerequisites: CS 154 and CS 280, or CS 134 and CS 233.

INSURANCE

IS 104 Insurance Mathematics (3) (F)

An introduction to the mathematics of insurance, including present value, law of large numbers, annuities and mortality tables. Individuals who are planning to take the Course 9 exam from the Life Office Management Association may wish to take this course as a means of preparation for the exam. Prerequisite: MG 165 or college level mathematics course.

IS 107 Principles of Life and Health Insurance (3) (F)

An introduction to the principles, practices, and techniques of life and health insurance.

IS 108 Insurance Law (3) (F)

An introduction to the law of life and health insurance. Individuals who are planning to take the HS 324 exam from the American College, Course 3 exam from the Life Office Management Association, or Course CPCU 6 from the American Institute of Chartered Property and Casualty Underwriters may wish to take the course as a means of preparation for the exams.

IS 109 Principles of Risk and Insurance (3) (F)

An introduction to the principles, practices, and techniques of risk and insurance. Individuals who are planning to take the HS 315 exam from the American College or Course CPCU 2 exam from the American Institute of Chartered Property and Casualty Underwriters may wish to take the course as a means of preparation for the exams.

IS 113 Pension Planning (3) (S)

An introduction to retirement plans for individuals and businesses. Individuals who are planning to take the HS 326 exam from the American College, the Course 10PP exam from the Life Office Management Association, or the Course III and Course IV exams from the Certified Employee Benefit Specialist program may wish to take the course as a means of preparation for the exams.

IS 123 Group Benefits (3) (S)

An introduction to group benefits available to employees through various employer and government sponsored plans. Individuals who are planning to take the HS 32f exam from the American College, the Course 10GI exam from the Life Office Management Association, or the Course I and

Course II exams from the Certified Employee Benefit Specialist program may wish to take this course as a means of preparation for the exams.

IS 202 Risk Management (3) (F)

An introduction to the principles of risk management and risk control focusing on the five steps of the risk management process. Individuals who are planning to take the ARM Exams 54 and 55 from the Insurance Institute of America may wish to take the course as a means of preparation for the exam. Prerequisite: MG 165 or college level mathematics course.

IS 205 Insurance Company Operations (3) (S)

An introduction to the various activities involved in the operation of an insurance company. Individuals who are planning to take the Course 2 exam from the Life Office Management Association or the CPCU 5 exam from the American Institute of Chartered Property and Casualty Underwriters may wish to take the course as a means of preparation for the exam. Prerequisite: IS 107 or IS 109.

IS 206 Property and Liability Insurance (3) (S)

Principles of commercial property and liability insurance including insurance and non-insurance techniques for dealing with exposures. Individuals who are planning to take the CPCU 3 and CPCU 4 exams from the American Institute of Chartered Property and Casualty Underwriters or the Property and Liability Course exam from the American College may wish to take this course as a means of preparation for the exams. Prerequisite: IS 109.

IS 210 Workers' Compensation (3) (S)

Comprehensive coverage of the area of workers' compensation presented for the business owner or manager. Included will be basic provisions of the law, employer responsibility, risk management and loss control in the area of workers' compensation, obtaining coverage, processing claims, and litigation. Specific application of Tennessee law will be surveyed along with a familiarity with Georgia and Alabama law.

IS 212 Business Insurance (3) (F)

Survey of the entire area of business insurance with concentration on types of insurance not covered by other individual courses. Emphasis will be on business' determination of coverage needed and means available for providing coverage.

INTERDISCIPLINARY STUDIES

IY 100 Student Government Leadership (2) (F,S)

A course designed to promote the development of appropriate leadership skills. Emphasis will be placed on identifying, nurturing and mentoring students as they grow to become effective leaders. This course will focus on the parliamentary process and the fundamental principles of arbitration, compromise, conflict resolution, effective communication, motivation and team building.

JAPANESE, SEE "HUMANITIES"

JOB SKILLS DEVELOPMENT

JS 101 Career and Life Planning (3) (F,S)

A course designed to assist the student to develop an awareness of personal choice in making career and life decisions. Emphasis will be placed on developing realistic short and long term career goals through personality, abilities and skills assessments. Job market trends will be explored in relation to the need for continual training and retraining.

JS 102 Job Seeking/Job Keeping Skills (2) (on demand)

This course is designed to provide practical and useful information on how to find, get, and keep a good job and includes the development of competencies for career development, job attainment, job survival and leadership and self development.

LPN, SEE "PRACTICAL NURSING"

LANDSCAPING AND TURF MANAGEMENT

LM 000 Landscaping and Turf Management (F,S,Su)

An introduction to the field of horticulture with emphasis upon landscape management. Plant science, plant identification and maintenance, pest and insect identification, integrated pest management, selection and safe application of pesticides, soils, plant nutrition and fertilizer application. Fundamentals of landscape design and construction. Principles of residential turf management. Calculation of costs and bid preparation. Identification and uses of flowering shrubs, bedding plants, perennials, and bulbs. Greenhouse and nursery production of plants, nursery management, and interiorscaping. Computer assisted landscape drafting and design available as supplementary material. 30 clock hours per week.

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for LM 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

LEADERSHIP, SEE "HUMANITIES," "INTERDISCIPLINARY STUDIES," "MANAGEMENT," "PSYCHOLOGY"

LEGAL ASSISTING

LA 110 Fundamentals of Law (3) (F,S,Su)

An introductory course designed to familiarize the student with the broad basics of various areas of the legal field upon which future courses will build. Includes a survey of the following substantive and procedural areas of law emphasizing the role of the attorney, paralegal, and legal tribunal in the administration of justice: Torts, Contracts, Civil Procedure, and Criminal Law. This course offers the

ideal opportunity for those who think they may be interested in pursuing a career in the legal field to obtain a first hand view of the field.

LA 130 Legal Research (3) (F)

A study of the sources of law as found in the legal library with emphasis on legal research and acquisition of various research and analytical skills.

LA 135 Legal Writing/Case Analysis (3) (S)

A systematized approach to the understanding of how legal results and doctrines are reached through case analysis. Includes coverage of various writing techniques, case analysis, and briefing skills. The course focuses on documentation development, format, application of judicial opinions, and uniform citations. Prerequisites: LA 110, LA 130.

LA 140 Advanced Legal Writing and Research (3) (F)

This course is designed to be the ultimate culmination of legal research and writing skills. Its purpose is to fine tune and focus all previously acquired skills into practical use. The course is comprised of various real experience, research and writing assignments designed to simulate the type work the student will encounter in the work force. Prerequisites: LA 130, LA 135.

LA 210 Contracts (3) (S)

An in-depth study of the law of contracts and restitution, with an emphasis on understanding the interrelationships among the concepts covered. Coverage includes the various contractual rules of law, their uses and applications. Prerequisite: LA 110.

LA 220 Torts (3) (S)

A paralegal-oriented study of tort law. This course covers the broad spectrum of tort litigation including items such as negligence, personal injury, intentional torts, worker's compensation and medical malpractice. The study includes a look at many functional skills such as investigation, interviewing, and research. This course is an intensive, in-depth study of the law of Torts. The materials and lectures are primarily from the viewpoint of preparation and litigation of the personal injury type case.

LA 225 Constitutional Law I (3) (F)

A study of critical constitutional issues affecting the legal justice system and its personnel. Emphasis is placed on constitutional provisions and court decisions presently shaping modern criminal law and fundamental Constitutional guarantees. Prerequisite: LA 110.

LA 230 Criminal Law/Procedure (3) (S)

This course is an intensive study of the Tennessee Rules of Criminal Procedure combined with an in-depth study of specific crimes, their elements and rules of criminal responsibility. The latter rules articulate when it is appropriate to blame and punish persons for committing morally wrong and harmful, illegal acts. The course canvasses the historical and modern state of criminal law doctrine and provides insight into some of the more controversial aspects of criminal law.

LA 240 Trial Practice and Civil Procedure (3) (F)

A study of the techniques and documentation utilized in the trial of a civil or criminal action. Covers basic elements of investigation, drafting, and interviewing. Topics emphasized include jurisdiction, discovery, procedure, multi-party litigation and various other topics. Prerequisites: LA 110, LA 130.

LA 250 Wills, Trusts and Estate Planning (3) (S)

This course introduces the student to the legal sub-

specialties of wills, trusts and estate planning. Includes a study of the more common forms of trusts, a survey of the fundamental principles of law applicable to trusts, and the planning, administration, and interpretation of trusts. This course primarily covers the planning and drafting of wills, and estate planning. The course emphasizes the development of writing skills, so that will contests will be avoided, and the purpose and intention of trusts will be carried out.

LA 260 Domestic Relations (3) (F)

A course to familiarize and instruct the student in the field of family law. Designed specifically to train the student in every aspect of family law. Course coverage includes divorce, legal separation, annulment, child custody, adoption, support and various other topics. Special emphasis is placed on pleading and documentation of drafting.

LA 270 Insurance Law (3) (F)

A course covering the fundamentals of the complex subject of insurance law. Includes policy analysis, various types of coverage, insurable interest, automobile insurance and industry regulation.

LA 275 Bankruptcy (3) (S)

An in-depth study of federal bankruptcy laws and guidelines. The course of study focuses primarily on statutory provisions and subsequent judicial interpretations of the Federal Bankruptcy Code. The course will further familiarize the student with the various forms associated with this type of action. Prerequisite: LA 110.

LA 280 Property Law (3) (S)

An advanced study in the various fields of property law including in-depth coverage of landlord/tenant law, transference of ownership interest and the general topic of assets—what they are, how they are created and sustained by legal institutions, how they are defined, who can own them, how they are transferred, and what regulations governments may impose on them.

LA 290 Law Practice Management (3) (F)

A survey of law office management techniques and practices. Designed to prepare and familiarize the student with the business aspects of the law office, including management concepts, chain of command, record keeping, billing procedures, and other technology aspects.

LA 298 Special Topics in Legal Assisting Technology (1-3) (on demand)

Selected Legal Assisting Technology related topics of current and special interest are studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

LA 299 Internship (1-3) (F,S,Su)

The internship program is a structured academic strategy combining on-campus study with a planned and supervised work experience related directly to the paralegal's role in the legal community. The objective is to assist the student in career development and to aid the student in the difficult transition from classroom knowledge to real-world applications. Prerequisites: CS 101, LA 110, LA 135, LA 240, and consent of instructor.

LITERATURE, SEE "ENGLISH"

MACHINE TOOL TECHNOLOGY

MT 000 Machine Tool Technology (F,S,Su)

An introduction to the metalworking trades as it relates to machining operations. Machine shop safety, basic hand tools, and shop measuring instruments. Lathe, vertical milling machine, metal cutting saws, bench grinders, and cutting tools as applied to machines. Surface grinder, band machining, shaper, bench grinders, and cut of saws. Basic principles in the design and construction of stamping die components as they relate to the metal working industry. Heavy emphasis on precision grinding. CNC machine tools, including four axis machining centers and two axis turning centers. Three types of CNC programming: Standard G-code, conversational, and interactive graphic programming. Use of CNC technology in the tool and die trades, such as punch dies, form dies and fixturing. Also covers applied mathematics needed for machine tool technology (arithmetic, geometry and trigonometry) and blueprint reading, with emphasis on principles of visualization needed to interpret shop drawings in order to produce machine work using actual industrial blueprints. 30 clock hours per week.

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for MT 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

MACHINE TRANSCRIPTION, SEE "OFFICE SYSTEMS"

MAGNETIC RESONANCE IMAGING, SEE "RADIOLOGIC TECHNOLOGY"

MAINTENANCE TECHNOLOGY

MN 102 Electrical Fundamentals I (3) (F,S)

An introduction to the fundamentals that support maintenance activities relative to industrial/commercial electrical and electronic systems. Although generation, transmission, distribution and regulation of power systems will be addressed, the emphasis will be on in-plant customs, practices and applications. This beginning course is a study of basic DC and AC theory and concepts to include circuits, batteries, transformers, and magnetism. Lecture two hours, laboratory three hours.

MN 103 Mechanical Fundamentals I (3) (F,S)

An introduction to mechanical concepts, practices, and applications of drive components, mechanical forces, and machine motion. Emphasis on machines and equipment, and on the concepts of operating, servicing and maintaining shafts, bearings, clutches, brakes, belts, chains and gear systems using a systems approach rather than machine specific. Lecture two hours, laboratory three hours. Corequisite: MD 104.

MN 112 Electrical Fundamentals II (3) (F,S)

This course addresses the variables of electrical/electronic systems and the devices and

means of measurement and monitoring; explores electrical devices such as switching, modifying, and regulating; examines electrical transmission (conductors), DC circuits, and AC circuits; introduces electronics; and prepares the student for advanced studies in control theory and application. Lecture two hours, laboratory three hours. Prerequisite: MN 102.

MN 113 Mechanical Fundamentals II (3) (F,S)

An introduction to the fundamentals of integrated drive systems that propel and control motion. Emphasis on conversion of motion patterns for the efficient and effective management of processes and the application of force/motion patterns in propulsion, positioning, and articulated movement of machines, materials and tooling systems. Lecture two hours, laboratory three hours. Prerequisite: MN 103.

MN 210 Building and Structural Maintenance (3) (F,S)

An introduction to the skills necessary to the servicing and maintenance of buildings and facilities used to house and support production machinery, processes, and storage. Includes carpentry, finishing for walls, ceilings, and floors, painting, roof maintenance, plumbing, lock and key systems, and landscape maintenance activities. Lecture two hours, laboratory three hours. Prerequisite: OS 120. Corequisite: HZ 115.

MN 215 Maintenance Management and Organization (3) (F,S)

An introduction to the role of the supervisor/leader in the contemporary maintenance department/organization. Beyond the human relations and organizational duties, other key responsibilities of maintenance organizations include the control of maintenance resources, the improvement of performance in maintenance, and the need to promote maintenance productivity through life long learning. Lab and project activities include research on current maintenance management practices. Class two hours, laboratory three hours. Prerequisites: HZ 115, MN 102, MN 103, OS 120.

MN 218 Hydraulics, Pneumatics, and Fluid Systems (3) (F,S)

An introduction to the basics of fluid handling, management and quality control activities. Emphasis directed to the parameters that sustain selection, installation, operation, service and maintenance of fluid handling and management systems. Activity based labs assist in perfecting skill and proficiency with regard to industrial/commercial systems. Lecture two hours, laboratory three hours. Prerequisite: MN 113.

MAMMOGRAPHY

MY 210 Mammography Patient Management (3) (F)

This course is one of a three course set in specialized imaging of the breast. The complete set provides fulfillment of federal regulations for formal specialized training in mammography prior to independent mammography performance. Topics include patient care (psychological, sociological and physical), breast anatomy and physiology, breast pathology, breast compression and positioning and special procedures in mammography. Corequisites: MY 220, MY 230.

MY 220 Mammography**Instrumentation/Physics (3) (F)**

This course is one of a three course set in specialized imaging of the breast. The complete set provides fulfillment of federal regulations for formal specialized training in mammography prior to independent mammography performance. Topics include characteristics of a dedicated film screen mammography unit, image receptors and physicist's/technologist's required quality control tests. Laboratory experiments are used to demonstrate clinical applications of the theoretical principles and concepts. Corequisites: MY 210, MY 230.

MY 230 Mammography Clinic (4) (F)

This course is one of a three course set in specialized imaging of the breast. The complete set provides fulfillment of federal regulations for formal specialized training in mammography prior to independent mammography performance. This course provides supervised performance of a minimum of 100 mammography exams and includes film-reporting sessions with radiologists interpreting mammograms. Observation and assistance in technologist's quality assurance tests and localization procedures required. Clinic 180 hours. Prerequisite: Completion of positioning course work in MY 210 according to standards set for the course. Corequisites: MY 210, MY 220.

MANAGEMENT**MG 101 Professional Ethics in the Workplace: Business and Commerce (1) (F,S)**

This course aims to help the student cope with difficult choices in the business-commerce arena by the study of moral principles or values that govern the conduct of persons at work.

MG 102 Communication Skills (1) (F)

A study of communication skills used in business. Topics include listening and assertion, managing conflict, creative thinking and decision making. Learning is enhanced through the use of surveys, case studies and exercises.

MG 103 Introduction to Business (3) (F,S,Su)

A course designed to give a concise and clear overview of business, developing awareness of our economic system, and promoting understanding of the tools available for management to use in making decisions. Course familiarizes the student with the concepts and structure of American business methods, financing, internal organization, and management.

MG 104 ISO 9000 Registration (3) (on demand)

This course, especially designed for small and medium-sized organizations, provides a basic understanding of the ISO 9000 series of quality management standards and the associated certification process. Through a series of lectures, open discussions, hands-on workshops and case studies, participants will become knowledgeable of the standards; learn acceptable methods of documenting their organization's quality system, including the quality manual and procedures; and develop internal quality audit techniques.

MG 105 Introduction to Quality Management (3) (F)

This course is designed to acquaint the student with the concepts and tools associated with continuous improvement of products and services offered by

the firm. The course explores the basic tenets of quality from several of the outstanding writers in the Quality Management field.

MG 106 Quality Improvement Tools (3) (S)

This course is an in-depth study of the tools needed to improve quality of products and services. The implementation of these tools will result in continuous quality improvement. The continuous improvement of quality will assist companies in meeting the global competition. Prerequisites: MA 153, MG 105.

MG 107 Principles and Practices of Public Relations (3) (F,S)

An in-depth overview of the public relations profession. Emphasis on principal concepts and definitions of public relations, public relations history, theory, ethical factors, specialized areas of practice and the correlation of public relations and various communication media.

MG 109 Practical Business Planning (2) (S)

A Multimedia course consisting of video tapes and the interactive Business Disc computer/video program. The focus is on establishing a small business venture. The course highlights the development of the Business Plan, the problems confronting the entrepreneur, and the various financial requirements of a small business.

MG 110 Leadership Skills (1) (S)

A course designed to offer a comprehensive approach to the subject of leadership. Activities include identifying successful leadership styles, formulating a plan from initial concept through execution, practicing techniques to boost productivity, identifying ways to manage conflict and preparing a plan to improve presentation and speaking skills.

MG 114 Principles of Management (3) (F,S,Su)

A course designed to provide a concise, comprehensive review of the management processes of planning, organizing, leading and controlling. The student is encouraged to develop decision making and communication skills through the use of case studies, research reports and simulations. Prerequisite: MG 103.

MG 134 Supervision and Human Relations (3) (F,S,Su)

A course to prepare the student for a leadership role through the study of managerial techniques for improving quality and productivity within a total quality management environment. Human relations and team building are stressed.

MG 154 Marketing (3) (F,S,Su)

A study of the field of marketing. Covers marketing channels, functions, methods and institutions. Orientation will include a basis for development of a marketing information system as a managerial tool. Case studies are analyzed and solved, and a computer simulation is utilized as an experiential exercise.

MG 160 Project Management (1-3) (F)

This course is designed to present the basic concepts of project management to include project organization, planning projects, quotations and negotiations, beginning operations, budgeting and funding, quality assurance and control, procurement, management style, team building and methods to phase-out the project. Students will be taught how to track their projects through a project management computer software package. Prerequisites: CS 101, MG 103, or consent of instructor.

MG 164 Personal Financial Management (1) (F)

This course is designed for the student who has little or no experience or training in financial matters and for the student whose major program does not include a course covering financial topics such as, insurance, taxes, interest, planning, budgeting, and investing. The student who has received credit for MG 165 or MG 185 may not receive credit for MG 164.

MG 165 Business Mathematics (3) (F,S,Su)

A study of the application of mathematics to solve problems related to routine business operations and to personal finances. Representative topics are insurance, taxes, consumer credit, retail applications, investments and introductory statistics.

MG 170 Labor Relations (3) (S)

This course is an introduction to labor relations. It presents an overview of labor relations beginning with the history and progressing through developments in the field, federal laws and recent trends. The course is designed to present a definition of labor relations and a working knowledge of the basic concepts involved in negotiations.

MG 185 Basic Investing (3) (F)

This course acquaints the student with alternative means of committing funds (investing) for the purpose of receiving some benefits such as interest payments, profits or income tax reduction. The course is designed as an elective for both business and non-business majors who would like to ready themselves to take advantage of investment opportunities.

MG 214 Purchasing (3) (F)

A study of the organization and operation of the purchasing function with emphasis on methods of commodity analysis, selection of sources of supply, systems of stock control, and purchasing policies. Prerequisite: Advanced standing or consent of instructor.

MG 215 Retail Operations (3) (F,S,Su)

A study of the field of retailing specifically covering store location and lay-out, merchandising, advertising, salesmanship, customer service standards, staffing, and security. Emphasis is placed on differences in policies according to the types of retail establishments. Prerequisites: MG 154, MG 165.

MG 216 Consumer Behavior (3) (S)

A study of the motives, attitudes, buying behavior, product innovation, and expectations of consumers that contribute to an understanding of the marketing process. Emphasis is placed on the consumer decision-making process and their perceptions. Prerequisites: MG 154, MG 244.

MG 224 Entrepreneurship (3) (S)

A capstone course that applies skills learned throughout the previous courses in the Small Business Management Program. Emphasis is on the starting, financing and operating of a small business, while building a comprehensive business plan. Prerequisites: BU 114, MG 103.

MG 235 Merchandising and Inventory Control (3) (S)

A study of the techniques of merchandising and inventory control as related to optimum management practices. Emphasis is placed upon profitable management of multi-faceted operations. Management information systems are examined. Prerequisite: BU 114.

MG 244 Advertising (3) (F)

The principles of modern advertising in relation to customer psychology are examined. Available

means and media are studied. Advertising is viewed as creative communication with customers. Group interaction (via a selected advertising campaign) is the focus of the course. Prerequisite: MG 154.

MG 254 Salesmanship (3) (S)

A study of basic principles of personal salesmanship with a study of methods, problems, and duties of a salesman. Customer needs are linked to selling activities. These activities are communicated several times through oral presentations where each student must serve both as buyer and seller. Included will be competitive knowledge, product knowledge, pricing strategies, handling objections and communications.

MG 260 Market Research (3) (F)

An in-depth study of the process of marketing research. Problem formulation, research design, data-collection methods, instruments, data collection, data analysis, and constructing the research report represent the stages explored in this essential course of study. Prerequisites: MA 170, MG 154.

MG 264 Human Resources Management (3) (F,S)

An introduction to the principles and practices involved in the effective administration of Human Resources. The operative functions of procurement, development, compensation, integration and maintenance related to management aspects through case studies, special readings, and consideration of related aspects of human resources pertaining to an organization. Prerequisite: MG 103 or consent of instructor.

MG 280 Problems in Marketing (3) (S)

This course is a study of marketing mistakes from all areas of the field. A case study approach is utilized as the student explores various problems that companies of today deal with frequently, with concentrations including direct marketing and telemarketing. Prerequisites: MA 170, MG 154, MG 260.

MG 285 Organizational Behavior (3) (S)

A study of strategic variables and relationships of structure and process involving groups of people and how they may be motivated to work together more productively.

MG 286 Health Services Management Practicum (3) (S)

This course is designed to prepare students for employment in Health Services Management by providing practical work experience. The two required areas of emphasis are Accounting and Management/Supervision. The student may choose the third area of emphasis from Marketing/Ethics, Human Resources, and Communications. The student will observe and work (without compensation) nine (9) hours per week for one semester in an approved health facility. Prerequisite: Permission of department head.

MG 299 Special Topics in Management (1-9) (on demand)

Selected management and management related topics of current and special interest are studied. May be repeated for credit on different topics. Prerequisite: Consent of department head.

MANAGEMENT, HOSPITALITY, SEE "HOSPITALITY MANAGEMENT"

MANAGEMENT, INDUSTRIAL, SEE "INDUSTRIAL MANAGEMENT"

MANAGEMENT, MEDICAL OFFICE, SEE "MEDICAL OFFICE MANAGEMENT"

MARINE ENGINE TECHNOLOGY

SE 000 Marine Engine Technology (F,S,Su)

Repair of marine engines. Shop safety, tools and equipment, the theory of both two- and four-cycle internal combustion engines, their types and construction. Electrical systems, fuel systems, compression systems, and power transfer systems. Outboard engines, lubrication, cooling systems, and routine maintenance. Remote controls, exhaust and carburetion, fine tune, dynamometer and engine trouble diagnosis, honing and advanced troubleshooting. The student will be required to disassemble, inspect, and reassemble engines. Also covers mathematical skills necessary to meet and accept the responsibilities of being a marine engine technician (problems reflect the practical situations technicians must handle as a part of trade requirements). 30 clock hours per week.

Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for SE 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

MARKETING, SEE "MANAGEMENT"

MASS COMMUNICATIONS

CO 110 Introduction to Mass Communications (3) (F,S)

Survey of mass communications field. General overview of the mass media (TV, radio, newspapers, and magazines), their role in society, how they work together, and their effect on society.

CO 202 Broadcast Announcing (3) (F,S)

Examination of broadcast communication principles and effective announcing techniques. Laboratory and broadcast experiences designed to cultivate announcing skills and an effective on-air personality.

CO 204 TV Production (3) (F,S)

Practice and study in the basic elements of television production with emphasis on studio facilities, equipment, and techniques.

CO 205 Radio and Television News Writing and Editing (3) (F,S)

The practice and study of preparing news for radio and television broadcasting. Prerequisites: CO 110, EN 110; keyboarding skills required.

CO 210 Communications Practicum (3) (F,S)

Classroom and supervised laboratory work in broadcast communications covering FCC rules and regulations, operating procedures, radio station format, and program development. One class hour, six laboratory hours. Prerequisites: CO 110, CO 202.

CO 212 Television Practicum (3) (F,S)

The study of television production, including lights and lighting techniques; cameras, including imaging devices and operation of cameras; and characteristics of microphones. Also postproduction editing, basic switching techniques, and electronic field production are covered. One class hour, six laboratory hours. Prerequisites: CO 110, CO 204.

CO 219 Internship in Television Communications (3) (F,S)

A field experience in television with supervision by college faculty and cooperating broadcast stations. Written reports relating to the field experience are required. Nine laboratory hours. Prerequisite: Permission of instructor.

CO 230 Remote Television Production (4) (F,S)

An intensive practical experience in multi-camera remote television production. Includes both production and technical elements required for staging remote broadcasts. Emphasis on production, direction, camera and audio operation, use of electronic graphics, satellite news gathering, and satellite uplinking.

CO 240 News and Sports Broadcasting (3) (on demand)

Techniques and methods utilized by Radio-TV news and sports broadcasters. Areas of concentration involve on-camera presentation, reporting, writing and management of resources. Prerequisite: CO 202 or CO 204 or consent of instructor.

CO 249 Special Topics in Mass Communications (3) (on demand)

Specialized topics in the field of mass communications. Course will cover very specific topics which are taught at the introductory level. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

MATHEMATICS

MA 000 Developmental Mathematics for Industrial Technology Programs

This course of study includes whole numbers, fractions, decimals, percents, ratio and proportion. 5 clock hours per week.

MA 070 Basic Mathematics (3) (F,S,Su)

A one-semester basic math course in whole numbers, fractions, decimals, percents and linear measures with calculator usage, elementary statistics, and applied problems. Prerequisite: AAPP Placement.**

MA 080 Elementary Algebra (5) (F,S,Su)

Topics include number properties, measurements, geometric formulas, integers, rational numbers, properties of exponents, equations, polynomials, factoring, graphing linear equations, calculator usage and applied problems. Prerequisite: MA 070 or AAPP Placement.**

MA 081 Intermediate Algebra (5) (F,S,Su)

Topics include factoring polynomials, rational expressions and equations, systems of linear equations and inequalities, radical expressions and equa-

**This is a developmental studies course and is not generally transferable. Is not accepted toward any degree program at Chattanooga State.

tions, exponents, Pythagorean Theorem, graphics calculator usage and applied problems. Prerequisite: MA 080 or AAPP Placement.**

MA 090 Geometry (3) (F,S,Su) (Not transferable)

A course designed for students who have not had high school geometry and intended to give minimum preparation for trigonometry and calculus. A study of lines, angles, planes, triangles, circles, polygons, and their properties. The course will include applications, direct and indirect proofs. *Note: This is a preparatory course and is not generally transferable. It is not accepted toward any degree program at Chattanooga State.*

MA 117 College Algebra (3) (F,S,Su)

A study of equations and inequalities, functions and graphs, linear and quadratic functions, polynomial and rational functions, exponential and logarithmic functions, and systems of equations. Students may not receive credit for both MA 117 and MA 121. Prerequisite: Two years of high school algebra and acceptable test scores or MA 081.

MA 118 Pre-Calculus (5) (F,S,Su)

A study of functions and graphs, higher degree polynomial functions, trigonometric functions, graphs of the trigonometric functions, trigonometric identities, inverse trigonometric functions, trigonometric equations, triangle applications, vectors, polar coordinates, complex numbers, conic sections, sequences and series, and the Binomial theorem. Students may not receive credit for both MA 125 and MA 118. Prerequisite: MA 117 or consent of department head.

MA 121 Algebra and Trigonometry for Technologies I (4) (F,S,Su)

This is the first of a two-semester pre-calculus or technical mathematics sequence. Topics emphasized are functions and graphs, equations, determinants, right triangle trigonometry, trigonometric functions of any angle, graphs of trigonometric functions, exponents, radicals, and vectors. Students may not receive credit for both MA 117 and MA 121. Prerequisite: Placement as required by TBR specifications or MA 081 and RE 081.

MA 125 Algebra and Trigonometry for Technologies II (4) (F,S,Su)

This is the second of a two-semester pre-calculus or technical mathematics sequence. Topics include complex numbers, logarithms, system of quadratic equations, exponential and logarithmic equations, inequalities, variations, properties of trigonometric functions, matrices, inverse trigonometric functions, equations of higher degree, introductory statistics, and an introduction to calculus. Students may not receive credit for both MA 125 and MA 118. Prerequisite: MA 121 with a minimum grade of "C" or consent of department head.

MA 135 Calculus I with Analytic Geometry (4) (F,S,Su)

A study of limits, derivatives and integrals of algebraic, trigonometric, exponential and logarithmic functions, their graphs and applications. Prerequisite: Four years of college preparatory mathematics and acceptable test scores or MA 118 or MA 125.

MA 136 Calculus II with Analytic Geometry (4) (F,S,Su)

A continuation of MA 135. Topics include differentiation and integration involving inverse trigonometric functions, techniques of integration, applications

of integrals, infinite sequences and series, plane curves, parametric equations, and polar coordinates. Prerequisite: MA 135.

MA 143 Contemporary Mathematics (3) (F,S)

A study of the nature and techniques of mathematics including such topics as number systems, modern geometry, probability, and the history and development of mathematical ideas. Prerequisite: Two years of high school algebra and acceptable test scores or MA 081.

MA 153 Introductory Statistics (3) (F,S,Su)

An introduction to statistical thinking. Topics include sampling methods, organization of data, measures of central tendency and variability, probability, probability distributions, estimations, hypothesis testing, inference for regression, and analysis of variance. Credit not allowed for both MA 170 and MA 153. Prerequisite: Two years of high school algebra and acceptable test scores or MA 081.

MA 163 Structure of Number Systems I (3) (F,S,Su)

A study of relations, functions, systems of numerations, and the system of whole numbers. Prerequisite: Two years of high school algebra and acceptable test scores or MA 081.

MA 164 Structure of Number Systems II (3) (F,S)

A study of integers, number theory, rational and irrational numbers and Euclidean geometry. Prerequisite: MA 163.

MA 170 Statistics I (3) (F,S,Su)

An introduction to statistical thinking. Topics include sampling methods, organization of data, measures of central tendency and variability, probability distributions and estimations. Credit not allowed for both MA 170 and MA 153. Prerequisite: Two years of high school algebra and acceptable test scores or MA 081.

MA 171 Statistics II (3) (F,S,Su)

A continuation of MA 170. Topics emphasized are hypothesis testing, construction of confidence intervals, independence of two variables, simple analysis of variance, analysis of regression, and introduction to non-parametric statistics. Prerequisite: MA 170.

MA 193 Calculus for Management, Life, and Social Sciences (3) (F,S,Su)

An introduction to calculus: limits, differentiation of functions, optimization, marginal analysis, integration, the Fundamental Theorem of Calculus, applications of integration. Prerequisites: Four years of college preparatory mathematics and acceptable test scores or MA 117.

MA 210 Linear Algebra (3) (F,S,Su)

An introduction to topics in linear algebra including linear systems, matrices and matrix algebra, determinants, vectors and vector spaces, inner product spaces, eigenvalues and eigenvectors, and linear transformations. Prerequisite: MA 136.

MA 245 Calculus III with Analytic Geometry (4) (F,S,Su)

A continuation of MA 136. Topics include vectors, space coordinates, vector-valued functions, partial differentiation, multiple integrals, and vector analysis. Prerequisite: MA 136.

MA 246 Differential Equations (3) (F,S,Su)

An introduction to the basic concepts, theory methods, and applications of ordinary differential equa-

tions including systems of equations and transform methods. Prerequisite: MA 136. Corequisite: MA 210.

MA 299 Special Topics in Mathematics (1-4) (on demand)

This course is designed to allow detailed study of a specific topic in mathematics. Topics may vary each semester or may be individualized according to student needs. Course topics and emphases will be published prior to each semester. May be repeated for credit on different topics. Prerequisite: Consent of instructor and department head.

MECHANICAL ENGINEERING TECHNOLOGY

MD 102 Elementary Drafting (2) (on demand)

A basic drawing course for students in chemical, nuclear, management information, and information systems technologies. The students acquire familiarity with the use of drawing instruments. The fundamentals of drafting treated with emphasis on the technology in which the student is majoring. Class one hour, laboratory three hours.

MD 103 Metric System Analysis (2) (on demand)

An introduction to Metric-English and English-Metric conversions with emphasis on industrial applications. Includes use of standards tables to determine Metric-English equivalencies for industrial materials such as bolts, nuts, gears, and other stock and machine components.

MD 104 Blueprint Reading and Analysis (1-4) (on demand)

The student will be introduced to the fundamentals of blueprint interpretation and mathematical analysis with topics to include orthographic projection, dimensioning, sectioning, line conventions, visualization of the object and basic shop mathematics.

MD 105 Introduction to Engineering Design (1) (on demand)

This course is designed to give the student an introduction to the engineering design process. A design project will be assigned. Work outside of class will be required to complete the project. Satisfactory/No Credit grading.

MD 109 Introduction to Manufacturing Measurement, Safety, and Quality Control (3) (on demand)

An introduction to manufacturing measurement, safety, and quality control. Includes topics and practices such as using hand tools and precision measurement devices, reading and interpreting control charts, and applying shop safety techniques.

MD 110 Customized Manufacturing Topics (1-4) (on demand)

Specialized topics and/or problems in manufacturing are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

MD 114 Engineering Drawing I (3) (F,S)

An introductory course in engineering drawing. Topics include the use of instruments, orthographic and pictorial drawing, normal and edge views, electrical schematics, dimensioning, and drafting conventions. Class two hours, laboratory three hours.

MD 124 Engineering Drawing II (3) (S,Su)

A continuation of MD 114. Topics include charts and graphs, welded parts, cams, gears, property plats, contour lines, highway cross sections, piping, structural steel, and developments and intersections. The AutoCAD system will be used to complete assignments. Class two hours, laboratory three hours. Prerequisites: ET 115, MA 121, and MD 114 or two years high school Mechanical Drafting.

MD 134 Statics and Strength of Materials I (3) (F)

Statics covers components and resultants of vectors, moments, equilibrium of structures, centroids and moment of inertia. Strength of materials covers basic stresses and deformations, beam diagrams, and beam flexure and shear. Prerequisites: ET 115, MA 125.

MD 184 Manufacturing Processes (3) (F,S)

A basic course designed to familiarize the student with the primary and secondary processes of manufacturing. This includes the formation of material into shapes through to the testing of the finished product. Elementary C.I.M. concepts are discussed together with the basic usage of lathes, mills, drills, saws and other machine shop tools. The course is supplemented with laboratory exercises, videos, and tours of manufacturing facilities. Class two hours, laboratory three hours.

MD 207 Numerical Control I (3) (F)

A course designed to familiarize the student with the basic principles of numerical control systems. Hands-on experience with the equipment is emphasized. Error diagnosis and program debugging are also stressed. Topics include: two- and three-axis machining, NC tooling, and G-codes. Class two hours, laboratory three hours. Prerequisites: ET 115, MA 125, MD 184. Corequisite: MD 294.

MD 208 Numerical Control II (3) (S)

A continuation of skills acquired in MD 207 and design skills from the CAD courses. Topics include 3-axis contouring, sculptured surfaces, interfacing CAD systems with NC systems, DNC links, NC programming languages, and Computer-Aided Manufacturing (CAM) software. Class two hours, laboratory three hours. Prerequisites: MD 207.

MD 226 Fluid Power (3) (S)

The study of the principles of pneumatics and hydraulics. Topics include: air compressors and power boosters, hydraulic fluids and power devices, accumulators, and controls. Class two hours, laboratory three hours. Prerequisites: ET 115, MA 125.

MD 242 Statics and Strength of Materials II (3) (S)

A continuation of MD 134 to further study vector operations and forces induced in structures in two and three dimensions. Stresses for welds, two material members, eccentric loads and those caused by temperature changes are studied. The interrelationship of beam diagrams will be derived. Wood and steel beams will be designed. Class two hours, laboratory three hours. Prerequisite: MD 134. Corequisite: MA 135.

MD 254 Metallurgy (3) (S)

An introductory course in physical metallurgy. Crystallization and metallic structure are studied. Topics include: equilibrium diagrams for binary alloys, iron-iron carbide diagram, heat treatment of steel, metallurgy of alloy steels, cast iron, nonferrous metals and the corrosion of metals. Class two hours, laboratory three hours. Prerequisite: MA 121.

MD 264 Thermodynamics I (3) (F)

An introductory course in applied thermodynamics.

Topics include heat energy, heat transfer, psychrometry, refrigeration, and load surveys. Labs include studies of real heating and cooling equipment in operation. Class two hours, laboratory three hours. Prerequisites: ET 115, MA 125.

MD 265 Thermodynamics II (3) (S)

A continuation of MD 264. Areas of study include the perfect gas law, heat and energy, internal combustion engines, gas turbines, steam turbines, properties of steam, and refrigeration. Class two hours, laboratory three hours. Prerequisite: MD 264.

MD 274 Machine Design (3) (S)

This course covers the principles of dynamics in the form of kinetics and kinematics of rectilinear motion and rotation of bodies, curvilinear motion, work, energy and power. The fundamentals of gear design will also be covered. Prerequisites: MD 134, PH 114. Corequisite: MA 135.

MD 280 Thermodynamics (3) (TVA)

An introduction to thermodynamic processes, the first and second laws of thermodynamics, heat and energy, the ideal gas law, properties of steam with emphasis on the steam cycle, and combustion and refrigeration cycles. Prerequisites: MA 125, PH 114.

MD 294 Automated Manufacturing (3) (F)

A study of various manufacturing concepts as they apply to manufacturing automation. Topics include: manufacturing organization, flexible manufacturing systems, plant layout and design, computer integrated manufacturing, quality control, jig and fixture design, geometric tolerancing and dimensioning, plastics, and tool design. Prerequisites: MA 153, MD 124, MD 184.

MD 298 Special Topics in Mechanical Engineering Technology (1-4) (on demand)

Specialized topics and/or problems in mechanical engineering technology are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

MD 299 Special Topics in Mechanical Engineering Technology with Lab (1-4) (on demand)

Specialized topics and/or problems in mechanical engineering technology are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

MECHANICAL ENGINEERING TECHNOLOGY (DuPont)**MZ 110 Mechanical Principles (4) (DuPont)**

An introduction to concepts of mechanical principles of motion, thermodynamics, fluid mechanics, and mathematical solution techniques. Class three hours, laboratory three hours.

MZ 111 Mechanical Tool Applications (5) (DuPont)

An introduction to the safe use and care of tools, precision measuring instruments, mechanical drawing, and everyday shop operations. Class three hours, laboratory seven hours.

MZ 112 Mechanical Piping Systems (6) (DuPont)

The equipment and practices involved in pipe fitting procedures are introduced. Properties of pipe and pipe fittings are identified by material, dimensions, schedule number, method of joining, and function. Basic concepts of piping system layout are taught

using orthographic and isometric sketches. Techniques of measurement, fabrication, assembly, and installation are demonstrated. With an emphasis on safety, the techniques and practices associated with testing and breaking into a piping system are explained. Class three hours, laboratory nine hours.

MZ 130 Principles of Machine Operation and Maintenance (3) (DuPont)

Advanced maintenance principles for production equipment. Subjects covered include chem pumps, ansi pumps, canned pumps, nonmetallic pumps, sealless pumps, pump bearings, pump motors, mechanical seals, fans and blowers, power transmission as it relates to chain drives, V belts, industrial flat belts, sheaves, shaft couplings, mounting and dismounting of bearings, analyzing of bearing failures, types and usage of gears, maintaining spur, helical, herringbone bevel work gears, and gear reducers. Class two hours, laboratory three hours. Prerequisite: Consent of instructor.

MZ 131 Introduction to Welding Principles and Techniques (2) (DuPont)

Instruction is presented in welding safety, personal protective equipment, welding processes, equipment set-up, and welding techniques. The oxy-acetylene process is utilized to demonstrate proper equipment set-up, lighting and adjusting the flame, bevel cutting pipe in position, extinguishing the flame, and equipment disassembly. The snaw process is used to make fillet welds on carbon steel plate in position. Class one hour, laboratory three hours. Prerequisite: Consent of instructor.

MECHANICS, AUTOMOTIVE, SEE "AUTOMOTIVE TECHNOLOGY"**MECHANICS, DIESEL, SEE "DIESEL EQUIPMENT MECHANICS"****MECHANICS, MARINE, SEE "MARINE ENGINE TECHNOLOGY"****MEDICAL OFFICE ASSISTING****MO 000 Medical Office Assisting (F,S,Su)**

Medical Office Assisting is a three-semester training program in which students receive a combination of classroom study, practice in the campus laboratory, and clinical and administrative practice in local physicians' offices.

Fall Semester

Administrative and clinical procedures. Includes anatomy and physiology, medical terminology, basic medical typing, business communication, professional orientation and exam room procedures. 30 clock hours per week.

Spring Semester

Instruction includes pharmacology and the administration of medication, administrative medical office practices (insurance, billing, filing, scheduling, and banking), psychology, laboratory procedures, medical transcription, first aid and CPR. 30 clock hours per week. Prerequisite: Successful completion of Fall Semester.

Summer Semester

Clinical procedures and laboratory procedures are reviewed. Students obtain administrative and clinical experience through an externship in an area

physician's office. 30 clock hours per week.
Prerequisite: Successful completion of Spring Semester.

MEDICAL OFFICE MANAGEMENT

OM 101 Medical Office Supervision (1) (F)
Students develop an understanding of the elements surrounding the supervision/management of today's successful medical offices. Emphasis on the supervisor's role in planning/follow-through of procedures; organizing and motivating people at work; and leadership/discipline styles. This course may not be substituted for any courses required for a degree or certificate program at the college.

OM 102 Medical Office Personnel Practices (1) (F)

Students develop an understanding of the personnel/human resource practices involved in the effective management of today's successful medical offices. This course may not be substituted to satisfy requirements for any certificate/degree program at the college.

OM 103 Medical Practice Marketing and Ethics (1) (F)

Students develop an understanding of the physician's role in marketing and in the role of the staff as a marketing team. Emphasis is placed on patient and public relations, and on improving the image of the practice through proven marketing strategies. Ethical issues prevalent in medical practice will be addressed. This course may not be substituted for courses required in any certificate/degree program at the college.

OM 104 Medical Office Communications (1) (F)

Students develop an understanding of the communication processes involved in staff, patient, and community relations. Emphasis will be placed on listening, improvement of telephone techniques, and writing routine medical correspondence. Also included are scheduling techniques for the medical practice. This course may not be substituted for any courses required in a certificate/degree program at the college.

OM 105 Medical Office Accounting (2) (S)

Students develop an understanding of medical office bookkeeping and accounting through intensive academic training and utilization of hands-on projects focusing on basic accounting principles and related computerized general ledger application. Since the theory and applications of this course are somewhat limited to medical office utilization, this course may not be substituted for BU 114 or BU 250. Prerequisite: CS 101 or equivalent.

OM 106 Medical Office Coding (2) (S)

A survey course in medical coding for individuals who are employed in a medical office. Includes a brief overview of coding principles for the ICD-9-CM and CPT classification systems. May not be substituted for MR 240 or MR 250.

MEDICAL RECORDS, SEE "HEALTH INFORMATION MANAGEMENT"

MEDICAL TERMINOLOGY, SEE "HEALTH SCIENCE"

MUSIC GENERAL

MU 001 Music Seminar (0) (F,S)

A course that provides opportunities to perform, and to attend concerts and seminars on various musical topics. Required each semester of attendance for every music major. Repeatable. Corequisite: Private instruction in music.

MU 110 Music Appreciation (3) (F,S,Su)

A course surveying the development of music from the Middle Ages to the present. Designed to aid the student in a better understanding and appreciation of traditional art music as well as music of our present culture.

MU 111 Fundamentals of Music (3) (F,S)

A study of the basic elements of music: scales, intervals, triads, meter, note values, rhythm, notation, and simple keyboard harmony.

MU 112 Beginning Harmony I (3) (F)

A course dealing with building scales, major and minor key signatures, triads, intervals, rhythmic notation, four-part vocal writing, and primary and secondary triads. Corequisite: MU 147.

MU 113 Beginning Harmony II (3) (S)

A course dealing with the harmonization of melodies, non-chord tones, writing for the piano, secondary dominants, and secondary diminished seventh chords. Prerequisites: MU 112, MU 147. Corequisite: MU 148.

MU 139 History of Rock and Roll (3) (on demand)

A course designed to gain the knowledge and appreciation for the development of rock and roll by musical analysis, style comparison and coverage of the performers and their music's impact on society.

MU 147 Fundamental Sightreading and Ear Training I (1) (F)

Development of sightreading skills through fundamental drills in aural and visual recognition, intervals, melodies, harmonies, and rhythmic impulsations. Laboratory three hours. Corequisite: MU 112.

MU 148 Fundamental Sightreading and Ear Training II (1) (S)

Continued development of sightreading skills through advanced drills in aural and visual recognition, intervals, melodies, harmonies, and rhythmic impulsations. Laboratory three hours. Prerequisites: MU 112, MU 147. Corequisite: MU 113.

MU 163 Brass Instrument Methods (1) (on demand)

A course designed to develop an understanding of and a basic performance ability on the following brass instruments: trumpet, French horn, trombone, and tuba. Emphasis will be given to embouchure, articulation, breath control, fingerings, slide positions, and educational techniques.

MU 164 Flute & Single Reed Woodwind Instrument Methods (1) (on demand)

A course designed to develop an understanding of

and a basic performance ability on the following woodwind instruments: flute, clarinet, saxophone. Emphasis will be given to embouchure, articulation, breath control, fingerings and educational techniques. Prerequisite: Ability to read music.

MU 165 String Instrument Methods (1) (on demand)

A course designed to develop an understanding of and a basic performance ability on the following string instruments: violin, viola, cello and bass. Emphasis will be given to parts of the instruments, bowing, basic left and right hand techniques and educational techniques.

MU 166 Percussion Instrument Methods (1) (on demand)

A course designed to develop an understanding of and a basic performance ability on the following percussion instruments: snare drum, multiple-percussion, keyboard percussion, timpani, bass drums, cymbals, accessories, Latin-American and other ethnic instruments, drum set. Emphasis will be given to sticking, instrument maintenance, percussion instruments, sticks and mallets, and educational techniques.

MU 167 Double Reed Woodwind Instrument Methods (1) (on demand)

A course designed to develop an understanding of and a basic performance ability on the oboe and bassoon. Emphasis will be given to embouchure, articulation, breath control, fingerings and educational techniques. Prerequisite: Ability to read music.

MU 212 Advanced Harmony (3) (F)

A course dealing with modal changes, Neapolitan chords, pedal points, modulations, extended tertian harmony, modal harmony, non-functional harmony, and non-tertian harmony. Prerequisites: MU 113, MU 148. Corequisite: MU 247.

MU 213 Advanced Harmony and Form (3) (S)

A course dealing with the study of harmony and form in music. Included are binary and ternary principles, imitative, variation, sonata-allegro, rondo and atypical formal organization. Prerequisites: MU 212, MU 247. Corequisite: MU 248.

MU 235 Special Topics in Music (1-3) (on demand)

Study of specific topics relating to the historical and cultural significance of music with emphasis on 20th Century forms. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics.

MU 239 Electronic Music (3) (on demand)

A hands-on course designed to gain the knowledge and required skills for electronic music with emphasis on MIDI and how it is used in conjunction with computers and sound devices. Electronic keyboards, software programs, and basic recording techniques will be covered.

MU 247 Sightreading and Ear Training III (1) (F)

The third level course dealing with sight singing, ear training and dictation. Sightreading skills will be developed through fundamental drills in aural and visual recognition, intervals, melodies, harmonies and rhythms. Laboratory three hours. Prerequisites: MU 113, MU 148. Corequisite: MU 212.

MU 248 Sightreading and Ear Training IV (1) (S)

The final course dealing with sight singing, ear

training and dictation. Sightreading skills will be developed through fundamental drills in aural and visual recognition, intervals, melodies, harmonies and rhythms. Laboratory three hours. Prerequisites: MU 212, MU 247. Corequisite: MU 213.

MU 249 Introduction to Hymnology (3) (S)

This course provides a foundation in the study of hymnody, the tradition of communal sacred song dating from the Hebrew roots of Christianity. This course will emphasize the musical, literary, historical and cultural contexts of hymnody. Prerequisite: EN 111 or permission of department head.

MUSIC PERFORMANCE AND INSTRUCTION

Designated Music Performance and Instruction courses may be repeated for credit. However, even though there is no limit on the number of times these courses may be repeated, there is a limit on the number of credit hours earned in these courses which may be applied toward a degree. The maximum for an individual course is stated in the course description. In addition, no more than twelve (12) semester hours of Music Performance/Instruction courses (in any combination) may be applied toward a degree.

MU 105 Vocal Music for Personal Development (1) (F,S)

Individual voice instruction for the non-music major. Emphasis on enjoyment of music and improvement of singing skills based on student's personal goals and present level of development. Repeatable. A maximum of two hours may be applied toward a degree. Extra fee required.

MU 115 Concert Choir (1-2) (F,S)

A course in the performance of choral literature. Selections will be from varied musical periods and styles. Open to all students. Members are required to perform at scheduled concerts. Repeatable. A maximum of six hours may be applied toward a degree. Laboratory three hours.

MU 122 Jazz Band (1-2) (F,S)

Performance of big band literature as well as jazz-rock and dixieland styles. Members are required to play at scheduled performances. Repeatable. A maximum of six hours may be applied toward a degree. Laboratory three hours. Prerequisite: Knowledge and skill in an instrument, permission of instructor.

MU 126 Class Voice (2) (F,S)

Group instruction in basic techniques of breath control, tone production, diction, phrasing and interpretation using simple song repertoire, with suggested songs suitable for solos. Daily practice required. Repeatable. A maximum of six hours may be applied toward a degree.

MU 130 Concert Band (1-2) (F,S)

A concert band open to all students who have had previous experience in wind and percussion instrumental music. Repeatable. A maximum of six hours may be applied toward a degree.

MU 136 Private Brass Musical Instrument Instruction (1-2) (on demand)

A course designed to instruct the student through the traditional apprenticeship approach in proper techniques in playing brass musical instruments. Proper breathing technique and breath control exercises as well as methods of brass playing will be discussed throughout the term. Instruction concentrates on only one brass instrument. Differentiation between specific brass instruments will be made by

differing section numbers for each instrument.

Prerequisites: Previous experience on a brass instrument and ability to read music.

MU 137 Private Woodwind Musical Instrument Instruction (1-2) (on demand)

A course designed to instruct the student through the traditional apprenticeship approach in proper techniques in playing woodwind musical instruments. Proper breathing technique and breath control exercises as well as methods of woodwind playing will be discussed throughout the term. Instruction concentrates on only one woodwind instrument. Differentiation between specific woodwind instruments will be made by differing section numbers for each instrument. Prerequisites: Previous experience on a woodwind instrument and ability to read music.

MU 138 Private Percussion Musical Instrument Instruction (1-2) (on demand)

A course designed to instruct the student through the traditional apprenticeship approach in proper techniques in playing percussion musical instruments. Proper sticking and mallet technique and muscle exercises as well as methods of percussion playing will be discussed throughout the term. Prerequisites: Previous experience on a percussion instrument and ability to read music.

MU 140 Jazz Piano (1) (on demand)

This course is designed to give the beginning or advanced student the opportunity to acquire and improve jazz/pop piano skills. Jazz theory, piano voicings, improvisation and various stylistic approaches will be discussed and integrated through exercises and a repertoire. Repeatable. A maximum of six hours may be applied toward a degree.

MU 141 Piano Instruction (1-2) (F,S)

Private instruction in piano, beginning with the student's level of development. Daily practice required. One half-hour lesson each week per semester hour of credit. Repeatable. A maximum of six hours may be applied toward a degree. Extra fee required.

MU 151 Voice Instruction (1-2) (F,S)

Private instruction in voice, beginning with the student's level of development. Daily practice required. One half-hour lesson each week per semester hour of credit. Repeatable. A maximum of six hours may be applied toward a degree. Extra fee required.

MU 157 Show Choir (1-2) (on demand)

A vocal course designed to study and execute pop, ballad, rock and jazz compositions with correlation of choreography. Repeatable. A maximum of six hours may be applied toward a degree. Laboratory three hours. Prerequisite: Selection by audition. Corequisite: MU 115.

MU 161 Guitar Class (2) (on demand)

Group instruction in the study of the guitar designed for students who are interested in developing elementary playing skills. Emphasis will be placed on learning chords with right hand accompaniment patterns and basic note reading in first position and extensions. Repeatable. A maximum of six hours may be applied toward a degree. Prerequisite: Student must furnish own instrument.

MU 171 Guitar Instruction (1-2) (F,S)

Private instruction in guitar, beginning with the student's level of development. Daily practice required. One half-hour lesson each week per semester hour of credit. Repeatable. A maximum of six hours may be applied toward a degree. Extra fee required.

MU 240 Conducting (2) (on demand)

A course designed to introduce and develop basic conducting techniques including posture, beat patterns, left and right hand functions, the effect of gesture, body language and non-verbal cues on sound, and reading choral, band and orchestral scores. Repeatable. A maximum of six hours may be applied toward a degree. Prerequisites: MU 112, MU 147.

MU 257 Vocal Ensembles—Sensations (1-2) (on demand)

An advanced vocal course designed to study and execute pop, ballad, rock, and jazz compositions with correlation of choreography. Members are required to perform at scheduled concerts. Repeatable. A maximum of six hours may be applied toward a degree. Laboratory three hours. Prerequisite: Selection by audition. Corequisite: MU 115.

MU 260 Chorale (1-2) (F,S)

An auditioned choral music performance group devoted to performing a wide variety of choral music from major works and chamber music to Broadway selections, folk songs and spirituals. Admission by audition only. Repeatable. A maximum of six hours may be applied toward a degree. Corequisite: MU 115.

NUCLEAR MEDICINE TECHNOLOGY

NM 200 Introduction to Nuclear Medicine (2) (F)

An introductory course including basic terminology, nuclear medicine technology, basic radiopharmacy, nuclear medicine equipment, radiation protection and detection. The policies and procedures of the program, clinical affiliates and state and federal regulatory agencies are also presented. Prerequisite: Admission to Nuclear Medicine Technology Program. Corequisites: NM 201, NM 205, NM 207, NM 208.

NM 201 Instrumentation and Statistics (2) (F)

Basic principles of instrumentations and nuclear statistics as used in nuclear medicine laboratory are presented. Radiation detectors with special emphasis on scintillation and semiconductor detectors for photons, collimators, electronic instrumentation such as amplifiers, pulse-height analyzers, scalars, count-rate meters and computers and statistics of counting random events are presented. Prerequisite: Admission to Nuclear Medicine Technology Program. Corequisites: NM 200, NM 205, NM 207, NM 208.

NM 205 Clinical Procedures I (2) (F)

This is the first of a three course sequence in nuclear medicine clinical procedures. The complete sequence provides an introduction to imaging and "in-vivo" and "in-vitro" nuclear laboratory principles. Special focus for this course is the biological, physiological and anatomical aspects of nuclear medicine procedures involving the skeletal, cardiovascular and respiratory organ systems. Prerequisite: Admission to Nuclear Medicine Technology Program. Corequisites: NM 200, NM 201, NM 207, NM 208.

NM 207 Practicum in Nuclear Medicine I (11) (F)

Provides practical and clinical experience in assigned affiliate sites including observation of procedures, attaining patient histories, patient positioning, camera set-up, computer acquisition and pro-

cessing, injection techniques and radionuclide administration, patient monitoring and scheduling of procedures. Direct supervision is required until students acquire clinical knowledge and skills consistent with specific performance objectives. Clinic 1,128 total hours. Prerequisite: Admission to Nuclear Medicine Technology Program. Corequisites: NM 200, NM 201, NM 205, NM 208.

NM 208 Radiopharmacology (2) (F)

Basic principles of radiopharmacy as practiced in the nuclear medicine laboratory are presented. Radiopharmaceutical production, methods of biochemical reaction and physiological action, including the mechanism of location, preparation of radiopharmaceutical agents, radiosafety, the operation of electronic equipment appropriate for radioassay and quality control are presented. Clinical experience is gained through the affiliate nuclear pharmacies. Prerequisite: Admission to Nuclear Medicine Technology Program. Corequisites: NM 200, NM 201, NM 205, NM 207.

NM 212 Physics and Radiation Biology of Nuclear Medicine (4) (S)

A comprehensive study of physics and radiation biology specific to nuclear medicine. Topics for physics will include mass-energy relationships, nuclear stability, excitation and ionization, decay processes, electromagnetic energy and radiation, and interactions of charged particles with matter. Topics for radiation biology will include units of radiation measurements, methods of measurement and protection, government regulations, ALARA principles, decontamination procedures and effects of ionizing radiation. Prerequisites: NM 200, NM 201, NM 205, NM 207, NM 208. Corequisite: NM 215.

NM 215 Clinical Procedures II (4) (S)

The second course of a three course sequence. Special emphasis on the biological, physiological and anatomical aspects of nuclear medicine procedures involving the gastrointestinal, genitourinary and endocrine systems. Computer applications as well as methods of radionuclide therapy will be included in the course. Prerequisites: NM 200, NM 201, NM 205, NM 207, NM 208. Corequisite: NM 212.

NM 225 Clinical Procedures III (4) (Su)

The third of a three course sequence in nuclear medicine clinical procedures. Special emphasis for this course is on the biological, physiological and anatomical aspects of nuclear medicine procedures involving the central nervous system. The course also included methods of inflammatory and tumor imaging as well as "in-vitro" procedures performed by radioimmunoassay and "in-vitro" non-imaging procedures. Prerequisites: NM 200, NM 201, NM 205, NM 207, NM 208, NM 212, NM 215. Corequisite: NM 227.

NM 227 Practicum in Nuclear Medicine III (1) (Su)

Students are assigned clinical practicum in routine and special function areas. The student works under the supervision of the clinical instructor. Special clinical assignments may be made at the discretion of the clinical supervisor or the clinical instructor. In addition, assigned readings from nuclear medicine periodical literature with reviews, presentation and discussion by the students will be required. Guest speakers will provide additional input for the course. Clinic 376 total hours. Prerequisites: NM 200, NM 201, NM 205, NM 207, NM 208, NM 212, NM 215. Corequisite: NM 225.

NURSING ASSISTANT

NA 105 Certified Nursing Assistant (5) (on demand)

This course provides education and clinical training to prepare individuals to become Certified Nursing Assistants. The course content encompasses basic nursing skills, restorative services, personal care skills, communication skills, infection control methods, safety measures, emergency care measures, patient rights and mental health needs. Class 64 total hours, clinic 48 total hours. The course is seven weeks in length.

NURSING

NS 024 Nursing Transition (4) (Su)

This course is designed to assist licensed practical nurses accepted into the nursing program with a smoother transition from the role of LPN to associate degree RN. Content derived from first year nursing courses to provide a background upon which the remainder of the student's educational program will be based. Successful completion of both the theory and clinical components of this course required for continued progression in the nursing program. Class three hours, laboratory three hours. (Liability insurance required.) Prerequisites: Acceptance into the Transition Program, Chemistry (high school or CH 104), BI 143, BI 174, BI 175, PY 101, PY 217. *Note: This is a course for which institutional credit is given. It is not accepted toward any degree program at Chattanooga State.*

NS 119 Nursing I—Wellness and Adaptation (9) (F)

This course begins the development of psychomotor, cognitive and affective competencies needed to assume the three roles of the associate degree nurse. Students are introduced to the nursing process with a focus on assessment of culturally diverse individuals across the life span. With a focus on communication and teaching, students plan and implement strategies to promote and maintain wellness and provide care to individuals experiencing variation in function. Clinical experiences are provided in a variety of community based settings. Class five hours, laboratory twelve hours. (NLN test fee and liability insurance required.) Prerequisite: Admission to Nursing Program. Corequisites: BI 143, BI 174, PY 217.

NS 128 Nursing II—Alterations in Health I (8) (S)

This course expands the development of psychomotor, cognitive and affective competencies needed to assume the three roles of the associate degree nurse. With a continued emphasis on assessment, the primary focus is on planning, implementing and evaluating strategies to promote, maintain and restore health in culturally diverse individuals across the life span who are experiencing alteration in protective, activity/mobility, comfort/rest, fluid and gas transport, psychosocial/cultural, and growth and development functions. Students apply the nursing process in caring for pediatric and adult clients in a variety of acute care, ambulatory care and community based settings. Class five hours, laboratory nine hours. (NLN test fee.) Prerequisite: NS 119. Corequisites: BI 175, PY 101.

NS 238 Nursing III—Alterations in Health II (8) (F)

This course enhances the development of psychomotor, cognitive and affective competencies needed to assume the three roles of the associate

degree nurse. The continuing emphasis is on assessing, planning, implementing and evaluating strategies to promote, maintain and restore health in culturally diverse individuals across the life span who are experiencing alteration in fluid and gas transport, nutrition and psychosocial/cultural and growth and development functions. Students apply the nursing process in caring for pediatric and adult clients in a variety of acute care and community based settings with a concentrated experience in the care of the client with altered psychosocial function. Class five hours, laboratory nine hours. (NLN test fee and liability insurance required.) Prerequisites: NS 119, NS 128. Corequisite: BI 234.

NS 249 Nursing IV—Alterations in Health III (9) (S) Day (F) Night

This course operationalizes the performance of psychomotor, cognitive and affective competencies needed to assume the three roles of the associate degree nurse. The continuing emphasis is on assessing, planning, implementing and evaluating strategies to promote, maintain and restore health in culturally diverse individuals across the life span who are experiencing alteration in growth and development, sensory/perceptual, protective and psychosocial/cultural functions. Students apply the nursing process in caring for clients in a variety of acute care and community based settings with a concentrated experience in the care of the childbearing family. The course culminates with a clinical experience in the management of groups of clients in the acute or extended care setting. Class five hours, laboratory twelve hours. (NLN test fee required.) Prerequisites: NS 119, NS 128, NS 238.

NS 299 Special Topics in Nursing (1-3) (on demand)

Study of selected topics of interest in the area of nursing. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

NUTRITION, SEE "BIOLOGY" AND "DIETARY MANAGER"

OCCUPATIONAL SAFETY

OS 120 Industrial Safety Compliance (3) (F)

A systematic review of the fundamental requirements of the Occupational Safety and Health Administration general industry standard. The course consists of a combination of lecture, class projects, and field trips designed to familiarize the student with compliance requirements set forth in 29 CFR 1910.

OS 125 Construction Safety Compliance (3) (on demand)

Recognition, avoidance and prevention of potential hazards in construction. Study of workplace standards, accident prevention programs, loss-control techniques and worker education as related to the construction industry. Credit not allowed for both OS 125 and CI 110.

OS 140 Health and Safety for Confined Spaces (3) (S)

A study of the practices and procedures for the protection of employees from hazards of entry into confined spaces. Topics include confined space identification, atmospheric monitoring, confined space permitting programs, rescue from confined spaces, and

compliance with the OSHA permit required for entry into confined spaces per 29 CFR 1910.146. Class two hours, laboratory three hours.

OS 150 Excavation and Trenching Operations (3) (F)

A study of the requirements of the OSHA "Excavation" Standard, 1926 Subpart P. and the application of this standard in excavation work and trench rescue. Topics include health hazards and other applicable safety guidelines associated with excavation operations.

OS 190 Special Topics in Occupational Safety (1-4) (on demand)

A study of specific topics pertaining to Occupational Safety of current industrial and business interests. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

OS 210 Motor Carrier Safety (3) (F)

An introduction and systematic review of the requirements of the Federal Motor Carrier Safety Regulations and Hazardous Material Regulations, as set forth in Part 49 CFR. The course will consist of a combination of lecture, classroom projects, and outside activities. Prerequisite: OS 120 or OS 125.

OS 220 Ergonomics and Human Factors (3) (F)

An introduction to ergonomic and human factor elements which combine to provide proven effective programs for the prevention of occupational ergonomic hazards. The course consists of a combination of lecture, class projects, and field trips designed to show the student effectively managed ergonomics programs in business and industry. The proper role for the safety and health professional in ergonomics is also reviewed. Prerequisites: OS 120, OS 125.

OS 230 Process Safety Management (3) (on demand)

A study of the most common safety and health protection systems present in an industrial or construction setting. Particular attention will be paid to employee training, preparation of checklists and accident investigation. Prerequisite: OS 120 or OS 125.

OS 240 Occupational Safety & Health Program Management (3) (on demand)

An introduction to occupational safety program elements which combine to provide proven effective overall safety programs for employers. The course consists of a combination of lecture, class projects, and field trips designed to show the student effectively managed safety programs in business and industry. The proper role in management of the safety and health professional is also reviewed. Prerequisite: OS 120 or OS 125.

OFFICE SYSTEMS

OF 103 Records Management/Calculators (3) (F,S)

A study of modern filing systems and equipment with extensive practice in applying ARMA indexing rules and a study of theory and practice in the use of electronic calculators.

OF 104 Business Communications I (3) (F,S)

An introduction to the art of business communica-

tions. Emphasis is given to spelling (commonly misspelled business words), vocabulary (common to business usage), all principles of English grammar, use of dictionary, and principles of punctuation, capitalization, and word division.

OF 105 Business Communications II (3) (F)

A study of the principles involved in writing effective, result-producing business letters, memos, and reports. Attention is given to developing oral communications skills through oral reports, committee interaction, and improvement of listening skills. Students will prepare resumés and related employment communications. Prerequisites: OF 104 or EN 110, OF 107 or OF 113 or keyboarding skill at 25 wpm.

OF 107 Keyboarding for Information Systems (1) (F,S,Su)

An introduction to touch keyboarding. Emphasis is on correct techniques and mastery of the keyboard. A proficiency test will be given at the beginning of the course so that students may test out of the course.

OF 113 Keyboarding/Document Processing I (3) (F,S,Su)

An introduction to touch typewriting system with emphasis on correct techniques, mastery of the keyboard, and formatting basic business letters, memos, reports, and tables. Course is self-paced. Placement by examination.

OF 114 Keyboarding/Document Processing II (3) (F,S,Su)

A continuation of increasing speed and accuracy on straight copy and production typing. Emphasis on decision making in preparing data abstracted from unarranged information by applying fundamental principles of typewriting as related to tables, forms, letters, and reports. Course is self-paced. Placement by examination. Prerequisite: OF 113 or equivalent.

OF 125 Word Processing I (3) (F,S,Su)

Student learns to use word processing applications software on a microcomputer to produce business documents. Instruction ranges from basic editing skills to advanced applications. Corequisite: OF 113 or equivalent.

OF 126 Word Processing II (3) (F,S)

A continuation of OF 125 in which the student learns advanced functions of word processing. Emphasis on speed, decision making, accuracy, and advanced applications. Prerequisite: OF 125.

OF 127 Desktop Publishing (3) (F,S)

A study of Desktop Publishing software, using the microcomputer. Student will develop skills in preparation of publications, both graphic and text. Prerequisite: OF 107 or equivalent.

OF 128 Advanced Desktop Publishing (3) (S)

A continuation of OF 127. Covers advanced functions of desktop publishing software. Emphasis on decision-making and advanced applications. Prerequisite: OF 127 or equivalent.

OF 143 Notehand (3) (F,S)

A study of principles and theory, with practice in reading and writing notehand. Emphasis on penmanship, phonetics, word families, brief forms, phrases, and development of student's ability to take light office dictation. Prerequisite: OF 104 or EN 110, keyboard speed/25wpm.

OF 173 Office Machines (3) (on demand)

A study of theory and practice in operation of ten-key and transcribing machines. Emphasis on touch

system of ten-key and production of mailable copy in transcription. Prerequisites: OF 104, OF 114 or equivalent.

OF 183 Machine Transcription (3) (F)

Student develops skill in transcribing machine dictation with emphasis on production of mailable copy. General business documents transcribed, along with medical and legal simulation activities. Prerequisites: OF 104 or EN 110, OF 114 or equivalent.

OF 195 General Office Procedures (3) (F,S)

A course designed to assist students in meeting the challenges presented in today's automated offices. Major topics: telephone technology and techniques, storage and information management, time management and organization, travel arrangements, management of human resources, and automated office systems.

OF 206 Office Systems Internship (3) (S)

A course designed to prepare students for employment in medical, legal, and industrial job markets, by providing simulated office experiences followed by on-the-job training in their chosen areas of emphasis. Evaluation by instructor for simulations; by employers at job sites. Class three hours, laboratory six hours. Prerequisite: OF 195 and sophomore standing, or permission of instructor.

ORNAMENTAL HORTICULTURE, SEE "LANDSCAPING AND TURF MANAGEMENT"

PARALEGAL, SEE "LEGAL ASSISTING"

PARAMEDIC TRAINING, SEE "EMERGENCY MEDICAL SERVICES"

PHARMACY TECHNICIAN

PC 101 Introduction to Pharmacy Practice (3) (F)

An introduction to pharmacy practice and the health care system with emphasis on the role of pharmacy technicians and their relationship with pharmacists. Includes effective written and oral communication skills in dealing with patients and other health care professionals; use of computers, automation, and technology used in pharmacy practice; health care organizations and managed care medicine; and both brand and generic names of the top 200 drugs. Class two hours, laboratory four hours.

PC 104 Principles of Chemistry (4) (F)

This course is designed as an introduction to the study of chemistry. Topics covered include atomic and molecular structure, bonding, equation writing and stoichiometry, classification and naming of compounds, gas laws, liquid and solid states, solutions, acids and bases, oxidation and reduction, kinetics and equilibria. Credit may not be applied toward a chemistry major. Three class hours, three laboratory hours. Prerequisite: RE 081. Corequisite: MA 081. (Same as CH 104. Credit not allowed for both courses.)

PC 105 Pharmacy Law and Ethics (3) (F)

An introduction to the history of pharmacy law and

the application of laws governing duties delegated to pharmacy technicians. Both state and federal laws pertaining to pharmacy practice and drug distribution are discussed.

PC 110 Pharmaceutical Calculations (4) (S)
Basic mathematical computations involving Roman numerals; addition, subtraction, multiplication, and division of whole numbers and fractions including the use of pharmacy measurement systems (metric, apothecary, and avoirdupois); interpretation of numeric symbols and Latin abbreviations; medical terms, symbols, and abbreviations used in pharmacy practice.

PC 115 Introduction to Human Biology (4) (F)

This course teaches structure and function of the human body with emphasis on cells, tissues, and nervous, cardiovascular, circulatory, respiratory, endocrine, reproductive and digestive systems. Not available to students with prior credit in BI 174 and BI 175. Three class hours, three laboratory hours. (Same as BI 115. Credit not allowed for both courses.)

PC 201 Pharmacology and Therapeutics (4) (S)

A course that provides a practical knowledge of the general therapeutic classes of drugs and their interactions with the human body. Emphasis on drug classifications, dosages and routes of administration as well as some of the major side effects of medications. Prerequisites: PC 101, PC 115.

PC 205 Pharmacy Practice (5) (S)

Topics include review of prescriptions for accuracy; gathering patient information; entering of information into data processing; preparing labels; counting, measuring, or admixing of drug products; pricing and third party billing; and maintaining records. Ordering, stocking, returning drug products, medication distribution and control, as well as compounding with a heavy emphasis on sterile products and IV admixture will also be covered. Class three hours, laboratory six hours. Prerequisite: PC 110.

PC 220 Pharmacy Practice Clinical Rotations (5) (Su)

Clinical experience in local institutional and community pharmacies to observe and practice basic pharmacy practice skills learned in the classroom and through laboratory participation. Students are under the supervision of a registered pharmacist. Seminar two hours, clinical experience 24 hours. Prerequisites: PC 110, PC 201, PC 205.

PHILOSOPHY

PL 111 Introduction to Western Philosophy (3) (F,S)

A course to familiarize the student with the basic teachings of the great philosophers from the Pre-Socratics to the modern Existentialists. The course will attempt to foster within the student what may be called the "philosophical attitude," especially as exemplified by the Socratic dictum that "the unexamined life is not worth living."

PL 211 Logic (3) (F)

The basic principles of deductive and inductive reasoning. Emphasis on ordered, rational approach to problem solving.

PL 212 Ethics (3) (S)

A study and comparison of the major ethical theories from classical times to the present.

PL 220 Philosophy of Religion: Old Testament (3) (F,S,Su)

An investigation of the philosophical, religious, socio-political, and literary aspects of the Old Testament. Study of the importance of the impact of the Old Testament on Western Culture.

PL 221 Philosophy of Religion: New Testament (3) (F,S,Su)

An investigation of the philosophical, religious, socio-political, and literary aspects of the New Testament. Study of the importance of the impact of the New Testament on Western Culture.

PHLEBOTOMY

PB 101 Introduction to Phlebotomy (4) (F)

The course, designed for phlebotomy students, provides an insight into hospital/clinical laboratory language and environment. Students learn the role of the Phlebotomist in human relations, legal considerations, laboratory testing, and moral/professional obligations. Selected anatomy and physiology will be presented. Additional topics include: OSHA regulations concerning the handling of blood-borne pathogens and hazardous materials; the role of the phlebotomist in quality management; and responsibilities in bedside and point-of-care testing. Prerequisite: Acceptance by interview only. Corequisites: PB 120, PB 121.

PB 120 Venipuncture Techniques (2) (F)

This course is designed for phlebotomy students who will combine classroom techniques of drawing blood specimen with clinical experience gained through PB 121 (Phlebotomy Practicum). However, other health care students or practitioners already working in health care may be eligible (by approval of instructor) for the class without accompanying practicum. Class one hour, laboratory three hours (lasts seven weeks only). Prerequisite: Acceptance by interview only. Corequisites: PB 101, PB 121, or approval of the instructor.

PB 121 Phlebotomy Practicum (6) (F)

Phlebotomy students will be placed in an area clinical facility for a seven-week rotation. Tuesday through Friday, students will work a daily 7.5-hour shift with clinical laboratory preceptors to gain practical experience in phlebotomy techniques. On Mondays, students will attend a two-hour, on-campus seminar. Class two hours, clinic twenty-six hours (lasts seven weeks only). Prerequisites: Acceptance by interview only; completion of a Chattanooga State Medical Form. Corequisites: PB 101, PB 120. *Note: Students who do not maintain a "C" average, or higher, in PB 101 and PB 120 will not be allowed to continue in their clinical rotation.*

PHYSICAL EDUCATION ACTIVITY COURSES

Designated Physical Education Activity courses are repeatable for credit. (This is to encourage students to develop and maintain an active, healthy lifestyle and reflects Chattanooga State's commitment to wellness.) However, even though there are no restrictions on the number of times these courses may be repeated, there is a limit on the number of credit hours earned in these courses which may be applied toward a degree. The maximum for an individual course is stated in the course description. In addition, no more than six semester hours of Physical Education Activity credit (in any combination) may be applied toward a degree.

Adaptive Physical Education

Students with Adaptive Physical Education needs may enroll in any of a number of regular Physical Education activity classes. These classes routinely begin with evaluation of each student's physical profile and the establishment of a personalized training or conditioning program based on the individual's needs. A wide range of adaptations may be implemented, limited by considerations of the student's personal safety and abilities and reasonable and appropriate use of the college's equipment and facilities.

PE 103 Self-Defense for Women (1) (F,S,Su)

A course which teaches basic self-defense techniques for women. Effective strategies to be used in a variety of situations will be introduced and demonstrated.

PE 105 Beginning Table Tennis (1) (F,S)

A course offering basic instruction and practice in the fundamentals of table tennis. Emphasis is on grip, proper stroke technique, service, return of serve, and understanding spin, all within the context of the rules of the modern game. Laboratory two hours.

PE 116 Golf (1) (F)

An elementary course of instruction, practice, and skill application for recreational usage; including rules, etiquette, club selection, and play. Laboratory two hours.

PE 118 Concepts of Wellness (1) (F,S,Su)

Acquaints students with concepts, understandings, and values of activity as applied to optimal living through wellness. Laboratory in motor activity required. Laboratory two hours.

PE 119 Beginning Tennis (1) (F)

Basic instruction and practice in the fundamentals of tennis. Emphasis on ground strokes, serve, and volley with special attention directed toward rules and etiquette. Laboratory two hours.

PE 121 Intermediate Tennis (1) (on demand)

A course designed to provide students with an understanding of the advanced strokes and strategies of tennis. The goal of this course is to have the students improve their basic tennis skills and enhance their view of tennis as a lifetime activity. Laboratory two hours. Prerequisite: PE 119 or comparable skills.

PE 122 Volleyball (1) (F,S)

A course designed to provide students with basic instruction and practice in the fundamentals of volleyball. Emphasis on the serve, passing and setting, offensive skills, defensive skills, basic team concepts, rules and etiquette. Laboratory two hours.

PE 124 Step Aerobics (2) (F,S,Su)

A course designed to improve each student's level of cardiovascular fitness through a variety of stepping movements performed in time to music on 4" steps. Graduated steps are used for students possessing higher levels of aerobic fitness. Supplementary topics include nutrition, body composition, and stress management. Repeatable for credit. A maximum of four hours may be applied toward a degree. Laboratory four hours.

PE 125 Aerobics (1-2) (F,S,Su)

A course offering basic instruction in low and high impact aerobics individualized for the participant.

Repeatable for credit. A maximum of four hours may be applied toward a degree. Laboratory two hours per semester hour of credit.

PE 126 Social Dance (1) (F,S)

Introduction and basic instruction in social-ballroom dances such as the foxtrot, waltz, swing, popular regional dances, and Latin dances (samba, mambo, cha-cha, rumba, and others). Laboratory two hours.

PE 127 Walking for Fitness (2) (on demand)

A course designed to improve each student's level of cardiovascular fitness without risks sometimes associated with higher intensity exercise. The Rockport Fitness Walking Test will be used to design individualized walking programs based on existing levels of cardiovascular fitness. Repeatable for credit. A maximum of four hours may be applied toward a degree. Laboratory four hours.

PE 128 Fitness for Living (1-2) (F,S,Su)

An individualized total fitness course encompassing strength training, body contouring and toning, aerobic conditioning, and flexibility. Each student's current status will be assessed, and progress will be monitored throughout the course. Seminars on diet, total wellness, and stress management will be conducted. This course may be selected as one of the two activity courses required in transfer programs, but it will not by itself meet the two-course physical education requirement. Repeatable for credit. A maximum of four hours may be applied toward a degree. Laboratory two hours per semester hour of credit.

PE 131 Racquetball (1) (F,S)

A course designed to assist students in developing the basic skills involved in racquetball. Emphasis on grips, serve, and fundamental shots. Laboratory two hours.

PE 140 Skin and Scuba Diving (1) (F,S)

A course designed to assist students in developing the basic skills involved in skin and scuba diving. A swimming proficiency test is administered in the early part of the semester. Rental of scuba equipment not included in course cost. Repeatable for credit. A maximum of two hours may be applied toward a degree.

PE 141 Bicycling (1) (S)

A course designed to assist students in developing the fundamental skills involved in bicycling as a lifetime fitness activity. Participants provide their own bicycles. Campsite rental fees, food, and transportation not included in course cost.

PE 142 Canoeing (1) (F,Su)

A course designed to assist students in developing the basic skills involved in canoeing. Emphasis is placed on skills for the beginner and on canoeing as a lifetime fitness activity. A swimming proficiency test is administered in the early part of the course. This course involves travel outside of Chattanooga and sometimes a multiple-day trip outside of Chattanooga. Students will be responsible for expenses associated with any trips to include costs of travel and equipment. Repeatable for credit. A maximum of two hours may be applied toward a degree.

PE 143 Backpacking and Hiking (1) (F,S)

A course designed to assist students in developing the basic skills involved in backpacking and hiking while appreciating the natural environment and reducing human impact on the land. Emphasis on the beginning skills. Equipment, campsite rental

fees, food, and transportation not included in course cost. Repeatable for credit. A maximum of two hours may be applied toward a degree.

PE 150 Elementary Ballet Technique (1) (on demand)

An introductory course in basic ballet technique that includes familiarization with basic concepts and vocabulary, stretching, and barre work. Students provide their own attire and are responsible for private studio user costs as may be necessary for participation in the course. Laboratory two hours. Repeatable for credit. A maximum of two hours may be applied toward a degree.

PE 151 Line Dance (1) (F)

A course designed to introduce individuals to a physical activity that can be entered at any age level and continued for a lifetime, relaxes and reduces stress from daily routine and teaches one to move more easily, flexibly and gracefully by developing balance, rhythm alignment and timing. Laboratory two hours.

PE 152 Basketball (1) (on demand)

Basic instruction and practice in the fundamentals of basketball. The course is designed to prepare students for future participation on a variety of levels.

PE 153 Self-Defense for the Disabled (1) (on demand)

An activity course offering individualized needs and basic instruction in personal safety and self-defense for people with disabilities. Attention is also given to the role of caregivers and to the use of appropriate techniques and adaptive devices as self-defense tools. Laboratory two hours.

PE 164 Beginning Self-Defense (1) (F,S)

A course offering basic instruction in personal safety and self-defense. Focus will be on mental conditioning, safety awareness, and creating a safe environment with emphasis on the mastery of simple self-defense moves. Laboratory two hours.

PE 165 Advanced Self-Defense (1) (S)

This course picks up where Beginning Self-Defense leaves off. The beginning course concentrated on prevention. This course will provide a review of basic instruction in Personal Safety and Self-Defense, then proceed into the techniques, methods and concepts dealing with actual confrontation and escape from attack. This course is intended to provide "real life" situations as realistic as possible. The course provides challenging presentations of mental and physical techniques that will include many threatening scenarios. Laboratory two hours. Prerequisite: PE 164 or consent of instructor.

PHYSICAL THERAPIST ASSISTANT

PT 104 Introduction to Physical Therapy (2) (F)

A course designed to familiarize students with the history, function, and purpose of physical therapy and the role of the physical therapist assistant in communication and interaction with other Health Care Providers. Medical terminology is presented in the context of its physical therapy application. Prerequisite: Admission into the Physical Therapist Assistant Program. Corequisites: PT 115, PT 123.

PT 111 Clinical Practice I (2) (S)

Clinical experience in local health care facilities to observe and practice basic physical therapy skills learned in the classroom and through laboratory participation. Students are under the supervision of a registered physical therapist or registered physical

therapist assistant. Clinic six hours. Satisfactory/No Credit grading. Prerequisites: PT 104, PT 115. Corequisites: PT 112, PT 125. Liability insurance fee.

PT 112 Pathological Conditions (3) (S)

A survey of diseases and injuries treated by physical therapy. Associated medical or surgical treatment of these conditions as well as physical therapy treatment for the specific conditions are covered. Prerequisites: PT 104, PT 115, PT 123. Corequisites: BI 175, PT 111, PT 125.

PT 115 Physical Therapy Procedures I (5) (F)

The first of a series of courses designed to teach students skillful knowledge and performance of the basic physical therapy principles and modality techniques. Class three hours, laboratory six hours. Prerequisite: Admission into the Physical Therapist Assistant Program. Corequisites: PT 104, PT 123. Liability insurance fee.

PT 123 Functional Anatomy (4) (F)

A course designed to integrate muscle innervation, position, and function of the musculoskeletal system for specific joints and their muscular components. Students are taught palpation skills, joint range of motion, and manual muscle testing. Biomechanical concepts are also integrated with this course as they relate to simple movement analysis and kinesiology. Class three hours, laboratory three hours. Prerequisite: Admission into the Physical Therapist Assistant Program. Corequisites: BI 174, PH 110, PT 104, PT 115.

PT 125 Physical Therapy Procedures II (4) (S)

A continuation of PT 115, emphasizing the principles and uses of spinal traction, goniometry, electrical stimulation, biofeedback, pain control, protocol exercise routines and completion of manual muscle testing. Class three hours, laboratory three hours. Prerequisites: PH 110, PT 104, PT 115, PT 123. Corequisites: PT 111, PT 112.

PT 201 Physical Therapy Seminar (2) (S)

Critique sessions concerning physical therapy procedures and techniques and clinic participation. The students prepare presentations on physical therapy procedures and techniques, pathology, anatomy and physiology. Prerequisite: PT 205. Corequisite: PT 221.

PT 205 Therapeutic Exercise (5) (F)

Designed to teach the principles and uses of therapeutic exercises and exercise equipment options. The course includes special assessment procedures, exercise techniques, neurodevelopmental exercises, and techniques utilized in specific conditions. An introduction to orthotics, prosthetics, splinting and gait analysis is included. Class three hours, laboratory six hours. Prerequisite: PT 125. Corequisite: PT 210.

PT 210 Clinical Practice II (4) (F)

A continuation of PT 111 where students work under the direct, on-premise supervision of a registered physical therapist or registered physical therapist assistant to gain expertise in the skills learned in class and the laboratory. Clinic twelve hours. Satisfactory/No Credit grading. Prerequisite: PT 125. Corequisite: PT 205. Liability insurance fee.

PT 221 Clinical Practice III (10) (S)

A continuation of PT 210 where students apply the skills learned in class and laboratory. Students will always be under the direct, on-premise supervision of a registered physical therapist or registered physical

cal therapist assistant. Clinic thirty hours.
Satisfactory/No Credit grading. Prerequisite:
PT 210, consent of instructor. Corequisite: PT 201.

PHYSICS

PH 100 Basic Technical Physics (3) (F) (Not transferable)

A course designed to prepare students with no previous physics background and with weak mathematical background for success in the normal college physics series. Topics include a review of relevant mathematics and continue with the mathematics of algebraic equations, trigonometry and vectors. Also included will be an introduction to physical mechanics. Prerequisites: RE 081, MA 081. Corequisite: MA 117 or MA 121 recommended.
Note: This is a preparatory course and is not generally transferable. It is not accepted toward any degree program at Chattanooga State.

PH 109 The Physical Environment (4) (F)

A course which explores physical science in three ways: physical science in its historical and sociological significance, the process of science, and the present content of scientific fact and theory. Topics include physics, chemistry, geology and astronomy. Three class hours, three laboratory hours.

PH 110 Concepts of Physics (4) (F,S,Su)

A one semester introductory physics course for non-science and engineering majors. Emphasis is placed on understanding the nature of physics and applying basic physics concepts in one's everyday life experience and work. The use of mathematics is limited to basic algebraic manipulations required to understand and apply physics concepts. Topics covered include mechanical motion, energy, temperature and heat, fluids, electricity, magnetism, wave motion and optics. Three hours lecture, three hours laboratory. Prerequisites: MA 081, RE 081. Corequisite: EN 081.

PH 114 Physics I (Mechanics and Thermodynamics) (4) (F,S,Su)

An introduction to algebra-based physics covering the topics of mechanics, heat, and thermodynamics. This course meets the needs of engineering technology majors, preprofessional majors, and serves as a background course for those with no previous physics who are required to take calculus-based physics. Class three hours, laboratory three hours. Prerequisite: PH 100 or equivalent. Corequisite: MA 118 or MA 125.

PH 115 Physics II (Electricity, Magnetism, and Optics) (4) (S,Su)

A continuation of PH 114. Covers the basic principles of electricity and magnetism, ray and wave optics. Three class hours, three laboratory hours. Prerequisite: PH 114.

PH 150 Astronomy—Observing the Evening Sky (2) (on demand) (Not transferable)

An introductory general interest astronomy course for persons wanting to learn about the night sky and how to make basic astronomical observations. Emphasis on gaining an understanding of the general characteristics and nature of various celestial objects; observation and identification of stars, constellations, and deep sky objects; and basic observational techniques. Naked eye and telescope observational activities of solar system and deep sky objects will be conducted. This course does not fulfill the requirements for a Natural Science elective and is not transferable.

PH 154 Astronomy (4) (F,S)

An introduction to astronomy and cosmology. The course explores what we know about the universe and how we know what we know. Topics covered include the history of astronomy, methods of astronomy, the solar system, stars and their evolution, and the big bang theory. Three or four lab periods will be scheduled late in the evening to allow for telescope observational activities. Three class hours, three laboratory hours.

PH 254 General Physics with Calculus I (4) (F)

A course designed for students working toward a bachelor's degree in engineering or the sciences. The course covers the topics of mechanics: statics, kinematics, work, energy, power, momentum, conservation laws, rotational and harmonic motion, heat, and thermodynamics. Three class hours, three laboratory hours. Prerequisites: MA 135 and PH 114 or departmental permission. Corequisite: MA 136.

PH 255 General Physics with Calculus II (4) (S)

A continuation of PH 254. The areas covered are electrostatics, fields and potentials, electromotive force, circuits both DC and AC, electromagnetism, capacitance and inductance, and electromagnetic waves. Three class hours, three laboratory hours. Prerequisite: PH 254.

PH 286 Optics and Modern Physics (4) (on demand)

A study of geometrical and physical optics, special relativity, quantum optics, quantum mechanics, atomic and molecular structure, and nuclear physics. Three class three hours, three laboratory hours. Prerequisite: PH 254.

PLANT SYSTEMS ADMINISTRATION (BOMA)

SA 111 Boilers and Heating Systems Fundamentals (3) (on demand)

The fundamentals of boiler and heating systems management are explored. Topics to be covered include thermodynamics principles, fuels and fuel burning, boiler controls, and hydronic, warm air, infrared, and electric heating systems.

SA 112 Refrigeration Systems and Accessories (3) (on demand)

A course on the basic operation, management, and maintenance of refrigeration systems and the associated accessories. Topics include the refrigeration cycle, compressors, refrigerants, condensers, operating cycles, and safety. Prerequisite: SA 111.

SA 113 Air Handling, Water Treatment, and Plumbing Systems (3) (on demand)

An overview of air handling, water treatment, plumbing, fire protection, and security systems as applied to facilities management and maintenance. Prerequisite: SA 112.

SA 114 Electrical Systems and Illumination (3) (on demand)

An introduction to the topics of basic electricity, electrical energy consumption, building electrical service and components, and building lighting as related to facilities management and maintenance. Prerequisite: SA 111.

SA 115 Control Systems (3) (on demand)

An overview of the types of HVAC controls used in

facilities management. Applications of pneumatic, electrical, electronic, auxiliary, and computer control will be covered. Prerequisites: SA 113, SA 114.

SA 116 Building Design and Maintenance (3) (on demand)

A study of the maintenance requirements for the structural components of a facility. Topics include foundations, roofing systems, floors, ceilings, walls, windows, doors, elevators, parking, and landscaping maintenance. Prerequisite: SA 114.

SA 117 Energy Management (3) (on demand)

This course is a thorough study of the conditions and equipment affecting energy consumption, conservation, and management. Prerequisite: SA 113, SA 114.

SA 118 Facilities Management Supervision (3) (on demand)

A course designed to help the facilities manager be an effective supervisor through a study of the role of the supervisor and various management techniques.

POLITICAL SCIENCE

PO 110 Introduction to American Government (3) (F,S)

A study of the fundamentals of democratic government emphasizing constitutional principles, functions, operations, and processes of governmental change. Attention is given to the role of political parties, public opinion, interest groups and propaganda.

PO 120 Introduction to Political Science (3) (S)

A survey of political concepts, institutions, processes, and methods appropriate to the analysis of political systems in the contemporary world. Attention is given to the concerns and methods of political research.

PO 219 State and Local Government (3) (F)

Introduction to state and local government with emphasis on the interrelationships between state and local, state and federal, and local and federal governments.

PRACTICAL NURSING

LP 000 Practical Nursing (F,S,Su)

The Practical Nursing Program is a three-semester training program designed to provide the theoretical knowledge and clinical practice experiences needed to prepare the graduate to be able to give competent and safe direct patient care at the practical nursing level. The program begins by introducing the student to the profession of nursing, normal basic processes in anatomy, basic nutrition, aging, basic math, and fundamental nursing procedures to assist in maintaining normal function. Clinical experiences are in long term care facilities. The program then progresses to the study of alterations in normal function, with a focus on a survey of nursing care as it applies to the adult with medical and/or surgical problems. Disorders of the body systems are studied in terms of diagnostic procedures, treatment modalities and the nursing process. The safe administration of medications is a major clinical focus. Clinical practice experiences are in the acute care setting. The program concludes with the specialty areas of obstetric, gynecologic and pediatric nursing. The final weeks of advanced medical surgical nursing

are devoted to an intensive review for the state licensing examination and a concentrated clinical practice experience in preparation for employment. 32.5 clock hours per week.

PSYCHOLOGY

PY 081 Psychology of Learning (3) (F,S,Su)

A course designed to develop effective study habits, attitudes and skills in the classroom setting. Major emphasis on the application of study skills, critical thinking, and the processes of learning how to learn in college.**

PY 101 General Psychology I (3) (F,S,Su)

Introductory survey course. A study of mental processes and human behavior in an effort to better understand ourselves and to anticipate and predict the behavior of others. Topics include history and methods of psychology, principles of human development (infancy through adulthood), motivation, emotion, stress, learning and remembering, and abnormal psychology.

PY 102 General Psychology II (3) (F,S)

A continuation of PY 101 with emphasis on theories of personality, how the brain works, sensation, perceptions, states of consciousness, thinking, language, intelligence, treating emotional disorders, social and applied psychology. Prerequisite: PY 101.

PY 103 Stress Management (1) (on demand)

A course designed to help students better understand the relationship of stress to a person's physical and mental well-being. Emphasis will be placed on developing a lifestyle that promotes wellness through exercise, proper nutrition and understanding the basic physiology of stress.

PY 109 Healthy Marriages Aren't Accidents (1) (on demand)

Introduction to the basic "maintenance skills" necessary to creating a marriage with long-range, positive potential. Attention will be given to an array of "pitfalls" which become obstacles to successful marriages. Significant time will be given to general communications skills, interactive listening, "CONSTRAT" (conscious strategizing), and conflict resolution.

PY 213 Abnormal Psychology (3) (S)

A survey of abnormal and psychopathological behavior patterns, mental deficiency, neuroses, psychoses, character disorders. Prevention and processing, with emphasis on the major perspectives of behavior: Psychodynamic, Behavioral, Humanistic, Sociocultural, Biological. Prerequisite: Three hours of college level psychology.

PY 215 Child Growth and Development (3) (S)

A study of the physical, emotional, social and intellectual development of children from conception through adolescence. Concepts of development and function derived from theoretical approaches, research and clinical observation will be emphasized. Child rearing applications also included. Prerequisite: PY 101.

PY 217 Human Growth and Development (3) (F,S,Su)

An overview of human developmental changes from conception to death focusing on multidisciplinary perspectives (biological, social, behavioral, cogni-

tive). Attention is given to the analysis and application of these perspectives emphasizing various environmental contexts. Prerequisite: PY 101.

PY 219 Industrial Psychology (3) (on demand)

A course presenting an overview of the problems of daily living and human relations in an industrial society. Approaches some of the aspects of industrial psychology seen as integral parts of industrial organization today.

PY 235 Special Topics in Psychology (1-3) (on demand)

Study of specific topics of traditional and current psychological and social interest. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics.

PY 241 Psychology of Individual Differences (3) (F,S)

Study of individual differences in the dimensions of intelligence, personality, interests, needs, and values. Discussion of group diversity relating to gender, age, race, work, social class, and education. Critical analysis of genetic and environmental factors influencing these differences.

PY 250 Leadership Development (3) (F,S)

A course designed to study leadership philosophy, practices, and skills. Emphasis will be placed on the learning and application of basic leadership concepts including decision making, empowerment, trust, conflict resolution and goal-setting. Leadership styles will be explored through selected readings in the humanities and through exposure to and critical analysis of various media including art, literature, film and music. (Same as HU 240. Credit not allowed for both courses.)

PY 251 Psychology of Personal Adjustment (3) (F,S,Su)

A course using the principles and methods of adjustment psychology in a group setting, including major emphasis on social learning and interpersonal development. Other topics include the role of religion, work behavior, and socialization practices in adjustment.

PUBLIC SPEAKING, SEE "SPEECH"

QUALITY TECHNOLOGY

QA 140 Quality Technician (3) (on demand)

This course details for the student the fundamental concepts and the body of knowledge involved in the Certified Quality Technician Examination. This includes the review and application of quality control concepts and techniques, practical statistical methods, sampling and reliability principles, reliability calculations, metrology, calibration fundamentals, quality data analysis and problem solving, cost methodology, and quality audit concepts and principles. Class two hours, laboratory two hours. Prerequisite: MA 153 or MA 170 recommended.

QA 142 Quality Engineering (4) (on demand)

This course details for the student the fundamental concepts and the body of knowledge involved in the Certified Quality Engineer Examination. This includes a review of, and the applications of, the fundamental concepts and principles of probability, discrete and continuous probability functions, sam-

pling distributions, statistical inference, regression, and correlation analysis. Statistical quality control, acceptance sampling using attributes and variables, experimental design, quality planning, quality management, product liability, metrology, inspection, testing, quality cost analysis, quality auditing, reliability, maintainability, produce safety, quality information systems, motivation, and human factors will also be studied. Prerequisite: MA 153 or MA 170 recommended.

QA 144 Mechanical Inspector (3) (on demand)

This course details for the student the fundamental concepts and the body of knowledge required for the Certified Mechanical Inspector Examination. This includes the review and application of technical mathematics, basic statistics, blueprint reading, inspection tools and equipment, materials and processes, inspection planning, inspection technology, sampling techniques, and sampling plans. Class two hours, laboratory two hours. Prerequisite: MA 153 or MA 170 recommended.

QA 146 Quality Auditing (1-2) (on demand)

This course details the fundamental concepts and the body of knowledge required for the Certified Quality Auditor (CQA) examination. Includes a review of the steps required for planning and conducting an audit: initiation, preparation, performing, reporting, and follow-up. Also, students will study sample questions from previous CQA examinations.

QA 148 Quality Manager (3) (on demand)

This course prepares personnel to take the ASQC Certified Quality Manager examination. The concepts of the Certified Quality Manager examination will be discussed. Includes quality standards, organizations and functions, quality needs and overall strategic plans, customer satisfaction and focus, project management, continuous improvement, human resource management, and training and education. Prerequisite: MA 153 or MA 170 recommended.

QA 240 Statistical Process Control (3) (on demand)

This course details for the student the fundamental concepts and the body of knowledge required in basic statistical process control and improvement. This includes the study and applications of the fundamental concepts and principles of probability, discrete and continuous probability functions, sampling distributions, limited statistical inference, linear regression, and correlation analysis. The student will also study and learn applications of flow charts, check sheets, stem and leaf plots, histograms, cause and effect diagrams, and run and pareto charts. Also, the methods used for an evaluation of the measurement process will be discussed. Prerequisite: MA 153 or MA 170 recommended.

QA 298 Special Topics in Quality (1-4) (on demand)

Specialized topics and/or problems in quality are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

QA 299 Special Topics in Quality with Lab (1-4) (on demand)

Specialized topics and/or problems in quality are selected and studied. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

**This is a developmental studies course and is not generally transferable. Is not accepted toward any degree program at Chattanooga State.

RADIATION THERAPY TECHNOLOGY, SEE "HEALTH SCIENCE"

RADIOLOGIC TECHNOLOGY

RT 110 Introduction to Radiologic Technology (3) (F)

Acquaints the student with the organization, function, supervision and financial arrangements relative to departments of radiology; the rules and regulations of the program and the clinical affiliates, a brief history of medicine and radiology, the do's and don'ts regarding radiation and electrical protection and general safety, and the ethical and legal responsibilities entailed by becoming a member of a paramedical profession. Prerequisite: Admission to the Radiologic Technology Program. (Liability insurance fee.)

RT 112 Clinic I (2) (S)

An introduction to radiographic imaging, the care of radiographic equipment, basic radiographic positioning and exposure selection, and body mechanics of handling patients. Special emphasis is given to the simulation, practice and competent performance of three radiologic exams from three of the following exam categories: 1) upper extremities, 2) lower extremities, 3) bony thorax, chest and abdomen, 4) contrast studies (introduction only), and 5) spines. 20 lab/clinic hours. Prerequisites: BI 174, HS 145, RT 110, RT 124, RT 134. Corequisites: BI 175, HS 155, RT 115, RT 125, RT 135.

RT 114 Clinic II (4) (Su)

A continuation of Clinic I, which gives the student the opportunity to develop increased knowledge and skill in correct positioning to demonstrate specific anatomy, the radiographic film evaluation process, the reasons for radiographic examinations, and proper methods of patient care. Special emphasis is given to the simulation, practice, and competent performance of three radiographic exams from three of the following exam categories: 1) upper extremities, 2) lower extremities, 3) bony thorax, chest and abdomen, 4) common contrast studies (introduction only), 5) spines and 6) cranium. In preparation for final category competency evaluation beginning fall semester of the second year, the student is also given the opportunity to gain experience and proficiency in the six exam categories which must be completed by the first half of the summer semester. 40 lab/clinic hours. Prerequisites: BI 175, HS 155, RT 115, RT 125, RT 135.

RT 115 Medical Terminology (3) (S)

A presentation of medical terminology as applied to Radiologic Technology. The course will provide the student with the elements of medical terminology. The origins of medical terminology are set forth. A word building system is introduced and specific terminology for the body is related. Abbreviations and symbols are addressed. Understanding radiographic orders and diagnostic reports is emphasized. Prerequisites: BI 174, RT 134. Corequisites: BI 175, RT 112, RT 135.

RT 124 Radiographic Exposure I (3) (F)

The first of a two-course sequence, topics covered include the nature and production of x-rays, x-ray film and intensifying screens, creation of the invisible and manifest image, film processing equipment and quality control, the prime factors of radiography and x-ray interaction with matter. Laboratory experiments are used to demonstrate clinical applications of the theoretical principles and concepts. Class

three hours, laboratory three hours. Prerequisite: Admission to the Radiologic Technology Program. Corequisites: HS 145, MA 117, RT 110.

RT 125 Radiographic Exposure II (3) (S)

The second of a two-course sequence, topics covered include the factors that govern and influence the production of the radiographic image using radiographic film, the importance of proper operation and care of radiographic equipment, filtration of the primary beam, image intensification radiography, stereoscopic radiography, tomography, and radiation protection and health physics. Laboratory experiments are used to demonstrate clinical applications of the theoretical principles and concepts. Class three hours, laboratory two hours. Prerequisites: HS 145, MA 117, RT 110, RT 124. Corequisite: HS 155.

RT 134 Radiographic Positioning—Film Critique I (3) (F)

The first of a three-course sequence, topics covered include: introduction to radiographic positioning and terminology, upper extremities, lower extremities, bony thorax and chest, abdomen and related positioning for common contrast examinations, and terminology, anatomy and radiographic positioning of the cervical, thoracic and lumbar-lumbo-sacral vertebrae. Laboratory assignments provide the student the opportunity for simulation and practice of the examinations prior to working with patients. Class three hours, laboratory five hours. Prerequisite: Admission to the Radiologic Technology Program. Corequisites: BI 174, RT 110.

RT 135 Radiographic Positioning—Film Critique II (3) (S)

The second of a three-course sequence, topics covered include: anatomy, topography, morphology and routine projections of the cranium and terminology, anatomy and radiography of the sella turcica, orbits, temporal bones, facial bones, mandible, temporomandibular articulations and paranasal sinuses. Laboratory assignments provide the student the opportunity for simulation and practice of the examinations prior to working with patients. Prerequisites: BI 174, RT 134. Corequisites: BI 175, RT 112.

RT 143 Radiographic Positioning—Film Critique III (3) (F)

The third of a three-course sequence, topics covered include radiography of the soft-tissue structures of the neck, thorax, and abdomen. In addition the characteristics of contrast media relative to their proper use in the body, side effects, and methods of administration and opacification are discussed. Normal radiographs of each system of the body are reviewed and emphasis is placed on preprocedure prep, patient care and management, contraindications for and complications of the procedures, and proper positioning and exposure of the structures. Prerequisite: Student must have successfully completed all courses taught in the first year of the Radiologic Technology Program.

RT 172 Radiologic Pathology (3) (S)

This course is a survey of disease as related to Radiologic Technology and is prepared for the advanced student radiographer. The presentation of the material is based on the systems and related organs of the body, emphasizing studies that make use of radiology. Each system is discussed according to the categories of disease which are demonstrated either by radiography or by another imaging modality. Specific pathologic conditions encountered in the major organ systems which require adjustments in exposure factors, patient care and management, and positioning are emphasized.

Prerequisite: All previous course material completed in the RT curriculum prior to the Spring semester of the second year.

RT 200 Magnetic Resonance Imaging (4-7) (F)

An introduction to the basic essentials of magnetic resonance imaging methods, system operation, cross-sectional anatomy and clinical image interpretation. Primary emphasis is placed on the requirements to operate magnetic resonance equipment. Class four hours, clinic optional: 225 hours. Prerequisite: Active certification as a Registered Technologist by the American Registry of Radiologic Technologists.

RT 202 Clinic III (2) (F)

A continuation of Clinic II with increased emphasis placed on correct positioning in order to demonstrate specific anatomy, the radiographic film evaluation process, the reasons for radiographic examinations, and proper methods of patient care. Special emphasis is given to final category instruction and evaluation of four category examinations from three of the following exam categories: 1) upper extremities, 2) lower extremities, 3) bony thorax, chest and abdomen, 4) contrast studies, 5) spines, and 6) cranium. In addition, assignments in nuclear medicine, radiation therapy, computerized tomography, special procedures, and the paradiologic areas give the student the opportunity for partial completion of general program competencies. 20 lab/clinic hours. Prerequisite: Student must have successfully completed all courses taught in the first year of the Radiologic Technology Program.

RT 210 Advanced Magnetic Resonance Imaging for Technologists (3) (S)

A one-semester course designed to provide an understanding of the advanced imaging techniques now used in Magnetic Resonance Imaging. Primary focus is placed on gradient echo imaging, 3-D imaging, cardiac/cine imaging, paramagnetics, spectroscopy, motion suppression techniques and MR angiography. Scan protocols which improve image quality and permit evaluation of moving joints are also discussed. Prerequisite: RT 200.

RT 212 Clinic IV (2) (S)

A continuation of Clinic III. 20 lab/clinic hours. Prerequisites: RT 143, RT 202, RT 223, RT 232, RT 234. Corequisites: HS 184, RT 172, RT 235.

RT 220 Magnetic Resonance Imaging: Comprehensive Overview (3) (Su)

The third of a three-course sequence in Magnetic Resonance Imaging. This course presents an integrated coverage of patient care and management, imaging procedures, data acquisition and manipulation, physical principles of image production, MRI safety and quality assurance and thus provides the opportunity for the student to develop the skills and knowledge necessary to exercise independent judgment and discretion in the technical performance of magnetic resonance imaging. Topics covered in this course present information and structure required to complete the national certification examination in MRI technology. Prerequisites: RT 200, RT 210, or consent of coordinator.

RT 223 Special Procedure Radiography— Nursing (3) (F)

Special procedures are discussed in reference to six basic categories: anatomy, indications and contraindications, procedures, contrast media, equipment and patient positioning. Topics covered include: basic medical techniques and patient care, medical and surgical asepsis, vital signs, medical emergencies, drug administration, anatomy and radi-

ography of the central nervous system, anatomy and radiography of the visceral and peripheral circulatory system, general and computerized tomography and foreign body localization. Prerequisite: Student must have successfully completed all courses taught in the first year of the Radiologic Technology Program.

RT 224 Clinic V (3) (Su)

A continuation of Clinic IV. In addition, the proper method of cleaning an automatic film processor and doing preventive maintenance checks and quality control are taught. 30 lab/clinic hours. Prerequisites: RT 172, RT 212, RT 235.

RT 232 Introduction to Pararadiologic Imaging Modalities and Radiation Therapy (3) (F)

This course introduces the student to subspecialties of diagnostic radiography and the basic principles of radiation therapy. Special emphasis is placed on the following pararadiologic imaging modalities: thermography, diaphanography, digital radiography, diagnostic ultrasound, positron emission tomography, magnetic resonance, and nuclear medicine. In general, the subspecialties and radiation therapy are discussed in reference to six basic categories: historical development, comparison to conventional radiology physical principles, equipment and methodology, selected clinical applications, and biological effects. Prerequisite: Student must have successfully completed all courses taught in the first year of the Radiologic Technology Program.

RT 234 Radiology Seminar I (4) (F)

The first of a two-course sequence in advanced radiographic science, patient care and management, and radiographic positioning and procedures. The complete sequence presents an integrated coverage of radiation protection, equipment operation and maintenance, image production and evaluation, radiographic positioning and procedures, patient care and management, and quality assurance; and thus, provides the student the opportunity to develop the skills and knowledge necessary to exercise independent judgment and discretion in the technical performance of medical imaging procedures. Primary focus is placed on non-routine procedures in each exam category area, and evaluation of the performance of radiologic systems to effect the best diagnostic results with the least cost and radiation exposure to the patient. Special emphasis on film processing quality assurance. Prerequisite: All previous course material completed in the RT curriculum prior to the Fall semester of the second year.

RT 235 Radiology Seminar II (4) (S)

The second of a two-course sequence in advanced radiographic science, patient care and management, and radiographic positioning and procedures. The complete sequence presents an integrated coverage of radiation protection, equipment operation and maintenance, image production and evaluation, radiographic positioning and procedures, patient care and management, and quality assurance; and thus, provides the opportunity for the student to develop the skills and knowledge necessary to exercise independent judgment and discretion in the technical performance of medical imaging procedures. Primary focus is placed on non-routine procedures in each exam category area; evaluation of the performance of radiographic systems to effect the best diagnostic results with the least cost and radiation exposure to the patient. Special emphasis on x-ray equipment analysis and quality control and the development of an exposure guide. Prerequisite: All previous course material completed in the RT curriculum prior to the Spring semester of the second year. Corequisites: HS 184, RT 172, RT 212.

READING

RE 000 Reading Skills for Industrial Technology Programs

This course provides individualized instruction to strengthen basic comprehension, vocabulary and spelling skills for students enrolled in vocational certificate programs. Five clock hours per week.

RE 069 Individualized Instruction in Reading Skills (2) (F,S,Su)

An individualized course designed to serve students who have significant weakness in general or specific reading skills and therefore need individualized instruction and guided practice. May be taken either before or after RE 070 and/or RE 081. Laboratory four hours. Repeatable for credit. Prerequisite: Recommendation from assessment test or permission of department head.**

RE 070 Basic/Developmental Reading (4) (F,S,Su)

A lecture/laboratory course designed to improve a student's ability to comprehend written materials, identify main and subordinate ideas, make inferences, separate fact from opinion, develop flexibility and efficiency in reading rate, and improve vocabulary and reasoning skill. Upon completion, the student will advance to RE 081. Prerequisite: AAPP Placement.**

RE 081 Developmental Reading: Reading Analysis and Reasoning (3) (F,S,Su)

This course is designed to improve a student's overall reading skills to college level. Emphasis will be placed on reasoning skills, on analysis of materials for bias and point of view, and on increasing flexibility and efficiency in reading rate. Prerequisite: RE 070 or AAPP Placement.**

RE 087 Topics in Reading I (1) (on demand)

This course is designed for the student who cannot demonstrate mastery of objectives in a particular area of competency in language arts even though he/she has competency in other language arts areas. A student may work on spelling, vocabulary, rate and flexibility, or reasoning skills. Laboratory two hours. Prerequisite: Recommendation from Assessment test or instructor.**

REAL ESTATE

RS 101 Basic Principles of Real Estate (4) (F,S,Su)

A study of the fundamentals of real estate providing a basic understanding of real estate and serving as an aid in preparing applicants for the State of Tennessee Real Estate License Exam. Topics include ethics, contracts, trust deeds, closing statements, leases, mortgages, and real estate math.

RS 102 Real Estate Finance Post License (3) (on demand)

A course designed to provide the fundamental basis from which the beginner may develop a solid foundation. Topics include the monetary system, government influences on money and credit, types of mortgages, primary and secondary money markets, FHA, VA programs, borrower qualification, settlement procedures and truth-in-lending laws. Prerequisite: RS 101 or any Tennessee approved prelicensing course passed or a professional designation (i.e., affiliate broker, broker, attorney).

RS 103 Real Estate Course for New Affiliates (2) (on demand)

A course designed to establish performance capabilities, knowledge, and skills for performing in real estate; for real estate affiliates (salespersons) already engaged in real estate as a career. Prerequisite: RS 101 or consent of instructor.

RS 104 Real Estate Brokerage (3) (F)

A study of the rapidly changing operation of real estate brokerage firms. Emphasis is placed on how companies operate, how managers function and how people become effective leaders. The course covers brokerage services, recruiting requirements, personnel selection, hiring procedures, policies and procedures, marketing and advertising, professional development, and the risks of doing business. Prerequisite: RS 101.

RELIGION, SEE "HUMANITIES" AND "PHILOSOPHY"

RESPIRATORY CARE

RC 111 Principles of Respiratory Care Procedures I (3) (F)

This course includes theory in the application of nursing principles and skills for respiratory personnel. It addresses basic nursing principles, vital signs, aseptic technique, the apothecary system and drug calculations. Also addressed are topics such as the gas laws, relative humidity and pulmonary values. Prerequisite: Acceptance into the Respiratory Care Program.

RC 112 Principles of Respiratory Care Procedures II (3) (S)

This course is an intensive study of the equipment and therapy modalities of humidity and aerosol therapy. Topics in oxygen therapy will be introduced. Prerequisite: RC 111.

RC 113 Principles of Respiratory Care Procedures III (4) (Su)

This course continues the study of oxygen therapy. The course also includes hyperinflation therapy such as SMI and IPPB, as well as airway management. Indications and contraindications will be emphasized. A series of preclinical check-offs will be required for completion of the course. Class three hours, laboratory three hours. Prerequisite: RC 112.

RC 141 Technical Foundations of Respiratory Care I (3) (F)

This course is designed to provide an overview of the development of respiratory care, the role of the therapist, and to improve the student's medical vocabulary. Emphasis is placed on the English meaning of root words, prefixes and suffixes used by the allied health professions.

RC 142 Technical Foundations of Respiratory Care II (3) (S)

This course is designed to give comprehensive awareness of the functioning of the heart and lungs. The student will be presented with the physiologic principles of pulmonary mechanics, O₂ and CO₂ transport, acid-base homeostasis, and an introduction into the general principles of drug action with emphasis on the effects on the cardiopulmonary and renal systems. Prerequisite: RC 141.

**This is a developmental studies course and is not generally transferable. It is not accepted toward any degree program at Chattanooga State.

RC 143 Technical Foundations of Respiratory Care III (3) (Su)

This course continues the development of the students' knowledge in cardiopulmonary physiology and pharmacology. Emphasis is placed on neural and chemical control of cardiopulmonary functions, drug administration, familiarization with respiratory and systemic drugs, and the recognition and management of adverse reactions. Prerequisites: RC 141, RC 142.

RC 210 Fundamentals of Respiratory Care I (3) (F)

An in-depth study of mechanical ventilation is provided through a combination of didactic and guided laboratory experiences. The principles of critical care medicine as applied to the rationale, institution and discontinuance of mechanical ventilation are presented. Fundamental concepts of ventilator operation and modification are also included. Class two hours, laboratory three hours. Prerequisites: RC 113, RC 143. Corequisites: RC 221, RC 241.

RC 212 Fundamentals of Respiratory Care II (3) (S)

This course is a study of cardiopulmonary diagnostic testing and monitoring as it pertains to the respiratory care practitioner. The major concepts of cardiovascular monitoring and supportive therapy are presented along with EKG testing and interpretation, pulmonary function testing and interpretation, transcutaneous oxygen monitoring, oximetry, end tidal CO₂ monitoring, etc. Class two hours, laboratory two hours. Prerequisites: RC 210, RC 221, RC 241. Corequisites: RC 222, RC 242, RC 243.

RC 213 Fundamentals of Respiratory Care III (3) (Su)

This course is designed to cover advanced topics including fluid and electrolyte balance, pulmonary rehabilitation, hemodynamics, and new techniques in respiratory care. Practice examinations will be given to prepare students for the entry level and advanced practitioner exams given by the NBRC. Prerequisites: RC 212, RC 222, RC 242, RC 243. Corequisite: RC 223.

RC 221 Clinical Practicum I (6) (F)

This course is designed to familiarize the student with respiratory care procedures in the hospital setting. Patient care experience will include oxygen therapy, medical gas cylinder use, humidity and aerosol therapy, IPPB, incentive spirometry, chest physiotherapy, bronchial hygiene, isolation techniques, cleaning and sterilization, arterial puncture, cardiopulmonary resuscitation, and physical assessment. Laboratory twenty-four hours. Satisfactory/No Credit grading. Prerequisites: RC 111, RC 112, RC 113, RC 143. Corequisites: RC 210, RC 241. (Clinical fee and professional liability insurance required.)

RC 222 Clinical Practicum II (6) (S)

A continuation of RC 221 with added emphasis on patient evaluation and clinical judgment. Additional procedures include pediatric therapy, blood gas instrumentation and quality control procedures, EKG testing and interpretation, endotracheal intubation, pulmonary function testing, interpretation of chest radiographs and home care. Clinical rotations may be scheduled during evening or night hours. Laboratory twenty-four hours. Satisfactory/No Credit grading. Prerequisites: RC 210, RC 221, RC 241. Corequisites: RC 212, RC 242, RC 243.

RC 223 Clinical Practicum III (7) (Su)

A continuation of RC 221 and RC 222 with additional emphasis on critical care procedures. New procedures include initiation, monitoring and dis-

continuation of mechanical ventilation, neonatal/pediatric intensive care, hemodynamic monitoring and interpretation of laboratory tests. Clinical rotations may be scheduled during evening or night hours. Laboratory twenty-four hours. Satisfactory/No Credit grading. Prerequisites: RC 212, RC 222, RC 242, RC 243. Corequisite: RC 213.

RC 241 Clinical Pathophysiology I (3) (F)

This course includes general concepts of disease, human pathology, arterial blood gases, and acid-base concepts. It is designed to complement the clinical experience in sampling and analysis gained in RC 221. Prerequisites: RC 113, RC 143.

RC 242 Clinical Pathophysiology II (3) (S)

This course consists of a study of the etiology, pathology, pathophysiology, symptoms, diagnosis, course, treatment, and prognosis of several selected diseases that affect the cardiopulmonary system. Prerequisites: RC 210, RC 241. Corequisites: RC 212, RC 222, RC 243.

RC 243 Pediatric/Perinatal Respiratory Care (3) (S)

A course designed to introduce the student to common pediatric and neonatal cardiopulmonary disorders. The student will be introduced to therapeutic modalities used in the treatment of infants and children, including critical care procedures. Prerequisites: RC 210, RC 221, RC 241. Corequisites: RC 212, RC 222, RC 242.

SECRETARIAL SCIENCE, SEE "OFFICE SYSTEMS"**SOCIOLOGY****SO 110 Introduction to Sociology (3) (F,S,Su)**

A general introduction to the field of sociology. Emphasis on the basic concepts, principles, and processes used to study the structure and function of society.

SO 120 Social Problems (3) (S)

A course designed to provide students with an understanding of social problems in the United States. The course has the goal of having the students acquire a lasting sociological perspective and the skills that will enable them to make sense of the future developments in our society. Prerequisite: EN 110.

SO 214 Criminology (3) (F)

A course designed to help students develop an understanding of the principles of criminology. Students will learn what constitutes a crime, the relevance of crime statistics, and the major theories relating to the causes of crime. Course will approach the problems and social costs of crime from a sociological perspective and includes its effects on our society. Prerequisite: EN 110.

SO 215 Marriage and Family (3) (S)

A course emphasizing the values and family dynamics of contemporary American life. Designed to help students make knowledgeable choices in their interpersonal lives by providing sound facts and using a problem-solving approach. Prerequisite: EN 110.

SO 216 Cultural Anthropology (3) (F,S,Su)

The comparative study of culture, social organiza-

tion, economics, government, education, religion, language, and arts in various primitive and present societies.

SO 217 Sociology of Aging (3) (on demand)

A basic course in social gerontology, with emphasis on the process of aging and the problems of the aged.

SO 235 Special Topics in Sociology (1-3) (on demand)

Study of specific topics of traditional and current sociological interest. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics. Prerequisite: EN 110.

SONOGRAPHY, SEE "DIAGNOSTIC MEDICAL SONOGRAPHY"**SPANISH****SH 110 Elementary Spanish I (4) (F,S)**

The first semester of a two-semester course sequence designed for students with little or no prior instruction in Spanish. The student will develop a solid grammar foundation, utilize practical vocabulary, and perform elementary reading tasks in the Spanish language. Emphasis is placed on idiomatic conversation and Spanish culture.

SH 111 Elementary Spanish II (4) (F,S)

Emphasis on more complex grammatical forms on the elementary level to enhance the development of reading, oral, and aural skills beyond the SH 110 level. Prerequisite: SH 110.

SH 210 Intermediate Spanish I (3) (F)

A course in intermediate Spanish grammar, reading, and conversation. Strong emphasis is placed on conversation, oral skills, and Spanish culture. Prerequisite: SH 111 or two years of high school Spanish.

SH 211 Intermediate Spanish II (3) (S)

A continuation of SH 210 with emphasis on conversation and oral skills. Strong emphasis is placed on reading and translation. Prerequisite: SH 210.

SH 235 Special Topics in Spanish (1-3) (on demand)

Study of specific topics pertaining to the Spanish language and the Spanish culture to meet the needs of special requests and interests. Course subjects and emphases will be published prior to the beginning of each term. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

SPEECH**SP 100 Speaking Basics (1) (F,S)**

A course designed to provide practical instruction for designing and delivering effective oral presentations in the business environment. Emphasis will be placed on specific strategies to cope with speech anxiety, to distribute information, and to influence actions through practice of these principles in planned and impromptu presentation formats. Prerequisite: Permission of Department Head.

SP 110 Fundamentals of Public Speaking (3) (F,S,Su)

An introductory public speaking course stressing organization and presentation of the extemporaneous speech in a variety of formats. Prerequisite: EN 110.

SP 112 Oral Communication (2) (on demand)

A study of the theory and process of interpersonal, intrapersonal, public and private group, and mass oral communication. Study includes small group and forum discussion, role playing, and interaction observation.

SURGICAL TECHNOLOGY**OR 000 Surgical Technology (F,S,Su)**

A three-semester training program designed to provide graduates with the knowledge and skills necessary to function effectively as Surgical Technologists. The first semester introduces the student to the world of surgery. Human anatomy and physiology, microbiology, and medical terminology form the basis on which to begin the exploration of the principles of asepsis, fundamental procedure techniques, and surgical operative procedures. The campus practice laboratory provides opportunity for students to begin to develop the skills and techniques used in surgery. The second semester provides for continued exploration of the fundamental procedure techniques and surgical operative procedures started in the first semester. Students are assigned to the surgical area of local hospitals to begin to develop skills and apply the knowledge learned in the classroom. The third semester concludes the study of surgical operative procedures with students receiving intensive clinical practice experience in a variety of surgical settings in preparation for employment. In the final weeks, program content is reviewed in preparation for the national certification examination. 32.5 clock hours per week.

TECHNICAL DRAFTING**DF 000 Technical Drafting (F,S,Su)****First Semester: Basic Drafting I**

Introduction to the tools, procedures and processes of the drafting trade. The student learns to manipulate the instruments, practices lettering and learns to make drawings to an acceptable standard, using the principles of geometric construction, multiview projection and perspective. The student also learns to apply the principles of algebra, geometry and elementary trigonometry to interpreting and making blueprints, drawings and multiview sketches.

Problems reflect standard procedures used in industry and engineering practice. 30 clock hours per week.

Second Semester: Basic Drafting II

Introduction to the various drafting disciplines of architectural, civil, electrical/electronic, sheet metal, piping, and structural. Introduction to computers in drafting. Instruction in AutoCAD, use of the Internet, and various computer programs as aids in the drafting field. 30 clock hours per week.

Prerequisite: Basic Drafting I.

Third Semester: Area of Specialization

Utilization of knowledge learned in the first two semesters to complete a course of advanced study in one of the following fields:

Architectural (commercial). Basic principles of commercial architectural drafting. How to draw plot plans, foundation plans, floor plans, and

electrical, mechanical, and plumbing plans. Use of various reference materials, including CD-ROM's and the Internet, as well as standard reference books and manuals.

OR

Mechanical/Piping. How to create gears, cams, die and jigs, and advanced piping drafting. Basic 3-D and computer rendering techniques. Use of various reference materials, including CD-ROM's and the Internet, as well as standard reference books and manuals.

OR

Civil/Structural. How to do plat and plot plans, road plans, and drainage plans. Use of concrete, steel, and wood in commercial Civil and Structural drafting. Use of various reference materials, including CD-ROM's and the Internet, as well as standard reference books and manuals.

30 clock hours per week. Prerequisite: Basic Drafting II.

Note: This competency based program is designed to be completed in one year (1290 clock hours).

Students register for DF 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.

THEATRE, SEE "DRAMA"

TRUCK DRIVING, SEE "COMMERCIAL TRUCK DRIVING"

ULTRASOUND, SEE "DIAGNOSTIC MEDICAL SONOGRAPHY"

WELDING**WD 000 Welding Technology (F,S,Su)**

This course provides theory and practice in the building of knowledge and physical skills in welding. Oxyacetylene flame cutting and acetylene welding and brazing. Basic MIG welding procedures, setting up MIG welding equipment, shut down operations and general purpose maintenance. Advanced training in gas metal arc welding on aluminum. TIG welding on mild steel plate and aluminum. Gas tungsten arc pipe welding. Flux cored arc welding, covering self shielding and shielded flux cored electrode wire. Instruction and practice in welding in all positions on thin and thick gauge aluminum and 11-gauge plate. Also covers mathematical skills necessary to meet and accept the responsibilities of being a welder (problems reflect the practical and realistic situations welders must handle as part of the trade requirements) and the fundamentals of blueprint interpretation as applied in the welding trade, including use of lines, views, dimensioning, specifications, structural shapes and assembly drawings, with particular emphasis on learning to interpret and apply welding symbols. 30 clock hours per week. *Note: This competency based program is designed to be completed in one year (1290 clock hours). Students register for WD 000 each term until all competencies are mastered. Some students may need more than 1290 clock hours in order to achieve the level of competency required to receive the certificate.*

WELLNESS, SEE "HEALTH AND PHYSICAL EDUCATION" AND "PHYSICAL EDUCATION ACTIVITY COURSES"

X-RAY TECHNOLOGY, SEE "RADIOLOGIC TECHNOLOGY"

1998-99 Administrative Professional Staff Faculty Accreditation Index

Contents

	Page No.
Administrative	138
Administrative/Professional	139-140
Faculty	140-143
Accreditation	144
Index	145-152

Tennessee Higher Education Commission

The Honorable Don Sundquist Governor of the State of Tennessee	J. V. Sailors (Ex Officio)
Richard Rhoda, Interim Executive Director	Reed Pond (Ex Officio)
A. C. Wharton, Jr., <i>Memphis</i> , Chairman	Wm. Ransom Jones, <i>Murfreesboro</i>
Wanda McMahan, <i>Knoxville</i> , Vice-Chairman	Joe E. Lancaster, <i>Columbia</i>
William R. Snodgrass, <i>Nashville</i> , Vice Chairman	John L. Parish, <i>Tullahoma</i>
Debby Patterson-Koch, <i>Nashville</i> , Secretary	James M. Powers, Sr., <i>Waverly</i>
Steve Adams, <i>Nashville</i>	June Scobee Rodgers, <i>Signal Mtn.</i>
Riley C. Darnell, <i>Nashville</i>	Lisa Verble, <i>Sevierville</i>
	Angela Neal, <i>APSU</i>

Hamilton County Legislative Delegation

Senator Ward Crutchfield, Tenth District	Representative Tommie Brown, Twenty-eighth District
Senator David Fowler, Eleventh District	Representative Brenda Turner, Twenty-ninth District
Representative Bobby Wood, Twenty-sixth District	Representative Jack Sharp, Thirtieth District
Representative Bill H. McAfee, Twenty-seventh District	Representative Arnold Stulce, Thirty-first District

Board of Regents

The State University and Community College System of Tennessee

The Honorable Don Sundquist, Chairman, Governor of the State of Tennessee (Ex-Officio)	Dr. Amy P. Dietrich	Ms. Jane Kisber
Dr. Charles Smith, Chancellor	Mr. Ryan Durham	Mr. W. Kieth McCord
Richard Rhoda, Interim Executive Director, THEC (Ex-Officio)	Mr. Robert Jack Fishman	Ms. Leslie Parks Pope
The Honorable Dan Wheeler (Ex-Officio)	Mr. Robert L. Gamble	Mr. J. Stanley Rogers
The Honorable Jane Walters (Ex-Officio)	Mr. F. Evans Harvill	Ms. Debora S. Seivers
	Mr. Clifford H. Henry	Dr. Maxine A. Smith
	Mr. Thomas H. Jackson	Mr. William H. Watkins, Jr.
	Mr. Ed Jernigan	

Chattanooga State Technical Community College Board of Associates

Mr. Herb Adcox	Mr. Steve Frost	Mr. John B. Phillips, Jr.
Mr. Charles Arant	Mr. John F. Germ	Mrs. Barbara Roberts
Mr. Ronald R. Arrington	Ms. Sue Harper	Mr. Jack Sample
Dr. Claude C. Bond	Dr. Clifford Hendrix	Mr. Paul M. Starnes
Mr. Mac Bridger	Mr. James Hill	Mr. Glen Stophel
Ms. Doris Carpenter	Mr. Hampton Johnston	Mr. Richard Sullivan
Mr. Andy Cope	Mr. Don Jordan	Mr. James Vaughan
Mr. Joseph Decosimo	Mr. Robert McGuff	Mr. Rudy H. Walldorf
Mr. Larry Duncan	Mr. J. Woodley Murphy	Mr. Steve Weddle
Mr. Harry Fields	Mr. Ray L. Nation	
Mrs. JoAnn Forman	Dr. Paul V. Nolan	

Administrative/Professional Staff

- James L. Catanzaro**, (1990) President. Faculty Member, Philosophy and Western Civilization. Ph.D., Claremont Graduate School and University Center, California.
- Deborah A. Adams**, (1981-86, 88) Director, Credit Programs/Placement, Business and Community Development. B.S., University of Tennessee, 1976.
- Bruce T. Alston**, (1993) Producer, Media Production Center. B.F.A., New York Institute of Technology, 1990.
- Alan K. Artress**, (1989) Coordinator, Community Education, Continuing Education. M.S., University of Tennessee at Chattanooga, 1990; B.S., Southern Missionary College, 1982.
- Mary T. Barker**, (1992) Vice President for Academic Affairs. Ph.D., University of Tennessee, 1977; M.A., Vanderbilt University, 1965; B.S., University of Chattanooga, 1957; B.M., New England Conservatory of Music, 1952.
- James L. Barrott**, (1985) Dean, Engineering and Environmental Science Technology and Manufacturing Productivity. M.S., University of Tennessee at Chattanooga, 1993; B.S., Brigham Young University, 1984; A.S., Ricks College, 1982.
- Martha K. Bates**, (1991) Technician, Biological Science. B.S., Mississippi College, 1967.
- Julie C. Bennett**, (1984) Registrar, Admissions and Records. B.S., Covenant College, 1991. A.S., Chattanooga State Technical Community College, 1984.
- Raymond M. Bertani**, (1984) Coordinator, Educational TV, Alternative Delivery Systems. B.A., University of Tennessee at Chattanooga, 1984.
- Larry L. Bray**, (1992) Counselor, Developmental Studies. M.Ed., Wright State University, 1981.
- Joyce R. Brennan**, (1992) Director, Academic Systems, Computer Center. M.S., University of Florida, 1964. B. S., Florida Southern College, 1962.
- James R. Brotherton**, (1988) Baseball Coach/Counselor, Business and Community Development. B.S., Health and Physical Education, Carson Newman College, 1976.
- Nora C. Burke**, (1993) Supervisor, PC Support, Computer Center. B.S., University of Tennessee at Chattanooga, 1987, A.S., Chattanooga State, 1984.
- Douglas E. Byrd**, (1988) Counselor, Student Services. M.A., University of Alabama, 1988; M.S., Jacksonville State University, 1981; B.S., Jacksonville State University, 1980.
- Mary Ann Carlson**, (1994) Dean, Business and Information Systems. M.P.C.D., University of Colorado, 1983.
- Paula L. Calhoun**, (1996) Technician, Biological Science. M.S., Forest Resources, Clemson University, 1995.
- Bruce A. Carlise**, (1997) Computer Programmer Analyst, Computer Center. B.S., Computer Science, University of Tennessee at Chattanooga, 1997.
- Wilka M. Carter**, (195) Librarian I. M.L.S., Peabody College, 1970.
- Lulu L. Copeland**, (1996) Advisor, Engineering and Environmental Science Technology. B.S., Engineering, University of Tennessee at Chattanooga, 1982.
- Gladys Crates**, (1974) Dean, Mathematics and Sciences, Associate Professor, Mathematics. Ed.D., University of Tennessee, 1994; M.S., Mathematics, University of Tennessee at Chattanooga, 1973; A.B., Mathematics with Honors, University of Tennessee at Chattanooga, 1971.
- Thomas F. Crum**, (1991) Director, Health and Wellness. M.S. and B.S., University of Illinois, Urbana, 1970 and 1969.
- Missy N. Crutchfield-Corn**, (1994) Director, Public Relations. B.S., University of Tennessee at Chattanooga, 1990.
- Mark A. Cunningham**, (1983) Manager, Systems Support, Computer Center. A.S., Chattanooga State Technical Community College, 1982.
- J. Cele Curtis**, (1991) Counselor, Career Planning and Placement. M.E., Guidance and Counseling, University of Tennessee at Chattanooga, 1996; B.S., Covenant College, 1991.
- Berta E. Davidson**, (1997) Assistant Director, Alternative Delivery Systems. B.A., Communication, University of Tennessee at Chattanooga, 1996.
- David W. Duvall**, (1987) Director, Retention/Tech. Prep. Programs. Ed.S., Middle Tennessee State University, 1978; M.Ed., Middle Tennessee State University, 1977; B.S., Middle Tennessee State University, 1971.
- James C. Durm**, (1997) Director, Administrative Systems, Computer Center. M.B.A., Business, Troy State University, 1980.
- Shirley Eldredge**, (1993) Director, Grants and Contracts, Business Office. B.S., Middle Tennessee State University, 1981.
- Nora S. Ernst**, (1991) Director, Institutional Research. Ph.D., University of North Texas, 1977; M.Ed., Northeastern Oklahoma State University, 1969; B.S., Westmar College, 1965.
- Juanita B. Finnell**, (1992) Coordinator, Services for Students with Disabilities/Emergency Response. M.S., University of Tennessee at Chattanooga, 1992.
- Gary L. Fisher**, (1993) Director, Media Production Center. B.A., University of Tennessee at Chattanooga, 1989.
- P. Andrew Forrester**, (1986) Coordinator, Student Services, TN Technology Center. B.S., University of Tennessee at Martin, 1984
- R. Bruce Franks**, (1995) Counselor, Business and Community Development. B.S., University of Tennessee, Chattanooga, 1990.
- Barbara A. French**, (1985) Coordinator, JTPA Program, Continuing Education.
- Paul L. Fuchear**, (1990) Director, Institutional Development, Institutional Advancement. M.Ed., Vanderbilt University, 1993. B.A., Southern College, 1980.
- Diane E. Garrett**, (1988) Coordinator, Curriculum Development. M.A., University of Tennessee, 1974; B.S., University of Tennessee, 1972.
- Donald W. Gibson**, (1992) Manager, Telephone Systems, Computer Center. B.S., University of Tennessee at Chattanooga, 1987.
- Karen L. Gibson**, (1991) Director, Financial Aid. M.Ed., University of Tennessee at Chattanooga, 1975. B.A., Middle Tennessee State University, 1964.
- Carolyn S. Gilliam**, (1997) Counselor, MultiCultural Services. B.S., Psychology, University of Tennessee at Chattanooga, 1979.
- Tanya Gorman**, (1982) Dean, Nursing/Allied Health. Associate Professor, Nursing. Ed.D., University of Tennessee, 1985; M.S.N., University of Tennessee Center for Health Sciences, Memphis, 1977; M.Ed., Memphis State University, 1975; B.S.N., Southern College, 1971; A.S.N., Loma Linda University, 1969.
- Scott R. Groninger**, (1995) Men's Basketball Coach/Counselor, Business & Community Development. M.S., Georgia Southern University, 1994.
- John C. Grosenbeck**, (1996) Technician, Chemistry. M.S.T., Chemistry, Portland State University, 1993.
- Robert C. Hawfield**, (1986) Technician, Industrial Technology, TN Technology Center. Master of Mathematics, University of Tennessee, 1994.
- Douglas P. Hampton**, (1996) Technician, Aerospace. A.S., Aviation Management and Machine Tool Technology, Chattanooga State Technical Community College, 1992.
- Jerry L. Hendrix**, (1997) Manager, Business and Industry Training, Business and Community Development Center. B.S., Business Administration, University of Tennessee at Chattanooga, 1975.
- Marcella P. Henry**, (1983) Librarian I. M.L.S., Louisiana State University, 1980; B.A., University of Pittsburgh, 1974.
- Fannie D. Hewlett**, (1979) Dean, Liberal Arts, Professor, Psychology, Department Head, Social and Behavioral Sciences. Ed.D., University of Tennessee, 1990; M.A., Fisk University, 1975; B.S., Belmont College, 1970.
- Carolyn J. Hill**, (1980) Manager, Employment and Job Analysis. B.S., University of Tennessee of Knoxville, 1966.
- Robert E. Hobgood**, (1996) Manager, Auditorium. B.A., University of Tennessee at Chattanooga, 1985.
- Linda R. Homa**, (1997) Academic Advisor, Allied Health. B.S., Organizational Management, Covenant College, 1997; A.A.S., Medical Lab Technology, Lakeland Community College, 1975.
- Timothy W. Hooker**, (1997) Assistant Manager, Writing Center, Developmental Studies. M.F.A. with ESL Certification, Creative Writing, University of Memphis, 1994; M.A., English, University of Tennessee at Chattanooga, 1990; B.A., Philosophy and Religion, University of Tennessee at Chattanooga, 1985.
- Herbert L. Hooper, Jr.**, (1967) Dean, Developmental Studies, Professor, Mathematics. Ed.D., University of Tennessee, 1979; M.M., Mathematics, University of Tennessee, 1965; B.S., University of Tennessee, 1960.
- Deborah S. Howe**, (1989) Programmer/Analyst 2, Computer Center. A.S., Chattanooga State Technical Community College, 1983.
- Steve C. Huskins**, (1993) Director, Plant Operations. B.S., University of Tennessee, 1978.
- Sue Y. Hyatt**, (1979) Director, Alternative Delivery Systems. B.S.Ed., Auburn University, 1964.
- Norma J. Johnson**, (1974) Specialist, Student Life. B.S., Tennessee Technological University, 1956.
- Betty M. Jones**, (1991) Coordinator, Intramurals/Men's and Women's Tennis Coach. B.S. University of Tennessee at Chattanooga 1989, U.S.P.T.A. Tennis Professional.
- Susan G. Joseph**, (1990) Director, Accounting, Business Office. B.S., University of Tennessee, 1982.
- Edward R. Kelly**, (1987) Assistant Director, Plant Operations. M.S., University of Tennessee, 1961; B.S., University of Tennessee, 1960.
- Sandra K. King**, (1992) Counselor, Developmental Studies. M.S., 1988. University of Tennessee, 1988; B.S., University of Tennessee, 1981.
- Sandra J. Kluttz**, (1991) Director, Student Activities. M.S., University of Tennessee, 1978; B.S. Carson Newman, 1977.
- Mary E. Knaff**, (1990) Affirmative Action Officer. M.S., University of Tennessee, Chattanooga, 1993. B.S., University of Tennessee at Chattanooga, 1982.
- Victoria P. Leather**, (1981) Dean, Library Services. M.S.L.S., University of Tennessee, 1978; B.A., University of Chattanooga, 1968.
- Norma L. Lee**, (1981) Academic Advisor, Business and Information Systems. B.S., Covenant College, 1994.
- Terrence E. Lee**, (1981) Programmer/Analyst 2, Computer Center. B.S., University of Tennessee at Chattanooga, 1980.
- William R. Littlejohn**, (1993) Technician, Biological Science. B.S., M.Ed., University of Tennessee at Chattanooga, 1989; A.S., Chattanooga State Technical Community College, 1986.
- M. Catherine Lunn**, (1987) Manager, Laboratory, Developmental Studies. A.S.,

1998-99 ADMINISTRATIVE

Chattanooga State Technical Community College, 1985.

Brenda R. Maples, (1987) Coordinator, Testing. A.S., University of Tennessee at Chattanooga.

Rosella Q. Marilao, (1996) Director, Human Resources. SPHR, M.P.A., Public Administration, California State University, 1979.

Donna G. Marsh, (1995) Specialist, Small Business Development, Continuing Education. M.S., University of Tennessee, 1963.

L. Ann Mawhinney, (1987) Director, Internal Audit. C. P. A., Certified Internal Auditor. B.B.A., University of Wisconsin, Milwaukee, 1975. M.S., 1979, University of Wisconsin, Milwaukee.

Thomas T. McCullough, (1990) Dean, Instructional Support. Ed.D., Vanderbilt University, 1986; M.S., University of Tennessee, 1974; B.S., University of Tennessee, 1969.

Jerry H. Meyerson, (1992) Director, Non-Credit Programs, Continuing Education. M.Ed., Mathematics, University of Tennessee at Chattanooga, 1996; M.E., Secondary Education, University of Tennessee at Chattanooga, 1996; B.S. Chemical Engineering, Clemson University, 1958.

Lawrence G. Miller, (1992) Vice President for Institutional Advancement. Ph.D., University of Texas, 1994. M.Ed., University of Arkansas, 1979. B.A., Humboldt State College, 1969.

Linda P. Miller, (1981) Director, Public Information. M.A., University of Tennessee at Chattanooga, 1990; B.A. University of Georgia, 1974.

M. Elaine Moniz, (1995) Specialist, Disabilities Support Services. M.S., University of Tennessee at Knoxville, 1973.

Judy E. Moore, (1997) Technician, Biological Sciences. M.Ed., Secondary Education, University of Tennessee at Chattanooga, 1991; B.A., Health and Physical Education, Rice University, 1977.

Barbara S. Morgan, (1968) Administrative Assistant to the President. A.S., Chattanooga State Technical Community College, 1967.

Diane C. Norris, (1982) Coordinator, Off-Campus Services.

Wanda Officer, (1996) Bursar, Business Office. B.S., Human Services Management, University of Tennessee at Chattanooga, 1996.

Tamara O. Oglesby, (1992) Academic Advisor, Liberal Arts. B.A., Spelman College, 1974.

Consuelo B. O'Neal, (1978) Vice President for Student Affairs. M.Ed., Memphis State University, 1977. B.S., Memphis State University, 1974.

Percy K. Parakh, (1995), Specialist, Computer Center. B.S., Mysore University, 1975.

Steve S. Pec, (1992) Assistant Librarian 1. M.L.S., Kent State University, 1992; M.A., Mississippi State University, 1988; M.A., State University of New York, 1969; B.A., State University of New York, 1968; A.A., Dutchess Community College, 1966.

Darryl J. Pirtle, (1994) Programmer/Analyst 2, Computer Center. B.S., Computer Science, Freed-Hardeman University, 1983.

Setina J. Pouengue, (1991) Director, Multi-Cultural Services. B.S. Georgetown University, 1989; A.A. Triton College, 1987.

Georgianne Ray, (1980) Director, Child Development Center.

Michael E. Ricketts, (1983) Director, Testing. M.Ed., Leadership Studies, University of Tennessee at Chattanooga, 1996; M.A., University of Alabama in Birmingham, 1979; B.A., Birmingham Southern College, 1974. A.A., Hiwassee College, 1972.

Bonnie H. Riggs, (1988) Assistant Director, Institutional Research. M.B.A., University of Tennessee at Chattanooga, 1996; B.S., Economics, University of Tennessee at Chattanooga, 1992.

George W. Abbott, (1981) Intermediate Vocational Teacher, Air Conditioning, Refrigeration and Heating, TN Technology Center. Diploma, Chattanooga Area Vocational Technical School 1980; A.S., Chattanooga State, 1988.

Marcia E. Abernathy, (1997) Instructor, Nursing. M.S.N., Nursing, University of Alabama, 1985.

Cinda J. Adams, (1992) Associate Professor, Social Sciences. M.S., University of Illinois at Urbana-Champaign, 1976; B.S., Jackson State University, 1974.

Deborah C. Ainscough, (1997) Instructor, Nursing. B.S.N., Nursing, Old Dominion University, 1988.

Bertha L. Alford, (1983) Associate Professor, Office Systems Technology. M.Ed., University of Tennessee at Chattanooga, 1985; B.S., Southern University, 1969.

Ebrahim M. Alipour, (1997) Instructor, Mechanical Engineering. P.E., 1984; A.S.M.E., 1988; M.E., Mechanical Engineering, Lamar University, 1981.

Kenneth D. Allen, (1997) Assistant Professor, Nuclear Medicine. M.S., Business Administration, Blemont University, 1995; B.A., Biology/Nuclear Medicine Technology, Austin Peay State University, 1989.

Truman G. Anderson, (1976) Professor, Management; Department Head, Accounting and Management. Ed.D. University of Tennessee, 1980; M.S., Tennessee Technological University, 1969; B.S., University of Chattanooga, 1966.

Donald F. Andrews, (1980) Professor, English; Department Head, English. Ph.D.,

Daryl G. Riley, (1980) Director, WAWL (Radio Station).

Paul A. Robertson, (1983) Technician, Developmental Studies. Master of Mathematics, University of Tennessee, 1994.

Susan E. Ruta, (1985) Technician, Chemistry. B.S., University of Tennessee at Chattanooga, 1985; B.A., University of Tennessee at Chattanooga, 1984.

Kathrandra D. Smith, (1994) Specialist, Public Information. M.A., University of North Carolina at Chapel Hill, 1994.

Jimmy Smithson, (1981) Dean, TN Technology Center. M.Ed., University of Mississippi, 1967; B.S., East Tennessee State University, 1962.

Elizabeth O. Soward, (1983) Director, Student Development. M.Ed., University of Tennessee at Chattanooga, 1985; B.S., University of Tennessee, 1959.

Cynthia W. Swafford, (1987) Director, Nursing. Ed.D., University of Tennessee, 1992; M.S.N., University of Michigan, 1970; B.S.N., State University of New York at Buffalo, 1968.

Elaine Swafford, (1988) Dean, Business and Community Development. M.Ed., Austin Peay University, 1982; B.S., Austin Peay State University, 1981.

Tammy L. Swenson, (1987) Vice President for Business and Finance. M.B.A., University of Tennessee at Chattanooga, 1991; B.S., Tennessee Technological University, 1983; Certified Public Accountant, State of Tennessee; Certified Government Financial Manager.

Pamela P. Temple, (1980) Librarian 1. M.L.S., George Peabody College, 1968; B.A., Middle Tennessee State University, 1967.

Lynda Timmons, (1989) Systems Programmer 1, Computer Center. B.S., University of Tennessee at Chattanooga, 1993.

William L. Tinker, (1990) Academic Advisor, Math and Sciences. B.S., University of Tennessee at Chattanooga, 1989.

Sandra D. Townley, (1997) Counselor, Developmental Studies. M.S., Clinical Psychology, University of Tennessee at Chattanooga, 1982; B.A., Psychology, Wesleyan College, 1975.

Thomas W. Trevor, III, (1989) Coordinator, Resource Development, Institutional Advancement. M.Ed., University of Tennessee at Chattanooga, 1976; B.S., University of Tennessee at Chattanooga, 1974.

Denese Walters Adams, (1995) Assistant Director, Financial Aid. B.A., Psychology and Social Relations, Lehigh University, 1976. Gina D. Wardlaw, (1991) Manager, Laboratory, Developmental Studies, A.S., Chattanooga State Technical Community College, 1988.

Gina D. Wardlaw, (1991) Manager, Laboratory, Developmental Studies. A.S., Chattanooga State Technical Community College, 1989.

Napoleon Williams, (1993) Assistant Director, Safety/Security. B.S., University of Tennessee at Chattanooga, 1996; A.S., Criminal Justice, Cleveland State Community College, 1974.

Sandra B. Williford, (1993) Assistant Librarian 1. M.L.I.S., Louisiana State University, 1988; B.A., University of Southwestern Louisiana, 1980.

Sandra J. Winton, (1997) Counselor, Financial Aid. B.S., Human Ecology, University of Tennessee at Chattanooga, 1992.

Melisa L. Wright, (1991) Coordinator, Graphic Arts, Public Information. B.S., Middle Tennessee State University, 1984.

Laura Young, (1994) Assistant Librarian 1. M.S.L.S., University of North Carolina, 1971.

Faculty

University of Tennessee, 1977; M.A., University of Alabama, 1973; A.B., University of Alabama, 1971; A.A., Florida College, 1969.

Jody Arnold, (1993) Instructor, Diagnostic Medical Sonography. B. S., Tennessee Wesleyan, 1994; A.S., Chattanooga State Technical Community College, 1986. R.D.M.S., R.T.(R).

Vernon F. Ball, (1978) Professor, English. Ph.D., Ball State University, 1976; M.A., Ball State University, 1967; B.S., Ball State University, 1966.

Sherri L. Barnes, (1993) Assistant Professor, Mathematics. M.S., University of Tennessee, 1992; B.S., University of Tennessee at Chattanooga, 1990.

Susan N. Bartley, (1997) Instructor, Developmental Studies - Mathematics. B.A., Secondary Education, University of Tennessee at Chattanooga, 1976.

Sharon V. Baum, (1983) Vocational Teacher, Cosmetology, TN Technology Center. Ray Reed Beauty College, 1965. Tennessee Instructors and Aesthetics License.

Paula Benford, (1987) Instructor, Adult Basic Education. B.A., University of Tennessee at Chattanooga, 1975

Cindy D. Birchell, (1993) Instructor, Physical Therapy. A.S., P.T.A., Chattanooga State, 1981. Licensed Physical Therapist Assistant in Tennessee.

Judy H. Boles, (1997) Instructor, Developmental Studies - English/Reading. M.Ed., University of Tennessee at Chattanooga, 1994.

Jane A. Bouldin, (1976) Associate Professor, Office Systems Technology. M.Ed.,

Faculty

- University of Tennessee at Chattanooga, 1975; B.S., University of Chattanooga, 1968; Certified Professional Secretary, 1983.
- Michael E. Brennan**, (1992) Associate Professor, Chemistry. Ph.D., University of Florida, 1967; M.S., University of Florida, 1965; B.S., University of Dayton, 1962.
- Dee K. Browder**, (1967) Associate Professor, English. M.A., West Georgia College, 1971; B.S., University of Chattanooga, 1965.
- Marilyn B. Brown**, (1979) Associate Professor, Mathematics. M.Ed., University of Tennessee at Chattanooga, 1975; B.S., Tennessee A&I State University, 1967.
- Neshawn Y. Bynum**, (1996) Instructor, Humanities. M.A., Music Education, University of Tennessee at Chattanooga, 1996; B.S., Music Education, University of Memphis, 1994.
- C. Stephen Byrum**, (1974) Professor, Humanities. Ph.D., University of Tennessee, 1976; M.A., University of Tennessee, 1974; Master of Divinity, Southern Seminary, 1971; B.A., Tennessee Wesleyan College, 1969.
- Joyce B. Campbell**, (1988) Associate Professor, Nursing. C.C.R.N., M.S.N., University of Tennessee, 1982; B.S.N., East Tennessee State University, 1964.
- Tina R. Cannon**, (1993) Instructor, Developmental Studies - Mathematics. M.Ed., Tusculum College, 1993; B.S., University of Tennessee at Chattanooga, 1989.
- Rebecca A. Cantrell**, (1988) Associate Professor, Developmental Studies - Writing. M.A., University of Tennessee at Chattanooga, 1990; B.S., Tennessee Wesleyan College, 1976; A.A., Hiwassee College, 1974.
- Ben W. Carr, Jr.**, (1975) Associate Professor, Aerospace. M.Ed., Middle Tennessee State University, 1972. B.S., Middle Tennessee State University, 1971.
- Karen W. Castleberry**, (1976) Assistant Professor, Dental Assisting Program. B.S., Organization Management, Covenant College, 1996; A.S., Chattanooga State, 1986; RDA, 1979; CDA, 1972; Certificate in Dental Assisting, 1972.
- R. Foster Chason**, (1976) Professor, Behavioral Sciences; Department Head, Social and Behavioral Sciences. D.A., Middle Tennessee State, 1984; M.S., East Tennessee State, 1975; B.S., East Tennessee State, 1974. National Certified Athletic Trainer, 1976.
- Shirley M. Clark**, (1992) Assistant Professor, Human Services. M.S.S.W, University of Tennessee, 1978; B.S., Middle Tennessee State University, 1976; A.S., Galveston College, 1972.
- Richard K. Clements**, (1994) Assistant Professor, Biology. Ph.D., Plant Ecology, University of Kentucky, 1995; M.S., University of Tennessee, 1987; B.S., Tennessee Technological University, 1984.
- Janice W. Cochran**, (1988) Assistant Professor, Chemistry; Department Head, Chemistry, Geology, and Physics. M.S., University of Georgia, 1980; B.S., University of Tennessee at Chattanooga, 1977.
- Charles L. Cofer**, (1988) Assistant Professor, Electrical/Electronic Engineering Technology. B.S.E., University of Tennessee at Chattanooga, 1986. P.E.
- Gay D. Cohen**, (1991) Assistant Professor, Nursing. M.S.N., University of Tennessee, 1981; B.S.N., University of Tennessee Center for Health Sciences, Memphis, 1974.
- Peter A. Collins**, (1983) Associate Professor, Mathematics. M.A., Eastern Michigan University, 1971; B.S., Eastern Michigan University, 1967.
- Patricia S. Conner**, (1997) Instructor, Nursing. B.S.N., Nursing, University of Tennessee at Chattanooga, 1985; B.A., Biology, University of Tennessee at Chattanooga, 1973.
- John E. Cousino**, (1991) Assistant Professor, Respiratory Care. M.A., University of South Florida 1986; B.A., University of South Florida 1984; A.S., Pasco Hernando Community College, 1977.
- Albert R. Covington**, (1983) Senior Vocational Teacher, Industrial Electronics, TN Technology Center. B.S., University of New York, 1986; A.S., Chattanooga State, 1967.
- John M. Davis**, (1981) Associate Professor, Information Systems. Ph.D., Purdue University, 1947. M.S., Purdue University, 1945. B.Ed. Illinois State University, 1941.
- Jarvis G. Dean, Jr.**, (1979) Associate Professor, Accounting. M.S., University of Tennessee, 1963; A.B., Duke University, 1957. Certified Management Accountant, 1984. C. P. A., Tennessee, 1979.
- Carolyn F. Dodson**, (1990) Associate Professor, Biology. M.S., Arizona State University, 1970; B.S., Southwest Missouri State University, 1968; Teacher Certification, University of Arkansas, 1972.
- T. Scott Douglass**, (1991) Associate Professor, English. Ph.D., Florida State University, 1982; M.A., Florida State University, 1979; B.A.; University of Tennessee at Chattanooga, 1977.
- Louie J. Edmundson**, (1979) Professor, English. D.A., Middle Tennessee State, 1975; M.A.T., Vanderbilt, 1960; B.A., Vanderbilt, 1959
- Linda S. Edwards**, (1985) Associate Professor, Developmental Studies - Reading. M.S., University of Tennessee at Chattanooga, 1982; B.S., University of Tennessee, 1977.
- Ann R. Ehmling**, (1988) Instructor, EMS Program. B.S., Covenant College, 1993; A.A.S., Chattanooga State Technical Community College, 1990. EMT-Paramedic, Volunteer State Community College, 1985.
- Joseph P. Everett**, (1976) Professor, Mathematics. Ed.D., Florida State, 1972; M.S., University of Southern Mississippi, 1963; B.S., University of Southern Mississippi, 1961; A.A., Copiah-Lincoln Junior College, 1959.
- Jerry L. Faulkner**, (1994) Assistant Professor, Environmental Science. Ph.D., University of Tennessee, 1994; M.S., University of Tennessee, 1987; B.S., Tennessee Temple University, 1983.
- JoAnne H. Favors**, (1988) Associate Professor, Nursing. M.S., Andrews University, 1989; B.S.N., University of the State of New York, 1983; A.S.N., Cleveland State Community College, 1973.
- D. Clay Ferguson**, (1976) Associate Professor, Management. M.Ed., University of Tennessee at Chattanooga, 1974. B.S., University of Chattanooga, 1970.
- David W. Fosbury**, (1991) Associate Professor, Chemistry. Ph.D., University of Birmingham, England, 1953; BSc., University of Birmingham, England, 1949.
- Toni W. Fountain**, (1992) Assistant Professor, Developmental Studies - Mathematics. M.Ed., University of Tennessee at Chattanooga, 1991; B.S., University of Tennessee at Chattanooga, 1988.
- Denise I. Frank**, (1979) Associate Professor, Art. M.A., University of Tennessee at Chattanooga, 1991; M.Ed., University of Florida, 1977; B.F.A., University of Florida, 1975; B.A., University of Florida, 1968.
- Jean H. Gammon**, (1981) Associate Professor, Developmental Studies - Reading. M.Ed., University of Tennessee at Chattanooga, 1977; B.S., University of Arkansas at Monticello, 1969; A.S., School of the Ozarks, 1966.
- Farrel Garnand**, (1988) Vocational Instructor, Automotive Technology, TN Technology Center. ASE Certified, Master Technician, 1989.
- James E. Garner**, (1983) Associate Professor, Mathematics. M.A., University of Mississippi, 1964; B.A., University of Mississippi, 1962.
- George G. Glass, Jr.**, (1977) Associate Professor, Developmental Studies and Environmental Science. M.S., North Carolina State University, 1974; B.S., North Carolina State University, 1968.
- Hisel H. Gobble**, (1978) Associate Professor, Accounting. M.B.A., East Tennessee State, 1974; B.A., Emory and Henry College, 1972.
- Efrem K. Graham**, (1997) Instructor, Communications/Broadcasting. M.S., Journalism, Columbia University, 1994; B.A., Literature, Richard Stockton College, 1992.
- Jesse R. Graham**, (1992) Assistant Professor, Hazardous Materials. M.S., Florida Institute of Technology, 1992; B.S., University of Tennessee, 1980.
- Billy D. Green**, (1969) Vocational Teacher, Machine Tool Technology, TN Technology Center. Teacher's Certificate, University of Tennessee, 1977. Diploma, Cincinnati Milling Machine Co., 1958.
- Donald W. Green**, (1986) Intermediate Vocational Teacher, Air Conditioning/Refrigeration and Heating, TN Technology Center. Certificate, Chattanooga State, 1984; A.B.S., McKenzie College, 1977.
- Yolanda J. Green**, (1988) Associate Professor, Nursing. M.S.N., University of Alabama in Birmingham, 1983; B.S.N., University of Tennessee at Chattanooga, 1980.
- Kelly L. Groninger**, (1996) Instructor, Nursing. B.S., Nursing, William Jewell College, 1984.
- Hennie Gunter**, (1988) Associate Professor, Nursing. M.S.N., University of Tennessee, 1981; B.S., Middle Tennessee State University, 1972; A.D.N., Middle Tennessee State University, 1971.
- M. David Haddock, Jr.**, (1979) Professor, Accounting. C.P.A., State of Tennessee, 1987; Ed.D., Auburn University, 1976; M.S., University of Tennessee, 1973. B.S., University of Tennessee, 1971.
- Sharon E. Hall**, (1988) Assistant Professor, Respiratory Therapy. Registered Respiratory Therapist, 1979; B.S., Respiratory Therapy, Mount Marty College, 1978.
- Jeanne L. Harrison**, (1997) Assistant Professor, Sustainability. M.S., Environmental Science, Washington State University, 1982.
- Betsy K. Headrick**, (1983) Associate Professor, Information Systems. M.S., University of Tennessee at Chattanooga, 1992; B.A.; A.S., Chattanooga State Technical Community College, 1983; University of Georgia, 1973.
- William J. Helseth**, (1980-83, 1992) Assistant Professor, Art. M.S., Florida State University, 1976; M.F.A., Pennsylvania State University, 1973; B.F.A., University of Florida, 1970.
- Alan D. Herweyer**, (1989) Associate Professor, Mathematics. M.A.T., Calvin College, 1985; M.S., Purdue University, Illinois, 1973; B.A., Calvin College, 1971.
- Sara J. Hill**, (1990) Associate Professor, Early Childhood Education. M.Ed., University of Tennessee at Chattanooga, 1987; B.S., University of Tennessee, 1978.
- Stuart R. Hilton**, (1989) Associate Professor, CAD/CAM Technology. M.S., University of Tennessee at Chattanooga, 1994; M.B.A., St. Joseph's, 1984; B.S., 1957.
- Robin H. Hoffecker**, (1993) Assistant Professor, Nursing. M.A.T.S., Gordon-Conwell Theological Seminary, 1985; M.N., Emory University, 1980; B.S.N., Medical College of Georgia, 1976.
- Max T. Holland**, (1989) Vocational Intermediate Teacher, Industrial Electricity, TN Technology Center. M.S., University of Southern Mississippi, 1965; B.S., University of Southern Mississippi, 1964.
- Shirley R. Hood**, (1995) Vocational Instructor, LPN Program, TN Technology Center. Diploma, Baroness Erlanger School of Nursing, 1971.
- Karla A. Horner**, (1992) Assistant Professor, English. M.F.A., Vermont College at Montpelier, 1988; B.S., Vanderbilt University, 1982.
- Don Hunt**, (1990) Vocational Instructor, Commercial Truck Driving, TN Technology

1998-99 ADMINISTRATIVE

Center. Certified Commercial Truck Driving Instructor, 1976.

Donald G. Hyde, (1979) Associate Professor, Management. M.S., Air Force Institute of Technology, 1968; B.S., Case Institute of Technology, 1958.

Alexis D. Jenkins, (1988) Intermediate Vocational Teacher, Medical Office Assistant Program, TN Technology Center. B.S., University of Tennessee at Memphis, 1970.

James C. Johnson, (1996) Vocational Instructor, Machine Tool Technology, TN Technology Center. Diesel Mechanic and Machine Tool Technology Certificate, Chattanooga State Technical Community College, 1991.

William A. Johnson, (1990) Associate Professor, Dental Auxiliary Programs. M.P.H. University of Michigan, 1973; D.M.D., University of Oregon Dental School, 1969; B.S., University of Oregon, 1966.

Jimmy E. Jones, (1996) Vocational Instructor, Marine/Small Engine Repair, TN Technology Center. A.A.S., Mechanical Engineering Technology, Chattanooga State Technical Community College, 1995.

Wayne C. Jones, (1981) Professor, Electrical/Electronic Engineering Technology. Ed.D. University of Tennessee, 1977; M.S., Oklahoma State University, 1970; B.S., Oklahoma State University, 1968; A.A.S., Kellogg Community College, 1965.

Angela L. Jordan, (1997) Instructor, Developmental Studies - Mathematics. M.S., Mathematics, Middle Tennessee State University, 1997.

Zia M. Kabiri, (1997) Instructor, Industrial Maintenance Technology. M.S., Engineering Administration, University of Tennessee at Chattanooga, 1981; B.S., Industrial Engineering, University of Tennessee at Chattanooga, 1970.

Patricia W. Kato, (1980) Associate Professor, Developmental Studies - Writing. M.A., East Tennessee State University, 1980; B.A., Tennessee Technological University, 1974; A.S., Columbia State Community College, 1972.

De'Lara M. Khalili, (1997) Instructor, English. M.A., English, University of Tennessee at Chattanooga, 1997.

Shirley A. Kilgore, (1985) Associate Professor, Nursing. M.S.N., University of Tennessee, 1986; B.S.N., University of Tennessee, 1977.

Virginia M. Kilgore, (1995) Vocational Instructor, Cosmetology, TN Technology Center. Cosmetologist Instructor License, Tennessee State Board of Cosmetology, 1993.

Sara E. Kuhn, (1980) Professor, Developmental Studies - English. Ed.D., University of Georgia, 1979; B.S., Louisiana State University, 1969.

Richard K. Lamerand, P.E., (1980-87, 1992) Associate Professor, Pre-Engineering Technology. B.S. Michigan Technological University, 1971; M.S., University of Houston, 1977.

Gilbert D. Lance, (1988) Associate Professor, Developmental Studies - Mathematics; Department Head, Developmental Studies in Mathematics. M.Ed., University of Tennessee at Chattanooga, 1981; B.S., Carson-Newman College, 1979.

Billie S. Lane, (1989) Assistant Professor, Biology. M.S., Louisiana State University, 1966; B.S., Northwestern State College, 1962.

K. Labron Lawson, (1989) Vocational Intermediate Teacher, Auto Body Repair, TN Technology Center. A.S., Applied Technology with Auto Body Repair, Chattanooga State Technical Community College, 1995. Diploma, Chattanooga Area Vocational Technical School, 1976. ASE Certified; ICAR Certified, Unibody.

Douglas M. Ledford, (1997) Instructor, Surgical Technology, TN Technology Center. Certified Surgical Technologist, 1984; B.S., Education, Tennessee Temple University, 1981.

Lisa Legg, (1993) Instructor, Radiation Therapy. B.S., Covenant College, 1994; Certificate, Radiation Therapy, Chattanooga State, 1992; A.S., Chattanooga State, 1990.

Charles L. Lewis, (1975) Associate Professor Developmental Studies - Study Skills; Department Head, Developmental Studies Counseling/Study Skills. Ed.S., Mississippi State University, 1971; M.Ed., Mississippi State University, 1970; B.S., Mississippi State University, 1969.

Patsy Littlejohn, (1978) Associate Professor, Dental Hygiene. M.Ed., Administration and Supervision, University of Tennessee at Chattanooga, 1987; B.S., University of Tennessee at Memphis, 1983.

Kathryn M. Loftis, (1977) Associate Professor, Developmental Studies. M.A., University of Alabama, 1970; University of Alabama, 1968.

Kathy L. Long, (1988) Associate Professor, Social Sciences. M.S., M.A., Florida State, 1973, 1974; B.A., Harding, 1972.

Sandra K. Lowery, (1996) Assistant Professor, Nursing. M.S., Nursing, Indiana University, 1978; B.S., Nursing, Washington University, 1968.

Beatrice R. Lyons, (1974) Associate Professor, Interpreter Training. M.S., University of Tennessee, 1965; B.S., University of Chattanooga, 1964. Council on Education of the Deaf Class A Teacher's Certificate, 1974. Expressive Interpreting Certificate, Expressive Transliterating Certificate, and Comprehensive Oral Interpreting Certificate from the National Registry of Interpreters of the Deaf, Inc., 1979, 1980.

Warren C. Mackey, (1976) Professor, Social Sciences. D.A., Middle Tennessee State University, 1980; M.S., Tennessee State, 1975; B.S., Tennessee State, 1972.

J. Charles Mahan, (1980) Associate Professor, English. M.A., University of Kentucky, 1973; B.A., University of Tennessee at Chattanooga, 1971.

Carol G. Martin, (1974) Associate Professor, Office Systems Technology. M.Ed., University of Tennessee at Chattanooga, 1976; B.S., University of Tennessee at Chattanooga, 1970. Certified Professional Secretary, 1983.

Frank B. Martin, (1976) Associate Professor, Management. M.B.A. University of

Tennessee at Chattanooga, 1976; B.S., University of Tennessee at Chattanooga, 1974; B.I.E., Georgia Tech, Atlanta, 1956.

Jack H. McEwen, (1983) Professor, Behavioral Sciences. Ed.D., University of Tennessee, 1972; M.Ed., University of Tennessee at Chattanooga, 1966; B.D., Southwestern Baptist Theological Seminary, 1961; B.S., University of Tennessee at Chattanooga, 1957; M.O., Baptist Bible College, 1952.

J. Jeffrey McEwen, (1995) Instructor, Social Sciences. M.A., University of Tennessee, 1995.

Grace G. Medley, (1988) Vocational Instructor, LPN Program, TN Technology Center. M.S., University of Tennessee at Chattanooga, 1987; B.S., University of Tennessee at Chattanooga, 1982; Diploma, Baroness Erlanger School of Nursing, 1961.

Carolyn S. Miller, (1989) Associate Professor, Developmental Studies. M.Ed., University of Tennessee at Chattanooga, 1976; B.S., University of Tennessee at Chattanooga, 1972.

Cheryl L. Miller, (1988) Associate Professor, Nursing. M.S.N., University of Tennessee, 1986; B.S.N., University of Tennessee at Memphis, 1973.

Stuart B. Miller, (1982) Senior Vocational Teacher, Landscaping and Turf Management, TN Technology Center. M.A.T., Rollins College, 1976; B.A., Rollins College, 1971. Vocational education, UCF, 1981.

James R. Morris, (1991) Associate Professor, Management. M.B.A., East Tennessee State University, 1972; B.S., University of Tennessee, 1964. Certified Public Accountant State, Tennessee, 1972.

M. Jeffrey Morris, (1996) Instructor, Advertising Arts. B.S., Mass Communications, Middle Tennessee State University, 1976.

Roy H. Morris, (1992) Vocational Instructor, Automotive Technology, TN Technology Center. Master ASE Certified in eight automotive fields, GM Master Technician.

Samuel J. Nalley, (1971) Professor, Physics. Ph.D., University of Tennessee, 1971; M.S., University of Tennessee, 1967; B.S., Arkansas State Teachers College, 1965.

Shirley F. Nelson, (1990) Associate Professor, English. M.A., Middle Tennessee State University, 1978; B.S., Middle Tennessee State University, 1971.

Edward C. Nichols, (1993) Associate Professor, Mathematics. Ph.D., M.S., University of Tennessee, 1986, 1983; B.S., Mississippi College, 1978.

R. Duane Nickols, (1979) Associate Professor, Civil Engineering Technology. P.E., A.S., C.E.T., Lexington Technical Institute, 1970; B.S.C.E. University of Kentucky, 1971.

Merrill B. Parker, (1976) Professor, Information Systems; Department Head, Information Systems. Ph.D., Peabody College of Vanderbilt University, 1979; M.S., University of Tennessee at Chattanooga, 1970; A.B. University of Chattanooga, 1968.

Richard C. Parker, (1991) Assistant Professor, Physics. M.S.E., University of Washington, 1970; B.S., University of Louisville, 1963.

Claire M. Peacock, (1988) Assistant Professor, Developmental Studies - Mathematics. M.Ed., University of Tennessee at Chattanooga, 1995; B.A., University of Tennessee at Chattanooga, 1969.

Richard C. Perkins, (1988) Vocational Intermediate Teacher, Technical Drafting, TN Technology Center. A.A., Chattanooga State Technical Community College, 1986.

John C. Peterson, (1990) Associate Professor, Mathematics. Ph.D., Ohio State University, 1969; M.A. and B.A., University of Northern Iowa, 1966, 1962.

Anita Polk-Conley, (1989) Assistant Professor, Developmental Studies - Mathematics. M.S., University of Tennessee Space Institute, 1986; B.A., University of Tennessee at Chattanooga, 1980.

Larry Ponder, (1979) Vocational Instructor, Welding Technology, TN Technology Center. Certified Combination Welder, 1976; Diploma, Chattanooga Area Vocational Technical School, 1976.

Roy J. Powell, (1986) Professor, Electrical/Electronic Engineering Technology. Ph.D., University of Miami, 1971; M.Ed., Florida Atlantic University, 1967; B.Ed., University of Miami, 1966.

Kathleen M. Puri, (1992) Assistant Professor, Nursing. Clinical Specialist, 1993; M.S.N., University of Connecticut, 1987; B.S., University of Hartford, 1974; Nursing Diploma, St. Francis Hospital School of Nursing, 1966.

Azar D. Raiszadeh, (1993) Assistant Professor, Developmental Studies - Mathematics. M.B.A., Southeastern Louisiana University, 1977; B.A., Tehran Business College, 1973.

Charles R. Ramsey, (1996) Vocational Instructor, Commercial Truck Driving, TN Technology Center.

Larry J. Ramsey, (1984) Senior Vocational Teacher, Industrial Electrics, TN Technology Center. M.S., University of Tennessee, 1989; B.S., Lincoln Memorial University, 1980.

Margaret S. Ramsey, (1988) Associate Professor, Mathematics. M.M., University of Tennessee, 1991; B.S., Tennessee Technological University, 1987; A.S., Chattanooga State Technical Community College, 1984.

Paul A. Ray, (1995) Instructor, Legal Assisting. J.D., University of Arkansas School of Law, 1988.

Linda P. Reaves, (1971) Associate Professor, English; Department Head, Humanities and Fine Arts. M.A., Columbia University, 1971; B.S., Mississippi University for Women, 1963.

Jane B. Reeder, (1979) Associate Professor, Humanities. M.S., University of Tennessee, 1955; B.S., East Tennessee State University, 1953.

- Ronald W. Reese**, (1983) Assistant Professor, Electrical/Electronic Engineering Technology. B.S., University of Tennessee, 1969.
- Joyce C. Rhoton**, (1977) Associate Professor, Biology. M.S., East Tennessee State University, 1969; B.S., East Tennessee State University, 1968; A.S., Hiwassee College, 1966.
- Jeffrey L. Rinkel**, (1995) Assistant Professor, English. M.A., University of Northern Iowa, 1982.
- Donna N. Roddy**, (1987) Senior Vocational Teacher, LPN Program, TN Technology Center; Coordinator, Practical Nursing/Surgical Technology. M.S.N., Andrews University, 1993; B.S.N., University of Tennessee at Chattanooga, 1989; R.N., Erlanger School of Nursing, 1972.
- Kathleen S. Rose**, (1996) Instructor, Nursing. M.S., Nursing, University of Tennessee at Chattanooga, 1996; B.S., Nursing, Ball State University, 1976.
- Leesa A. Ross**, (1996) Instructor, Nuclear Medicine. A.S., Nuclear Medicine Technology, West Virginia State College, 1991; C.N.M.T.
- McIver Rountree, Jr.**, (1987) Assistant Professor, Respiratory Care. B.S., Respiratory Care, Medical College of Georgia 1977.
- Curtis E. Rowell**, (1978) Associate Professor, Information Systems. B.S., Jacksonville State, 1961; Certified Data Processor, 1979.
- Deborah J. Rudd**, (1987) Associate Professor, English. M.A., University of Tennessee at Chattanooga, 1990; B.S., University of Tennessee at Chattanooga, 1981.
- Jo Ruta**, (1978) Associate Professor, Information Systems. A.S., Chattanooga State Technical Community College, 1970. B.S., University of Tennessee at Chattanooga, 1972. M.A., University, Tennessee at Chattanooga, 1976. Certificate, Data Processing (CDP), 1985. Certified Systems Professional (CSP), 1985.
- George R. Ryan**, (1996) Instructor, Developmental Studies. M.S., Electrical Engineering, California State University, 1986; B.S., Electrical Engineering, California State University, 1979.
- Margery K. Sanders**, (1997) Assistant Professor, Radiologic Technology. M.B.A., Business, University of Tennessee at Chattanooga, 1985; B.S. Education, University of Tennessee at Knoxville, 1967; A.S., Radiologic Technology, Chattanooga State Technical Community College, 1981.
- MaryBeth A. Sanders**, (1988) Associate Professor, Humanities. M.A., Middlebury College, 1985; B.A., The King@s College, 1983.
- Rose N. Scalise**, (1997) Instructor, Health Information Management. B.S., Health Records Administration, University of Pittsburgh, 1974.
- Marsha M. Schoonover**, (1983) Associate Professor, Mathematics. M.Ed, University of Tennessee at Chattanooga, 1981; B.S., University of Tennessee.
- Randolph C. Schulte**, (1995) Instructor, Management. M.A.T., Colgate University, 1977.
- Richard M. Seehus**, (1995) Instructor, English. MFA, Indiana University, 1993.
- William W. Shifflett**, (1984) Associate Professor, Accounting. M.B.A., University of Tennessee at Chattanooga, 1983; B.S., Troy State University, 1973. Certified Public Accountant, 1980; Certified Management Accountant, 1982; Certified Internal Auditor, 1983; Certified Fraud Examiner, 1991; Certified Quality Auditor, 1991; Chartered Financial Consultant, 1992; Certified Financial Planner, 1993; Chartered Life Underwriter, 1993; Fellow, Life Management Institute, 1989; Certified Cost Estimator/Analyst 1990.
- Gregory M. Smith**, (1992) Instructor, Radiologic Technology. R.T. (R), A.S., Chattanooga State Technical Community College, 1989; ARRT Certification, 1989.
- Joyce Smith**, (1987) Assistant Professor, Developmental Studies - Mathematics. B.S., Tennessee Technological University, 1973; A.S., Columbia State Community College, 1970.
- Kimberly W. Smith**, (1997) Instructor, Physical Education. M.S., Physical Education, University of Tennessee at Knoxville, 1988.
- Matthew J. Smith**, (1997) Assistant Professor, English. Ph.D., English, Purdue University, 1997.
- Merle L. Smith**, (1992) Vocational Teacher, Medical Office Assistant Program and LPN Program, TN Technology Center. B.S.N., University of Tennessee, 1962.
- Robert L. Smith**, (1990) Vocational Instructor, Diesel Technology, TN Technology Center. A.S.E. certified in eight automotive fields.
- Sarah S. Smith**, (1992) Assistant Professor, Nursing. M.S., Andrews University, 1994; B.S.N., University of Tennessee at Chattanooga, 1982.
- Walter Smith**, (1991) Associate Professor, EMS Program. NREMT-Paramedic, Chattanooga State Technical Community College, 1989; M.S., East Tennessee State University, 1970. B.S., East Tennessee State University, 1960.
- Laqueta A. Soule**, (1991) Instructor, Court Reporting. A.S. Chattanooga State Technical Community College 1986; A.S. Edmundson Junior College 1989.
- Betty K. Spaulding**, (1988) Associate Professor, Information Systems. M.Ed., Secondary Education, University of Tennessee at Chattanooga, 1988; B.A., History, University of Tennessee at Chattanooga, 1980.
- David Stanislawski**, (1994) Assistant Professor, Chemistry. Ph.D, University of Wisconsin at Madison, 1978; H.A.B., Xavier University, 1972.
- Mary Ann Stewart**, (1976) Associate Professor, Office Systems Technology. M.Ed., University of Tennessee at Chattanooga, 1976; B.S., University of Tennessee at Chattanooga, 1972.
- William L. Stifler, Jr.**, (1992) Assistant Professor, Developmental Studies - Writing. M.A., University of Tennessee at Chattanooga, 1991; M.R.E., Temple Baptist Theological Seminary, 1981; B.A., Tennessee Temple College, 1976.
- John A. Stigall**, (1981) Associate Professor, English. M.A., State University of New York, 1980; B.A., State University of New York, 1978. Chattanooga State@s Poet-in-Residence.
- Donald R. Stone**, (1969) Professor, Health Physics. Certified Diagnostic Radiological Physicist (A.B.R.), 1993; Ed.D., University of Tennessee, 1987; M.S., University of Tennessee, 1969; B.S., Austin Peay State University, 1957.
- Ken Storrs**, (1976) Associate Professor, Developmental Studies. M.S., University of Tennessee, 1980; B.A., University of Tennessee, 1971.
- Erik G. Stubsten**, (1996) Instructor, Developmental Studies. B.S., Environmental Studies, University of Tennessee at Chattanooga, 1994.
- Thomas B. Sturtevant**, (1989) Assistant Professor, Fire Science Technology. M.P.A., University of Tennessee at Chattanooga, 1993; B.S., Tusculum College, 1988; A.S., Georgia Military College, 1980.
- James A. Sutton, Jr.**, (1970) Associate Professor, Behavioral Sciences. M.A., Middle Tennessee State University, 1973; B.S., Western Carolina University, 1959.
- Glenda K. Thurman**, (1975) Associate Professor, Radiologic Technology. R.T. (R); M.Ed., Vanderbilt University, 1988; B.A., Covenant College, 1985; A.S., Chattanooga State Technical Community College, 1975; Diploma, Baroness Erlanger Hospital School of Radiologic Technology, 1968; Certification A.R.R.T., 1968. David M. Trayer, (1991) Associate Professor, Health Physics. Certified Industrial Hygienist (C.I.AAAH.), 1973; M.S., Harvard University, 1962; B.S., Emory and Henry College, 1954.
- Katherine H. Trotter**, (1997) Instructor, Psychology. Ph.D., Psychology, University of Tennessee at Knoxville, 1996.
- Theresa A. Underwood-Lemons**, (1995) Assistant Professor, Physics. Ph.D., University of Tennessee, 1990; B.S., University of Southern Mississippi, 1982.
- Cynthia R. Veach**, (1988) Associate Professor, Dental Hygiene. M.Ed., University of Tennessee at Chattanooga, 1992; B.S. University of Tennessee at Memphis, 1980; A.A.S., Guilford Technical Institute, Jamestown, N.C., 1968.
- Kathy Veal**, (1995) Vocational Instructor, LPN Program, TN Technology Center. Diploma, Baroness Erlanger School of Nursing, 1977.
- Margaret B. Venable**, (1981) Assistant Professor, Biology. M.S., Auburn University, 1976; B.S. Lambuth College, 1974.
- Hugh W. Vines**, (1983) Intermediate Vocational Teacher, Industrial Electricity, TN Technology Center. A.S., Chattanooga State Technical Community College, 1991. Journeyman electrician, 1972.
- Vicki L. Vonschaaf**, (1989) Intermediate Vocational Teacher, LPN Program, TN Technology Center. B.S., University of Tennessee at Chattanooga, 1981; Diploma, Baroness Erlanger School of Nursing, 1966.
- Hugh H. Walker**, (1981) Associate Professor, Mathematics; Department Head, Mathematics. M.A., Louisiana State University, 1962; M.A., George Peabody College of Vanderbilt University, 1956; B.S., Maryville College, 1953.
- Jane S. Wallace**, (1970) Associate Professor, Biology. M.A., Austin Peay State University, 1966; B.S., Austin Peay State University, 1961.
- Lewis A. Wallace**, (1988) Associate Professor, Advertising Arts. M. Div., Temple Theological Seminary, 1980; M.F.A., University of Georgia, 1970; B.S., Fine Art, Lamar University, 1972.
- Laura P. Warren**, (1984) Associate Professor, Physical Therapy. M.S., Physical Therapy, University of Tennessee at Memphis, 1996; B.S., Medical College of Georgia, 1979. Licensed Physical Therapist.
- Nancy V. Watts**, (1997) Assistant Professor, Pharmacy Technician Program. Pharm.D., Pharmacy, Mercer University/Southern School of Pharmacy, 1990.
- Dorothy T. Weathersby**, (1981) Professor, English. Ed.D., University of Tennessee, 1975; M.A., B.A., George Peabody College for Teachers, 1967 and 1966.
- Brenda G. White**, (1996) Instructor, Radiologic Technology. B.S., Nursing, University of Tennessee at Chattanooga, 1994; R.T., Erlanger Hospital School, 1968.
- Mary E. White**, (1996) Instructor, Developmental Studies. B.S., Secondary Education - Mathematics, University of Tennessee at Chattanooga, 1992.
- Dean S. Wiley**, (1975-83, 1993) Professor, English. Ed.D., University of Tennessee, 1983; M.Ed., Southern University, 1969; B.S., Jackson State University, 1967.
- Lucy Wood**, (1995) Vocational Instructor, Surgical Technology, TN Technology Center. BSN, University of Tennessee at Chattanooga, 1983.
- Mark W. Wood**, (1992) Assistant Professor, Art. M.F.A., Yale University, 1987; B.F.A., East Tennessee State University, 1985.
- Suzanne A. Wood**, (1992) Assistant Professor, Early Childhood Education. M.S., University of Tennessee, 1979; B.S., University of Tennessee, 1977.
- Amanda A. Wynn**, (1971) Associate Professor, English. M.A., Virginia Polytechnic Institute and State University, 1969; B.A., Tennessee Technological University, 1961.
- Jane M. Yantis**, (1984-86, 1988) Associate Professor, Biology. M.S., Cornell University, 1984; B.S., Virginia Polytechnic Institute and State University, 1981.
- Howard L. Yarbrough**, (1973) Professor, Biology; Department Head, Biology and Environmental Sciences. Ed.D, The University of Tennessee, 1986; M.A., Austin Peay, 1966; B.S., Austin Peay, 1965.



Southern Association of Colleges and Schools

ACCREDITATION

144

AMERICAN BAR ASSOCIATION
LEGAL ASSISTING TECHNOLOGY

COMMISSION ON DENTAL ACCREDITATION OF THE
AMERICAN DENTAL ASSOCIATION
(A specialized accrediting body recognized by the
Council on Postsecondary Accreditation by the
United States Department of Education)

DENTAL ASSISTING
DENTAL HYGIENE

COMMISSION ON ACCREDITATION OF ALLIED HEALTH
EDUCATION PROGRAMS (CAAHEP)

DIAGNOSTIC MEDICAL SONOGRAPHY
(in cooperation with JRCEDMS)

HEALTH INFORMATION MANAGEMENT
(in cooperation with AHIMA)

RESPIRATORY CARE
(in cooperation with JRCRTE)

SURGICAL TECHNOLOGY

COMMISSION ON ACCREDITATION IN
PHYSICAL THERAPY EDUCATION
PHYSICAL THERAPIST ASSISTANT

JOINT REVIEW COMMITTEE ON EDUCATION IN
DIAGNOSTIC MEDICAL SONOGRAPHY (JRCEDMS)
DIAGNOSTIC MEDICAL SONOGRAPHY

JOINT REVIEW COMMITTEE ON EDUCATIONAL
PROGRAMS IN NUCLEAR MEDICINE TECHNOLOGY
NUCLEAR MEDICINE TECHNOLOGY

JOINT REVIEW COMMITTEE ON EDUCATION IN
RADIOLOGIC TECHNOLOGY

RADIATION THERAPY TECHNOLOGY
RADIOLOGIC TECHNOLOGY

NATIONAL COURT REPORTERS ASSOCIATION
COURT REPORTING

NATIONAL LEAGUE FOR NURSING
NURSING

TECHNOLOGY ACCREDITATION COMMISSION
OF THE ACCREDITATION BOARD FOR
ENGINEERING AND TECHNOLOGY
ELECTRICAL/ELECTRONIC ENGINEERING
TECHNOLOGY
COMPUTER SYSTEMS CONCENTRATION
AUTOMATED CONTROLS CONCENTRATION
MECHANICAL ENGINEERING TECHNOLOGY

Chattanooga State Technical Community College Official Bulletin, Volume XXIII, January 1998

Chattanooga State Technical Community College is an equal opportunity/affirmative action institution and welcomes applications for employment and educational programs from all individuals regardless of race, color, religion, sex, or national origin. Chattanooga State Technical Community College is non-discriminatory on the basis of sex in its educational programs and activities, including employment and admission of students to the College as required by Title IX of the Educational Amendments of 1972 and by rules and regulations based thereon and published as 45 C FR, part 86.

Chattanooga State Technical Community College complies fully with the Rehabilitation Act of 1973 and does not discriminate against the disabled.

Chattanooga State Technical Community College is one of 46 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. The Tennessee Board of Regents is the

governing board for this system which is comprised of six universities, fourteen community colleges, and twenty-six area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education. Crime statistics, rate, and institutional security policies and procedures are available upon request.

*This catalog is intended for information purposes only. Requirements, rules, procedures, courses and informational statements set forth herein are subject to change. Notice of changes will be conveyed to duly enrolled students and other appropriate persons at the time such changes are effected. The period during which the degree requirements set forth in this catalog shall remain in effect, subject to changes provided herein, shall not exceed five (5) years from the beginning of the **Fall 1998** academic term.*

A

A Community College Guarantee65
 Academic Calendar and Credit System72
 Academic Calendar for 1998-994
 Academic Fresh Start.....71,72,84
 Academic Honors72-73
 Academic Load.....73
 Academic Performance Scholarship.....81
 Academic Probation/Suspension 73-74
 Academic Programs2-4
ACADEMIC REGULATIONS72-79
 Academic Calendar and Credit System72
 Academic Fresh Start.....71,72,84
 Academic Honors72-73
 Academic Load73
 Academic Retention Standards73-74
 Change of Name/Address74
 Change of Registration (Add/Drop).....74
 Change of Status74
 Class Attendance74-75
 Class Cancellation.....75
 Classification of Students75
 Co-op Credit75
 Correspondence Credit75
 Course Substitutions75
 Diplomas75
 General Expectations72
 Grade Appeal76
 Grading Policy.....75-77
 Graduation Requirements77
 Indebtedness.....77
 Industrial Technology Certificate, AAS Degree Articulation77-78
 Notification to Students Regarding Testing as a
 Degree Requirement79
 Privacy Rights of Students78-79
 Probation/Suspension73-74
 Retention of Records79
 Transcript Evaluation.....79
 Transcripts.....79
 Undecided Majors.....79
 Video Independent Study Courses.....79
 Withdrawal from College79
 Academic Retention/Attendance, (Industrial Technology Division)62
 Academic Retention Standards.....73
 Academic Suspension.....73-74
 Academic Terminology5-6
 Accounting Courses.....93
 Accounting (Transfer)44
 Accounting Technology Concentration10
 Accounting Technology Major10
 Accounting Technology Concentration10
 Financial Planning Concentration12-13
 Accreditation.....144
 ACT66-69
 Adaptive Computer Lab85
 Adaptive Physical Education.....129

ADMISSION INFORMATION66-71
 General Admission Requirements66
 Admission Procedures66-70
 Associate Degree Programs66
 First Time Freshmen66
 Transfer Students66
 International Students67
 Manadatory Placement Requirements67
 High School Unit Requirements.....67-68
 Industrial Technology Programs68
 Technical Certificate Programs.....68
 Special Students68
 Transient Students.....68
 Early Admission68-69
 Audit.....69
 Senior Citizens and Persons with Disabilities69
 Non-Residents.....69
 Readmission.....69-70
 Alternative Sources of Credit.....70-71
 Orientation71
 Residency Classification.....71
 Veterans71
 Admission/Retention Policies, Nursing and Allied Health.....29-30
 Admission, Industrial Technology.....62,68,77
 Adult Basic Education/GED Preparation88
 Advanced Placement (AP) Credit70
 Advertising Arts Courses93-94
 Advertising Arts Major10
 African American Grant, see "Minority Grant"
 Air Conditioning and Refrigeration10-11,58,62,77-78
 Air Conditioning and Refrigeration Courses.....94
 Alternative Sources of Credit.....70-71
 American Council on Education (ACE).....71
 American History Requirement43
 American Sign Language Studies Courses94
 American Sign Language Studies Major.....26
 Appeal of Academic Suspension74
 Appeal of Developmental Suspension.....74
 Appeal of Grade76
 Appeals (Academic)74,76
 Appeals (Financial Aid).....83,84
 Applicable Catalog77
 Application for AdmissionLast Insert
 Application for Graduation77
 Applied Technology Major10-11,62,77-78
 Aboriculture Courses.....94-95
 Art Courses95
 See also "Advertising Arts"
 Art Education (Transfer)44
 Art (Transfer)44
 Articulation.....42,62,77-78
 Associate Degree (Minimum Requirements)8,42
 Associate of Applied Science Degree3,8,77
 Associate of Arts Degree2,42,77
 Associate of Science Degree2,42,77
 Attendance.....34,62,74-75,84,87
 Audit Student69

1998-99 CATALOG INDEX

Auto Body Repair10-11,58,62,77-78
 Auto Body Repair Courses.....95
 Automated Controls Concentration.....18-19
 Automotive Technology10-11,58,62,77-78
 Automotive Technology Courses95
 Aviation Courses95-96
 Aviation Management Concentration11
 Award Notification (Financial Aid).....82

B

Banking and Financial Management Concentration11-12
 Banking Courses.....96-97
 Biology Courses.....97
 Biology (Transfer)44-45
 Board of Associates138
 Board of Regents138
 Books and Supplies80
 Broadcasting Courses, see “Mass Communications”
 Broadcasting (Transfer)45
 Business Accounting Courses, see “Accounting”
 Business Administration (Transfer)45

BUSINESS AND COMMUNITY DEVELOPMENT CENTER.....89

Community Outreach.....89
 Placement Services89
 Cooperative Education.....89
 High School Recruitment89

BUSINESS AND INFORMATION SYSTEMS DIVISION10-18

Accounting Technology Major.....10,12-13
 Accounting Technology Concentration10
 Advertising Arts Major10
 Applied Technology Major10-11,62,77-78
 Aviation Management Concentration11
 Banking and Financial Management Concentration11-12
 Computer Science, see “Information Systems Technology”
 Computer Programming, see “Information Systems Technology”
 Court Reporting Concentration.....12
 End User Support Concentration12
 Financial Planning Concentration12-13
 General Management Concentration13
 Health Services Management Concentration13-14
 Hospitality Management Concentration14
 Industrial Management Concentration14
 Information Systems Technology Major12,17
 Information Systems Technology Certificate15
 Insurance Management Concentration15
 Legal Assisting Technology Major.....15
 Management Major.....11,12,13,14,15,16,17,18
 Marketing Concentration16
 Microcomputer, see “End User Support”
 Office Systems Technology Concentration16
 Office Systems Technology Major12,16
 Paralegal, see “Legal Assisting”
 Programming Concentration.....17
 Retail Management Concentration17
 Small Business Management Concentration.....17-18
 Word Processing Certificate18

Business Courses, see “Accounting,” “Advertising Arts,” “Aviation,”
 “Banking,” “Court Reporting,” “Financial Management,” “Financial
 Planning,” “Hospitality Management,” “Industrial Management,”

“Information Systems,” “Insurance,” “Legal Assisting,”
 “Management,” “Medical Office Management,” “Office Systems,”
 and “Real Estate”

Business Law Courses, see “Accounting”
 Business Management Courses, see “Management”

C

CAD/CAM Technology Major19
 CAD Courses99
 Calculation of Grade Point Average (GPA).....76
 Calendar4
 Calendar and Credit System72
 Cardiopulmonary Resuscitation Courses (CPR), see “Emergency Medical
 Services”
 Career Planning89-90

CAREER PLANNING AND COUNSELING SERVICES

CENTER89-90
 Career Planning89-90
 Counseling Services.....90

CAREER PROGRAMS7-40

General Information/General Education8-9
 Business and Information Systems Division.....10-18
 Engineering and Environmental Technologies Division.....18-25
 Liberal Arts Division26-27
 Mathematics and Sciences Division28
 Nursing and Allied Health Division.....29-40

Certificate Student68,77,82
 Certificates Offered4
 Certificates, Industrial Technology (Vocational).....4,57-62
 Certificates, Technical4,68,77,82
 Change of Name or Address74
 Change of Registration (Drop/Add)74
 Change of Status74
 Chattanooga State Academic Performance Scholarship81
 Chattanooga State Foundation Scholarship.....81
 Chemical Plant Operations Technology Concentration19-20
 Chemical Technology Concentration20
 Chemical Technology Courses97-98
 Chemistry (Transfer)45,46
 Chemistry Courses.....98
 Child Development Center90
 Civil Engineering Technology Courses.....98-99
 Civil Engineering Technology Major20
 Class Attendance34,62,74-75,84,87
 Class Cancellation75
 Class Load, see “Academic Load”
 Classification of Students75
 CLEP Credit.....70
 Commencement Honors72
 Communication Courses, see “Mass Communications”
 Communications (Transfer), see “Broadcasting” and “Journalism”
 Commercial Truck Driving.....58

Commercial Truck Driving Courses.....99
 Community Outreach.....89
 Computer-Aided Design Technology Courses99
 Computer-Aided Drafting/Design, see “CAD/CAM Technology”
 Computer Electives.....8,42
 Computer Courses, see “Information Systems”
 Computer Programming, see “Information Systems”
 Computer Repair, see “Industrial Electronics”
 Computer Science, see “Information Systems”
 Computer Systems Concentration20-21

CONTINUING EDUCATION AND CORPORATE SERVICES.....85
 The Division of Continuing Education.....85
 Corporate Services.....85
 The Continuing Education Unit (CEU).....85
 WorkKeys Service Center.....85

Co-op Courses99
 Co-op Credit75
 Cooperative Education.....75,89
 Cooperative Education Courses.....99
 Correspondence Credit75
 Cosmetology58
 Cosmetology Courses100
 Counseling Services.....90
 Course Abbreviations.....92
 Course Add74
 Course Drop74

COURSE DESCRIPTIONS91-136

Course Load, see “Academic Load”
 Course Substitutions75
 Court Reporting Concentration12
 Court Reporting Courses100
 Creative Writing Courses, see “English”
 Credit by Examination70
 Credit for Life Experience.....70
 Credit Load, see “Academic Load”
 Credit, Military Service71
 Credit System.....72
 Criminal Justice26
 Curriculum Guides (Transfer Programs).....44-56

D

Deaf and Hard of Hearing Program85-86
 Dean’s List72
 Degrees Offered2-4
 Degree Seekers (Admissions)66-68
 Dental Assisting Courses100
 Dental Hygiene Courses100-101
 Dental Hygiene Major30-31
 Developmental Studies87-88
 Developmental Suspension (Two-Attempt Rule).....74,87

Diagnostic Medical Sonography (Technical Certificate)31
 Diagnostic Medical Sonography Courses101-102
 Diesel Equipment Mechanics10-11,59,62,77-78
 Diesel Equipment Mechanics Courses102
 Dietary Manager Courses102-103
 Diplomas75
 Disabilities Support Courses103
DISABILITIES SUPPORT SERVICES85-86
 Adaptive Computer Lab85
 Deaf and Hard of Hearing Program85-86
 Emergency Medical Assistance86
 Dishonored Checks80
 Distance Learning Program86
 Double Certificate.....77
 Double Degree77
 Double Major.....77
 Drafting Courses, see “Technical Drafting,” “Computer-Aided Design Technology,” and “Mechanical Engineering Technology”
 Drafting, Technical, see “Technical Drafting”
 Drama (Transfer)46
 Drama Courses.....103
 Drop/Add74
 Drop Deadline.....74

E

Early Admission68-69
 Early Childhood Education Courses, see “Education”
 Early Childhood Education Major26-27
 Early Childhood Education (Transfer)46
 Economics Courses.....103
 Economics (Transfer)46,47
 Education (Transfer).....44,46,47,54,55
 Education Courses103-104
 Electrical/Electronic Engineering Technology Courses.....104-106
 Electrical/Electronic Engineering Technology Major18-19,20-21,24-25
 Automated Controls Concentration18-19
 Computer Systems Concentration20-21
 Networking Technology Concentration24-25
 Electrician, see “Industrial Electricity”
 Electronics, Industrial, see “Industrial Electronics”
 Elementary Education (Transfer)47
 Emergency Medical Assistance86
 Emergency Medical Care Concentration.....21
 Emergency Medical Services Courses106-107
 Emergency Service Supervision and Administration Concentration ...21-22
 End User Support Concentration12
 Engineering Technology Courses107
 See also: “Civil Engineering Technology,” “Computer-Aided Design Technology,” “Electrical/Electronic Engineering Technology,” “Maintenance Technology” “Mechanical Engineering Technology,” “Plant Systems Administration (BOMA),” “Quality Technology”

ENGINEERING AND ENVIRONMENTAL TECHNOLOGY DIVISION18-25

- Automated Controls Concentration.....18-19
- CAD/CAM Technology Major19
- Chemical Plant Operations Technology Concentration19-20
- Chemical Technology Concentration.....20
- Civil Engineering Technology Major20
- Computer Systems Concentration20-21
- Electrical/Electronic Engineering Technology Major.....18-21,24-25
- Emergency Medical Care Concentration.....21
- Emergency Service Supervision and Administration Concentration21-22
- Environmental Health and Safety Technology Major.....22-24
- Environmental Protection Technology Concentration.....22
- Environmental Protection Technology Major.....19-20,22-23
- Environmental Remediation Technology Concentration22-23
- Fire Science Technology Major21-24
- Fire Suppression Concentration.....23
- Health Physics and Industrial Hygiene Concentration23-24
- Mechanical Engineering Technology Major24
- Networking Technology Concentration24-25
- Occupational Health and Safety Technology Concentration.....25

Engineering Transfer Courses107

English as a Second Language, see “Adult Basic Education”

English Courses107-109

English Education (Transfer), see “Secondary Education: English”

English (Transfer)47

Entrance Deficiencies, Removal of43

Entrance Requirements.....67-68

Environmental Health and Safety Technology Major.....22,23,24,25

- Health Physics and Industrial Hygiene Concentration.....23,24
- Occupational Health and Safety Technology Concentration.....25

Environmental Protection Technology Concentration22

Environmental Protection Technology Major.....19,20,22-23

- Chemical Plant Operations Technology Concentration19-20
- Chemical Technology Concentration.....20
- Environmental Protection Technology Concentration.....22
- Environmental Remediation Technology Concentration22-23

Environmental Remediation Technology Concentration22-23

Environmental Science Courses109

Environmental Studies (Transfer).....47

Environmental Technology, see “Environmental Protection Technology”

Environmental Technology Courses, see “Hazardous Materials”

ESL Courses, see “Adult Basic Education”

Exit Testing77,79

Expenses and Fees80

F

- Faculty and Staff140-143
- Families First Program87
- Federal Family Educational Loans82
- Federal Financial Aid81-82
- Federal Pell Grant.....81
- Federal Plus Loans.....82
- Federal Stafford Loan82
- Federal Supplemental Educational Opportunity Grant (FSEOG).....81
- Federal Unsubsidized Stafford Loan82
- Federal Work Study82

- Fee Policy80
- Fee Schedule80
- Fees Charged in Addition to Maintenance and Tuition.....80

FINANCIAL AID81-84

- Appeals83
- Federal Family Educational Loans82
- Federal Financial Aid.....81
- Financial Aid Policies and Procedures82
- Financial Aid Repayment Policies82-83
- Other Financial Aid Sources.....84
- Policies and Procedures of Financial Aid Appeals Committee.....83
- Quality Assurance Program81
- Satisfactory Academic Progress Standards83-84
- Scholarships81

Financial Information80

Financial Management Courses.....109

Financial Planning Concentration12-13

Financial Planning Courses109

Fire Science Courses109-110

Fire Science Technology Major21-24

- Emergency Medical Care Concentration.....21
- Emergency Service Supervision and Administration Concentration.....21-22
- Fire Suppression Concentration.....23

Fire Suppression Concentration.....23

First Time Students66

Foreign Language Courses, see “French,” “German,” “Japanese, see ‘Humanities,’ ” “Spanish”

Foreign Language Placement42

Foreign Language (Transfer).....47,48,56

Foreign Student67

Forestry Courses110-111

Forestry, Fisheries or Wildlife (Transfer).....47

French Courses.....111

French (Transfer).....47

Freshman Admission66

Freshman Orientation Course111

Full-Time Student Credit Load.....73

G

- GED62,66,67,68,80,81,84,87,89
- GED Test.....87,88
- General Education8-9,42-43

GENERAL INFORMATION63-90

- A Community College Guarantee.....65
- Academic Regulations.....72-79
- Admission.....66-71
- Continuing Education and Corporate Services.....85
- Disabilities Support Services.....85-86
- Distance Learning Program86
- Families First Program87
- Financial Aid81-84
- Financial Information80
- History.....64
- Instructional Materials Center87-88
- Library Services.....88
- Notice to Students.....65
- Statement of Mission.....64-65

The Small Business Development and Resource Center90
 Telephone Numbers90
 The Business and Community Development Center89
 The Career Planning and Counseling Services Center89-90
 The Child Development Center90
 General Management Concentration13
 General Transfer Program42
 Geography Courses111
 Geography (Transfer)48
 Geology Courses111
 German Courses111
 German (Transfer)48
 Grade Appeal76
 Grade Point Average (GPA)73,76,83
 Grade System75-76
 Grading Policy75-76
 Graduation Honors72
 Graduation Requirements77
 Graduation Residency Requirements77
 Graphic Design Courses, see "Art"
 Graphic Design (Transfer)48
 Grants81
 Greenhouse, see "Landscaping and Turf Management"
 Guarantee65

H

Hamilton County Legislative Delegation138
 Hazardous Materials Courses111-112
 Hazardous Materials Technology, see "Environmental Remediation Technology"
 Health and Physical Education Courses (non-activity)112-113
 Health and Physical Education (Transfer)48
 Health Information Management Courses113
 Health Information Management Major31-32
 Health Physics and Industrial Hygiene Concentration23-24
 Health Physics Courses113
 Health Science Courses113-114
 Health Services Management Concentration13-14
 Hearing Impaired, see "American Sign Language"
 High School Unit Requirements67
 History and Purpose of Chattanooga State64-65
 History Courses114-115
 History (Transfer)48
 Honors72-73
 Honors Program73
 Horticulture, see "Landscaping and Turf Management"
 Hospitality Management Concentration14
 Hospitality Management Courses115
 Human Services Courses115-116
 Human Services Specialist Major27
 Humanities Courses116

Humanities Electives8-9,42-43
 Humanities (Transfer)49
 HVAC, see "Air Conditioning and Refrigeration"

I

Indebtedness77
 Industrial Electricity10-11,59,62,77-78
 Industrial Electricity Courses116
 Industrial Electronics10-11,59,62,77-78
 Industrial Electronics Courses116-117
 Industrial Hygiene, see "Health Physics and Industrial Hygiene"
 Industrial Hygiene Courses117
 Industrial Maintenance Mechanics10-11,59,62,77-78
 Industrial Maintenance Mechanics Courses117
 Industrial Management Concentration15
 Industrial Management Courses117
 Industrial Technology Academic Policies62
 Industrial Technology Admission62,68,77
 Industrial Technology Certificates4,57-62,77
 Industrial Technology Certificate/AAS Degree Articulation Agreement62,77-78
 Industrial Technology Division (Financial Aid)84
INDUSTRIAL TECHNOLOGY PROGRAMS57-62
 Air Conditioning and Refrigeration58
 Auto Body Repair58
 Automotive Technology58
 Commercial Truck Driving58
 Computer Repair, see "Industrial Electronics"
 Cosmetology58
 Diesel Equipment Mechanics59
 Drafting, see "Technical Drafting"
 Electrician, see "Industrial Electricity"
 Greenhouse, see "Landscaping and Turf Management"
 Horticulture, see "Landscaping and Turf Management"
 HVAC, see "Air Conditioning and Refrigeration"
 Industrial Electricity59
 Industrial Electronics59
 Industrial Maintenance Mechanics59
 Landscaping and Turf Management60
 LPN, see "Practical Nursing"
 Machine Tool Technology60
 Marine Engine Technology60
 Mechanic, see "Automotive Technology," "Diesel Equipment Mechanics," "Marine Engine Technology"
 Medical Office Assisting60
 Ornamental Horticulture, see "Landscaping and Turf Management"
 Practical Nursing60-61
 Surgical Technology61
 Technical Drafting61
 Truck Driving, see "Commercial Truck Driving"
 Welding61
 Information Systems Courses117-118
 Information Systems Technology Major12,15,17
 End User Support Concentration12
 Programming Concentration17
 Information Systems Technology (Technical Certificate)15
 Information Systems (Transfer)49
 Institutional Work Program82

1998-99 CATALOG INDEX

Instructional Labs88

INSTRUCTIONAL MATERIALS CENTER87-88

 Testing Center87

 Developmental Studies.....87-88

 Adult Basic Education/GED Preparation88

Insurance Courses.....118-119

Insurance Management Concentration15

Interdisciplinary Studies Courses119

International Student.....67

Interpreter Training, see “American Sign Language Studies”

Interpreters, see “Deaf and Hard of Hearing Program”

J

Japanese Courses, see “Humanities”

Job Skills Development Courses119

Job Training Partnership Act (JTPA).....84

Joint Enrollment.....69

Journalism (Transfer)49

L

Landscaping and Turf Management.....10-11,60,62,77-78

Landscaping and Turf Management Courses119

Late Registration Fee.....80

Leadership Courses, see “Humanities,” “Interdisciplinary Studies,”
 “Management,” and “Psychology”

Legal Assisting Courses119-120

Legal Assisting Technology Major.....15

LIBERAL ARTS DIVISION26-27

 American Sign Language Studies.....26

 Criminal Justice26

 Early Childhood Education26-27

 Human Services Specialist27

Library Services.....88

Literature Courses, see “English”

Load, Student Academic, see “Academic Load”

Loans.....82

LPN, see “Practical Nursing”

LPN Transition Program.....36

M

Machine Tool Technology10-11,60,62,77-78

Machine Tool Technology Courses120

Machine Transcription, see “Office Systems”

Magnetic Resonance Imaging Courses, see “Radiologic Technology”

Maintenance Technology Courses120

Mammography Courses120-121

Management Courses121-122

 See also: “Hospitality Management,” “Industrial Management,” and
 “Medical Office Management”

Management Major11-18

 Aviation Management Concentration11

 Banking and Financial Management Concentration11-12

 General Management Concentration13

 Health Services Management Concentration13-14

 Hospitality Management Concentration14

 Industrial Management Concentration14

 Insurance Management Concentration15

 Marketing Concentration16

 Retail Management Concentration17

 Small Business Management Concentration.....17-18

Management (Transfer)49

Mandatory Placement Requirements67,87

Marine Engine Technology10-11,60,62,77-78

Marine Engine Technology Courses.....122

Marketing Concentration16

Marketing Courses, see “Management”

Marketing (Transfer)49-50

Mass Communications Courses.....122

Mass Communications (Transfer), see “Broadcasting” and “Journalism”

Math Placement9,43

MATHEMATICS AND SCIENCES DIVISION28

 Pharmacy Technician Certificate28

Mathematics Center88

Mathematics Courses122-123

Mathematics Education (Transfer), see “Secondary Education: Mathematics”

Mathematics Electives9,43

Mathematics (Transfer)50

Mechanical Engineering Technology Courses123-124

Mechanical Engineering Technology Major24

Mechanics Courses, see “Automotive Technology,” “Diesel Equipment
 Mechanics,” and “Marine Engine Technology”

Medical Laboratory Technician.....32-33

Medical Office Assisting.....10-11,60,62,77-78

Medical Office Assisting Courses124-125

Medical Office Management Courses125

Medical Records, see “Health Information Management”

Medical Terminology Courses, see “Health Science”

Merit Awards.....73

Microcomputer, see “End User Support”

Military Service Credit71

Minority Grant81

Mission Statement64-65

Music Courses125-126

Music (Transfer)50-51

N

Name Change.....74

Native American Grant, see “Minority Grant”

Natural Science Electives9,43

Networking Technology Concentration24-25

Nuclear Medicine Technology Courses126-127

Nuclear Medicine Technology (Technical Certificate)33

NURSING AND ALLIED HEALTH DIVISION29-40
 Admission/Retention Policies29-30
 Dental Hygiene.....30-31
 Diagnostic Medical Sonography Certificate.....31
 Health Information Management31-32
 Medical Laboratory Technician.....32-33
 Medical Record Technology, see “Health Information Management”
 Nuclear Medicine Technology Certificate.....33
 Nursing (AAS).....33-36
 LPN Transition Program.....36
 Physical Therapist Assistant36-37
 Radiation Therapy Technology Certificate.....38
 Radiologic Technology.....38-39
 Advanced Standing Program39
 Respiratory Care40
 Ultrasound, see “Diagnostic Medical Sonography”
 X-Ray Technology, see “Radiologic Technology”
 Nursing Assistant Courses127
 Nursing Courses.....127
 Nursing Major, AAS33-36
 Nursing, LPN Transition Program36
 Nutrition Courses, see “Biology” and “Dietary Manager”
 Nutrition (Transfer).....51

O

Occupational Health and Safety Concentration25
 Occupational Safety Courses127-128
 Office Systems Courses.....128
 Office Systems Technology Concentration16
 Office Systems Technology Major12,16,18
 Court Reporting Concentration.....12
 Office Systems Technology Concentration16
 Word Processing18
 Orientation71
 Ornamental Horticulture, see “Landscaping and Turf Management”

P

Paralegal, see “Legal Assisting Technology”
 Paramedic Training Courses, see “Emergency Medical Services”
 Part-time Students.....73
 Pell Grant.....81
 Persons Over Sixty (Admission).....69
 Persons Over Sixty-five (Admission).....69
 Petition, Right of.....72
 Pharmacy Technician (Technical Certificate).....28
 Pharmacy Technician Courses.....128-129
 Philosophy Courses129
 Philosophy (Transfer)51
 Phi Theta Kappa73
 Phlebotomy Courses129
 Physical Education (Transfer)48,56
 Physical Education Activity Courses43,129-130
 Physical Therapist Assistant Courses130-131
 Physical Therapist Assistant Major36-37

Physics Courses131
 Physics (Transfer)51
 Placement Services89
 Placement Tests.....66,67,68,87
 Plant Systems Administration (BOMA) Courses131
 Political Science Courses.....131
 Political Science (Transfer)51
 Practical Nursing60-61
 Practical Nursing Courses132
 Pre-Cytotechnology (Transfer)51
 Pre-Dentistry (Transfer)52
 Pre-Engineering (Transfer).....52
 Pre-Law (Transfer)52
 Pre-Medical Technology (Transfer)52
 Pre-Medicine (Transfer)52-53
 Pre-Occupational Therapy (Transfer)53
 Pre-Optometry (Transfer)53
 Pre-Pharmacy (Transfer)53
 Pre-Physical Therapy (Transfer)53
 Pre-Veterinary Medicine (Transfer)54
 Privacy Rights of Students78-79
 Probation/Suspension, see “Academic Retention Standards”
 Programming Concentration.....17
 Psi Beta73
 Psychology Courses.....132
 Psychology (Transfer)54
 Public Speaking Courses, see “Speech”
 Purpose of the College64-65

Q

Quality Point Average73,76,83
 Quality Technology Courses132-133

R

Radiation Therapy Technology (Technical Certificate)38
 Radiation Therapy Technology Courses, see “Health Science”
 Radiologic Technology Courses.....133-134
 Radiologic Technology Major.....38-39
 Reading/College Life Center88
 Reading Courses134
 Readmission69-70
 Real Estate Courses134
 Records, Retention of79
 Refrigeration, see “Air Conditioning and Refrigeration”
 Refund Policies80
 Registration, Change of74
 Religion Courses, see “Philosophy” and “Humanities”
 Religion (Transfer)54

1998-99 CATALOG INDEX

Removal of Entrance Deficiencies43
 Repeating a Course76
 Residency Classification.....71
 Residency Requirements77
 Respiratory Care Courses.....134-135
 Respiratory Care Major40
 Retail Management Concentration17
 Retraining Guarantee65

S

Scholarships81
 Science Education (Transfer), see “Secondary Education: Science”
 Secondary Education (Transfer)54,55
 Secretarial Science, see “Office Systems”
 Senior Citizens (over 60, over 65)69
 Services for Students with Disabilities85-86
 Sign Language (American), see “American Sign Language Studies”
 Small Business Development and Resource Center90
 Small Business Management Concentration.....17-18
 Social and Behavioral Science Electives.....9,43
 Social Science Education (Transfer), see “Secondary Education: Social Science”
 Social Work (Transfer)55
 Sociology Courses135
 Sociology (Transfer)55
 Sonography, see “Diagnostic Medical Sonography”
 Spanish Courses135-136
 Spanish (Transfer).....56
 Special Students.....68
 Speech Courses.....136
 Stafford Loan.....82
 Student Course Load, see “Academic Load”
 Student Records, Retention of79
 Supplemental Educational Opportunity Grant81
 Surgical Technology.....10-11,61,62,77-78
 Surgical Technology Courses136
 Suspension, Academic.....73-74,87

T

Tech Prep, see “Technical Preparation Education”
 Technical Certificates4,68
 Technical Drafting.....10-11,61,62,77-78
 Technical Drafting Courses136
 Technical Preparation Education (Tech Prep)69
 Teleconferencing Services86
 Telephone Numbers90
 Tennessee Board of Regents.....138
 Tennessee Higher Education Commission138
 Tennessee Student Assistance Award (TSSA).....81

Terminology, Academic.....5-6
 Testing as Degree Requirement77,79
 Testing Center87
 Theatre Arts (Transfer)56
 Theatre Courses, see “Drama”
 Transcript Evaluation.....79
 Transcripts66,67,68,69,70,79
 Transfer Curriculum Guides44-56

TRANSFER PROGRAMS41-56

Curriculum Guides44-56
 General Information/General Education42-43
 Transfer Students66-67
 Transient Students68
 Truck Driving, Commercial, see “Commercial Truck Driving”
 Truck Driving Courses, see “Commercial Truck Driving”
 Tuition Costs80
 Two Attempt Rule, see “Developmental Suspension”

U

Ultrasound, see “Diagnostic Medical Sonography”
 Undecided Majors.....79

V

Veterans.....71
 Video Independent Study Courses.....79,86
 Vocational Certificates, see “Industrial Technology Certificates”
 Vocational Rehabilitation.....84

W

Welding10-11,61,62,77-78
 Welding Courses136
 Wellness Courses, see “Health and Physical Education” and “Physical Education Activity”
 Wellness/Fitness Leadership (Transfer).....56
 Who’s Who Among Students in American Junior Colleges73
 Withdrawal from College79
 Word Processing (Technical Certificate).....18
 Word Processing Courses, see “Office Systems”
 WorkKeys85
 Work Study82
 Writing Center88
 Written and Oral Communication Electives.....8,42

X

X-Ray Technology, see “Radiological Technology”

1998-99 Student Handbook

Contents

	Page No.		Page No.
STUDENT INFORMATION AND SERVICES	H2-H4	Demonstration and Peaceful Assembly	H5
Academic Advisement	H2	Dress Code	H5
Academic Appeals	H2	Drug-Free Campus Policy	H5
Adding or Dropping a Course.....	H2	Emergency Medical First Response.....	H5
Admissions and Records	H2	Health Insurance Plan for Students	H5
Bookstore	H2	Housing.....	H5
Career Planning Center	H2	Identification Cards	H5
Class Attendance.....	H2	Lost and Found	H5
Cooperative Education	H2	Measles Outbreaks in Colleges.....	H6
Counseling Services	H2	Signs and Posters	H6
Financial Aid	H2	Smoking Policy.....	H6
How Does a Student Get a Job?	H2	Theft of Student Property.....	H6
Inclement Weather.....	H2	Visiting Speaker Policy	H6
Library Services	H3	Visitors	H6
Minority Affairs.....	H3	Wall Lockers.....	H6
Placement Office	H3		
Privacy Rights of Students	H3	STUDENT ORGANIZATIONS	H6-H8
Records Office	H3		
Registration.....	H3	CAMPUS SAFETY AND SECURITY	H8-H9
Services for Students with Disabilities.....	H3	Crime on Campus Statistical Report.....	H9
Services for Off-Campus Students	H3		
Student Activities	H3	TRAFFIC REGULATIONS	H10-H11
Student Life Specialist (Judicial Officer).....	H3	Parking Appeals Procedures	H10
Testing Center	H3	Campus Map Showing Parking Areas	H11
Tutorial Program	H3		
Veterans Affairs	H3	INSTITUTIONAL STUDENT DISCIPLINARY RULES...	H12-H16
Withdrawal from the College.....	H3	Institution Policy Statement	H12
Whom To Contact	H4	Disciplinary Offenses	H12
		Student Code of Conduct.....	H12-H15
STUDENT LIFE	H4-H6	Sexual and Racial Harassment Policy	H15
AIDS Policy.....	H4	Sexual Offense Policy and Procedure.....	H15-H16
Claims Against the State of Tennessee.....	H4		
Consumer Concerns.....	H4-H5		

STUDENT INFORMATION AND SERVICES

ACADEMIC ADVISEMENT

The Academic Advising Program at Chattanooga State can help you take advantage of every opportunity so that you will be able to make the most of the educational benefits offered here. Advisers are assigned during the first four weeks of the fall and spring semesters. If you do not know who your adviser is by the fifth week of classes, please call the Advisement Center at 697-4483. In addition, all faculty members are available to students for consultation and maintain regular office hours for this purpose. Students who need academic assistance are encouraged to seek help before their problems become critical.

WHAT CAN YOUR ADVISER DO FOR YOU?

- Provide accurate information about Chattanooga State's educational/career programs including requirements, offerings, and procedures.
- Assist you in making educational choices if you are planning transfer to another institution.
- Help you realistically monitor your academic progress.
- Assist in course selection and registration for classes.
- Make referrals to other service areas as needed.

ACADEMIC APPEALS

ACADEMIC SUSPENSION

See "Academic Regulations" section of the catalog.

DEVELOPMENTAL SUSPENSION (TWO-ATTEMPT RULE)

See "Academic Regulations" section of the catalog.

GRADE APPEAL

See "Academic Regulations" section of the catalog.

ADDING OR DROPPING A COURSE

After the official registration period is over, the student may make adjustments in his/her class schedule through the process of adding and/or dropping courses. For more information, see "Change of Registration" in the "Academic Regulations" section of the catalog.

ADMISSIONS AND RECORDS

The Office of Admission and Records processes all applications for admission to the College; supplies information regarding procedures and requirements, grade transcripts and student schedules; evaluates transfer credits and graduation requirements; and updates and maintains all student records. See the "General Information" section of the catalog for an in-depth discussion of academic regulations and admissions policies and procedures.

BOOKSTORE

Books and Supplies

Books and supplies may be purchased in the College bookstore. Costs vary with programs of study from a few dollars for a single textbook to a first semester cost of \$300 for some technical programs. In the health science programs, the initial cost of the uniforms, instruments, insurance, and textbooks can approximate \$250-\$700.

Bookstore Refund

Students should not write in new textbooks until they have attended classes and have been assured by the instructor that they have the correct textbook, and the instructor intends to use all of the books. Students who have purchased the wrong book should return it, with the sales receipt, within 15 days of that semester's first class for a full refund (Summer sessions have 7 days). New books that are not returned in new condition will have to be put back on the shelf as used books and are therefore refunded as such.

CAREER PLANNING CENTER

The Career Planning Center assists students in choosing a college major, giving them career information and direction, and offering a variety of inventories to help them identify their interests, abilities, work personality and work values.

An extensive career library is available for student use in the Career Center. The library is comprised of books, journals, and other information relating to careers, jobs, job trends, job descriptions, salaries, and non-traditional careers for women. Additionally, books and articles relating to such personal and family issues as self-esteem, alcoholism, parenting, family and personal crises are available.

CLASS ATTENDANCE

See the "Academic Regulations" section of the catalog.

COOPERATIVE EDUCATION

The Cooperative Education Office places students with area businesses and industries in jobs related to their major to give them opportunities to gain actual work experience and receive college credit while attending school.

COUNSELING SERVICES

A staff of professional counselors provide a number of free services to students and to the community. In addition to personal counseling and referral services, the center assists students in making informed decisions when making personal, social, educational, and career-life planning choices.

Free tutoring services are available to students for college level classes through this office.

FINANCIAL AID

The Financial Aid Office handles all student loans, grants, and scholarships which assist qualified students who would find it difficult to attend Chattanooga State without aid. This assistance is based primarily through federally funded programs. Inquiries should be made early to this office to allow time for processing before classes begin.

WHAT IS FINANCIAL AID?

Financial Aid is an award to students based on eligibility, financial need (as determined by a need analysis) and availability of funds. The purpose of the funds is to assist students in meeting their educational related expenses. Financial aid is provided by federal, state, institution, and/or private sources; and can be a combination or package of scholarships, and/or grants, loans, and work. Scholarships and grants do not have to be repaid. Part-time work programs allow students to earn money for their educational expenses while going to school.

For more information, see the "Financial Aid" section of the catalog or contact the Financial Aid Office.

HOW DOES A STUDENT GET A JOB?

- On Campus
 1. Academic Performance Scholarship—Entering freshmen with less than 12 credit hours should complete a Freshman APS application. Students who have attended more than 12 credit hours at Chattanooga State or another post-secondary institution and have never received the scholarship should complete a Sophomore APS application. APS students work between three and six hours per week. Since the Academic Performance Scholarship is used primarily as a means of recruiting new students, availability of funds for currently enrolled students is limited.
 2. Federal Work Study—This is a federal financial aid program based on need. Complete a Free Application for Federal Student Aid to determine eligibility, and complete a Campus Employment Application in addition to all paperwork required for the processing of financial aid. Federal Work Study students work between 10 and 20 hours per week.
 3. Institutional Employment—Students may be employed in this program who are not eligible, or funding was not available, in the above programs. Complete a Campus Employment Application and turn it in to the Financial Aid Office. Students in this program may work no more than 20 hours per week. On both Federal work study and institutional employment the student will be paid minimum wage. Students may not work more than 25 hours per week in any combination of programs. Students may not be hired in any of the above programs until the department has received a written placement form from the Financial Aid Office.
- Off Campus

The Placement Office maintains a job bank of current part-time and full-time off-campus employment listings. The file is constantly being updated and is available during regular hours.

INCLEMENT WEATHER

In cases of inclement weather, Chattanooga State will review the weather and current conditions and will announce a decision regarding cancellation of classes and activities by 6:00 a.m. on the following stations:

TELEVISION:	Channel 3	WRCB	RADIO:	WDEF	WLMX
	Channel 9	WTVC		WSKZ	WMOC
	Channel 12	WDEF		WJTT	WNOO
				WDOD	WUSY
				WAWL	WOGT

Although Chattanooga State will attempt to offer classes on a regular basis unless weather conditions are extremely severe area-wide, students are urged to use their own judgment regarding attendance when in doubt, based on specific geographic areas. Students will be responsible for any academic work that they miss due to absences caused by severe weather conditions. It is the individual student's responsibility to take the initiative to make up any missed class work, and it is the instructor's responsibility to provide a reasonable opportunity for students to complete assignments or examinations missed due to such absences.

Announcements regarding cancellation of classes and activities in the evening programs will be called in to the above stations by 4:30 p.m.

NOTE: Decisions regarding the cancellation of classes and activities at Chattanooga State are made independent of other local schools' decisions.

LIBRARY SERVICES

- All students are invited to use the Main Library for research, assignments, personal interest and recreational reading. For assistance, just ask a librarian.
- There is a branch library at Chattanooga State East. Reference books, the Intelligent Catalog for books, and several computer periodical indexes and databases are available. The Library staff will obtain circulating books and photocopies of magazine articles from the Main Library. There is a charge for photocopies.
- The Jasper Public Library (JPL) provides services to students at Chattanooga State West (Kimball). JPL staff can obtain books and magazine articles from the Main Library. Students will be able to use the Intelligent Catalog and some CD-ROM periodical databases that the Main Library has placed there. Requests for materials will be faxed to the Main Library by JPL staff and the materials will be delivered there by first-class mail.
- Bryan College Library (BCL) provides services to students at Chattanooga State North. Procedures are similar to those listed above.
- Main Library hours during the academic year are:
 - Monday through Thursday, 7:30 a.m.–9:00 p.m.
 - Friday, 7:30 a.m.–4:30 p.m.
 - Saturday, 11:00 a.m.–6:00 p.m.
 - Sunday, 1:00 p.m.–6:00 p.m.
 East Library hours are:
 - Monday through Thursday, 8:00a.m.–8:30 p.m.
 - Friday, 8:00 a.m.–2:00 p.m.
- Students must show a current Chattanooga State identification card in order to get a library card.
- Books are checked out for 3 weeks. A date-due receipt is given to the student.
- The library catalog and several magazine indexes are available on computer.
- Magazines may not be checked out. Articles may be photocopied.
- Books on reserve for particular classes are located at the circulation desk. Students must check them out there and use them only in the library.
- Two photocopiers are available at the Main Library. One photocopier is available at the East Library. Cost is ten cents per copy. Please bring coins. The library staff does not have change.
- Daily fines are not charged. Students must pay for lost books. All books must be returned at the end of each semester to receive grades or transcripts.

MINORITY AFFAIRS

The Office of Minority Affairs provides support services to all minority students. The office further serves as an advocate for the needs of minority students through planning, development, and implementation of programs designed to increase academic, social, vocational, and personal growth. Additionally, consultation and referral services are available to all students for resolution of racial concerns and conflicts. Advice and technical assistance are provided to all minority organizations.

PLACEMENT OFFICE

The Placement Office provides assistance to students who are looking for jobs upon graduation. Resumes and other employment information provided by the student are kept in this office and are available to employers.

PRIVACY RIGHTS OF STUDENTS

See "Academic Regulations" section of the catalog.

RECORDS OFFICE

The Records Office supplies information regarding procedures and requirements, grade transcripts and student schedules; evaluates transfer credits and graduation requirements; and updates and maintains all student records.

REGISTRATION

Registration is the process whereby students enroll in classes. New students whose admissions files are complete register during the regular Registration Period at the beginning of each term. Continuing students are given the opportunity to preregister during designated Early Registration periods. An adviser's signature is required to register (or preregister) for classes. However, assistance from an adviser does not relieve the student from the responsibility of following all requirements for the specific program being pursued, meeting prerequisites, and adhering to all applicable policies and procedures.

Note: You are encouraged to take at least 15 credit hours per semester to assist you in completing your program in a timely manner. In order to complete a major in two years, more than 15 hours per term will be required.

SERVICES FOR OFF-CAMPUS STUDENTS

Chattanooga State's satellite sites in Dayton, Kimball, Downtown Chattanooga, and on Lee Highway offer full registration and fee payment services. Financial aid, career counseling, testing and other services are available by appointment. Telephone the site for specific information.

SERVICES FOR STUDENTS WITH DISABILITIES

The Services for Students with Disabilities Office is the coordinating body

which acts as an advocate for students with disabilities at the College, surveying the needs of these students and working toward developing programs and services to meet their needs.

ADAPTIVE LAB

The Adaptive Lab assessment and training is for students with disabilities who need to use adaptive computer equipment.

DEAF AND HARD OF HEARING

Any student who has a significant loss of hearing which would make it difficult to fulfill his/her potential may receive support services from this office which include:

- Interpreters in the classrooms
- Note takers in lecture classes
- Special tutoring as needed
- An amplification system
- Braille services
- Real - Time Captioning
- Other related services when requested, if possible
- Teletypewriters (TTYs)

Main campus: Omniplex (near the cafeteria)
Student Center, second floor (near pay phone)

East campus: main hall (near pay phone)

ADAPTIVE PHYSICAL EDUCATION

Students with adaptive physical education needs may enroll in any of a number of regular physical education activity classes as identified in the course descriptions listed in the College Catalog. These classes routinely begin with evaluation of each student's physical profile and the establishment of a personalized training or conditioning program based on the individual's needs. A wide range of adaptations are regularly implemented, limited only by considerations of the student's personal safety and appropriate use of the College's equipment and facilities.

STUDENT ACTIVITIES

The Student Activities Office is involved in almost every aspect of student life, and students should visit this office to learn about the following: student ID's, student clubs and organizations, student activities and trips, locker registration, Student Government Association, lost and found, student newspaper, student insurance, Cheerleading Program, and the Activities Programming Board. More information is on page H6.

STUDENT LIFE SPECIALIST (JUDICIAL OFFICER)

The Judicial Officer assists the Vice President for Student Affairs with monitoring and enforcing the student judiciary policies and procedures.

TESTING CENTER

The Testing Center provides a wide range of services to both the College and the community. The center offers regularly scheduled tests, tests by special appointment, and unscheduled tests. In addition, through its CLEP program, the center provides an avenue by which a person may gain college credit for prior learning.

TUTORIAL PROGRAM

College Level – The tutorial program has been developed to assist students in successfully completing their academic work, while enjoying their educational experience at Chattanooga State. The program seeks to accomplish this function by providing assistance in major academic course areas, counseling, and basic skills development. The goal of the program is to enable students to become independent and self-sufficient as they gain academic competence. This service is free. For more information, telephone the Counseling Center at 697-4426.

Developmental Level – Tutoring services for students taking developmental courses in English and mathematics are available in the Writing Center and the Mathematics Lab. Peer tutors or faculty are available to give assistance during many of the hours the facilities are open. Tutoring in college-level English and mathematics is also available in these facilities.

Tutorial Services For Deaf and Hard of Hearing Students – Deaf students may use the college-level and developmental tutorial services. Students should make arrangements for interpreter assistance prior to meeting with a tutor. The Deaf and Hard of Hearing Program also provides tutoring to deaf and hard of hearing students in developmental classes. All of the tutoring services are at no cost to the student.

VETERANS AFFAIRS

A Veterans Affairs assistant is available in the office of Services for Off-Campus Students.

WITHDRAWAL FROM THE COLLEGE

When a student wishes to terminate studies at the College (i.e. drop ALL courses), the student must complete a withdrawal form in the Records Office. Failure to follow withdrawal procedures may result in grades of "F" being recorded in all courses. For more information, see the "Academic Regulations" section

of the catalog.

WHOM TO CONTACT IF YOU

- Are in academic need. . . . Counselor or Faculty Adviser
- Are in financial trouble, such as needing a loan or scholarship. . . . Financial Aid Office
- Want to get a job. . . . Placement Office, Financial Aid Office
- Want to learn about Cooperative Education. . . . Co-op Office
- Want to drop or add a course. . . . Records Office
- Want to withdraw from the College. . . . Records Office
- Feel you need personal counseling. . . . Counseling Office
- Want special permission for unusual activity. . . . Director of Student Activities
- Have College financial obligation. . . . Business Office
- Want to put a notice on the bulletin board or communications monitor. . . . Director of Student Activities
- Need to notify someone in case of emergency. . . . Student Services
- Want to change your program. . . . Records Office
- Want to participate in student activities. . . . Director of Student Activities

STUDENT LIFE

AIDS POLICY

I. Background. As stated by the Public Health Services, Acquired Immune Deficiency Syndrome (AIDS) is the name given to a complex of health problems reported first in the U.S. in 1981. As of January 1, 1992, Tennessee ranked 22nd nationally for the total number of reported AIDS cases and 30th nationally for the annual case rate per 100,000 population. Also, it was estimated that during 1992, more than 2,000 Tennesseans would become infected with Human Immunodeficiency Virus (HIV). Further, during 1991, 25 percent of persons reported with AIDS in Tennessee were 20-29 years of age, which means it is likely that many persons who developed AIDS at this age became infected with HIV during their teen years. Since January 1992, in Chattanooga/Hamilton County 208 persons have tested HIV positive; 27 percent were infected during their teen years and 340 persons had AIDS. Persons afflicted with AIDS suffer a severe loss of natural immunity against disease, leaving them vulnerable to diseases that are not otherwise a threat to most people. These diseases are often referred to as "opportunistic."

The emergence since 1981 of AIDS in the American population has raised profound questions for multiple professional disciplines, including those of medicine, law, and education. While medical research continues on the fundamental nature of the disease, public policy must be formulated on the basis of the best available medical knowledge. Educational institutions nationwide are currently faced with the task of promulgating policies designed to protect the rights of victims of AIDS while recognizing legitimate concerns of unafflicted individuals who will necessarily be thrust into varying degrees of close contact with victims.

In recognition of the concerns of unafflicted members of the campus community regarding possible disease transmission, an institution or school shall reserve the right to review the individual circumstances of AIDS victims who are students and employees. These circumstances would include but not necessarily be limited to classes involving close personal contact such as those providing training in mouth-to-mouth resuscitation, work or training experience in certain areas such as health care, campus security, laboratory research, day care centers for young children, and food preparation.

Based on the best currently available medical information and on recommendations of the Public Health Service and the Center for Disease Control, colleges and universities must respond to AIDS issues by developing guidelines for analysis and management of all individuals concerned about the disease.

II. AIDS Policy Objectives:

1. Seek to dispel unwarranted and counterproductive misconceptions and allay fears and prejudices operating in regards to AIDS through educational programs and literature.
2. Heighten awareness by making available through appropriate campus personnel and/or the Counseling Center information regarding the available community resources for services and/or counseling. Provide free literature regarding AIDS in the counseling area in the Student Services Building.
3. Maintain confidentiality.

III. The AIDS Policy Guidelines

As recommended by the American College Health Association, these guidelines will be used as the basis for the following AIDS policy at Chattanooga State Technical Community College:

1. Students and employees who have AIDS, ARC, or a positive HIV antibody test, whether they are symptomatic or not, will be allowed to attend classes and work in an unrestricted manner at Chattanooga State Technical Community College, as long as they are physically able.
2. Students and employees with AIDS or ARC, or a positive HIV antibody test will not be restricted from access to student unions, theaters, cafeterias, snack bars, gymnasiums, recreational facilities, or other common areas within the College.
3. Consideration of the existence of AIDS, ARC, or a positive HIV antibody test will not be part of the initial decision for those applying to attend or work at Chattanooga State Technical Community College.
4. On January 1, 1992, confirmed HIV positive infection became a reportable disease in Tennessee to the Tennessee Department of Public Health. The HIV test is strictly confidential. The Family Education and Privacy Act of 1974 precludes the provision of such specific or detailed information to faculty, administration, or even parents concerning known diagnosis without the expressed written permission of the affected individual in each case.
5. Chattanooga State Technical Community College will provide guidelines as proposed by the Public Health Service for departments involved with the handling of all blood and body fluids of persons with AIDS, ARC, or a positive HIV antibody test.
6. Disposable equipment must be used when puncturing the skin or mucous membrane of all individuals. Reasonable barrier protection as defined by the Center for Disease Control, using current industry guidelines, will be provided by the appropriate individual departments within Chattanooga State Technical Community College.
7. Chattanooga State Technical Community College will provide safety guidelines for the handling of blood or body fluids by all students and employees in other known settings as well. Procedures for the decontamination of environmental surfaces and objects soiled by blood or body fluids will be implemented. Laboratory courses requiring exposure to blood, such as finger pricks for blood typing examination, will use disposable equipment and no lancets or other blood-letting devices will be reused or shared. No student except those in health care professions within Chattanooga State Technical Community College will be required to obtain or process the blood of others. These clinical students will be provided with reasonable appropriate barrier protection (i.e., gloves). Students in the Allied Health and vocational L.P.N. programs will adhere to the policies and procedures in the student handbooks prepared for these programs.

CLAIMS AGAINST THE STATE OF TENNESSEE

Students who believe they have a claim against the State of Tennessee should contact the College's Business Office for information on processing a claim.

CONSUMER CONCERNS

Part of our philosophy states that we will treat each person served by the College with dignity, rendering instruction and administrative services marked by courtesy and competence. If you feel that you have not received proper treatment in keeping with this philosophy or simply want to make a suggestion or voice your concern, forms are provided by the Student Government Association to bring these concerns to the attention of the proper administrative personnel.

Simply pick up a Student Government Association Suggestion Form at the

green counter in the Student Center or from the Student Government Association office upstairs in the Student Center, complete, and return to that office.

This office takes the matter to the areas involved and seeks a resolution. If a solution is not accomplished to the consumer's satisfaction, the matter is then referred to the Vice President for Student Affairs as a second attempt to meet the consumer's need. As a last resort, the consumer may use the SPRE program (State Postsecondary Review Entity) found in Part H of the amended Higher Education Act of 1965, Section 494C(j) which states:

"Students should be aware that, should they have concerns or complaints about their program or their financial aid, this institution has a complaint procedure. To the extent possible, students should seek a resolution of such matters through the institution's complaint procedure (outlined above) before involving others. Should the institution not be able to resolve the problem, the student should contact the State Postsecondary Review Program office at the Tennessee Higher Education Commission at (615) 532-8276."

DEMONSTRATION AND PEACEFUL ASSEMBLY

For purposes of definition, a demonstration is considered to be a public manifestation of welcome, approval, protest or condemnation through a mass meeting, procession, picketing, or occupation of a building or other unauthorized gatherings.

Any proposed student demonstration must be registered with the Vice President for Student Affairs at least 48 hours in advance. Registration is in no way to be used as a means of restricting freedom of speech but is a means of providing for appropriate use of space.

The following are offered as guidelines for demonstration:

1. No demonstrations are permitted within College buildings, at the location of any entry/exit, any fire hydrant or on any campus roadway.
2. At the time of the registration, the registrant is advised regarding reasonable demonstration activities including location of areas and length of time for completion of demonstration activity.
3. Demonstrations are not to block traffic.
4. The right of expression is not to be confused with license to incite violence or to use indecent language, which is prohibited because these are beyond legal and reasonable espousal of any cause for which demonstrations are conducted.

The Vice President for Student Affairs will assign one or more of the members of his/her staff to observe any demonstration and a complete report will be made by the observing representative.

In the event that an assembly appears to be a demonstration related to grievances, those present should be advised that orderly procedures for the hearing of grievances are available and must be followed.

Violation of the above mentioned regulations may subject the student(s) to those sanctions or penalties listed under Student Disciplinary Rules.

DRESS CODE

Students are expected to use good taste in considering appropriate dress on campus. They should dress in a manner appropriate to their position as college students preparing for professional and career employment.

DRUG-FREE CAMPUS POLICY

It is the policy of Chattanooga State that the unlawful manufacture, distribution, possession, use of alcohol and illicit drugs on the Chattanooga State campus, on property owned or controlled by Chattanooga State, or as part of any activity of Chattanooga State is strictly prohibited. All employees and students are subject to applicable federal, state, and local laws related to this matter. Any violation of this policy will result in disciplinary actions.

Legal Sanctions: Various federal, state, and local statutes make it unlawful to manufacture, distribute, dispense, deliver, sell or possess with intent to manufacture, distribute, dispense, deliver, or sell controlled substances. The penalty imposed depends upon many factors which include the type and amount of controlled substance involved, the number of prior offenses, if any, and whether any other crimes were committed in connection with the use of the controlled substance.

Possible maximum penalties for a first-time violation include: supervised release, imprisonment for any period of time up to a term of life imprisonment, a fine of up to \$4,000,000 or any combination of the above.

These sanctions are doubled when the offense involves either: distribution or possession at or near a school or college campus, or distribution to persons under 21 years of age.

Institutional/School Sanctions: Chattanooga State will impose the appropriate sanction(s) on any employee or student who fails to comply with the terms of this policy.

Employees: As a condition of employment, each employee, including student employees, must abide by the terms of this policy, and must notify their department heads/supervisor of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction. Possible disciplinary sanctions for failure to comply with this policy, including failure to notify of conviction, may include one or more of the following: letter of warning, probation, suspension, termination, mandatory participation in and satisfactory completion of a drug/alcohol abuse program, or rehabilitation program, or referral for prosecution.

Students: Possible disciplinary sanctions for failure to comply with the terms

of this policy may include one or more of the following: warning, reprimand, probation, suspension, expulsion, or mandatory participation in and satisfactory completion of a drug/alcohol abuse program or rehabilitation program, or referral for prosecution.

SPECIAL SUPPORT SERVICES

Counseling Services serves as a contact for the following student support groups: Alcoholics Anonymous (AA), Adult Children of Alcoholics/AL-ANON (ACOA), Overeaters Anonymous (OA), Narcotics Anonymous and CODA.

EMERGENCY MEDICAL FIRST RESPONSE

EMERGENCY - MEDICAL

Numbers To Call - First Response

MONDAY - FRIDAY

8:00 AM - Noon CALL.....Ext. 4476

Ask for a member of the "First Response Team"

MONDAY - FRIDAY

9:00 AM - 3:00 PM CALL.....Ext. 4236

Juanita B. Finnell

Location: S-226

MONDAY - SUNDAY CALL.....Ext. 4466

Security (24 hours) Chief Napoleon Williams

If 911 is called, the ill/injured individual is responsible for all ambulance fees.

URGENT emergency - person is alert and conscious; includes head injury, severe lacerations requiring professional medical help, fractures, etc.

Action Plan

1. Call one of the above persons. If possible, have someone remain with the victim until help arrives.

MINOR injuries or medical problems include bruises, scrapes, minor cuts, fever, etc.

Action Plan

1. Call one of the above persons.
2. First aid care will be given as the individual requests.
3. Recommendation may be made for follow-up care by private doctor.

If the patient is unable to make a request, the patient will be transported to the nearest hospital. Arrangements have been made with these hospitals to receive the institution's patients in the event of an emergency when the person does not specify a hospital:

Erlanger Medical Center	975 E. Third Street	778-2094
Memorial Hospital	2500 Citico Avenue	495-8577
Northpark Hospital	2051 Hamill Road	870-2199
Parkridge Medical Center	2333 McCallie Avenue	493-1491

All expenses incurred for ambulance transportation and subsequent treatment will be the responsibility of the individual.

If the designated persons are not available, emergency help may be requested by calling 9-911. Generally speaking, the campus is closed after 10:30 p.m. on weekdays and after 12:30 p.m. on Saturday. Should a special group be present, the group supervisor is responsible for implementing emergency procedures. The Security Office should always be contacted. Documentation of all first-aid or medical treatment will be done by Security.

HEALTH INSURANCE PLAN FOR STUDENTS

Health and accident insurance coverage is available to all qualified students by the State University and Community College System of Tennessee. The underwriting of this coverage is bid each year by the State University and Community College System of Tennessee, and they attempt to provide a comprehensive plan of protection that satisfactorily meets the needs of the student at a minimal cost.

All students attending a College, Institute, Area Vocational School, or University in the State University and Community College System of Tennessee are eligible to participate in this program provided they are enrolled in classes for at least half-time. At Chattanooga State, if you are taking a total of six hours, you would be eligible. Coverage is from the first day of classes in fall of academic year if premium has been paid or when payment is received thereafter.

A detailed brochure is available in the Student Activities Office. Should you have a need for a claim form, these may also be picked up in the Student Activities Office.

HOUSING

Chattanooga State is primarily comprised of students already living in the area who are able to commute to the College. However, more and more students are coming to Chattanooga from areas that are too great a distance to commute. For this reason, assistance in locating housing is available through the Director of Financial Aid in the Student Services Division.

IDENTIFICATION CARDS

Identification cards are issued to new students in the fall semester and successive semesters. The I.D. card will be used for admittance to College-sponsored activities, student elections, library privileges, and for other College services.

LOST AND FOUND

This service is available through the office of the Director of Student Activities. Articles should be turned in or claimed in that office.

MEASLES OUTBREAK IN COLLEGES

Based on relatively new data, our medical community believes that many students who were immunized in childhood and therefore thought to be immune to measles, are now in fact susceptible to acquiring the disease. Some important facts for your consideration follow:

1. Measles is highly contagious and can spread rapidly in a campus community.
2. Individuals born prior to 1957 are presumed to have already been infected, therefore immune to measles. However, since a single immunization given in early childhood has frequently not proven to be protective in late adolescence and beyond, individuals born after 1956 should have a second injection of the live measles vaccine.

Chattanooga State strongly recommends that you receive a second measles vaccine, preferably a combined measles, mumps and rubella vaccine (MMR).

SIGNS AND POSTERS

1. Generally only signs and posters of faculty, staff and students will be allowed.
2. All materials posted must be approved and stamped by Student Services. Student Activities (Sandy Kluttz) will have this responsibility. Signs will be removed if not stamped. Student Services, custodial, and administrative personnel may remove signs posted on windows, doors, etc. or in areas other than those designated.
3. There will only be a two-week posting period allowed.
4. Signs on windows and doors will only be allowed in the Student Center and gym. Other buildings will have designated boards.
5. All constituents will be encouraged to use TV monitors for announcements.
6. Students may also place classified ads in the student newspaper.

SMOKING POLICY

Chattanooga State has a "no smoking" policy in all facilities except in designated places that are identified by signs.

THEFT OF STUDENT PROPERTY

Chattanooga State cannot assume responsibility for loss, theft or damage of

students' property. Students may store items in lockers and in the bookstore holding area at their own risk. Students are encouraged to report any loss of property or theft to the Vice President for Student Affairs.

VISITING SPEAKER POLICY

Any speaker invited to the campus by an officially recognized student club or organization shall be approved by the organization's faculty adviser and cleared through the Vice President for Student Affairs before the invitation is extended.

The resolution adopted by the State Board of Regents on September 29, 1978, concerning off-campus speakers is available in the Library and Student Services, and should be reviewed by each student organization.

Chattanooga State complies with ALL Tennessee Board of Regents Policies and Procedures.

VISITORS

The campus and facilities of the College are restricted to students, faculty, staff, guests and invitees of the College, except when part or all of the campus, its buildings and facilities are open to the general public for a designated time and purpose. Relatives and other guests not on official business are discouraged from attending classes. Minor children are prohibited from attending regularly scheduled classes.

Further, the College does not assume responsibility for unsupervised children. The policy is consistent with the Tennessee Board of Regents policy 3:02:02:00, which states: "The safety of the children requires that children may not accompany adults into classrooms, offices or other workspaces as a babysitting function nor be left unsupervised in the halls or grounds of the College." In the event an unsupervised child is discovered in a Chattanooga State facility, immediate contact will be made with the person responsible for the child's presence.

WALL LOCKERS

A limited number of wall lockers are available to students. Lockers are located in the Omniplex Building. Lockers are assigned on a first-come, first-served basis. A student desiring a locker should (1) locate an empty locker, (2) place a lock on the locker, and (3) report the locker number to the Director of Student Activities to officially register for that particular locker. All lockers should be cleaned out and the locks removed at the conclusion of the spring semester. Lockers left locked after the end of the summer semester will be cleaned out and

STUDENT ORGANIZATIONS

H6

A well-rounded, integrated program of student activities is provided through student organizations. Students may choose from a variety of organizations depending upon individual interests. These organizations include scholastic honors, discipline groups, service organizations, and special interest groups. Registration with the Director of Student Activities is required for all student organizations on the campus. Registration forms may be secured from the Student Activities Office.

The following information must be provided for official registration of student organization:

1. Name of organization
2. Name of faculty sponsor(s)
3. List of current officers
4. Statement of purpose
5. Copy of constitution, charter, or by-laws, as applicable.

STUDENT GOVERNMENT ASSOCIATION (SGA)

The purpose of the SGA is to promote and maintain active communication between the administration, faculty, and students; to supplement academic goals through the development of appropriate co-curricular programs; to aid in the social adjustment and maturation of students; to provide leadership training and to promote democratic action and ideas; to provide a medium for student expression; to directly reflect student needs and interests in campus activities; to offer services to the College and the community; and to develop loyalty and enthusiasm for Chattanooga State. Elections for the office of President and Vice-President are held each Spring. Other positions are filled in the Fall. If you are willing to serve as part of the SGA, please contact the SGA office.

ACTIVITIES PROGRAMMING BOARD (APB)

The APB (Activities Programming Board) works closely with musicians, bands, comedians and various entertainment agencies to offer first class entertainment events on campus. The APB designs a yearly program of events including trips, speakers, and special programs. The Back to School Blast, Oktoberfest, Student Christmas Party, Winter Welcome Week, Student Talent Show and Fun In The Sun are some of the events coordinated by the APB. Monthly calendars are available in the Student Activities area S-260 and in various other locations on campus. The APB is always looking for new students to join the staff.

AMBASSADORS

The Chattanooga State Ambassadors are students who serve as hosts for special functions on campus and represent the College at off-campus events. Ambassadors must be energetic, outgoing individuals who enjoy working with

others and greeting the public.

CHEERLEADERS

A squad of qualified cheerleaders is selected annually at Chattanooga State. Tryouts are open to all students. The cheerleaders promote school spirit and are active during basketball season. Tryouts are held the third week of September. For further information contact the Student Activities Office.

CLUB TENNIS

The tennis teams compete in Division II of the National Junior College Athletic Associations' intercollegiate tennis events. Tryouts for men's and women's club tennis are held the first week in September. Fall matches begin in October.

THE COMMUNICATOR

The Chattanooga State student newspaper, *The Communicator*, is a very integral part of student life at the College. Yearly positions to be filled include a staff of editors, reporters, photographers, and layout or graphic artists. Applications are available in the office of *The Communicator* located in the Student Center Building.

INTRAMURALS, CLUB SPORTS & RECREATION

Chattanooga State's program is designed to encourage lifetime recreational activities, positive lifestyles and broadening experiences to all campus populations, while reaching out to provide positive community recreational relationships. Activities offered include archery, basketball, canoeing, camping, rafting, adventure trips, hiking, horseback riding, tennis, flag football, softball, skiing, bowling, volleyball, ping pong, badminton, and horseshoes. Instruction in most sports is available to the physically challenged.

91 ROCK, WAWL RADIO STATION

91 Rock, WAWL in Chattanooga, is licensed to Chattanooga State as a non-commercial, educational radio station. The station began broadcasting in September 1980. Currently, 91 Rock operates with 6,000 watts of full stereo power and a signal radius of 60 miles. The tower is located atop Missionary Ridge. 91 Rock serves the student population of the College as well as the city of Chattanooga and its neighboring communities with alternative programming. WAWL also serves as a learning lab where students enrolled in broadcasting courses receive valuable hands-on experience in radio broadcasting. The station is staffed entirely by students who man the news, sports, and public affairs departments.

CHATTANOOGA STATE CONCERT CHOIR

The Chattanooga State Concert Choir is supported by the Chattanooga State Music Department. The choir and the performing groups associated with it are open without audition to all students. Performances are given on campus and throughout the community. Students may register for the concert choir during regular registration periods.

CHATTANOOGA STATE CHORALE

Formerly known as Vocal Ensemble, the Chorale is a very talented group of students selected through an audition process. Members of this group are also members of the Chattanooga State Concert Choir. The Chorale performs a wide variety of music both on campus and throughout the community.

CHATTANOOGA STATE JAZZ BAND

The Jazz Band plays jazz-rock and dixieland style music during scheduled performances throughout the year. Knowledge and skill in an instrument is required, however, the band is open to all students without an audition.

Honors Organizations

See "Academic Honors" in the "Academic Regulations" section of the catalog.

Special Interest Clubs and Organizations**ACCOUNTING CLUB**

This group provides opportunities for professional development to students majoring in accounting technology. The Accounting Club participates in VITA, a program through which trained volunteers assist people with income tax forms.

AD CLUB

The AD Club is a student chapter of the Chattanooga Advertising Federation, which is a local organization promoting professionalism and education within the advertising community. Membership allows students to meet and network with professionals within their field. This organization also provides scholarships and opportunities for competition.

ADULT CONNECTION

This club provides information, moral support and other types of help to adult students who have entered college for the first time or who have re-entered after an extended absence. Discussion groups meet monthly and membership is open to all students. (Formerly known as College Bound/Second Time Around.)

ALPHA ETA RHO

Membership in Alpha Eta Rho is open to all students pursuing regular courses in the College and who are engaged in or anticipate being engaged in the profession of aviation.

ALUMNI ASSOCIATION

The Chattanooga State Alumni Association is concerned about prior/present students. The association gives three scholarships yearly to qualifying students. One full-time and two part-time scholarships are given each Fall. The Alumni Association also volunteers its services to other on-campus groups and does volunteer work for needy community organizations.

AMERICAN JUNIOR DENTAL ASSISTING ASSOCIATION

Membership in this professional association is open to all students enrolled in the dental assisting program.

AMERICAN JUNIOR DENTAL HYGIENIST ASSOCIATION

The purpose of this organization is to offer professional development opportunities to students enrolled in the dental hygiene program.

AMERICAN SOCIETY OF CERTIFIED ENGINEERING TECHNOLOGY (ASCET)

ASCET is a professional group for students in engineering technology programs.

ASSOCIATION OF DEAF STUDENTS

This organization strives to educate, inform, and motivate deaf and hard of hearing students.

ASTRONOMY CLUB

The Astronomy Club conducts star parties at Greenway Farms in Hixson approximately every three months. During student activity periods, informational seminars on various astronomy-related topics are held in room OMN-159 for the benefit of anyone interested in astronomy. Members of the club are encouraged to participate in the Barnard Astronomical Society (BAS). The BAS meets monthly on the second Thursday of the month at the Jones Observatory in Brainerd. In addition, the BAS conducts a star party monthly in a dark sky area and each month provides the public an opportunity to observe the first quarter moon from the Walnut Street Bridge.

ATHLETIC BOOSTER CLUB

This organization promotes and supports the Chattanooga State athletic teams.

BAPTIST STUDENT UNION

The BSU is supported by the Southern Baptist Convention. It offers an opportunity for students to help others, to grow in their relationship with God, and to participate in fellowship activities.

BLACK STUDENT ASSOCIATION

The purpose of the Black Student Association is to promote educational and social development of its members by providing academic support services and appropriate extra-curricular programs. Its mission is to provide a medium for Black student expression, and to offer services to the College and community.

BROADCAST CLUB

Membership in this club is open to all students interested in broadcasting as a career or in working at the campus radio station, WAWL.

BUSINESS CLUB

The Business Club is open to all majors. It provides business related and career development activities for all students interested in marketing, finance, management, merchandising economics, as well as other allied business fields.

COLLEGIATE SECRETARIES INTERNATIONAL

CSI is a professional club for students majoring in office systems technology or who are working toward office systems certificates.

COMPUTER CLUB

A student chapter of the Association of Information Technology Professionals, this club offers professional development opportunities to students studying data processing or computer science.

COSMETOLOGY CLUB

The Cosmetology Club is a support organization for students in the cosmetology program. This club provides free perms and haircuts to Chattanooga State students, Bethel Bible Village residents and senior citizens. The Cosmetology Club meets on the first Friday of every month in the Industrial Technology Building. All students are invited to have free haircuts and manicures on scheduled dates. (Check the Student Activities Office for the schedule.)

COURT REPORTERS ASSOCIATION

The purpose of this organization is to lend support to court reporting majors and to promote professionalism in this area.

DRAMA CLUB

Students who have interests in drama or related activities are invited to be a part of the Chattanooga State Drama Club. Students will be working with productions and workshops both on campus and in the community.

EMERGENCY SERVICES STUDENT ASSOCIATION (ESSA)

The ESSA was established to promote and enhance the continuous education of emergency services, and to provide emergency safety education to students, faculty, and the Chattanooga State area.

THE ENGLISH CLUB

The English Club is open to all students with an interest in creative writing. Members share their talents and criticisms.

ENVIRONMENTAL TECHNOLOGY ASSOCIATION

The Environmental Technology Association is a student organization dedicated to promoting natural resource conservation and environmental awareness, and to providing increased opportunities for campus and community involvement with environmental issues. Its goals are to promote environmental literacy for everyone, provide community service, and develop partnership with business/industry, education, government, and professional associations. Students are invited to join by calling 697-2454.

HEALTH PHYSICS SOCIETY (STUDENT CHAPTER)

This is the only chartered student chapter of the Health Physics Society in the United States. Membership is open to students studying health physics.

HUMAN SERVICES SPECIALIST ASSOCIATION

Students who are interested in pursuing careers which focus on professions such as counseling and social work, are invited to participate in this organization. The group's purpose is to provide members with opportunities for social activities, professional development and community service. Meetings are held in HPF-129.

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE, STUDENT BRANCH)

IEEE provides opportunities for students to participate in the largest professional group representing engineers in the electronics field.

LAND SCULPTORS (LANDSCAPING AND TURF MANAGEMENT)

Membership in this club is open to all Chattanooga State students. The club strives to cultivate and promote the horticulture industry. It is concerned with all aspects of horticulture.

MEDICAL RECORD STUDENT ASSOCIATION

This club provides professional growth opportunities for students majoring in Health Information Management. Members must maintain a 2.5 grade point average.

MICAD

Engineering Technology Students or students interested in Computer Aided Design Applications (CAD) are invited to join MICAD. The purpose of this club

1998-99 STUDENT HANDBOOK

is to promote awareness in CAD technology and provide a social environment for students with like interests. MICAD members have opportunities for contact with professionals from related fields.

OUTDOOR CLUB

The purpose of the Outdoor Club is to promote enthusiasm for the knowledge of outdoor educational and recreational activities. The club sponsors outdoor activities and serves as a source of information pertaining to opportunities available in the community.

PARALEGAL ASSOCIATION

The Paralegal Association provides social and professional development opportunities for students majoring in legal assisting.

PHYSICAL THERAPIST ASSISTANTS' ASSOCIATION

Membership is open to all students in the physical therapist assistant program who wish to expand their professional horizons.

PRACTICAL NURSING CLUB

Open to all practical nursing students, this club provides its members with opportunities for professional development.

PSYCHOLOGY CLUB

The objective of the Psychology Club is to promote interest in psychology. Membership is open to all students.

RADIOLOGIC TECHNOLOGY SOCIETY

Active membership is composed of students who have been formally accepted into the radiologic technology program and who maintain a 2.5 grade point average. The primary objectives of the society are to encourage fellowship and interchange of ideas among members, to assist in establishing high standards of education and training to advance the science of radiologic technology, to evaluate the quality of patient care, and to encourage active professional membership in local, state, and national organizations of radiologic technology.

STUDENT EDUCATORS' CLUB

The Student Educators' Club is open to all students with an interest in teaching as a career. This club promotes professionalism and excellence in education.

STUDENT NURSES' ASSOCIATION

The purpose of this association are to encourage fellowship and an interchange of ideas, assist in establishing high standards of education and training to advance the science of nursing as a career choice, and to encourage active professional membership in local, state and national organizations in nursing. Active membership is open to students who have been formally accepted into the nursing program.

STUDENTS FOR THE VISUAL ARTS

Students for the Visual Arts provides enhanced learning opportunities for art students and promotes a community and campus-wide awareness and appreciation of quality art. The group also provides greater opportunities for club mem-

CAMPUS SAFETY AND SECURITY

The following information is designed to provide a greater understanding of the facts and figures related to campus security at Chattanooga State Technical Community College (CSTCC). The information presented is not designed to serve as any agreement or contractual arrangement for providing security services to members of the campus community, nor to guarantee an individual's personal safety when utilizing the campus facilities or grounds. The Security Department urges all members of the College community to follow personal safety guidelines as the best method of preventing crime.

The information presented is designed to meet the standards of the "College and University Security Information Act," which was enacted by the General Assembly of the State of Tennessee on May 8, 1989, approved by the Governor on May 16, 1989, and became effective on July 1, 1989. Also in keeping with the requirements of this legislation, a statistical report of crime on campus at Chattanooga State Technical Community College for the last three years is given at the conclusion of this information.

- A. The Security Department, located in the Maintenance Building, is responsible for safety and security on the CSTCC campus.
- B. There are eight commissioned Public Safety Officers employed by the Security Department of the College. Their training consists of 40 hours of in-service and firearm training each year which must meet the requirements of the Tennessee Police Officers' Standards and Training Commission.
- C. The Security Department has a close working relationship with municipal, county, state, and federal law enforcement agencies. The Chattanooga Police Department offers close support by providing transportation of all persons arrested on campus, by patrolling surrounding neighborhoods, and by investigating all major crimes on campus.
- D. The Chattanooga Police Department is notified of all felony crimes that occur on campus. The Tennessee Bureau of Investigation is notified of any crime determined to be of special interest. The report to the TBI consists of a request for assistance.
- E. The campuses and facilities of the College are restricted to students, faculty, staff, guests, and invitees of the College, except when part or all of the campus, its buildings or facilities, are open to the general public for an approved and designated time and purpose.

All persons on the campus, including students, faculty, staff, guests, and invitees, shall be subject to all rules and regulations of the College and the Tennessee Board of Regents that are applicable to the conduct of students on campus, as well as all applicable federal and state laws and regulations. All persons on the campus shall provide adequate identification upon request to appropriate officials and to Security Department personnel. Personnel and students of the College who refuse to provide such identification may be subject to disciplinary action, and other persons who refuse to provide such identification shall be requested to leave campus, and if they refuse, will be subject to lawful removal and prosecution.

CSTCC maintains a 24-hour dispatch service accessible by police radio, by telephone, by direct emergency phones placed across campus, and by pedestrian traffic during normal business hours. Officers patrol the campus by automobile and on foot around the clock. The Security Department is open 365 days a year. Students are encouraged to promptly report all suspicious and/or criminal activity.

Department regulations provide that when a person applies for assistance or advice or makes a complaint or report, either by telephone or in person, all pertinent information shall be obtained in an official and courteous manner and will be properly and judiciously acted upon consistent with established departmental procedures.

- F. The use and/or possession of alcoholic beverages on College owned or controlled property is strictly prohibited.
- G. The unlawful use, possession, sale, or distribution of any drug or controlled substance (including any stimulant, depressant, narcotic, hallucinogenic drug, or marijuana) on College owned or controlled property is strictly prohibited.
- H. The use of deadly force by a Public Safety Officer is prohibited except when necessary to prevent serious harm or death to the employee or another person. Only the minimum amount of force consistent with accomplishment of duties shall be used. Every other reasonable means of prevention, apprehension, or defense must be exhausted before resorting to the use of deadly force. All weapons and ammunition carried by an officer must meet departmental standards and must be approved, inspected, and recorded by the Chief of Security prior to use. All employees must qualify in proficient use, as determined by the Chief of Security, prior to carrying any weapon. Any person who indicates on an application for employment a conviction for a felony offense will be subject to review by the Selection Committee Chairperson. Where such conviction directly affects the performance of the employee or poses a threat to the campus community in any way, the employee may be subject to rejection. These standards also apply to felony convictions after attainment of employee status.
- I. The Security Department
 - conducts a monthly survey of outdoor lighting and reports problems directly to the Physical Plant.
 - conducts a pre-semester survey of the campus for hazardous conditions and reports problems directly to the Physical Plant, routinely reports all hazardous, unsafe, or potentially unsafe conditions found to exist on campus. In the event of a hazardous or unsafe condition, steps are taken to ensure the safety of the campus community.
- J. A monthly security operations report, which contains all incidents involving Security Department personnel in a current and cumulative format may be obtained from the Office of the Vice President for Student Affairs. A copy of all incident reports is available in the Public Safety Department located on the second floor of the Plant Operations Building. Trends of crime patterns, methods to prevent crimes, and other information pertaining to campus safety and security are regularly distributed to members of the College community through newsletters, memorandums, newspaper articles, posters, and other such media. Crime prevention materials are distributed every sixty days.

See Chart on "Crime on Campus Statistical Report" on page H9.

Chattanooga State Technical Community College
Crime on Campus Statistical Report

	1994 Calendar Year						1995 Calendar Year						1996 Calendar Year					
	Actual Offenses Reported	Rate Per 1,000	Offenses Falsely Reported	Offenses Cleared	Percent Cleared	Clearances Involving Persons<18	Actual Offenses Reported	Rate Per 1,000	Offenses Falsely Reported	Offenses Cleared	Percent Cleared	Clearances Involving Persons<18	Actual Offenses Reported	Rate Per 1,000	Offenses Falsely Reported	Offenses Cleared	Percent Cleared	Clearances Involving Persons<18
Part I																		
Homicide																		
Manslaughter																		
Rape																		
Robbery																		
Assault	3	0.52	0	0	0.00%	0	2	0.36	0	0	0.00%	0	4	0.67	0	0	0	0
Burglary	1	0.17	0	0	0.00%	0							2	0.34	0	0	0	0
Larceny	31	5.34	0	0	0.00%	0	21	3.81	0	0	0.00%	0	13	2.18	0	0	0	0
Vehicle Theft																		
Arson																		
Part II																		
Forgery							1	0.18	0	0	0.00%	0						
Fraud																		
Embezzlement																		
Stolen Property																		
Vandalism	7	1.21	0	0	0.00%	0	7	1.27	0	0	0.00%	0	8	1.34	0	0	0	0
Weapons	2	0.34	0	0	0.00%	0												
Prostitution																		
Sex Offenses																		
Drugs (Sale/Mfg.)							1	0.18	0	0	0.00%	0	1	0.17	0	0	0	0
Drugs (Possession)																		
Gambling																		
Family Offenses																		
DUI																		
Liquor Laws																		
Drunkness																		
Disorderly Conduct	3	0.52	0	0	0.00%	0	1	0.18	0	0	0.00%	0	10	1.68	0	2	20	0
Vagrancy																		
All Other Offenses							3	0.54	0	0	0.00%	0	2	0.34	0	0	0	0
Suspicion	2	0.34	0	0	0.00%	0	5	0.91	0	0	0.00%	0	1	0.17	0	1	100	0

Campus Population Statistics (1994 Fall Term Campus Population)				Campus Population Statistics (1995 Fall Term Campus Population)				Campus Population Statistics (1996 Fall Term Campus Population)					
FTE Undergraduate Students	5,144	FTE Undergraduate Students	4,982	FTE Undergraduate Students	5,426	FTE Undergraduate Students	5,426	FTE Undergraduate Students	5,426	FTE Undergraduate Students	5,426	FTE Undergraduate Students	5,426
FTE Graduate Students	0	FTE Graduate Students	0	FTE Graduate Students	0	FTE Graduate Students	0	FTE Graduate Students	0	FTE Graduate Students	0	FTE Graduate Students	0
Staff Personnel	232	Staff Personnel	321	Staff Personnel	321	Staff Personnel	321	Staff Personnel	321	Staff Personnel	321	Staff Personnel	321
Faculty Personnel	345	Faculty Personnel	194	Faculty Personnel	194	Faculty Personnel	194	Faculty Personnel	194	Faculty Personnel	194	Faculty Personnel	194
Security Personnel	14	Security Personnel	19	Security Personnel	19	Security Personnel	18	Security Personnel	18	Security Personnel	18	Security Personnel	18
Total	5,735	Total	5,516	Total	5,516	Total	5,959	Total	5,959	Total	5,959	Total	5,959

TRAFFIC REGULATIONS

1. Policy: All students, faculty and staff are expected to comply with the parking regulations in force. A copy of these regulations is made available at registration for each student and is also posted on bulletin boards. All vehicles parked illegally are subject to being towed away at the owner's expense. All vehicles for day and evening classes must be registered during the week of general academic registration or immediately after the vehicle is brought to campus. Please bring your tag registration.

2. General Parking Rules

- a. The cooperation of all persons using Chattanooga State parking facilities is necessary. Those who refuse to comply with these regulations and with the normal expected parking requirements (such as parking properly within an outlined space, parking where directed by a Security Officer, obeying traffic signs, and other normal courtesies) will be given a violation ticket. Refusal to pay parking fines will result in holding of grades and student records until all fines are paid.
- b. Persons who flagrantly disobey these regulations by parking where they block entrances, exits or other cars, or exhibit other complete disregard of common courtesies and other people, will have their car removed from Chattanooga State parking facilities at the owner's expense.
- c. Decals must be properly displayed by all students using parking facilities. Decals are issued annually in August. Where a non-registered vehicle is necessary for a limited time, the student or faculty/staff member must secure a temporary parking permit from the Security Department in order not to be liable for a fine.
- d. Parking is prohibited on any curve, roadway, loading zone, fire lane, or reserved area. Any vehicle parked crossing yellow curbs or parallel to yellow curbs, or in graveled islands will be in violation. Wheels must be headed into concrete wheel stop in graveled lots.
- e. Maximum speed on campus is 15 m.p.h. All accidents on campus must be reported to the Security Department.
- f. When a faculty member or a member of the staff has a valid requirement to park overnight on the Chattanooga State parking facilities, he/she should check with the Physical Plant for permission and advise the Security Department by written memo of intent.
- g. See curb marking color codes which follow:

- RED: Fire lane, no parking.
- YELLOW: Traffic lanes, no parking.
- BLUE: Student parking.
- ORANGE: Faculty and staff parking.
- WHITE: Marked "Visitor." Visitors to campus ONLY.
- WHITE: Marked "Handicapped." Approved disabled/handicapped students ONLY. Must secure Chattanooga State handicapped sticker.
- BLACK: Marked "Motorcycles." Motorcycles ONLY.
- GREEN: Marked "15 minute parking." Located near the Omniplex, 15-minute parking for students ONLY.

PARKING LOCATIONS (SEE MAP SHOWING PARKING LOCATIONS)

- Student Parking Lots: Blue Curbs. There are six major student parking areas. Two lots are located in the rear of the campus, one large lot southwest of the Health and Physical Education Building and one lot south of the Health and Physical Education Building. The remaining lots are located in front of the Industrial Technology Center and across from the pond toward the main entrance.
- Faculty/Staff Parking Lot: Orange Curb. Reserved for faculty and staff.
- Disabled/Handicapped Parking Lots: White Curb. Parking areas facing Omniplex Building and other designated spaces are reserved during day and evening only for disabled/ handicapped students.
- Visitor Parking Lot: White Curb. Row directly behind disabled/handicapped parking in front of Omniplex Building reserved day and evening only for visitors to campus.
- Motorcycle Parking Lot: Black Curb. Area designated "Motorcycle" located at rear of Omniplex Building
- Traffic Lanes: Yellow Curbs. DO NOT PARK.
- Fire Lane: Red Curbs. DO NOT PARK IN ANY RED MARKED AREA.

3. Motor Vehicle Registration

All students are required to properly display a parking decal. Handicapped parking decals can be obtained upon approval of written request through the Disabilities Office. Vehicles must be registered during the week of general academic registration or immediately after the vehicle is brought to campus.

TRAFFIC VIOLATION FINES	MINIMUM FEE
Unlawful Parking:	
Handicapped Area	\$100.00
Red Curb or Fire Lane	\$10.00
Yellow Curb or Traffic Lane	\$10.00
Parking on Grass	\$10.00
Faculty/Staff Lot	\$10.00
Visitor's Parking Area	\$10.00
Dental Clinic Parking Area	\$10.00
CDC Staff Parking	\$10.00
Cafeteria Parking	\$10.00
White Curb	\$10.00
Parking by Stop Sign	\$10.00
Fifteen (15) Minute Parking	\$10.00
Motorcycle Parking	\$10.00
Parking on Pavement (side walk)	\$10.00
Unregistered Vehicle	\$10.00
Moving Violations:	
Reckless Driving	\$10.00
Running Stop Sign	\$10.00
Speeding	\$10.00

PARKING APPEALS PROCEDURES

Procedures of Administering Traffic and Parking Regulations

- A. Students who violate campus traffic and parking regulations will receive a written citation according to the regulations established and published in the traffic code of the Student Handbook.
- B. Students who wish to appeal traffic citations must file an appeal within a seventy-two (72) hour period (Saturdays and Sundays excepted).
- C. Appeal forms are available in the Student Center (green information counter in the lobby). Pick up appeal forms, complete them, and leave them with the personnel at the counter. **The appeal form must be completed giving the proper return address and the ticket in question attached to the appeal form.**
- D. Appeals are presented to the Student Court to either approve or deny. A copy of the appeal form stating the student court's decision is then mailed to the individual making the appeal.
NOTE: Students should hold on to the copy of the appeal form returned to them showing denial or approval in case questions arise in the future about the disposition of the ticket.
- E. The student has the right to appeal the decision of the Student Court to the Vice President for Student Affairs within seventy-two (72) hours after student is notified of the Student Court's decision.

See "Campus Map" on page H11.

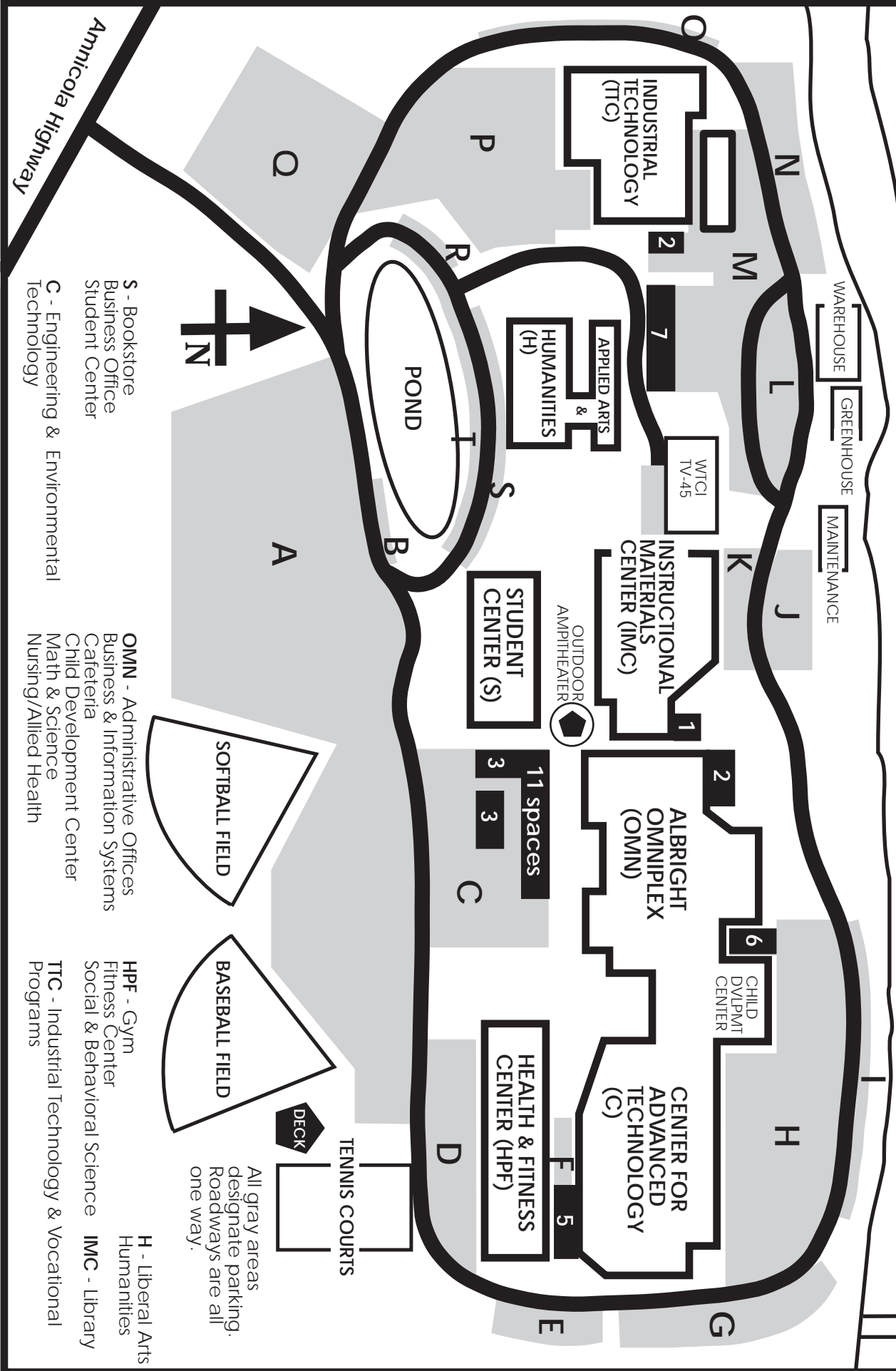
CAMPUS MAP

Chattanooga State Technical Community College
 4501 Amnicola Highway
 Chattanooga, Tennessee 37406-1097
 423/697-4400
 Web Site: <http://cstcc.chattanooga.net>



Tennessee River

Chickamauga Dam



S - Bookstore
 Business Office
 Student Center

C - Engineering & Environmental
 Technology

OMN - Administrative Offices
 Business & Information Systems
 Cafeteria
 Child Development Center
 Math & Science
 Nursing/Allied Health

HPF - Gym
 Fitness Center
 Social & Behavioral Science

IMC - Library

H - Liberal Arts
 Humanities

TTC - Industrial Technology & Vocational
 Programs

All gray areas
 designate parking.
 Roadways are all
 one way.

The Tennessee Board Of Regents
State University And Community College System Of Tennessee
Institutional Student Disciplinary Rules
Chapter 0240-3-7
Chattanooga State Technical Community College

INSTITUTION POLICY STATEMENT

- (1) College students are citizens of the State, local and national governments, and of the academic community and are, therefore, expected to conduct themselves as law-abiding members of each community at all times. Admission to an institution of higher education carries with it special privileges and imposes special responsibilities apart from those rights and duties enjoyed by non-students. In recognition of the special relationship that exists between the institution and the academic community which it seeks to serve, the Tennessee Board of Regents has authorized the President of the College to take such action as may be necessary to maintain campus conditions and preserve the integrity of the institution and its educational environment.
- (2) Pursuant to this authorization, the College has developed the following Regulations which are intended to govern student conduct on campus. In addition, students are subject to all national, state and local laws and ordinances. If a student's violation of such laws or ordinances also adversely affects the institution's pursuit of its educational objectives, the institution may enforce its own regulations regardless of any proceedings instituted by other authorities. Conversely, violation of any section of these Regulations may subject a student to disciplinary measures by the institution whether or not such conduct is simultaneously violative of state, local or national laws.

DISCIPLINARY OFFENSES

DEFINITIONS

- (1) The term "College" means Chattanooga State Technical Community College.
- (2) For the purposes of these rules only, the term "student" includes all persons taking courses at the College, both full-time or part-time, credit or non-credit pursuing Industrial Technology certificates.
- (3) For the purposes of these rules only, the term "faculty member" means any person hired by the College to conduct classroom activities.
- (4) The term "College official" includes any person employed by the College, performing assigned administrative or professional responsibilities.
- (5) The term "member of the College community" includes any person who is a student, faculty member, College official or any other person employed by the College.
- (6) The term "College premises" includes all land, buildings, facilities, and the property in the possession of or owned, used, or controlled by the College (including adjacent streets and sidewalks).
- (7) The term "organization" means any number of persons who have complied with the formal requirements for College registration of an organization.
- (8) The term "judicial body" means persons authorized by the President of the College to determine whether a student has violated the Student Code of Conduct and to recommend imposition of sanctions. (Disciplinary Appeals Subcommittee)
- (9) The term "Judicial Officer" means a College official authorized by the Vice President for Student Affairs to file charges and to impose sanctions on students who choose to admit to violation of the Student Code of Conduct. The duties of the Judicial Officer will usually be determined by the Vice President for Student Affairs.
- (10) The term "College Appeals and Review Committee" means a body authorized by the President to consider an appeal from a judicial body's determination that a student has violated the Student Code of Conduct, or from sanctions imposed by the Judicial Officer or hearing body.
- (11) The term "shall" is used in the imperative sense.
- (12) The term "may" is used in the permissive sense.
- (13) The "Vice President for Student Affairs" is that person designated by the College President to be responsible for the administration of the Student Code of Conduct.
- (14) The term "policy" is defined as the written regulations of the College as found in, but not limited to, the Student Handbook, or College catalog.
- (15) The term "cheating" includes, but is not limited to:
 - (a) use of any unauthorized assistance in taking quizzes, tests, or examinations;
 - (b) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
 - (c) the acquisition, without permission, of tests or other academic material before such material is revealed or distributed by the instructor;
 - (d) the misrepresentation of papers, reports, assignments or other materials as the product of a student's sole independent effort, for the purpose of affecting the student's grade, credit, or status in the College.
 - (e) failing to abide by the instructions of the proctor concerning test-taking procedures; examples include but are not limited to talking, laughing, failure to take a seat assignment, other disruptive activity or failing to adhere to start-

ing and stopping times;

- (f) influencing, or attempting to influence, any College official, faculty member, graduate student or employee possessing academic grading and/or evaluation authority or responsibility for maintenance of academic records, through the use of bribery, threats, or any other means or coercion in order to affect a student's grade or evaluation;
 - (g) Any forgery, alteration, unauthorized possession, or misuse of College documents pertaining to academic records, including, but not limited to, late or retroactive change of course application forms (otherwise known as "drop slips") and late or retroactive withdrawal application forms. Alteration or misuse of College documents pertaining to academic records by means of computer resources or other equipment is also included within this definition of "cheating".
- (16) The term "plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

JUDICIAL AUTHORITY

- (1) The College has established alternative judicial bodies for hearing disciplinary charges under the Student Code of Conduct:
 - (a) Disciplinary Appeals Subcommittee—A sub-committee of the Appeals and Review Committee whose members are responsible for the review and disposition of all discipline cases. The subcommittee shall make a finding on the merits of the charges and shall impose an appropriate sanction.
 - (b) Hearing before the Judicial Officer or Administrator—if a student chooses to admit violation of a provision of the Code, the student may either accept the sanction proposed by the Administrator or Judicial Officer or choose to have a hearing before another administrator appointed by the Vice President for Student Affairs regarding his or her sanction. At this hearing, the student may present witnesses and other evidence relevant to the offense that may mitigate in the student's favor.
 - (c) Tennessee Uniform Administrative Procedures Act (TUAPA)—disciplinary charges that may result in suspension or expulsion from the College may, at the student's option, be heard in conformance with the requirements of the Tennessee Uniform Administrative Procedures Act. The TUAPA is an official state act defining certain procedures that are required when a student chooses to have his or her case heard through the Act's provisions. A more detailed description of the Act and its provisions may be obtained from the Office of the Vice President for Student Affairs.
- (2) The Judicial Officer and appropriate Committee members shall have responsibility for development of policies for the administration of the judicial program and procedural rules for the conduct of hearings as stated herein. Tennessee Uniform Administrative Procedures Act hearings will be conducted in conformance with the procedural requirements of the Act.
- (3) Decisions made by a judicial body shall be final, pending the normal appeal process.

STUDENT CODE OF CONDUCT

- (1) **Jurisdiction of the College**—Generally, College jurisdiction and discipline shall be limited to conduct which occurs on the College's premises or conduct occurring off-campus which adversely affects the College's educational mission and/or objectives.
- (2) **Prohibited Conduct**—Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined below:
 - (a) Acts of dishonesty, including but not limited to the following:
 1. Cheating, plagiarism, or other forms of academic dishonesty.
 2. Furnishing false information to any College official, faculty member or office.
 3. Forgery, alteration, or misuse of any College document, record, or instrument of identification.
 - (b) Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other College activities, including its public service functions on or off campus, or other authorized non-College activities, when the act occurs on College premises.
 - (c) Physical abuse, threats of harm, coercion and/or other conduct which threatens or endangers the health or safety of any person.
 - (d) Attempted or actual theft of and/or damage to property of the College or property of a member of the College community or other personal or public property.
 - (e) Hazing, any act of hazing, as defined by state law, by an individual or group. "Hazing" is defined by the State of Tennessee as any intentional or

reckless act, on or off institutional property, by one (1) student, acting alone or with others, which is directed against any other student, that endangers the mental or physical health or safety of that student, or which induces or coerces a student to endanger his or her mental or physical health or safety, and includes treatment of a violent, abusive, shameful, insulting or humiliating nature. Such action is prohibited when connected with initiation into, affiliation with or continuing membership in a group or organization and does not include participation in customary athletic events or similar competition.

- (f) Failure to comply with directions of College officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to these persons when requested to do so.
- (g) Unauthorized possession, duplication of, or use of keys to any College premises or unauthorized entry to or use of College premises.
- (h) Violation of published College policies, rules or regulations.
- (i) Violation of federal, state or local law.
- (j) Use, possession or distribution of narcotics or other controlled substances except as expressly permitted by law.
- (k) Use, possession or distribution of alcoholic beverages or public intoxication while on College owned or controlled property or while attending a College sponsored event.
- (l) Unauthorized possession of any firearms, explosives, or other weapons, including, but not limited to, pistols, rifles, shotguns, BB guns, paint guns, knives, or dangerous chemicals on College premises.

NOTICE: Signs at Chattanooga State entrances notify entrants that weapons are prohibited. You are **not** permitted to carry a weapon on campus property or to school functions **even if you have a handgun permit.** State of Tennessee Statute TCA 39-17-1359 allows a state or federal government entity or agent thereof to prohibit possession of weapons by any person at meetings conducted by, or on the premises owned, operated, managed or under control of such government entity.

- (m) Participation in a campus demonstration which disrupts the normal operations of the College and infringes on the rights of other members of the College community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.
- (n) Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at College-sponsored or supervised functions.
- (o) Conduct which is disorderly, lewd, or indecent; breach of peace; or aiding, abetting, or procuring another person to breach the peace on College premises, or at functions sponsored by the College or in which the College participates.
- (p) Sexual battery or rape as defined by state law.
- (q) Theft or other abuse of computer time, including but not limited to:
 1. Unauthorized entry into a file, to use, read or change the contents, or for any other purpose.
 2. Unauthorized transfer of a file.
 3. Unauthorized use of another individual's identification and password.
 4. Use of computing facilities to interfere with the work of another student, faculty member or College official.
 5. Use of computing facilities to send obscene messages.
 6. Use of computing facilities to interfere with normal operation of the College computing system.
- (r) Abuse of the College Judicial System, including, but not limited to:
 1. Failure to obey the summons of a judicial body or College official.
 2. Falsification, distortion, or misrepresentation of information before a judicial body.
 3. Disruption or interference with the orderly conduct of a judicial proceeding.
 4. Institution of a judicial proceeding knowingly without cause.
 5. Attempting to discourage an individual's proper participation in, or use of, the judicial system.
 6. Attempting to influence the impartiality of a member of a judicial body prior to, and/or during the course of, the judicial proceeding.
 7. Failure to comply with the sanction(s) imposed under the Student Code of Conduct.
 8. Influencing or attempting to influence another person to commit an abuse of the judicial system.
- (3) **Violation of Law and College Discipline**
 - (a) If a student is charged only with an off-campus violation of federal, state, or local laws, but not with any other violation of this Code, disciplinary action

may be taken and sanctions imposed for grave misconduct which demonstrates flagrant disregard for the College community. In such cases, no sanction may be imposed unless the student has been found guilty in a court of law or has declined to contest such charges, although not actually admitting guilt.

- (b) College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of this Student Code of Conduct, for example, if both violations result from the same factual situation, without regard to the pendency of civil litigation in court or criminal arrest and prosecution. Proceedings under this Student Code of Conduct may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.
- (c) When a student is charged by federal, state or local authorities with a violation of law, the College will not request or agree to special consideration for that individual because of his or her status as a student. If the alleged offense is also the subject of a proceeding before a judicial body under the Student Code of Conduct, however, the College may advise off-campus authorities of the existence of the Student Code of Conduct and of how such matters will be handled internally within the College community, consistent with student record confidentiality requirements under state and federal law. The College will cooperate fully with law enforcement and other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students and faculty members, acting in their personal capacities, remain free to interact with governmental representatives as they deem appropriate.

ACADEMIC AND CLASSROOM MISCONDUCT

The instructor has the primary responsibility for control over classroom behavior and maintenance of academic integrity, and can order the temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct violative of the general rules and regulations of instruction. Extended or permanent exclusion from the classroom and further disciplinary action can be effected only through appropriate procedures of the College.

Plagiarism, cheating and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions which may be imposed through the regular institutional procedures as a result of academic misconduct, the instructor has the authority to assign an "F" or zero for an activity or to assign an "F" for the course.

If the student believes that he or she has been erroneously accused of academic misconduct, the student may appeal the case through the Academic Subcommittee.

JUDICIAL PROCEDURES

- (1) **Charges and Hearings**—The following procedures are applicable to all hearings for violations of this Code except those hearings that are heard in conformance with the requirements of the Tennessee Uniform Administrative Procedures Act.
 - (a) Any member of the College community may file a complaint against any student for misconduct. Complaints shall be prepared in writing and directed to the Judicial Officer. A complaint should be submitted as soon as possible after the event takes place, preferably within ten (10) days of the alleged misconduct.
 - (b) The Judicial Officer or his or her designee may conduct an investigation to determine if the complaint has merit and/or if it can be disposed of administratively by the Judicial Officer or by mutual consent of the parties involved on a basis acceptable to the Judicial Officer. Such disposition shall be final and there shall be no subsequent proceedings.
 - (c) All charges shall be presented to the accused student in written form. A time shall be set for a hearing, not less than five (5) days after the student has been notified.
 - (d) All written notices will be mailed or hand-delivered to the address of the student as it appears on the official campus records. Students are responsible for keeping the campus Records Office informed of a current address.
 - (e) Hearings shall be conducted by a judicial body according to the following guidelines:
 1. Hearings shall be conducted in private in order to protect the confidential nature of the proceedings.
 2. In hearings involving more than one accused student, the chairperson of the judicial body, in his or her discretion, may permit the hearings concerning each student to be conducted separately.
 3. The complainant and the accused have the right to be present and be assisted by any advisor they choose, at their own expense. The advisor may be an attorney. The accused is responsible for presenting his or her own case and advisors are not permitted to speak or to participate directly in any hearing before a judicial body.
 4. The College, the accused and the judicial body shall have the privilege of presenting witnesses, subject to the right of questioning by the judicial body.
 5. Pertinent records, exhibits and written statements may be accepted as evidence for consideration by the Judicial Officer or a judicial body at the discretion of the chairperson.

6. Hearings shall proceed in the following order:
- (i) reading of the charges;
 - (ii) the student's denial or admission of the charges;
 - (iii) presentation of evidence by the College and questions by the student charged and/or the Judicial Officer or hearing body;
 - (iv) presentation of evidence by the student charged and questions by the College and/or the Judicial Officer or hearing body; and
 - (v) closing statements by both parties.
 - (vi) After the hearing, the judicial body shall determine whether the student has violated each section of the Student Code of Conduct which the student is charged with violating.
 - (vii) The judicial body's determination shall be made on the basis of whether it is "more likely than not" that the accused student violated the Student Code of Conduct.
 - (viii) The student shall be notified in writing of the decision within five (5) days of the judicial body's decision. Every attempt will be made to verbally notify the student of the decision prior to the five-day period. In cases involving alleged sexual assault, both the accused and accuser shall be notified in writing within five (5) days of the judicial body's decision.
- (f) There shall be a single verbatim record, such as a tape recording, of all hearings before a judicial body. The record shall be the property of the College.
- (g) No student may be found to have violated the Student Code of Conduct solely because the student failed to appear before a judicial body. In all cases, the evidence in support of the charges shall be presented and considered.
- (2) **Appeals**
- (a) A decision reached by a judicial body and sanction imposed may be appealed by accused students to the College Appeals and Review Committee within five (5) class days of notification of the decision. Such appeals must be in writing and shall be delivered to the Judicial Officer or his or her designee.
 - (b) Except as required to explain the basis of new evidence, an appeal shall be limited to review of the verbatim record of the initial hearing and/or supporting documents for one or more of the following purposes:
 1. To determine whether the original hearing was conducted fairly in light of the charges and evidence presented, and in conformity with prescribed procedures giving the accused student a reasonable opportunity to prepare and to present a rebuttal of those allegations.
 2. To determine whether the sanction(s) imposed were appropriate for the violation of the Student Code of Conduct which the student was found to have committed.
 3. To consider new evidence, sufficient to alter a decision, or other relevant facts not brought out in the original hearing, because such evidence and/or facts were not known to the person appealing at the time of the original hearing.
 - (c) If an appeal is upheld by the College Appeals and Review Committee, the matter shall be remanded to the original judicial body and the Judicial Officer for reopening of the hearing to allow reconsideration of the original determination and/or sanction(s).
 - (d) Subsequent to review by the College Appeals Committee, a student may petition the President for review of the appropriateness of any sanctions imposed by a hearing body. Petitions must be delivered to the Office of the President within three (3) class days of the notification of the decision of the College Appeals and Review Committee.
- (3) **Victim's Rights**
- (a) Some actions that violate the College rules involve victimization of one or more students by another student(s). This behavior may include acts of theft or damage to property, physical violence, and other acts that endanger the safety of others in the College community. If a student has filed a complaint and is identified as a victim, that student is entitled to certain rights during the disciplinary process.
 - (b) If a complaint is filed with the Judicial Officer, it is important to remember that the accused student is being charged with violating a College rule or regulation; therefore, the College is ultimately responsible for initiating charges, imposition of sanctions if the charged student chooses to admit the violation, implementation of the hearing process, and determination of sanctions following a finding of guilt. Although a victim's input may be sought during the disciplinary process, the ultimate disposition of the case rests with the College. If a victim withdraws his or her complaint during the course of the disciplinary proceeding, the College reserves the right to proceed with the case on the basis of evidence other than the testimony of the victim.
 - (c) During the course of a disciplinary proceeding, victims have the following rights:
 1. To meet with the Judicial Officer or his or her representative to discuss the disciplinary process.
 2. To submit a written account of the alleged incident.
 3. To be advised of the date, time and location of the disciplinary hearing, and to request rescheduling of the hearing for good cause.
 4. To be present and to be accompanied by an advisor of the victim's choosing during the hearing process, although the advisor will not be permitted to speak for the victim during the hearing.
5. To testify as a witness during the hearing.
6. To decline to testify, with knowledge that such action could result in dismissal of the College's charges for lack of evidence.
7. To submit a written impact statement to the hearing panel for consideration during the sanctioning phase of the disciplinary process.
- (4) **Cases of Alleged Sexual Assault**—In cases involving alleged sexual assault, both the accuser and the accused shall be informed of the following:
- (a) Both the accuser and the accused are entitled to the same opportunity to have others present during a disciplinary proceeding; and,
 - (b) Both the accuser and the accused shall be informed of the outcome of any disciplinary proceeding involving allegations of sexual assault.
- (5) **Interpretation and Revision**
- (a) Any question of interpretation regarding the Student Code of Conduct shall be referred to the Vice President for Student Affairs, or his or her designee, for final determination.
 - (b) The Student Code of Conduct shall be reviewed annually under the direction of the Judicial Officer.
- (6) **Sanctions**
1. The following sanctions may be imposed upon any student found to have violated the Student Code of Conduct:
 - (a) Warning—A notice in writing to the student that the student is violating or has violated institutional regulations.
 - (b) Probation—Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any institutional regulation(s) during the probationary period. Probation may also include a loss of privileges discussed below, and in cases involving alcohol violations, may require attendance at a College sponsored alcohol offender's program.
 - (c) Loss of Privileges—Denial of specified privileges for a designated period of time. Loss of privileges may include, but will not be limited to, denial of the right to represent the College (as a member of an athletic team or in scholastic competition, for example), a denial of the use of campus facilities, a denial of parking privileges, a denial of participation in extracurricular activities, etc.
 - (d) Restitution—Compensation for loss, damage or injury. This may take the form of appropriate service and/or monetary or material replacement.
 - (e) Discretionary Sanctions—Work assignments, service to the College or other related discretionary assignments (such assignments must have the prior approval of the Judicial Officer).
 - (f) College Suspension—Separation of the student from the College for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
 - (g) College Expulsion—Permanent separation of the student from the College.
 2. More than one of the sanctions listed above may be imposed for any single violation.
 3. Interim Suspension—In certain circumstances, the Vice President for Student Affairs or the Judicial Officer may impose a College suspension prior to the hearing before a judicial body.
 - (a) Interim suspension may be imposed only: a) to ensure the safety and well-being of members of the College community or preservation of College property; b) to ensure the student's own physical or emotional safety; or c) if the student poses a substantive threat of disruption of or interference with the normal operations of the College. In cases involving an interim suspension, the hearing will be scheduled within ten (10) days of the first day of the suspension.
 - (b) During the interim suspension, students shall be denied access to the campus (including classes) and/or all other College activities or privileges for which the student might otherwise be eligible, as the Vice President for Student Affairs or the Judicial Officer determine to be appropriate.
 4. Disciplinary sanctions shall not be made part of the student's permanent academic record, but shall become part of the student's confidential disciplinary record. One year after graduation, the student's confidential disciplinary record may be expunged of disciplinary actions other than College suspension or College expulsion, upon application to the Judicial Officer.
- STUDENT ORGANIZATION DISCIPLINARY PROCEDURES**
- (1) **Prohibited Conduct for Student Organizations**
- (a) Any registered student organization may be placed on probation, suspension, restriction or have its registration withdrawn by the Judicial Officer, after having a hearing conducted in accord with the provisions covering individual students or, in the case of withdrawal of registration during the term of the registration, in accord with the contested case provisions of the Tennessee Uniform Administrative Procedures Act unless those provisions have been waived in writing by an authorized representative of the student organization. Such action may be taken for any one of the following reasons:
 1. The organization fails to maintain compliance with the initial requirements for registration.

2. The organization fails to submit any required report.
3. The organization operates or engages in any activity in violation of the rules and regulations of the College, of any Organizational Governing Body, Federal or State laws.

(2) **Student Organization Disciplinary Procedures**

- (a) The organization shall be afforded all the rights provided an individual student under "Judicial Procedures."
- (b) Initial Action
 1. Violations of College Policy and/or Organizational Governing Body rules shall be reported to the Judicial Officer where the violation involves College Policy. Where the violation involves Organizational Governing Body rules, a report shall be made to an officer of the Governing Body who shall report to the appropriate adviser in the Division of Student Services. The Judicial Officer shall hold a preliminary interview to determine if formal disciplinary action is warranted.
 2. If the adviser or Judicial Officer determines there is probable cause to believe that a violation of the Code and/or governing rules has occurred, he/she shall arrange a conference with the organization's officers to notify them of the charges to allow them to present their version of the alleged violation, and to review the rights of the organization.
 - (i) In the absence of unusual mitigating circumstances, the initial conference should be held within five (5) class days from the date of the complaint.
 - (ii) Failure of the officers to agree to, or appear at a conference or formal hearing, shall in itself constitute a violation of the code of proscribed conduct and may result in a decision being rendered without organizational input.
 - (iii) After notifying the officers of their rights and explaining the hearing alternatives set forth in sub-paragraph (e) below, the Adviser or Judicial Officer shall solicit from the officers their choice of a hearing alternative. Once this election has been knowingly made, the choice will be binding on all parties.
- (c) Disciplinary charges shall be heard by or pursuant to one of the following:
 1. Through a hearing conducted by the Judicial Officer.
 2. If the alleged violation may result in suspension or withdrawal of registration of the organization during the term of the registration, through a hearing conducted in accordance with the contested case provisions of the Tennessee Uniform Administrative Procedures Act.
- (d) The finding of any judicial branch, including the SGA Student Court, on matters of College policy shall be advisory only, the right of any final decision (subject to any right to appeal) shall rest with the Judicial Officer who may (a) accept the finding(s) in whole or in part or make any modification thereof, or (b) reject the finding(s) and direct a hearing before himself/herself or such other administrative official as he/she may designate.

(3) **Student Organization Sanctions**

- (a) Upon a proper determination that an organization has violated any rules or regulations of the College or of this Code, the following organization sanctions may be imposed, either singly or in combination and shall be part of the permanent record.
 1. Reprimand. A written reprimand may be given to any organization in violation of College policy or of this Code. It signifies that the organization is to take necessary actions to bring it into compliance and to avoid further violation. Failure to do so will result in more severe penalties.
 2. Restitution. Any organization that has committed an offense against property may be required to reimburse the College or other owner. Any such payment shall be limited to actual cost of repair or replacement.
 3. Restriction. A restriction(s) may be imposed upon an organization. Such restrictions may include, but are not limited to: loss of privilege of meeting or using College facilities, denial of right to participate in intramural or other campus events, denial of social functions, other restrictions consistent with the nature of the offense.
 4. Probation. An organization placed on probation is deemed not to be in good standing with the College. Its continued registration is conditioned by adherence to the rules, regulations, and provisions of the Code. Organizations on probation may continue to hold meetings, but may lose selected privileges accorded including, but not limited to, access to College facilities and social privileges. Said organization must obtain advance approval for all activities from the Judicial Officer.
 5. Suspension or Withdrawal of Registration. Any organization which is suspended or has had its registration withdrawn may not engage in or sponsor any activity or program, and may not hold meetings. When registration is withdrawn, the organization shall cease to exist.

SEXUAL AND RACIAL HARASSMENT POLICY

Sexual harassment and racial harassment have been held to constitute forms of discrimination prohibited by Title VI, Title VII of the Civil Rights Act of 1964, as amended and Title IX of the Educational Amendments of 1972. An institution or technology center may be held liable pursuant to Title VI or Title VII and/or lose federal funds pursuant to Title IX for failure to properly investigate and remedy claims of sexual or racial harassment.

Sexual harassment shall be defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- a. submission to such conduct is made explicitly or implicitly a term or condition of

- an individual's employment or classroom evaluation;
- b. submission to or rejection of such conduct by an individual is used as the basis for employment or academic decisions affecting the status of the individual;
- c. such conduct has the purpose or effect of unreasonably interfering with an individual's work or classroom performance, or creating an intimidating, hostile, or offensive work or academic environment.

Generally, racial harassment is defined as any person's conduct which unreasonably interferes with an employee's or student's status or performance by creating an intimidating, hostile, or offensive working or educational environment. Harassment on the basis of race, color, or national origin includes offensive or demeaning treatment of an individual, where such treatment is based typically on prejudiced stereotypes of a group to which that individual may belong. It includes, but is not limited to, objectionable epithets, threatened or actual physical harm or abuse, or other intimidating or insulting conduct directed against the individual because of his/her race, color, or national origin. Title VII requires employers to take prompt action to prevent the expression of opinions which abuse or offend their peers.

The College seeks to encourage the prompt reporting of such harassment and its prompt resolution through either informal or formal procedures. In addition, the College takes steps and develops programs designed to inform students of their rights to be free from sexual harassment and the procedures available for reporting such actions.

Programs have also been developed to educate members of the College staff about sexual harassment.

The final resolution of sexual or racial harassment complaints and the imposition of any appropriate sanctions will be governed by existing College procedures. The following set of procedures will be implemented for the reporting of sexual or racial harassment by a student against another person:

1. Complaint by a student against a faculty member or employee of the College—contact the College's Affirmative Action Officer who will provide the complainant with procedures.
2. Complaint by an employee against another employee of the College—contact the College's Affirmative Action Officer who will provide the complainant with the procedures.
3. Complaint by a student against another student—contact the Judicial Officer in the Office of Vice President for Student Affairs. The Judicial Officer will provide the student with consultation and procedures.

Complaints of other forms of harassment on the basis of religion, handicap or other protected status are generally handled in the same manner as procedures described above.

H16

STUDENT HANDBOOK INDEX

Academic Advisement	H2	Judicial Authority.....	H12
Academic and Classroom Misconduct	H13	Judicial Procedures	H13-H14
Academic Appeals	H2	Library Services.....	H3
Adaptive Lab	H3	Lost and Found	H5
Adaptive Physical Education.....	H3	Measles Outbreaks in Colleges	H6
Adding or Dropping a Course	H2	Minority Affairs	H3
Admissions and Records	H2	Parking	H10
AIDS Policy.....	H4	Placement Office.....	H3
Appeals		Privacy Rights of Students	H3
Academic Suspension.....	H2	Records Office	H3
Developmental Suspension.....	H2	Registration.....	H3
Disciplinary.....	H14	Services for Off-Campus Students	H3
Grade.....	H2	Services for Students with Disabilities.....	H3
Parking & Traffic.....	H10	Sexual and Racial Harassment Policy	H15
Bookstore	H2	Sexual Offense Management Team	H16
Campus Map Showing Parking Areas.....	H11	Sexual Offense Policy and Procedure	H15
CAMPUS SAFETY AND SECURITY	H8-H9	Signs and Posters	H6
Career Planning Center.....	H2	Smoking Policy.....	H6
Claims Against the State of Tennessee	H4	Student Activities.....	H3,H6-H8
Class Attendance.....	H2	Student Code of Conduct.....	H12-H14
Consumer Concerns.....	H4	Student Government Association (SGA).....	H6
Cooperative Education.....	H2	STUDENT INFORMATION AND SERVICES	H2-H4
Counseling Services.....	H2	STUDENT LIFE	H4-H6
Crime on Campus Statistical Report	H9	Student Life Specialist (Judicial Officer)	H3
Deaf and Hard of Hearing	H3	Student Newspaper	H6
Demonstration and Peaceful Assembly	H5	STUDENT ORGANIZATIONS	H6-H8
Disciplinary Offenses	H12	Student Organization Disciplinary Procedures.....	H14-H15
Dress Code.....	H5	Testing Center	H3
Drug-Free Campus Policy	H5	Theft of Student Property	H6
Emergency Medical First Response	H5	TRAFFIC REGULATIONS.....	H10-H11
Financial Aid.....	H2	Tutorial Program.....	H3
Health Insurance Plan for Students	H5	Veterans Affairs.....	H3
Housing.....	H5	Victim's Rights	H14,H16
How Does a Student Get a Job?.....	H2	Visiting Speaker Policy	H6
Identification Cards	H5	Visitors	H6
Inclement Weather	H2	Wall Lockers	H6
INSTITUTIONAL STUDENT DISCIPLINARY RULES.....	H12-H15	Whom To Contact If You.....	H4
Intramurals	H6	Withdrawal from the College	H3

1998-99 Certificates of Advancement

Contents

	Page No.		Page No.
General Information/Admission Procedures	C1	Industrial Hygiene.....	C4
BUSINESS & INFORMATION SYSTEMS		Occupational Safety	C4
AS/400 Specialist.....	C2	Quality Technology.....	C4
Computer Network Support.....	C2	Structural Engineering Technology	C5
Customer Service.....	C2	Surveying.....	C5
General Office Clerk/Receptionist.....	C2	LIBERAL ARTS	
Highway Transportation	C2	American Sign Language.....	C5
Advanced Highway Transportation	C2	Early Childhood Education	C5
Legal Office Clerk/Receptionist	C2	Caregivers Certificate.....	C5
Medical Office Clerk/Receptionist.....	C2	Child Development Associate Credential	C5
Purchasing.....	C2	Mental Health Technician	C5
Quality Management.....	C2-C3	Substance Abuse Counseling.....	C5
Small Business.....	C3	Theatre Arts.....	C5
Supervisory Management	C3	MATHEMATICS & SCIENCES	
ENGINEERING & ENVIRONMENTAL TECHNOLOGY		Arboriculture	C5
Automated Controls.....	C3	Dietary Manager Program.....	C5-C6
Chemical Technology.....	C3	Forestry	C6
Computer-Aided Drafting & Design (CAD).....	C3	NURSING/ALLIED HEALTH	
Basic Computer-Aided Drafting & Design.....	C3	Dental Assisting	C6
Advanced Computer-Aided Drafting & Design.....	C3	Emergency Medical Services	C6-C7
Computer-Aided Manufacturing (CAM).....	C3	EMT/EMT-IV Program.....	C6
Computer Systems Technology	C3	Paramedic Training Program	C7
Construction and Inspection	C3	Magnetic Resonance Imaging	C7
Electricity/Electronics Technology.....	C4	Advanced Magnetic Resonance Imaging.....	C7
Environmental Technician	C4	Mammography.....	C7
General Manufacturing	C4	Nursing Assistant Program.....	C7-C8
Hazardous Materials Technology	C4	Phlebotomy.....	C8
HVAC Technology	C4	Supportive Care Specialist.....	C8
Hydraulics/Pneumatics Technology.....	C4		

Chattanooga State's Certificates of Advancement are composed of regular Chattanooga State courses selected by faculty to provide students with skills in specific specialties. Each of Chattanooga State's five academic divisions awards Certificates of Advancement. The certificate signifies that the student has satisfactorily completed the courses required to develop specified skills.

Many employers recognize Chattanooga State's Certificates of Advancement as appropriate documentation for employment or for professional development credit. Certificates of Advancement, however, must not be confused with other credentials awarded by the College, which are Associate Degrees, Technical Certificates and Industrial Technology Certificates (see the Academic Catalog portion of this publication). Because Certificates of Advancement are not part of Chattanooga State's official academic inventory, the only documentation of completion is the certificate itself. *No notation will appear on the student's transcript.* However, all courses taken for Certificates of Advancement are regular college classes and will appear on the transcript.

In many cases, the courses required for a Certificate of Advancement are also required for an Associate Degree or Technical Certificate. Under these circumstances, the student may apply the credits earned for the Certificate of Advancement toward the Associate Degree or Technical Certificate as well.

Certificates of Advancement are awarded by the division offering the program. The student should contact the division prior to completion of the program to initiate the necessary paperwork. In addition to successful completion of all

required courses, the student must also satisfy the following requirements:

Grade Point Average

The cumulative GPA in coursework required for the certificate must be 2.0 or better.

Residency Requirement

At least one-third of the credit hours required for the certificate must be completed in residence at Chattanooga State. (Credits earned through Chattanooga State's Distance Learning Program are considered to be "in residence.")

Admission Procedures

1. Submit an application (or re-application) to the Admissions Office.
2. Pay \$10.00 non-refundable application fee. (This is a one-time fee for new applications only. There is no fee for re-applications.)
3. Declare "Special Student" status on application form. To be admitted as a Special Student a person must hold a regular high school diploma or GED or be 21 years of age (or older).
4. If the certificate program requires mathematics or English or any course that has a mathematics or English prerequisite, the student must demonstrate eligibility to take the course(s) in one of the following ways:

For Math

- a. Transcript showing successful completion

of a college level mathematics course;

-or-

- b. Mathematics subscore of 19 or higher on the ACT (or corresponding SAT score);

-or-

- c. college level placement on the mathematics portion of the AAPP;

-or-

- d. successful completion of the required Remedial or Development course(s) as indicated by AAPP placement.

For English

- a. Transcript showing successful completion of a college level English course;

-or-

- b. English subscore of 19 or higher on the ACT (or corresponding SAT score);

-or-

- c. college level placement on the Writing portion of the AAPP;

-or-

- d. successful completion of the required Remedial or Development course(s) as indicated by AAPP placement.

5. Certificate programs in the Division of Nursing/Allied Health have admission requirements in addition to those listed above. See the specific program for more information.

AS/400 Specialist

The AS/400 specialist certificate program is designed for current data processing professionals who want to prepare themselves for AS/400 support and AS/400 applications positions. The certificate program provides the basic hardware and software knowledge used in a midrange computer environment.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	FALL
CS 133	Control Language, Operations, and Utilities	3		
CS 134	¹ RPG Programming Language	4		
CS 205	² Computer Networks	3		
CS 233	Interactive RPG Programming		3	
CS 235	Systems Implementation and Documentation			3
CS 296	Principles of Database Management Systems *Directed Elective			3
Total Hours: 22/23		10	3/4	6

*Directed Elective must be selected from:

CS 154	³ COBOL Programming Language I	4
CS 244	Systems Analysis and Design	3
CS 249	Topics in Computer Applications (AS/400 Topics)	3
CS 280	⁴ COBOL Programming Language II	3

¹Prerequisites: CS 104, CS 154 or equivalent programming experience (COBOL).

²Prerequisite: CS 176. Corequisite: CS 204.

³Prerequisite: CS 114.

⁴Prerequisite: CS 154 or equivalent programming experience (COBOL).

Computer Network Support

In today's computer industry, professionals face the need for upgrading computer skills. The area of computer networks is rapidly changing and requires employees to acquire and show proficiency in this area. The Certified Network Administrator (CNA) designation is the first level of network certification conferred by Novell upon successful completion of their exam. Before taking the exam, one must receive training in the areas of microcomputers and data communication. The Computer Network Support certificate should provide the required knowledge and training to the experienced professional who wishes to acquire network related skills as well as those new to the computer field.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
1st Yr.			
CS 104	Fundamentals of Information Systems	3	
CS 176	Microcomputer Operating Systems		3
Total Hours: 15		3	3
2nd Yr.			
CS 204	Microcomputer Architecture	3	
CS 205	Computer Networks	3	
CS 215	Local Area Network Management		3
Total Hours: 15		6	3

Customer Service

This two-semester certificate provides students with entry level skills in the Customer Service area. The curriculum is designed to provide training in business operations, microcomputers, oral and written communications, salesmanship, and ethics.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
CS 101	Computer Literacy		3
MG 101	Professional Ethics in the Workplace: Business and Commerce	1	
MG 103	Introduction to Business	3	
MG 154	Marketing		3
MG 254	Salesmanship		3
OF 104,105	Business Communications I, II	3	3
OF 107	Keyboarding for Information Systems	1	
PY 251	Psychology of Personal Adjustment	3	
Total Hours: 23		11	12

General Office Clerk/Receptionist

This certificate provides training in the field of office systems. This two-semester program is intended to offer entry-level skills for the person wishing to begin an office career as a clerk or receptionist.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
OF 103	Records Management/Calculators	3	
OF 113,114	Keyboarding/Document Processing I, II	3	3
OF 125	Word Processing I	3	
OF 195	General Office Procedures		3
Total Hours: 15		9	6

Highway Transportation

This certificate program is open only to persons employed in the over-the-road transportation industry. It is designed to help them to understand and apply the basics of good business practice and service in dealing with their own company and its clients. All courses required in this program are offered via Chattanooga State's Distance Learning Program.

†Students must demonstrate eligibility to take this course. See Item 4 under "Admission Procedures" on page C1.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
HZ 200	Hazardous Materials Technician Certification		2
MG 103	Introduction to Business	3	
MG 134	Supervision and Human Relations		3
OF 104	Business Communications I	3	
Total Hours: 11		6	5

Advanced Highway Transportation

This program is designed for persons who have completed the Certificate of Advancement in Highway Transportation and desire additional depth and breadth of coverage in the areas of business and special interests. For this certificate, the student must complete 10 semester hours of credit (in any combination) from the courses listed below:

Course No.	Course Title	Semester Hours	
		FALL	SPR
BU 173	Business Law I	3	
FP 101	Fundamentals of Financial Planning	3	
HZ 201	Special Topics in Hazardous Materials and Waste Management		1-4
MG 101	Professional Ethics in the Workplace: Business & Commerce		1
MG 114	Principles of Management		3
PY 101	General Psychology I		3
Total Hours: 10			

Legal Office Clerk/Receptionist

This certificate provides training in the field of office systems. This two-semester program is intended to offer entry-level skills for the person wishing to begin an office career as a clerk or receptionist in a legal office.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
LA 110	Fundamentals of Law		3
OF 103	Records Management/Calculators	3	
OF 113	Keyboarding/Document Processing I	3	
OF 125	Word Processing I	3	
OF 195	General Office Procedures		3
Total Hours: 15		9	6

Medical Office Clerk/Receptionist

This certificate provides training in the field of office systems. This two-semester program is intended to offer entry-level skills for the person wishing to begin an office career as a clerk or receptionist in a medical office.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
HS 104	General Medical Terminology I	3	
OF 103	Records Management/Calculators		3
OF 113	Keyboarding/Document Processing I	3	
OF 125	Word Processing I	3	
OF 195	General Office Procedures		3
Total Hours: 15		9	6

Purchasing

This two-semester certificate is designed to provide a basic foundation in communication, microcomputers, accounting, and the tools of purchasing needed for an entry level position.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
BU 114	Principles of Accounting I		4
BU 173	Business Law I		3
CS 101	Computer Literacy	3	
MG 103	Introduction to Business	3	
MG 165	†Business Mathematics	3	
MG 214	Purchasing	3	
*Directed Elective(s)			3
Total Hours: 22		12	10

*Directed Electives totaling three (3) hours must be selected from the following:

CS 197	Spreadsheet Software Applications	3
EC 110	Introduction to Economics	3
EC 211	Principles of Economics I	3
EC 212	Principles of Economics II	3
MA 170	†Statistics I	3
MG 101	Professional Ethics in the Workplace: Business and Commerce	1
MG 154	Marketing	3
MG 254	Salesmanship	3
SP 110	¹ Fundamentals of Public Speaking	3

¹Prerequisite: EN 110.†

Quality Management

This two-semester certificate provides students with entry level Quality Management skills. The curriculum is designed to provide participants with a basic foundation in team building, statistics, and the improvement tools used in Quality Management.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
CS 101	Computer Literacy	3	

MA 153	†Introductory Statistics	3	
MG 101	Professional Ethics in the Workplace: Business and Commerce	1	
MG 105	Introduction to Quality Management	3	
MG 106	Quality Improvement Tools		3
MG 110	Leadership Skills		1
MG 134	Supervision and Human Relations		3
MG 285	Organizational Behavior		3
PY 251	Psychology of Personal Adjustment	3	
Total Hours: 23		13	10

Small Business

This two-semester certificate provides students with the basic accounting, management and planning skills necessary for a successful business venture. The curriculum is arranged to provide the student with a finished business plan for presentation for funding of the venture.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
BU 114	Principles of Accounting I		4
BU 173	Business Law I		3
CS 101	Computer Literacy	3	
MG 103	Introduction to Business	3	
MG 109	Practical Business Planning		2
MG 165	†Business Mathematics	3	
	Approved Electives	2	3
Total Hours: 23		11	12

Supervisory Management

This two-semester certificate provides students with entry level skills in Supervisory Management. The curriculum is designed to provide training in communication, microcomputers, supervision, and management of human resources.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
CS 101	Computer Literacy	3	
MG 101	Professional Ethics in the Workplace: Business and Commerce	1	
MG 103	Introduction to Business	3	
MG 110	Leadership Skills		1
MG 134	Supervision and Human Relations		3
MG 165	†Business Mathematics	3	
MG 264	Human Resources Management		3
MG 285	Organizational Behavior		3
PY 251	Psychology of Personal Adjustment	3	
Total Hours: 23		13	10

Computer-Aided Drafting and Design (CAD)

BASIC COMPUTER-AIDED DRAFTING AND DESIGN (CAD)

This program is designed to upgrade the skills of present engineers, draftsmen, designers, architects, and technicians in the area of computer-aided drafting and design. Two-dimensional drafting and design will be stressed on two different computer-aided drafting and design systems, AutoCAD and Intergraph.

Prerequisites for all courses in this program include MD 114 Engineering Drawing I or equivalent experience.

SUMMARY OF REQUIRED HOURS				
Course No.	Course Title	Semester Hours		
		FALL	SPR	FALL
DD 101	Microcomputer Drafting I	3		
DD 118	Introduction to Intergraph Microstation		3	
DD 209	CAD Applications			3
Total Hours: 9		3	3	3

ADVANCED COMPUTER-AIDED DRAFTING AND DESIGN (CAD)

This program is designed to provide engineers, draftsmen, designers, architects, and technicians advanced techniques, concepts, and skills in computer-aided drafting and design. Students should have completed the Basic CAD Certificate courses before attempting any of the advanced courses.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
DD 204	Computer-Aided Design/Modeling		3
DD 210	¹ AutoLISP Programming		3
DD 226	² Advanced Intergraph Microstation		3
Total Hours: 9			9

¹Additional prerequisite: ET 115.
²Prerequisite: DD 118.

Computer-Aided Manufacturing (CAM)

This program is an extension of the Computer-Aided Drafting and Design Certificate Programs, and courses may be taken concurrently in both programs as long as the prerequisites for each course are completed. The program is designed to upgrade the skills of present engineers, draftsmen, designers, machinists, and technicians in the area of computer-aided manufacturing. Hands-on experience with computer numerical control (CNC) machine tools and CAD/CAM software systems will be emphasized.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
MD 207,208	¹ Numerical Control I, II	3	3
MD 294	² Automated Manufacturing	3	
Total Hours: 9		6	3

¹Prerequisites: ET 115, MA 125 †, MD 184.
²Prerequisites: MD 124, MD 184. Corequisite: MA 153.†

Computer Systems Technology

The purpose of this certificate program is to provide technical people the opportunity to upgrade their skills in the areas of microcomputer coprocessors, assembly programming, and computer systems for both hardware and software applications.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
EE 140	¹ Digital Circuits	4	
EE 141	Microcomputer Circuits		4
		4	4
2nd Yr.			
EE 250	² Microcomputer Systems	4	
EE 251	³ Microcontrollers Applications		4
		4	4
Total Hours: 16			

¹Prerequisite: MA 081.†
²Additional prerequisites: EE 110, ET 115.
³Additional prerequisite: EE 110.

Construction and Inspection

This certificate program is designed to upgrade the skills of experienced construction industry personnel. It is also for those working or interested in the construction industry. It is designed to provide students with a knowledge of some basic mathematics required in the construction field and to introduce them to principles of surveying, construction estimating, testing, and contracts.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
CI 116	Construction Planning & Scheduling	3	
CI 164	Construction Methods & Estimating	3	
CI 174	Surveying I		4
CI 231	¹ Construction Materials Testing	3	
CI 233	² Contracts & Specifications		3
MA 121,125	†Algebra & Trigonometry for Technologies I, II	4	4
Total Hours: 24		13	11

¹Corequisite: MD 134.
²Prerequisite: RE 081.

ENGINEERING & ENVIRONMENTAL TECHNOLOGY

Automated Controls

The purpose of this certificate program is to provide engineers, technicians, and other technical people the opportunity to upgrade their skills in the areas of programmable controllers, networking, robotics, sensors, and other basic principles related to shop floor control in a computer-integrated manufacturing environment.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
EE 140	¹ Digital Circuits	4	
EE 260	² Programmable Logic Controllers		4
EE 261	³ Automation Control Systems		4
EE 271	⁴ Robotic Systems		4
Total Hours: 16		4	8

¹Corequisite: MA 081.†
²Additional Prerequisite: EE110.
³Prerequisites: EE 121, EE 141, EE 212. Corequisite: EE 221.
⁴Prerequisites: EE 121, MA 121.†

Chemical Technology

This certificate is designed to provide the student with the tools necessary to perform in an industrial or commercial chemical laboratory through enhanced comprehension of concepts, familiarity with chemical instrumentation, and technical communication skills.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
CH 105	Survey of Organic & Analytical Chemistry		4
CH 134,135	¹ General Chemistry I, II	4	4
CS 101	Computer Literacy	3	
CT 110	Laboratory Methods and Techniques		4
CT 211	Instrumental Analysis I		4
Total Hours: 23		7	12

¹Prerequisite or corequisite: MA 117 or MA 121.†

1998-99 Certificates of Advancement

Electricity/Electronics Technology

A certificate program designed to acquaint people with the basics of electricity and electronics and to assist them in becoming more adaptable in our advanced technological society.

SUMMARY OF REQUIRED HOURS		
Course No.	Course Title	Semester Hours
MA 121	†Algebra & Trigonometry for Technologies I	4
EE 110	Electrical Circuits I	5
EE 140	Digital Circuits	4
Total Hours: 13		

Environmental Technician

This concentrated program of study is designed to upgrade the skills and marketability of technical persons working in or desiring to find careers in the environmental field. It provides professionals now employed with a vehicle for upgrading their practical skills with specialized professional development training. Successful certificate holders are qualified to perform in a broad range of environmental career fields including: Environmental Field Technician, Field Sampling Technician, Remediation Technician, and Environmental Compliance Assistant. This training program is an excellent review for professionals qualified to sit for certification examinations such as the *Registered Environmental Technician* offered by the National Environmental Health Association.

SUMMARY OF REQUIRED HOURS				
Course No.	Course Title	Semester Hours		
		FALL	SPR	FALL
HZ 120	Hazardous Materials Regulations	3		
HZ 125	¹ Pollutant Migration		3	
HZ 201	² Special Topics in Hazardous Materials and Waste Management	2		
HZ 225	³ Environmental Sampling			4
HZ 235	Hazardous Waste Operations and Emergency Response		4	
Total Hours: 16		5	7	4

¹Prerequisite: CH 134.† [Corequisite for CH 134: MA 117.†]
²May substitute HZ 200.
³Prerequisite: MA 153.†

General Manufacturing

The purpose of this program is to provide the completer with the basic skills needed by manufacturers to work in a manufacturing plant. Eligible students must take the ACT and/or AAPP and test at the MA 081 and RE 081 level or complete MA 080 and RE 070.

SUMMARY OF REQUIRED HOURS		
Course No.	Course Title	Semester Hours
MD 104	Blueprint Reading and Analysis	3
MD 109	Introduction to Manufacturing Measurement, Safety, and Quality Control	3
MD 110	Customized Manufacturing Topics	1-4
Total Hours: 7-10		

Hazardous Materials Technology

This certificate program will provide students a practical, working knowledge of environmental regulations and management practices. This certificate will also allow individuals already employed in the field an opportunity to upgrade their skills.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
HZ 101	¹ Introduction to Hazardous Materials and Safety Concepts	3	
HZ 120	Hazardous Materials Regulations	3	
HZ 150	Facility Compliance I	3	
HZ 230	² Chemistry of Hazardous Materials		4
HZ 235	Hazardous Waste Operations and Emergency Response		4
HZ 240	² Hazardous Waste Disposal		3
HZ 245	Hazardous Materials Practicum		2
Total Hours: 22		9	11

¹Prerequisite: RE 081.
²Additional prerequisite: CH 134.† [Corequisite for CH 134: MA 117.†]

HVAC Technology

The purpose of this certificate program is to provide engineers, technicians, and other technical people the opportunity to upgrade their skills in the areas of heating, ventilation, and air conditioning design.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
1st Yr.			
MA 121,125	†Algebra & Trigonometry for Technologies I, II	4	4
		4	4
2nd Yr.			
MD 264,265	¹ Thermodynamics I, II	3	3
		3	3
Total Hours: 14			

¹Additional prerequisite: ET 115.

Hydraulics/Pneumatics Technology

This program is designed for those people working in a technical field who need to upgrade their skills in the area of hydraulics and pneumatics.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
1st Yr.			
CI 224	¹ Hydraulics	3	
MA 121,125	†Algebra & Trigonometry for Technologies I, II	4	4
		7	4
2nd Yr.			
MD 184	Manufacturing Processes	3	
MD 226	² Fluid Power		3
		3	3
Total Hours: 17			

¹Corequisite: MD 134.
²Additional prerequisite: ET 115.

Industrial Hygiene

This certificate program will provide an opportunity to develop the basic skills necessary to effectively monitor and inspect the workplace for hazards. Successful certificate holders will be qualified to perform a broad range of industrial hygiene services in a variety of industries. Individuals with previous college training may use this certificate to upgrade their qualifications or to redirect their career paths into a field that is predicted to have great opportunities and challenges in the future.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
1st Year			
IH 104	¹ Essentials of Industrial Hygiene	4	
NU 204	¹ Introduction to Health Physics and Industrial Hygiene		4
OS 120	Industrial Safety Compliance	3	
OS 140 or HZ 235	Health & Safety/Confined Spaces or ² Hazardous Waste Operations and Emergency Response		3/4
		7	7/8
2nd Year			
IH 204	Industrial Hygiene Sampling and Monitoring	4	
IH 214	Industrial Hygiene Control Technology		4
Total Hours: 22/23		4	4

¹Prerequisite: MA 081.†
²Recommended prerequisite: HZ 120.

Occupational Safety

This certificate program will provide students an opportunity to enhance their skills in the area of occupational safety.

SUMMARY OF REQUIRED HOURS				
Course No.	Course Title	Semester Hours		
		FALL	SPR	FALL
OS 120 or OS 125	Industrial Safety Compliance or Construction Safety Compliance	3		
OS 210	Motor Carrier Safety			3
OS 220	Ergonomics and Human Factors			3
OS 240	Occupational Safety & Health Program Management			3
	*Directed Electives	6-8	2-5	
		9-11	5-8	6
Total Hours: 22/23				

**Directed Electives must be selected from:*
 FI 255 Industrial Fire Prevention and Protection 3
 HZ 235 ¹Hazardous Waste Operations and Emergency Response 4
 IH 104 ²Essentials of Industrial Hygiene 4
 NU 101 Health Physics and Industrial Hygiene Seminar 1
 OS 140 Health and Safety for Confined Spaces 3
 OS 150 Excavation and Trenching Operations 3
 OS 190 Special Topics in Occupational Safety 1-4
 OS 230 Process Safety Management 3
¹Recommended prerequisite: HZ 120.
²Prerequisite: MA 081.† Corequisite: CH 134.† [Corequisite for CH 134: MA 117.†]

Quality Technology

The American Society of Quality Control (ASQC) offers professional certification to those who demonstrate proficiency in one of five quality areas: technician, engineer, auditor, inspector, and manager. This certificate program will prepare the individual for the ASQC certification process. A professional may choose one or more areas in which to become certified.

SUMMARY OF REQUIRED HOURS			
Course No.	Course Title	Semester Hours	
		FALL	SPR
MA 153 or MA 170	†Introductory Statistics or †Statistics I	3	
MG 106	¹ Quality Improvement Tools		3
QA 240	Statistical Process Control		3
	*Directed Elective		2-4
Total Hours: 11-13		3	8-10

**Directed Elective must be selected from:*
 QA 140 Quality Technician 3
 QA 142 Quality Engineering 4
 QA 144 Mechanical Inspector 3
 QA 146 Quality Auditing 2
 QA 148 Quality Manager 3

¹Prerequisite: MG 105.

Structural Engineering Technology

This certificate program is designed to upgrade the skills of persons with experience in the structural field. It is also for those working in or interested in working in the structural field. This program will provide the student with an appropriate background in mathematics and will acquaint him/her with the principles and practices of reinforced concrete and structural steel design. The course in reinforced concrete will be in accordance with the American Concrete Institute Building Code (ACI). The structural steel course will be in accordance with the American Institute of Steel Construction (AISC).

SUMMARY OF REQUIRED HOURS			Semester Hours	
Course No.	Course Title		FALL	SPR
			1st Yr.	MA 121,125
	MD 114	Engineering Drawing I	3	4
			7	4
2nd Yr.	CI 242	1Structures I		3
	CI 243	1Structures II		3
	MD 134,242	2Statics & Strength of Materials I, II	3	3
			3	9
Total Hours: 23				

¹Corequisite: MD 242.

²Additional prerequisite for MD 134: ET 115. Corequisite for MD 242: MA 135.†

Surveying

The objective of this certificate program is to qualify the student, through basic theory and laboratory practice, for any of the work assignments in a survey party. This should help the student prepare for the ASCM certification exams and the state surveying licensure exam. The student may take MA 125 before CI 174 or at the same time.

SUMMARY OF REQUIRED HOURS			Semester Hours		
Course No.	Course Title		FALL	SPR	FALL
			CI 174,274	Surveying I, II	
MA 121,125	†Algebra & Trigonometry for Technologies I, II	4	4	4	4
Total Hours: 16			4	8	4

LIBERAL ARTS

American Sign Language

This certificate is designed to provide one year of basic instruction in the American Sign Language for the deaf. Persons working with deaf employees in the market place desiring to communicate with their co-workers, parents of deaf children wanting to learn to communicate more effectively in the family unit, and professionals finding a need for basic sign language skills on the job may enroll in this program of study. The student completing the American Sign Language Certificate will be able to communicate at a basic level in ASL and will be considered a "signer." This certificate does not lead to employment as an interpreter for the deaf nor does it in any way replace the American Sign Language Studies Associate of Applied Science degree. The student desiring to continue study and to become an interpreter may do so with the degree program of instruction. American Sign Language is the fourth most used language in the world and the third most used language in the United States.

SUMMARY OF REQUIRED HOURS			Semester Hours	
Course No.	Course Title		FALL	SPR
			HP 120, 121	American Sign Language I, II
HP 130	Orientation to Deafness	3		
HP 132	Psychology of Deaf People and Their Culture			3
Total Hours: 12			6	6

Early Childhood Education

CAREGIVERS CERTIFICATE

This program consists of a group of courses selected especially for upgrading the knowledge of persons already employed as caregivers of young children. Since these courses are already a part of the regular Early Childhood Education curriculum, students may wish to apply credits earned in this program later to an Associate of Applied Science Degree.

SUMMARY OF REQUIRED HOURS			Semester Hours	
Course No.	Course Title		FALL	SPR
			ED 117	Principles of Childhood Education
ED 126	Creative Expression	3		
ED 199	Practicum I			4
ED 223	Language Arts for Young Children			3
ED 240 or	Infant & Toddler Care or			
ED 219	Family Dynamics/Parent Educator	3		7
Total Hours: 16			9	7

CHILD DEVELOPMENT ASSOCIATE CREDENTIAL

"CDA" National Credential—this credential, recognized on a national level, is awarded to child care providers and home providers who have demonstrated their skill in working with young children and their families by successfully completing the CDA Assessment Process. Formal training is required to meet the competency areas of the CDA credentialing system. Students who complete this

Please check the Chattanooga State Catalog for information on course prerequisites.

program successfully may transfer their credits to further their studies toward the Associate of Applied Science Degree.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
ED 117	Principles of Childhood Education		3
ED 199	Practicum I		4
PE 213	Health and First Aid for Young Children		3
Total Hours: 10			

Mental Health Technician

This certificate is offered for students who wish simply to take additional courses for professional development. It is also intended to provide mental health paraprofessionals with practical knowledge and skills that are essential to be effective as mental health practitioners.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	FALL
HR 219	Family Dysfunction	3		
HR 240	Group Dynamics	3		
HR 245	Introduction to Counseling		3	
HR 260	Seminar			3
PY 213	Abnormal Psychology		3	
PY 217	Human Growth and Development	3		
PY 251	Psychology of Personal Adjustment	3		
Total Hours: 21		12	6	3

Substance Abuse Counseling

This certificate program provides training in the field of drug abuse counseling. It is intended to assist the business community in upgrading the quality of the existing human services paraprofessional workforce through the provision of an alternative method of developing required skills and competencies. It provides persons now employed with a vehicle for upgrading their practical skills in counseling drug abusers.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	FALL
HR 130	Substance Abuse Theories		3	
HR 219	Family Dysfunction	3		
HR 235	Methods of Substance Abuse Treatment	3		
HR 240	Group Dynamics		3	
HR 245	Introduction to Counseling		3	
HR 250	Substance Abuse and the Law	3		
HR 260	Seminar			3
Total Hours: 21		9	9	3

Theatre Arts

A one-year course of study in all aspects of the theatrical arts including acting, performance and production, technical theatre, and movement as well as voice and diction for the stage. This program creates a special focus for students with a wide variety of interests and needs ranging from a desire to obtain a degree to those whose specific concentration is theatrical production.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
DR 111	Introduction to the Theatre	3	
DR 126	Voice and Diction for the Stage	2	
DR 131	Movement I		2
DR 204	Performance and Production	2	2
DR 212,213	Acting I, II	3	3
Total Hours: 17		10	7

MATHEMATICS & SCIENCES

Arboriculture

This three-semester certificate is intended to provide professional training for workers in the landscape, tree trimming, construction and brush clearing businesses. The focus of the program will be primarily landscape/tree related work in urban areas and will include an intense practicum which will require students to demonstrate proper techniques for climbing, pruning, tree cabling and bracing, tree/plant installation and nurture, and protection from environmental damage. With the exception of the practicum experience, these courses will be taught via Chattanooga State's Distance Learning Program.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
AL 110	Fundamentals of Tree Biology and Identification	4		
AL 116, 126	Tree Management I, II	4	4	
AL 136	Tree Management III		4	
AL 236	Applications in Arboriculture			2
Total Hours: 18		8	8	2

Dietary Manager Program

This program is designed to provide the basic skills used by the dietary manager to supervise and manage all aspects of non-commercial food service, partic-

1998-99 Certificates of Advancement

ularly in schools and long term care settings, in support of the registered dietician and/or consulting dietician. The program includes training on Hazard Analysis Critical Control Point (HACCP) food safety systems required by the Occupational Safety and Health Administration (OSHA) and the SERVSAFE certification offered through the National Restaurant Association. Students who successfully complete this program will be eligible to sit for the Certified Dietary Manager examination (CDM) administered by the Dietary Managers Association.

Admission Requirements

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to the Dietary Manager Program must also:

1. Submit a Dietary Manager Program Application Form to the Division of Mathematics & Sciences.
2. Submit official copies of high school transcript(s) or GED scores. Transfer students must also submit official college transcript(s) from all colleges attended.
3. Complete an interview with the program director.
4. Meet one of the following criteria:
 - Two years experience in either health care food service or school food service.
 - OR
 - Demonstrate an acceptable level of proficiency in English, Reading, and Mathematics as follows:
 ENGLISH — ACT English subscore of 19 or higher (or corresponding SAT score) **or** AAPP placement at the EN 081 level **or** completion of EN 070 **or** completion of a college level English course with minimum grade of "C."
 READING — ACT composite of 19 or higher (or corresponding SAT score) **or** AAPP placement at the RE 081 level **or** completion of RE 070 **or** completion of a college level English course with minimum grade of "C."
 MATHEMATICS — ACT Math subscore of 19 or higher (or corresponding SAT score) **or** AAPP placement at the MA 080 level **or** completion of MA 070 **or** completion of a college level Math course with minimum grade of "C."

Continuation Policy

A grade of "C" or better in all Dietary Manager (ND) courses is required to remain in the program. Students may not take additional Dietary Manager courses until a grade of "C" or better is achieved in the courses previously attempted. (Grades of "W" or "WP" do not count as attempts.)

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
ND 110	Practical Diet Therapy	3		
ND 111	Practical Diet Therapy Practicum	1		
ND 120	Food Service Sanitation	2		
ND 121	Food Service Sanitation Practicum	1		
ND 130	Food Service Management		2	
ND 131	Food Service Management Practicum		1	
ND 140	Food Service Administration			3
ND 141	Food Service Administration Practicum			1
		7	3	4

Total Hours: 14

Call 697-4442 for information and application.

Forestry

This three-semester certificate is intended to provide the most pertinent information for persons working in forest-related occupations. Identification of trees, techniques for measuring forest resources, principles of establishing and tending the tree crop, protection of forests from potential threats, and model practices of erosion control are presented. This program is designed for the student who does not intend to transfer to a baccalaureate degree program.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	FALL
FO 274	Dendrology	4		
FO 283	Forest Protection	4		
FO 287	Forest Mensuration		4	
FO 291	Silviculture		4	
FO 292	Best-Management Practices			3
		8	8	3

Total Hours: 19

NURSING/ALLIED HEALTH

Dental Assisting

This two-semester program prepares the student to become a valuable member of the dental health team. The dental assistant may serve a dental practice or health center as an office manager/business assistant, chairside assistant, laboratory assistant, or as the person responsible for dental health education. The Dental Assisting curriculum provides a foundation in the health sciences along with extensive training in the technology necessary to perform those tasks delegated to dental assistants by the State Dental Practice Act. Clinical training experiences

working with dentists and patients are provided in the facilities of the Dental Center on the Chattanooga State campus, in private offices of practicing dentists, at community health centers, and at schools within the area.

This program is accredited by the American Dental Association, Commission on Dental Accreditation. Students who successfully complete this program are eligible to sit for the State Registry Examination (RDA) and the Dental Assisting National Board Examination (CDA).

Career Opportunities

- Private Practice—general, group, or specialty
- Health Departments
- Dental Supply House/Manufacturer's Representative
- Dental Insurance Claims
- Dental Office Receptionist/Manager

Admission Procedures

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to the Dental Assisting Program must also:

1. Submit a Nursing/Allied Health Application Form to the Division of Nursing/Allied Health.
2. Take the Health Certificate Assessment Test (HCAT) and achieve a competitive score.
3. Submit high school transcripts (and/or GED scores) along with all college transcripts to the Division of Nursing/Allied Health.
4. Participate in a personal interview conducted by members of the Dental Assisting selection committee.

Students are accepted each fall. Final acceptance into the program is contingent upon the candidate's completion of a physical exam which includes drug screening and an optional hepatitis-B vaccination. Please note that costs relating to the physical exam, HCAT, and the purchase of uniforms, supplies, books, and liability insurance are the financial responsibility of the student. Students are also responsible for transportation to and from off-campus clinical educational facilities.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
DA 120,121	Basic Sciences I, II	2	1
DA 124	Dental Materials	3	
DA 125	Dental Radiology	3	
DA 128	Dental Office Management		3
DA 130,131	Clinical Skills I, II	5	9
DA 134	Communications for Dental Assistants		2
		13	15

Total Hours: 28

Call 697-4450 for information and application.

Emergency Medical Services

The Emergency Medical Technician and Paramedic Training programs consist of both classroom and clinical experience in basic and advanced life support procedures and will enable the student to acquire the knowledge and skills proficiency sufficient to prepare him/her to sit for the examinations for licensure as an Emergency Medical Technician/Paramedic by the Tennessee Department of Health and Environment—Emergency Medical Services Division.

Employment Opportunities

- Director/manager of an emergency medical service
- Supervisor with public safety organizations
- Supervisor with emergency/air medical transport service
- Emergency medical service instruction/education

EMT/EMT-IV PROGRAM

Admission Requirements

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to the EMT/EMT-IV Program must also:

1. Submit a Nursing/Allied Health Application Form to the Division of Nursing/Allied Health.
2. Submit official copies of all transcripts (high school/GED and college) to both Chattanooga State's Records Office and to the Division of Nursing/Allied Health.
3. Take the Basic EMS Entrance Examination (for screening purposes).

Deadline

All applications, transcripts, and EMS test scores must be submitted by

July 1 for priority consideration.

Upon acceptance into the program, students must:

1. Submit a Nursing/Allied Health Verification form
2. Submit a State of Tennessee Medical Statement for EMS Personnel
3. Purchase malpractice insurance

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
EA 106,116	Emergency Medical Technician I, II	8	8

Total Hours: 16

PARAMEDIC TRAINING PROGRAM

Students who complete the Paramedic Training program may receive 25 hours of Advanced Placement credit toward the completion of an Associate of Applied Science degree in either the Health Services concentration under the Management major or the Emergency Medical Care concentration under the Fire Science Technology major. See the "Career Programs" section of the catalog for more information.

Admission Requirements

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to the Paramedic Training Program must also:

1. Submit a Nursing/Allied Health Application Form to the Division of Nursing/Allied Health.
2. Submit official copies of all transcripts (high school/GED and college) to both Chattanooga State's Records Office and to the Division of Nursing/Allied Health.
3. Take the following screening examinations as outlined by the Tennessee Department of Health and Environment—Emergency Medical Services Division:
 - a. EMT-Basic licensure examination. Must make a score of 80% or higher. Failure to score 80% or higher results in immediate termination of the application process.
 - b. Psychological Profile Battery.
4. Take the Health Certificate Assessment Test (HCAT). [Documentation of college level competency in English and mathematics may be submitted in lieu of the HCAT.] Applicants must test at or above the following levels to be considered for admission.
 - a. Reading—college level
 - b. English—EN 081 minimum placement
 - c. Math—MA 080 minimum placement
5. Attend an interview session with the Paramedic Screening Committee.
6. Complete BI 174 and BI 175 (Human Anatomy & Physiology I, II) with a "C" or better prior to Fall admission into the Paramedic Program.

Deadline

All applications and transcripts must be submitted by **March 15** to be eligible for consideration.

Upon acceptance into the program, students must:

1. Submit a Nursing/Allied Health Verification form
2. Submit a State of Tennessee Medical Statement for EMS Personnel
3. Purchase malpractice insurance

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
EA 210,230	Paramedic Theories I, II	10	10	
EA 225	Emergency Pharmacology	5		
EA 231	Psychological Emergencies		1	
EA 250	Paramedic Review			8
EA 255	Advanced Trauma Care		2	
EA 260	Advanced Cardiac Care	2		
EA 261,262	Clinical Practice I, II	1	2	
EA 265	Pediatric Emergencies			2
EA 270	Neonatal Resuscitation			1
EA 281	Field Internship			1
Total Hours: 45		18	15	12

Call 697-4450 for information and application.

Magnetic Resonance Imaging

The Magnetic Resonance Imaging Course (RT 200) is a one-semester training program designed to meet the professional needs of radiologic technologists. The curriculum includes MRI physics, cross-sectional anatomy, patient safety, site development and MR imaging techniques which can be applied to all MR systems.

The Magnetic Resonance Imaging course is taught in the Fall semester only, on alternate Saturdays and offers four or seven hours of credit, based upon the individual student's choice. Students who desire seven semester hours of college credit must attend all classroom sessions and complete an additional 225 hours of clinical education at an approved MRI facility near their home. Those students desiring four hours of credit need only attend all classroom sessions. Students participating in the clinical portion of the MRI course must purchase malpractice insurance or show evidence of self coverage of \$1,000,000 or more.

Admission Procedures

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to the Magnetic Resonance Imaging Program must also submit a Nursing/Allied Health Application Form to the Division of Nursing/Allied Health.

Deadline

Applications for Fall semester must be submitted by **August 15** for priority consideration.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
RT 200	Magnetic Resonance Imaging	4-7	
Total Hours: 4-7			

Call 697-4450 for information and application.

Advanced Magnetic Resonance Imaging

The Advanced Magnetic Resonance Imaging Course (RT 210) is a one-semester training course designed to provide an understanding of the advanced imaging techniques used in Magnetic Resonance Imaging. Primary focus is placed on gradient echo imaging, 3-D imaging, cardiac/cine imaging, paramagnetics, spectroscopy, motion suppression techniques and MR angiography. Scan protocols which improve image quality and permit evaluation of moving joints are also discussed.

This course is only offered in the Spring semester and requires successful completion of the Magnetic Resonance Imaging Course (RT 200).

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours
RT 210	Advanced Magnetic Resonance Imaging for Technologists	3
Total Hours: 3		

Call 697-4450 for information and application.

Mammography

The Mammography program is a one-semester, three-course series designed to meet the professional needs of radiologic technologists for formal specialized training in mammography. The curriculum includes patient care and management, breast anatomy and physiology, breast pathology, breast positioning, special procedures in mammography, characteristics of a dedicated film-screen mammography x-ray unit, image receptors and film processing, and physicist's/technologist's required quality control tests.

The required clinical education component is conducted at an approved and FDA certified breast center over a fifteen week period providing at least 140 contact hours on site. A *minimum* of 100 supervised mammograms are to be performed during the allotted period with no fewer than five examinations performed during any one week period.

The Mammography Series is generally taught in the Fall semester on alternate weekends (Friday night and Saturday), based on demand and offers 10 semester credit hours (160 CEU's for purposes of ARRT continuing education). The program exceeds requirements for formal education set by the FDA and defined in "Quality Determinants of Mammography" U.S. Department of Health and Human Services.

Admission Procedures

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to the Mammography Program must also submit a Nursing/Allied Health Application Form to the Division of Nursing/Allied Health. Eligibility to take the American Registry of Radiologic Technology certification exam is required for admission to the program. Radiologic Technologists certified and registered by ARRT may receive advanced standing if they presently perform independent mammography. Students must purchase malpractice insurance or show evidence of self coverage of \$1,000,000 or more.

Deadline

Applications for Fall semester must be submitted by **August 15** for priority consideration.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours
MY 210	Mammography Patient Management	3
MY 220	Mammography Instrumentation/Physics	3
MY 230	Mammography Clinic	4
Total Hours: 10		

Call 697-4450 for information and application.

Nursing Assistant Program

The Nursing Assistant, also known as an Orderly or a Geriatric Aide, works as an assistant in an entry-level position in a department of nursing, helping the professional nursing staff in the care of sick, disabled or feeble patients.

Nursing assistants perform routine duties such as answering patient bell calls, delivering messages, serving and collecting food trays, feeding patients who are unable to feed themselves, assisting patients with their personal hygiene, and reporting all unusual conditions to the nurses in charge. In assisting in basic patient care, the nursing assistant may administer catheterization treatments; take and record temperature, blood pressure, pulse and respiration rates; and accompany patients during exercise periods. Upon completion of the program, completers will sit for State Certification examinations.

The nursing assistant training is completed in a seven-week period. The training is divided into three weeks of classroom instruction, one week of clinical lab and three weeks of clinical practice in skilled and non-skilled areas.

Places of Employment

- Home health care
- Hospitals
- Nursing homes
- Other long-term health care facilities

Admission Requirements

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to

1998-99 Certificates of Advancement

the Nursing Assistant Program must also:

1. Submit a Nursing/Allied Health Application Form to the Division of Nursing/Allied Health.
2. Applicants meeting minimum qualifications will be contacted for an interview.

Deadline

The Nursing Assistant program is generally offered during the Fall and Summer semesters, based on demand. The priority deadline for submitting applications and scheduling interview appointments will be 30 days prior to the first day of classes for the Fall and Summer semesters. Any application received after the priority deadline date will be reviewed on a space-available basis.

After being accepted to the Nursing Assistant program and before beginning classes, the student must complete a "Health Verification Form," which will be supplied by the Division of Nursing/Allied Health. The form requires the results of a physical examination by a doctor. A drug screening test and proof of liability insurance are also required. Final acceptance to the Nursing Assistant Program is based on the results of the physical examination and drug screening. Liability insurance is available through the College's Business Office for a small fee. Students must arrange for and pay for their physical and drug screening.

SUMMARY OF REQUIRED HOURS		
Course No.	Course Title	Semester Hours
NA 105	Certified Nursing Assistant	5
Total Hours: 5		
Call 697-4450 for information and application.		

Phlebotomy

A Phlebotomist is an individual who works with the clinical laboratory staff in obtaining various blood samples for analysis. Although the Phlebotomist does not actually perform any blood tests, the test results can be inaccurate if the sample is not correctly obtained. Therefore, it is extremely important that the Phlebotomist be trained correctly in venipuncture and fingerstick techniques, as well as medical terminology, selected anatomy and physiology, application of laboratory testing, communication skills, and human relations. The phlebotomist must also be trained in safety and infection control of handling biohazardous materials to safeguard both the patient and employee.

The Phlebotomy Training Program covers one semester (14-16 weeks) and is usually only offered in the Fall semester. The first eight weeks are spent in the classroom and laboratory sessions on campus. Classes meet twelve hours per week. During the last seven weeks, students will spend Tuesday through Friday working a daily 7 1/2 hour shift (26 shifts total) in a hospital with a clinical laboratory preceptor—an employee of the hospital who serves as a role model and clinical instructor. On Mondays, students will attend a two-hour on-campus seminar. The final week is reserved for exams and make-up days.

Admission into the Phlebotomy Training Program may be a competitive process. Selection into the program is based on a comparative analysis of test scores, transcripts, interviews, and other application materials. Composition of the class will reflect diversity based on age, gender, and race.

Places of Employment

Hospital laboratories	Physician's offices
Private or reference laboratories	Home health agencies
Health departments	Blood banks
Plasma centers	Insurance agencies

Admission Requirements

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to the Phlebotomy Program must also:

1. Submit a Nursing/Allied Health Application Form to the Division of Nursing/Allied Health.
2. Take the Health Certificate Assessment Test (HCAT).
3. Submit a copy of high school transcript or GED scores.
4. Applicants meeting minimum qualifications will be contacted for an interview.

Deadline

Applications and test scores must be submitted by **May 1** for priority consideration. Applications submitted after May 1 will be reviewed on a space-available basis.

After being accepted into the Phlebotomy Training Program and before beginning the Phlebotomy Training Program classes, the student must complete a Health History Verification form and a Nursing/Allied Health Drug Screen Form, which will be supplied by the Division of Nursing/Allied Health. Final acceptance into the Phlebotomy Training Program is based on the results of the physical examination and drug screening. Liability insurance is required before beginning Phlebotomy Training Program classes, and is available through the College's Business Office for a small fee. Students must arrange for and pay for their physical and drug screening.

SUMMARY OF REQUIRED HOURS		
Course No.	Course Title	Semester Hours
EA 120	CPR Training	1
PB 101	Introduction to Phlebotomy	4
PB 120	Venipuncture Techniques	2
PB 121	Phlebotomy Practicum	6
Total Hours: 13		

Call 697-4450 for information and application.

Supportive Care Specialist

A Supportive Care Specialist is dedicated to assisting developmentally disabled and mentally retarded individuals to achieve their maximum potential through inclusion into the mainstream of society. The Supportive Care Specialist achieves this goal with specialized care-giving skills in a variety of settings within the field of Human Services.

A Supportive Care Specialist is a member of a team which designs and implements an individually tailored program for clients with special needs. The Supportive Care Specialist provides direct care and contributes to the evaluation of clients in their progress toward meeting goals.

The Supportive Care Specialist program lasts one semester (fifteen weeks). The first half of the semester is spent in classroom and laboratory sessions. Classes meet approximately 15 hours per week. The second half of the semester is spent in the classroom and clinical environment where students will work with clients in a supervised setting. Classes and clinical in the second half of the semester requires approximately 30 hours per week.

Admission into the Supportive Care Specialist program may be a competitive process. Selection is based on a comparative analysis of test scores, transcripts, interviews, and other application materials. Composition of the class will reflect diversity based on age, gender and race. Minimum performance requirements are available for review and reflect professionally accepted standards.

Admission Procedures

In addition to completing the application process for admission to Chattanooga State (see "Admissions Procedures"), students seeking admission to the Supportive Care Specialist Program must also:

1. Submit a Nursing/Allied Health Application Form to the Division of Nursing/Allied Health.
2. Take the Health Certificate Assessment Test (HCAT). In lieu of the HCAT, applicants may take the AAPP, ACT, or SAT (ACT or SAT scores may not be more than three years old), OR have completed (with a minimum grade of "C") college-level course(s) which demonstrate reading and English competency.
3. After all applications and test scores are screened, applicants selected for an interview will be contacted.
4. It is strongly recommended that the prospective Supportive Care Specialist student spend 10-15 observation hours in a facility serving the developmentally disabled/mentally retarded community. (See fact sheet or Nursing/Allied Health adviser for more information.)

Deadline

The Supportive Care Specialist class is available in the Fall semester. Testing and applications are accepted in the Spring and Summer for the fall class. The application process should begin as soon as possible. The preferred deadline for applications is **July 31**. Applications submitted after July 31 will be reviewed on a space-available basis.

After being accepted into the Supportive Care Specialist training program and before beginning classes the student must complete a Health Verification Form and a Nursing/Allied Health Drug Screen Form, along with other health related forms which will be supplied by the Division of Nursing/Allied Health. Final acceptance into the Supportive Care Specialist program is based on the results of the physical examination and drug screening. Liability insurance is required before beginning Supportive Care Specialist classes and is available through the College's Business Office for a small fee due at the time of registration. Students must arrange and pay for their physical and drug screening.

SUMMARY OF REQUIRED HOURS		
Course No.	Course Title	Semester Hours
HR 113	Introduction to Individuals with Developmental Disabilities	3
HR 123	Requisite Skills for Direct Caregivers	3
HS 119	Caregiver Skills	9
Total Hours: 15		

Call 697-4450 for information and application.

PREVIOUS SCHOOL INFORMATION

PLEASE PRINT

DO NOT WRITE IN SHADED AREAS

() High School Graduate - Specify School _____ Year Graduated 19__

_____ City _____ State

___ Honors Diploma ___ Regular Diploma ___ High School Certificate ___ Diploma of Specialized Education

() GED - Specify Year Completed 19__

PREVIOUS COLLEGES ATTENDED

Name Of College	Address	Dates Attended	Degree Earned
_____ 	_____	_____ to _____	_____
_____ 	_____	_____ to _____	_____
_____ 	_____	_____ to _____	_____
_____ 	_____	_____ to _____	_____
_____ 	_____	_____ to _____	_____

From the last college attended:

Are you on probation? Yes___ No___ If yes, Date_____

Are you on suspension? Yes___ No___ If yes, Date_____

Have you been academically dismissed because of unsatisfactory grades? Yes___ No___ If yes, Date_____

Check here if you wish to have previous college transcripts evaluated for transfer credit_____.

I understand that acceptance as a degree student requires submission of a copy of my high school transcript or GED scores, all college transcripts, **and** ACT and or Placement scores. If not received by Chattanooga State prior to my initial registration, acceptance is conditional pending receipt of these documents. Grades and transcripts of credits will be withheld and registration for subsequent semesters may be denied until this requirement is met.

NOTICE

If you are accepted as a student at this institution, there are certain performance tests you will be required to take during your academic career. It is a requirement of admission that you agree to take any tests deemed necessary by the institution. In those instances where tests are administered by an external entity, you hereby agree for the results of such tests to be released to the institution. The purpose of this requirement is to comply with the legislature's expressed intent that institutions regularly evaluate and improve instruction at all levels. If you are under twenty-one years of age and are required by institutional policy to complete the Academic Assessment and Placement Program (AAPP) tests, your scores on these tests and course placement may be reported to your high school for research purposes. Any test scores will be treated confidentially as required by law.

I hereby apply for admission to the Chattanooga State Technical Community College and certify on my honor that to the best of my knowledge all of the above statements are correct and complete.

Signature _____ Social Security Number _____ / ____ / _____

PLEASE ENCLOSE \$10.00 APPLICATION FEE. THERE IS NO CHARGE FOR RE-ADMISSION.



Chattanooga State Technical Community College supports affirmative action and does not discriminate against any applicant for admission or employment on the basis of race, color, religion, disability, sex, or national origin.

Chattanooga State Technical Community College is one of 46 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. The Tennessee Board of Regents is the governing board for this system which is comprised of six universities, fourteen community colleges, and twenty-six area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education. Crime statistics, rate, and institutional security policies and procedures are available upon request.

Office Use Only
 Received by: _____
 DT E W N
 Other _____
 Entered by: _____

Chattanooga State Technical Community College
 4501 Amnicola Highway
 Chattanooga, Tennessee 37406-1097
Admission Application

Office Use Only
 Receipt #: _____
 Amount _____
 Date _____
 Cash Check

APPLICANT INFORMATION

Social Security Number _____ Birthday: Month _____ Day _____ Year _____
 Last Name _____ First _____ Middle _____
 Jr., III, etc. _____ Previous Name(s) _____
 Permanent Address:
 Street _____ Apt. No. _____
 City _____ State _____ Zip _____
 Home Phone () _____ Business Phone () _____ Home County _____

IN COMPLIANCE WITH TITLE VI CIVIL RIGHTS ACT 1964, PLEASE CHECK ONE IN EACH AREA

Sex	Race	U.S. Citizen
() M	() 1 Asian or Pacific Islander	() Yes
() F	() 2 American Indian	() No, If No, indicate country of citizenship _____
	() 3 Black	Visa Type or Registration Card _____
	() 4 Hispanic	Non-U.S. citizens must present Visa or Registration Card
	() 5 White	

DRAFT INFORMATION

Draft Information: (check one) ___ I certify that I am registered with the Selective Service.
 ___ I certify that I am **not required to be** registered with the Selective Service.
Military Information: (check one) ___ I have never served in the military.
 ___ I have served or am still serving in the military.

EMERGENCY CONTACT INFORMATION

In case of emergency contact:
 Last Name _____ First _____ Middle _____ Relationship _____
 Street Address _____ City _____ State _____ Zip _____ Phone No. () _____

CLASSIFICATION

Major	Registration Type - Check One	Special Category
Major code <input type="text"/>	() 1 First Time College Student	() 60-Year-Old Audit
Option code <input type="text"/>	() 3 Transfer Student	() 65-Year-Old Credit
Undecided <input type="text"/>	() 4 Transient Student	() TBR/UT employee using fee waiver
Special <input type="checkbox"/>	() 6 Re-admission	() Joint Enrollment
	Student Classification	___ Hamilton County School System
	() Special Student (not degree seeking)	___ Other School Systems
	() Degree	() Early Admission
	() Technical Certificate	
	() Industrial Technology	
	() Transient	

When Do You Wish To Enter?
 () Fall 19____
 () Spring 19____
 () Summer 19____

— OVER —

OFFICE USE ONLY

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Req. Rule	TN Req.	Admit Type	Residency