Field of Study Curriculum for Music

The field of study curriculum for music is designed to apply to the Bachelor of Music degree but may also be applied to the Bachelor of Arts or other baccalaureate-level music degrees as deemed appropriate by the awarding institution. The field of study curriculum is furthermore intended to serve as a guide for community and technical colleges in structuring a transfer curriculum in music.

Field of Study Courses

The field of study curriculum shall consist of 27 to 35 lower-division semester credit hours (31 without the keyboard course described below) that are fully transferable. Transfer of credit in ensemble, applied study and theory/aural skills shall be on a course-for-course basis.

COURSE	NUMBER OF SEMESTERS	SEMESTER CREDIT HOURS
Ensemble		
MUSI 1127, 1128, 2127, 2128 (Instrumental Majors)	4	4
MUSI 1141, 1142, 2141, 2142 (Voice Majors)	4	4
Applied Study		
Four semesters of sequential courses in voice or one instrumental area:		
MUAP 1231, 1232, 2231, 2232 (Woodwinds)	4	8
MUAP 1241, 1242, 2241, 2242 (Brass)	4	8
MUAP 1257, 1258, 2257, 2258 (Percussion)	4	8
MUAP 1261, 1262, 2261, 2262 (Guitar)	4	8
MUAP 1271, 1272, 2271, 2272 (Piano)	4	8
MUAP 1281, 1282, 2281, 2282 (Voice)	4	8
Theory/Aural Skills		
MUSI 1211, 1212, 2211, 2212 (Theory)	4	8
MUSI 1216, 1217, 2216, 2217 (Ear Training)	4	8
Music Literature		
MUSI 1308 or 1309	1	3

Keyboard (Piano) Competency

Because keyboard (piano) competency is a requirement for most baccalaureate degrees in music, up to four additional semester credit hours of course work pertaining to keyboard (piano) may transfer by agreement between institutions. Keyboard competency courses approved for transfer are courses in group piano or applied lessons that concentrate specifically on skills development for passing keyboard proficiency examinations. Keyboard courses that concentrate primarily on performance literature are not considered to be keyboard competency courses for the purposes of this field of study. Completion of courses leading to keyboard proficiency does not necessarily satisfy the established proficiency requirement at a receiving institution.

Competency, Proficiency, and Diagnostic Assessment

Transferring students who have completed the field of study curriculum must satisfy the competency and proficiency requirements of the receiving institution. Transferring students shall not be required to repeat courses transferred as part of the field of study curriculum. However, diagnostic assessment of transfer students is permissible if the receiving institution routinely conducts diagnostic assessment of native students at the same point in the program of study.

Courses for Specific Degree Programs

Completion of the field of study curriculum shall not prevent a receiving institution from requiring additional lower-division courses that may be

necessary for specific degree programs. Courses selected for inclusion in the field of study curriculum are those considered to be common to lower-division study for most music degrees. Receiving institutions may require transfer students in specialized programs (e.g., jazz studies, performance, composition, music therapy, etc.) to take additional degree-specific lower-division courses that are not included in the field of study curriculum.

Full Academic Credit
Academic credit shall be granted on a course-for-course basis in the transfer of theory/aural skills, applied music, and ensemble courses and will be accepted at the credit-hour level of the receiving institution. Full academic credit shall be granted on the basis of comparable courses completed, not on specific numbers of credit hours accrued.

General Education Courses
In addition to the course work listed above, the maximum recommended transfer credit from the general education core curriculum is 31-39 semester credit hours. Students shall complete the general education core curriculum in effect at the institution that will grant the baccalaureate degree.

The Associate's Degree in Music
The field of study curriculum should serve as the basis for structuring the associate's degree in music. Each two-year college should determine which courses from its approved general education core curriculum to include with the music field of study curriculum in order to constitute a 66-semester credit hour transfer block. In order to receive the baccalaureate degree, a transferring student shall complete the general education core at the receiving institution.

Musical Theatre Degree Program

Associate of Arts Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+ENGL 1301	Composition and Rhetoric I	3	0	3
+DRAM 2336a	Voice for Theatre	3	0	3
MUAP 1281	Applied Music: Voice	1	4	2
*MUSI 1181	Class Piano	1	1	1
MUSI 1159	Musical Theatre	1	4	1
DRAM 1322	Stage Movement & Dance	1	3	3
+MATH 1314 or MATH 1332 or Natural Science		3	0-3	3-4
		13	12-15	16-17
Second Semester				
+**HIST 1301	The U.S. to 1877	3	0	3
DRAM 1351	Acting I 2	4	3	
MUAP 1282	Applied Music: Voice	1	4	2
*MUSI 1182	Class Piano	1	1	1
MUSI 1309	Survey of Music Literature	3	0	3
+Social/Behavioral Science	Social/Behavorial Science Core p. 23	3	0	3
		13	9	15
Third Semester				
+ENGL 1302	Composition and Rhetoric II	3	0	3
+Humanities	Humanities Core p. 23	3	0	3
+GOVT 2301	American National & State Govt. I	3	0	3
DRAM 1341	Stage Makeup	2	4	3
MUAP 2281	Applied Music: Voice	1	4	2
MUSI 2159	Musical Theatre	1	1	1
		13	12	15

Fourth Semester				
DRAM 1352	Acting II	2	4	3
MUAP 2282	Applied Music: Voice	1	4	2
+**HIST 1302	The U.S. Since 1877	3	0	3
+GOVT 2302	American National & State Govt. I	3	0	3
+DRAM 2360 or	Modern Theatre Literature or	3	0	3
+MUSI 1308b or	Survey of Music Literature	3	0	3
+DRAM 1310	Introduction to Theater	15	8	17

+Denotes core requirement; see p. 18.
*MUAP 1271, 1272, 2271, 2272 may be substituted.
**Texas History (HIST 2301) may be substituted for one semester of U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirement
a Satisfies Speech Core requirement
b Satisfies Visual/Performing Arts Core requirement. Students should choose based on requirements of the senior institution to which they are transferring.

Total Minimum Credits Required for Musical Theatre Degree 63-64

Musical Theater Degree Program

Associate of Arts Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+ENGL 1301	Composition and Rhetoric I	3	0	3
+DRAM 2336[a]	Voice for Theatre	3	0	3
MUAP 1281	Applied Music: Voice	1	4	2
*MUSI 1181	Class Piano	1	1	1
MUSI 1159	Musical Theater	1	4	1
DRAM 1322	Stage Movement & Dance	1	3	3
+MATH 1314 or MATH 1332 or Natural Science		3	3-4	4
		13	15-16	17
Second Semester				
+**HIST 1301	The U.S. to 1877	3	0	3
DRAM 1351	Acting I	2	4	3
MUAP 1282	Applied Music: Voice	1	4	2
*MUSI 1182	Class Piano	1	1	1
MUSI 1309	Survey of Music Literature	3	0	3
+Social/Behavioral Science	Social/Behavioral Science Core	3	0	3
		13	9	15
Third Semester				
ENGL 1302	Composition and Rhetoric II	3	0	3
+Humanities	Humanities	3	0	3
+GOVT 2301	American National & State Govt. I	3	0	3
DRAM 1341	Stage Makeup	2	4	3
MUAP 2281	Applied Music: Voice	1	4	2
MUSI 2159	Musical Theater	1	4	1
		13	12	15
Fourth Semester				
DRAM 1352	Acting II	2	4	3
MUAP 2282	Applied Music: Voice	1	4	2
+**HIST 1302	The U.S. since 1877	3	0	3
+GOVT 2302	American National & State Govt. II	3	0	3
+DRAM 2360 or	Modern Theatre Literature or	3	0	3
+MUSI 1308[b]	Survey of Music Literature	3	0	3
		15	8	17

+Denotes core requirement; see p. 18.
*MUAP 1271, 1272, 2271, 2272 may be substituted.
**Texas History (HIST 2301) may be substituted for one semester of U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirement
a Satisfies Speech Core requirement
b Satisfies Visual/Performing Arts Core requirement. Students should choose based on requirements of the senior institution to which they are transferring.

Total Minimum Credits Required for Musical Theater Degree 64

Psychology Degree Program

Associates in Arts Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+ENGL 1301	Composition & Rhetoric I	3	0	3
+**HIST 1301	The U.S. to 1877	3	0	3
+MATH	Math	5	0	3
PSYC 2301	General Psychology	3	0	3
+SPCH 1315/1318	Public Speaking/Interpersonal Comm.	3	0	3
PHED	Physical Activity	0	3	1
		15	3	16
Second Semester				
+ENGL 1302	Composition & Rhetoric II303			
+**HIST 1302	The U.S. Since 1877	3	0	3
+COSC	Computer Science	3	3	4
PSYC 2317	Statistical Methods in Psychology	3	0	3
PSYC 2314	Life-Span Growth & Development	3	0	3
PHED	Physical Activity	0	3	1
		15	6	17
Third Semester				
+Humanities	Humanities	3	0	3
+GOVT 2301	American National & State Govt. I	3	0	3
+Natural Science	Natural Science	3	3	4
+Visual and Performing Arts	Visual and Performing Arts	3	0	3
PSYC Elective	Elective	15	3	16
Fourth Semester				
+GOVT 2302	American National & State Govt. II	3	0	3
+Natural Science	Natural Science	3	3	4
PSYC Elective	Elective	3	0	3
PSYC Elective	Elective	3	0	3
		12	3	13

+Denotes Core Requirement; see p.18

**Texas History (HIST 2301) may be substituted for one semester of U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirements.

Total Minimum Credits Required for a Psychology Degree 62

Sociology Degree Program

Associates in Arts Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+ENGL 1301	Composition & Rhetoric I	3	0	3
+**HIST 1301	The U.S. to 1877	3	0	3
+MATH	Math	3	0	3
SOCI 1301	Principles of Sociology	3	0	3
+SPCH 1315/1318	Public Speaking/Interpersonal Comm.	3	0	3
PHED	Physical Activity	0	3	1
		15	3	16
Second Semester				
+ENGL 1302	Composition & Rhetoric II	3	0	3
+**HIST 1302	The U.S. Since 1877	3	0	3
+COSC	Computer Science	3	3	4
PSYC 2317	Statistical Methods in Psychology	3	0	3
SOCI 1306	Social Problems	3	0	3
PHED	Physical Activity	0	3	1
		15	6	17
Third Semester				
+Humanities	Humanities	3	0	3
+GOVT 2301	American National & State Govt. I	3	0	3
+Natural Science	Natural Science	3	3	4
+Visual and Performing Arts	Visual and Performing Arts	3	0	3
SOCI Elective	Elective	3	0	3
		15	3	16
Fourth Semester				
+GOVT 2302	American National & State Govt. II	3	0	3
+Natural Science	Natural Science	3	3	4
SOCI Elective	Elective	3	0	3
SOCI Elective	Elective	3	0	3
		12	3	13

+Denotes Core Requirement; see p.18

**Texas History (HIST 2301) may be substituted for one semester of U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirements.

Total Minimum Credits Required for a Sociology Degree 62

Sports and Human Performance

Associate of Arts Degree Program

(281) 756-3691

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester				
+ENGL 1301	Composition and Rhetoric I	3	0	3
+**HIST 1301	The U.S. to 1877	3	0	3
+BIOL 1406	General Biology I	3	3	4
PHED 1302	Intro. to Sports & Human Performance	3	0	3
+COSC 1401	Microcomputer Applications	3	3	4
PHED	Physical Activity	0	3	1
		15	9	18
Second Semester				
+ENGL 1302	Composition and Rhetoric II	3	0	3
+**HIST 1302	The U.S. Since 1877	3	0	3
PHED 1304	Health and Wellness	3	0	3
PHED 1346	Drug Use and Abuse	3	0	3
PHED	Physical Activity	0	3	1
		12	3	13
Summer Semester				
+MATH 1314	College Algebra	3	0	3
		3	0	3
Third Semester				
+Visual/Performing	Visual & Performing Arts	3	0	3
BIOL 2401	Anatomy & Physiology I	3	3	4
+GOVT 2301	American National & State Govt. I	3	0	3
PHED 1306	First Aid	3	0	3
+PSYC 2301	General Psychology	3	0	3
		15	3	16
Fourth Semester				
BIOL 2402	Anatomy & Physiology II	3	3	4
+GOVT 2302	American National & State Govt. II	3	0	3
PHED 1321 or PHED 1322	Coaching Athletics-Volleyball Coaching Athletics-Baseball/Softball	3	0	3
+Humanities	Humanities	3	0	3
+SPCH 1315	Public Speaking	3	0	3
		15	3	16

+Denotes core requirement; see p. 18

**Texas History (HIST 2301) may be substituted for one semester U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirements.

Total Minimum Credits Required for Sports & Human Performance Degree 66

Associate of Arts - General Studies

Degree: Associate of General Studies (A.G.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The program is designed for the student who wishes to pursue a multidisciplinary academic program for personal enrichment, but who does not have a specific baccalaureate degree goal. However, in some academic areas, this program may meet the requirements for more advanced study. (The student wishing to continue should consult with the receiving institution about transfer of courses.) Students who successfully complete the following program of study, in addition to meeting the graduation requirements, will be eligible to receive the Associate in Arts - General Studies Degree.

Associate of Arts - General Studies Degree

Core Curriculum	Course Title	Credits
Communication	ENGL 1301, ENGL 1302, SPCH 1315	9
Mathematics	MATH 1314 or above	3
Natural Sciences	Select two from the following courses: BIOL 1406, 1407, 2401, 2402 CHEM 1405, 1407, 1411, 1412 GEOL 1401, 1403, 1404 PHYS 1401, 1402, 2425, 2426	8
Visual & Performing Arts	Select from ARTS 1301, 1303, 1304 DRAM 1310, 2360 MUSI 1306, 1310	3
Humanities	Select from: PHIL 1301, PHIL 2306, HUMA 1301, 1302 ENGL 2322, 2323, 2326, 2332, 2333	3
History	U.S. History; Select from: HIST 1301,1302,2301	6
Government	GOVT 2301, 2302	6
Social and Behavioral Sciences	Select one course from: Anthropology, Economics, Geography, Psychology or Sociology	3
Basic Computer	COSC 1401 or more advanced COSC course	4
Other Requirements	Physical Activity (each 1 hour activity course)	2
College Level Electives	Students planning to transfer to a university baccalaureate degree are strongly encouraged to visit with their advisor prior to selecting electives.	18

Total credits required for the Associate of Arts - General Studies Degree.....65

Associate of Arts in Teaching Program

Length: Four –Semester (Two Year) Program
Purpose: The AAT is designed to provide a set of courses within the Teacher Certification areas which will fully transfer to any public college or university in the state of Texas that offers educator preparation programs. Specific Teaching tracks include: Early Childhood-Grade 4; Grades 4-8; EC-12 Bilingual and Special Education and 8-12 . *The transfer student must meet the admission requirements from the accepting college or institution.

Leading to Initial Texas Teacher Certification EC-4 Early Childhood Generalist and Early Childhood Specialization

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
ENGL 1301	Composition and Rhetoric I	3	0	3
ENGL 1302	Composition and Rhetoric II	3	0	3
SPCH 1315	Public Speaking	3	0	3
COSC 1401	Microcomputer Applications	3	3	4
MATH 1314	College Algebra or higher (excludes Math 1332)	3	0	3
MATH 1350	Fundamentals of Math I	3	0	3
MATH 1351*	Fundamentals of Math II	3	0	3
BIOL	Select from: BIOL 1406, 1407 or 2401	3	3	4

Earth Science or CHEM or PHYS	Select from: GEOL 1401, 1403,1404 Select from: CHEM: 1405, 1411, PHYS 1401	3	3	4
HIST	Select from: American History 1301 or 1302 and Texas History 2301	6	0	6
GOVT 2301	American National & State Govt. I	3	0	3
GOVT 2302	American National & State Govt. II	3	0	3
Humanities	Select from: ENGL literature(sophomore level) or HUMA, or PHIL	3	0	3
Elective	Visual & Performing Arts Elective ARTS, DRAM or MUSC (see Core for selection)	3	0	3
Social/ Behavioral Science	GEOG 1303 (preferred)	3	0	3
PHED	Physical Activity (2)	0	6	2
Pre-Major/Early Childhood Courses:				
TECA 1303	Family, School & Community	3	1	3
TECA 1311	Educating Young Children	3	1	3
TECA 1318	Wellness & the Young Child	3	1	3
TECA 1354	Child Growth & Development	3	0	3

Total Minimum Credits Required 65

* UHCL transfer: Take Math 3032 at UHCL and transfer back to complete AAT degree.

Associate of Arts in Teaching

Leading to Initial Texas Teacher Certification
Early Childhood - Grade 4, Grades 4-8 Generalist, EC-12 Bilingual/ESL & EC-12 Special Education.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
ENGL 1301	Composition and Rhetoric I	3	0	3
ENGL 1302	Composition and Rhetoric II	3	0	3
SPCH 1315	Public Speaking	3	0	3
COSC 1401	Microcomputer Applications	3	3	4
MATH 1314	College Algebra or higher (excludes Math 1332)	3	0	3
MATH 1350	Fundamentals of Math I	3	0	3
MATH 1351*	Fundamentals of Math II	3	0	3
BIOL	Select from: BIOL 1406, 1407 or 2401	3	3	4
CHEM	Select from: CHEM:1405, 1411	3	3	4
PHYS/GEOL	PHYS 1401, PHYS 2425, GEOL 1401, 1403 or 1404 (for Grades 4-8 Science Certification: Two lab sciences must be in same discipline)	3	3	4
HIST	Select from: American History 1301 or 1302 and Texas History 2301	6	0	6
GOVT 2301	American National & State Govt. I	3	0	3
GOVT 2302	American National & State Govt. II	3	0	3
Humanities	Select from: ENGL literature(sophomore level) or HUMA, or PHIL	3	0	3
Elective	Visual & Performing Arts Elective ARTS, DRAM or MUSC (see Core for selection)	3	0	3
Social/ Behavioral Science	GEOG 1303 (preferred)	3	0	3
PHED	Physical Activity (1)	0	3	1
Pre-Major Required Courses:				
EDUC 1301	Introduction to Teaching Profession	3	1	3
EDUC 2301	Introduction to Special Populations	3	1	3

Total Minimum Credits Required 66

Important Note: Bilingual Certification also requires SPAN 2311-2312.
* UHCL Transfer: Take Math 3032 at UHCL and transfer back to complete AAT degree.

Associate of Arts in Teaching

Leading to Initial Texas Teacher Certification
Grades 8 – 12, and Other EC- 12 Tracks

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
ENGL 1301	Composition and Rhetoric I	3	0	3
ENGL 1302	Composition and Rhetoric II	3	0	3
SPCH 1315	Public Speaking	3	0	3
COSC 1401	Microcomputer Applications	3	3	4
MATH 1314*	College Algebra	3	0	3
BIOL	Select from: BIOL 1406, 1407 or 2401	3	3	4
Earth Science or	Select from: GEOL 1401, 1403			
CHEM or PHYS	Select from:CHEM: 1405, 1411 PHYS 1401, PHYS 2425	3	3	4
HIST	Select from: American History 1301 or 1302 and Texas History 2301	6	0	6
GOVT 2301	American National & State Govt. I	3	0	3
GOVT 2302	American National & State Govt. II	3	0	3
Humanities	Select from: ENGL literature(sophomore level), or HUMA or PHIL	3	0	3
Elective	Visual & Performing Arts Elective ARTS, DRAM or MUSC (see Core for selection)	3	0	3
Social/ Behavioral Science**	Social & Behavioral Science (see Core page)	3	0	3
PHED	Physical Activity (2)	0	6	2
Pre-major Courses				
EDUC 1301	Introduction to the Teaching Profession	3	1	3
EDUC 2301	Introduction to Special Populations	3	1	3
Content area teaching fields/academic disciplines (12 hours) (See Dept. Chair of Child Development & Early Childhood)				12

Total Minimum Credits Required 65

* Non math or science majors may take Math 1332. Consult the requirements from the accepting university.
** Specific couse may be required. Consult the catalog from the accepting university.

Associate of Science Degree Program

Degree: Associate of Science (A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The Associate of Science Degree (A.S.) is awarded to students who fulfill the requirements of the biological science, business administration, mathematics, or physical science curriculum. Students who complete these curriculums normally transfer to a four-year college where they may major in one of the following subject areas:

Biology
Business Administration
Chemistry
Communications-Radio & Television Broadcasting
Conservation
Engineering
Forestry
Geology
Mathematics
Pharmacy
Physics
Pre-Dentistry
Pre-Medicine
Pre-Veterinary

Program Requirements: Although the major emphasis in these curriculums is in mathematics, biological science, and physical science, the curriculums also include courses in the humanities and social sciences. When planning a program and selecting electives, the student should become acquainted with the requirements of the major department in the college or university to which he/she expects to transfer.

Biological Science Degree Program

Associate of Science Degree Program

(281) 756-3746

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+BIOL 1406	General Biology I	3	3	4
CHEM 1411	General Chemistry & Analysis I	3	4	4
+ENGL 1301	Composition and Rhetoric I	3	0	3
+MATH 1314	College Algebra	3	0	3
+**HIST 1301	The U.S. to 1877	3	0	3
PHED	Physical Activity	0	3	1
		15	10	18
Second Semester				
+BIOL 1407	General Biology II (Botany)	3	3	4
CHEM 1412	General Chemistry & Analysis II	3	4	4
+ENGL 1302	Composition and Rhetoric II	3	0	3
+CSCI 1401(or higher)	Microcomputer Applications	3	3	4
+**HIST 1302	The U.S. Since 1877	3	0	3
PHED	Physical Activity	0	3	1
		15	13	19
Third Semester				
BIOL 2306 or	Environmental Conservation	3	0-3	3-4
BIOL 2401	Anatomy and Physiology I			
CHEM 2423	Organic Chemistry	3	4	4
+ENGL 2332 or	Survey of Literature I	3	0	3
ENGL 2322	Survey of English Literature I			
+GOVT 2301	American National & State Govt. I	3	0	3
+Visual/Perform. Arts	Visual/Performing	3	0	3
		15	4-7	16-17
Fourth Semester				
BIOL 2420 or	Microbiology	3	3	4
BIOL 2402	Anatomy and Physiology II			
+Social/Behav. Sciences	Social/Behavioral Science	3	0	3
+GOVT 2302	American National & State Govt. I	3	0	3
+SPCH 1315	Public Speaking	3	0	3
		12	3	13

+Denotes core requirement; see p. 18
**Texas History (HIST 2301) may be substituted for one semester U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirements.

Total Minimum Credits Required for Biological Science Degree 66-67

Business Administration Degree Program

(281) 756-3660

Associate of Science Degree Program with a Field of Study in Business

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+ENGL 1301	Composition and Rhetoric I	3	0	3
+MATH 1314	College Algebra	3	0	3
+**HIST 1301	The U.S. to 1877	3	0	3
+Natural Science	Natural Sciences	3	3-4	4
+Visual/Performing Arts	Visual/Performing Arts	3	0	3
PHED	Physical Activity	0	3	1
		15	6-7	17
Second Semester				
+ENGL 1302	Composition and Rhetoric II	3	0	3
MATH 1324	Math for Business & Social Science I	3	0	3
+**HIST 1302	The U.S. Since 1877	3	0	3
+Natural Science	Natural Sciences	3	3-4	4
+Humanities	Humanities	3	0	3-4
PHED	Physical Activity	0	3	1
		15	6-7	17-18
Third Semester				
***BCIS 1405	Business Computer Applications	3	3	4
***ACCT 2301	Financial Accounting	3	1	3
+GOVT 2301	American National & State Govt. I	3	0	3
+***ECON 2301[a]	Principles of Economics I	3	0	3
BUSI 2301	Business Law I	3	0	3
		15	4	16
Fourth Semester				
+SPCH 1315 or	Public Speaking	3	0	3
***SPCH 1321	Business Speaking			
***ACCT 2302	Managerial Accounting	3	1	3
+GOVT 2302	American National & State Govt. II	3	0	3
***ECON 2302	Principles of Economics II	3	0	3
***MATH 1325	Math for Business & Social Science II	3	0	3
		15	1	15

+Denotes core requirement; see p. 18
**Texas History (HIST 2301) may be substituted for one semester U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirements.
[a]Satisfies Social/Behavioral Science Core Requirement
***Field of Study Curriculum; see p. 21

Total Minimum Credits Required for Business Administration Degree.....65-66

This degree plan is designed to meet the needs of students who major in Business and transfer to a four-year college/university. It was approved by the Texas Higher Education Coordinating Board with the intention that transferring students shall not be required to repeat courses transferred as part of the field of study curriculum. Receiving institutions are not required to accept a grade below "C" in transfer and may require additional lower-division courses that may be necessary for specific degree programs.

The following courses, totaling 22 hours have been adopted by theTHECB as a Field of Study Curriculum in Business: ECON 2301 and 2302, MATH 1325, BCIS 1405, SPCH 1315 or SPCH 1321 (one speech course only, ACCT 2301 and 2302.

Communications/Radio and Television Broadcasting Degree Program

281-756-3765

(for students planning to transfer to a four year institution)

Associate of Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+ENGL 1301	Composition and Rhetoric I	3	0	3
+MATH 1314	College Algebra	3	0	3
+**HIST 1301	The U.S. to 1877	3	0	3
+Natural Science	Natural Sciences	3	3-4	4
COMM 1335	Survey of Radio/Television	3	0	3
PHED	Physical Activity	0	3	1
		15	6-7	17
Second Semester				
+ENGL 1302	Composition and Rhetoric II	3	0	3
COMM 2311	News Gathering & Writing I	3	0	3
+**HIST 1302	The U.S. Since 1877	3	0	3
+Natural Science	Natural Sciences	3	3-4	4
COMM 2331	Radio & TV Announcing	3	0	3
PHED	Physical Activity	0	3	1
		15	6-7	17
Third Semester				
ENGL 2322 or ENGL 2326 or ENGL 2332	Survey of English Literature American Literature Survey of Literature I	3	0	3
COMM 2303	Basic Radio Production	2	3	3
+GOVT 2301	American National & State Govt. I	3	0	3
+ECON 2301[a]	Principles of Economics I	3	0	3
COMM 1336	Television Production I	2	3	3
		13	6	15
Fourth Semester				
+SPCH 1315 or SPCH 1318	Public Speaking Interpersonal Communication	3	0	3
COMM 2366	Introduction to Film	2	3	3
+GOVT 2302	American National & State Govt. II	3	0	3
COMM 2314 or COMM 1337	Advanced Radio Production Television Production II	2	3	3
+COSC 1401 (or higher)	Microcomputer Applications	3	3	4
		13	9	16

+Denotes core requirement; see p. 18

**Texas History (HIST 2301) may be substituted for one semester U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirements.

[a]Satisfies Social/Behavioral Science Core Requirement

Total Minimum Credits Required for Communication/Radio & Television Broadcasting Degree.....65

Health Science Degree Program

281- 756-3531

Associate of Science Degree Program

This is a recommended course of study for students who plan to pursue a baccalaureate degree in nursing or other allied health field. It does not prepare students for direct entry into a health related career field. Students should identify early the institution to which they intend to transfer for specific requirements. Transferability of courses is determined by the receiving institution.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+BIOL 2401	Anatomy and Physiology I	4	3	4
+ENGL 1301	Composition and Rhetoric I	3	0	3
+PSYC 2301	General Psychology	3	0	3
+**HIST 1301	US History to 1877	3	0	3
+COSC 1401	Microcomputer Applications	4	3	4
		17	6	17
Second Semester				
+BIOL 2402	Anatomy and Physiology II	4	3	4
+ENGL 1302	Composition and Rhetoric II	3	0	3
PSYC 2314	Lifespan Growth & Development	3	0	3
+HUMA/PHIL 2306	Intro to Ethics (recommended)	3	0	3
+**HIST 1302	US History Since 1877	3	0	3
PHED	Physical Activity	1	3	1
		17	6	17
Third Semester				
BIOL 2420	Microbiology	4	3	4
HECO 1322	Nutrition and Diet Therapy	3	0	3
+GOVT 2301	American National &State Govt II	3	0	3
SOCI 1301	Sociology	3	0	3
+MATH 1314	College Algebra	3	0	3
		16	3	16
Fourth Semester				
CHEM 1405 or 1411	Chemistry	4	3	4
+GOVT 2302	American National & State Govt II	3	0	3
+SPCH 1315	Public Speaking	3	0	3
MATH 1342	Statistical Methods	3	0	3
(PSYC 2317 will also fulfill this requirement)				
+VISUAL & PERF ARTS	Visual/ Performing Arts	3	0	3
		16	3	16

+Denotes Core Requirement; see p. 18

** Texas History (HIST 2301) may be substituted for one semester US Hist (Hist 1301 or 1302 to satisfy degree requirements

Total Minimum Credits Required for Health Science Degree 66

Mathematics Degree Program

Associate of Science Degree Program

(281) 756-3705

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
+ENGL 1301	Composition and Rhetoric I	3	0	3
+MATH 1314	College Algebra	3	0	3
+**HIST 1301	The U.S. to 1877	3	0	3
PHED	Physical Activity	0	3	1
+Visual/Performing Arts	Visual/Performing Arts	3	0	3
		12	3	13
Second Semester				
+ENGL 1302	Composition and Rhetoric II	3	0	3
MATH 2412	Pre-Calculus	4	0	4
+**HIST 1302	The U.S. Since 1877	3	0	3
PHED	Physical Activity	0	3	1
+Humanities	Humanities	3	0	3
+Social/Behavioral Sciences	Social/Behavioral Sciences	3	0	3
		16	3	17
Third Semester				
ENGL 2332 or	Survey of Literature I	3	0	3
ENGL 2322	Survey of English Literature I			
+GOVT 2301	American National & State Govt. I	3	0	3
MATH 2413	Calculus I	4	0	4
+SPCH 1315	Public Speaking	3	0	3
+Natural Sciences	Natural Sciences	3	3-4	4
		16	3-4	17
Fourth Semester				
+GOVT 2302	American National & State Govt. II	3	0	3
MATH 2414	Calculus II	4	0	4
+Natural Science	Natural Sciences	3	3-4	4
+COSC 1401 (or higher)	Microcomputer Applications	3	3	4
		13	6-7	15

+Denotes Core Requirement; see p. 18

**Texas History (HIST 2301) may be substituted for one semester U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirements.

Total Minimum Credits Required for Mathematics Degree 62

Physical Science Degree Program

(281) 756-3745

Associate of Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CHEM 1411	General Chemistry & Analysis I	3	4	4
+ENGL 1301	Composition and Rhetoric I	3	0	3
+**HIST 1301	The U.S. to 1877	3	0	3
+SPCH 1315	Public Speaking	3	0	3
PHED	Physical Activity	0	3	1
+COSC 1401 (or higher)	Microcomputer Applications	3	3	4
		15	10	18
Second Semester				
CHEM 1412	General Chemistry & Analysis II	3	4	4
+ENGL 1302	Composition and Rhetoric II	3	0	3
+**HIST 1302	The U.S. Since 1877	3	0	3
+MATH 2412	Pre-Calculus Math	4	0	4
+Visual/Perform. Arts	Visual/Performing Arts	3	0	3
PHED	Physical Activity	0	3	1
		16	7	18
Third Semester				
***Science	Recommended for Majors	3	3-4	4
+ENGL 2332 or	Survey of Literature I	3	0	3
ENGL 2322	Survey of English Literature I	3	0	3
+GOVT 2301	American National & State Govt. I	4	0	4
MATH 2413	Calculus I	13	3-4	14
Fourth Semester				
****Science	Second half of science courses taken third semester	3	3-4	4
+GOVT 2302	American National & State Govt. II	3	0	3
MATH 2414	Calculus II	4	0	4
+Social/Behav. Science	Social/Behavioral Science	3	0	3
		13	3-4	14

+Denotes core requirement; see p. 18

***Chemistry majors should take CHEM 2423 and either PHYS 2425 or BIOL 1406.
Geology majors should take GEOL 1403 and GEOL 1404. Physics majors should take PHYS 2425 and either BIOL 1406 or GEOL 1403.

**Texas History (HIST 2301) may be substituted for one semester U.S. History (HIST 1301 or HIST 1302) to satisfy degree requirements.

****Select two of the following: CHEM 2425, PHYS 2425, GEOL 1403, BIOL 1406, PHYS 1401

Total Minimum Credits Required for Physical Science Degree 64

Associate of Applied Science Degree Programs

Degree: Associate of Applied Science (A.A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The Associate of Applied Science Degree (A.A.S.) is awarded to students who fulfill the requirements in one of the following programs:

Child Development/Early Childhood
Communications-Radio Broadcasting
Communications-Television Broadcasting
Computer Repair Technology
Computer Science - Networking
Court Reporting
Computer Science Technology
Correctional Science
Diagnostic Cardiovascular Sonography-Echocardiography
Diagnostic Cardiovascular Sonography-Non-Invasive Vascular Technology
Drafting Technology
Electronic Technology
Emergency Medical Technology
Law Enforcement & Police Administration
Legal Office Professional
Management Development
Marine Robotics
Medical Office Professional
Mental Health/Chemical Dependence Counseling (LCDC)
Nursing ADN
Office Professional
Paralegal
Process Technology
Respiratory Care

These programs are two years in length, and prepare the student for immediate occupational employment.

Capstone Experience: The capstone is a learning experience which results in a consolidation of a student's educational experience and certifies mastery of entry-level workplace competencies. The Capstone experience must occur in the last semester of the student's educational program.

Advanced Technical Certificate Programs

(Associate of Applied Science Degree in an Allied Health Program required prior to earning these certificates.)

Diagnostic Cardiovascular Sonography-Echocardiography
Diagnostic Cardiovascular Sonography-Non-Invasive Vascular Technology
Polysomnography

Certificate Programs

The Certificate of Completion in Technical Education is awarded to students who fulfill the requirements in one of the following programs:

Child Development/Early Childhood
Child Development/Early Childhood Admin.
Communications-Radio Broadcasting
Communications-Television
Computer Repair
Computer Science-Data Processing
Computer Science-Networking
Court Reporting
Court Reporting Scopist
Criminal Justice-Correctional Admin.
Criminal Justice-Correctional Science
Criminal Justice-Crime Scene Technician
Criminal Justice-Police Administration
Criminal Justice-Texas Peace Officer
Drafting Technology
Electronic Communications
Electronics
Emergency Medical Technology
Instrumentation Technology
Law Enforcement & Police Administration
Legal Office Assistant
Legal Stenography
Management Development
Marine Robotics
Medical Coding & Billing Specialist
Medical Transcriptionist
Mental Health/Chemical Dependence Counseling (LCDC)
Office Assistant
Paralegal
Process Technology
Vocational Nursing

These programs vary in length from one to three semesters, and they prepare the student for immediate occupational employment.

Child Development/Early Childhood Degree Program

(281) 756-3644

Degree: Associate of Applied Science (A.A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The curriculum in child development and early childhood prepares individuals for career services in day care centers, pre-school programs and related occupations. Supported by a broad general education, training is given to develop professional competence in the area of child development and early childhood.
Admission Requirements: In addition to the general requirements for admission to the college, entry into the program requires a personal interview with the Child Development/Early Childhood Department.
Program Requirements: Approximately two-thirds of the curriculum includes courses in child development and early childhood with the remaining courses in related areas, general education, and electives. Instruction includes both the theoretical concepts and practical applications needed for future success in child development and early childhood or related activities. Students are urged to consult with their faculty advisor and the Office of Admissions and Academic Advising in planning their program and selecting electives. Upon satisfactory completion of the program, the graduate will be awarded the Associate in Applied Science Degree.

Associate of Applied Science Degree Program-TECH PREP

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
CDEC 1270	Early Childhood: Games & Recreation	1	2	2
TECA 1311 or	Educating Young Children	3	1	3
*CDEC 1313	Curriculum Resources for Early Childhood Prog.			
CDEC 1317	Child Development Associate Training I	2	3	3
*CDEC 1358	Creative Arts for Early Childhood	2	3	3
ENGL 1301	Composition and Rhetoric I	3	0	3
PHED	Physical Activity	0	3	1
		11	12	15
Second Semester				
TECA 1354	Child Growth and Development	3	0	3
CDEC 1356	Emergent Literacy for Early Childhood	2	3	3
*CDEC 1384 or	Cooperative Ed. in Child Development I	1	20/8	3
CDEC 2322	Child Development Assoc. Training II			
COSC 1401	Microcomputer Applications	3	3	4
SPCH 1315	Public Speaking	3	0	3
PHED	Physical Activity	0	3	1
		12	17/29	17
SECOND YEAR				
First Semester				
BIOL 2306	Environmental Conservation	3	0	3
TECA 1303	Family, School and Community	3	1	3
CDEC 1319	Child Guidance	3	1	3
CDEC 1359	Children with Special Needs	3	0	3
***CDEC 2324 or	Child Development Associate Training III	1	8/20	3
***CDEC 2384	Cooperative Ed. in Child Development II			
		13	10/22	15
Second Semester				
TECA 1318	Wellness of the Young Child	3	1	3
CDEC 2307	Math and Science for Early Childhood	2	3	3
CDEC 1321	The Infant and Toddler	3	0	3
SOCI 2319	American Minorities	3	0	3
ARTS 1301	Art Appreciation	3	0	3
		14	4	15

*Students who finish high school program are given college credit for these courses.
***CDEC 2324 or CDEC 2384 may be used as Capstone course.

Total Credits Required for A.A.S. Child Development/Early Childhood Degree 62

Child Development/Early Childhood Certificate

Degree: Certificate
Length: 35 Semester Hours
Purpose: The Certificate of Child Development/Early Childhood Administration is designed for mature persons working in the early childhood field. A certificate represents the completion of 35 hours of approved course work.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CDEC 1270	Early Childhood: Games & Recreation	1	2	2
TECA 1311 or	Educating Young Children	3	1	3
CDEC 1313	Curriculum Resources for Early Childhood Programs			
CDEC 1317	Child Development Associate Training I	2	3	3
CDEC 1358	Creative Arts for Early Childhood	2	3	3
CDEC 1359	Children with Special Needs	3	0	3
CDEC 2322 or	Child Development Associate Training II			
CDEC 1384	Cooperative Ed. in Child Development I	1	8/20	3
		12	17/29	17
Second Semester				
TECA 1318	Wellness of the Young Child	3	1	3
TECA 1354 or	Child Growth and Development or	3	0	3
CDEC 1321	The Infant and Toddler			
CDEC 1356	Emergent Literacy for Early Childhood	2	3	3
CDEC 2307	Math & Science for Early Childhood	2	3	3
*CDEC 2324 or	Child Development Associate Training III	1	8/20	3
*CDEC 2384	Cooperative Ed. in Child Development II			
Elective	College Elective	3	0	3
		14	15/27	18

*Capstone course requirement: CDEC 2324 or CDEC 2384.

Total Credits Required for Child Development/Early Childhood Certificate 35

Child Development/Early Childhood Administration Certificate

Degree: Certificate
Length: 26 Semester Hours
Purpose: The Certificate of Child Development/Early Childhood is designed for mature persons working in the early childhood field. A certificate represents the completion of 26 hours of approved course work.

First Semester				
CDEC 1313	Curriculum Resources for Early Childhood	3	0	3
CDEC 1317	Child Development Training I	2	3	3
CDEC 2322 or	Child Development Training II	1	8/20	3
CDEC 1384	Cooperative Ed. in Child Development I			
CDEC 2426	Administration of Program for Children I	3	2	4
		9	13/25	13
Second Semester				
TECA 1318	Wellness of the Young Child	3	1	3
*CDEC 2324 or	Child Development Training III	1	8/20	3
*CDEC 2384	Cooperative Ed. in Child Development II			
CDEC 2428	Administration of Program for Children II	3	2	4
Elective	College Elective	3	0	3
		10	11/23	13

*Capstone Course Required: CDEC 2324 or CDEC 2384.

Total Credits Required for Certificate of Child Development/Early Childhood Administration 26

Communications - Radio/TV Broadcasting Degree Program

(281) 756-3892

Associate of Applied Science Degree (A.A.S.) - Tech Prep
Length: Four-Semester (Two-Year) Program
Purpose: The program is designed to prepare the student for further study at a senior institution or for an entry level position in the field o communications.
Program Requirements: This curriculum includes the general education courses and introductory specialty courses that are usually required in th first two years of equivalent baccalaureate programs.

When planning a program and selecting electives, the student should become acquainted with the requirements of the major department in th college or university to which he/she expects to transfer. Students planning to begin employment upon completion of their program should give specia consideration to their specific area of interest in the field of communications when selecting electives. Students planning on transferring to a four yea academic institution would consult with the department chair, and enroll under the COMM rubric.

OPTION I - Radio Broadcasting

Associate of Applied Science Degree Program - Tech Prep

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
COSC 1401	Microcomputer Applications	3	3	4
ENGL 1301	Composition and Rhetoric I	3	0	3
PHED	Physical Activity	0	3	1
RTVB 1301	Broadcast News Writing	2	4	3
RTVB 1317	Survey of Electronic Media	3	0	3
RTVB 1329	Writing for Electronic Media	2	4	3
		13	14	17
Second Semester				
MUSC 1327	Audio Engineering I	2	2	3
RTVB 1355	Radio and Television Announcing	2	4	3
RTVB 1380	Cooperative Education-Radio/TV Broadcasting	1	20	3
RTVB 1409	Audio/Radio Production I	2	6	4
SOCI 1301	Principles of Sociology	3	0	3
		10	32	16
SECOND YEAR				
First Semester				
HIST 1301	The United States to 1877	3	0	3
RTVB 2339	Broadcast Sales	2	4	3
RTVB 2380	Cooperative Education-Radio/TV Broadcasting	1	20	3
RTVB 2431	Audio/Radio Production III	2	6	4
MUSC 2427 or	Audio Engineering II			
MUSC 2447	Audio Engineering III	2	4	4
		10	34	17
Second Semester				
MATH 1314	College Algebra	3	0	3
MRKG 1313	Public Relations	3	0	3
SPCH 1315	Public Speaking	3	0	3
*RTVB 1391	Special Topics in Radio/TV Broadcasting	2	4	3
Elective	Visual & Performing Arts/Humanities	3	0	3
PHED	Physical Activity	0	3	1
		14	7	16

*Capstone Course

Total Credits Required for Communications-Radio Broadcasting Degree 66

Educational Programs

OPTION II - Television Broadcasting

Associate of Applied Science Degree Program - Tech Prep

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
FIRST YEAR				
First Semester				
COSC 1401	Microcomputer Applications	3	3	4
ENGL 1301	Composition and Rhetoric I	3	0	3
PHED	Physical Activity	0	3	1
RTVB 1317	Survey of Electronic Media	3	0	3
RTVB 1325	TV Studio Production	2	4	3
RTVB 1329	Writing for Electronic Media	2	4	3
		13	14	17
Second Semester				
RTVB 1355	Radio/TV Announcing	2	4	3
RTVB 1381	Cooperative Education-Radio/TV Broadcasting	1	20	3
RTVB 1421	TV Field Production	2	6	4
RTVB 2335	TV Production Workshop I	2	4	3
SOCI 1301	Principles of Sociology	3	0	3
		10	34	16
SECOND YEAR				
First Semester				
COMM 2366	Introduction to Film	2	3	3
HIST 1301	The United States to 1877	3	0	3
MRKG 1313	Public Relations	3	0	3
RTVB 2339	Broadcast Sales	2	4	3
RTVB 2381	Cooperative Education-Radio/TV Broadcasting	1	20	3
		11	27	15
Second Semester				
MATH 1314	College Algebra	3	0	3
PHED	Physical Activity	0	3	1
SPCH 1315	Public Speaking	3	0	3
*RTVB 1391	Special Topics in Radio/TV Broadcasting	2	4	3
Elective	Visual & Performing Arts/Humanities	3	0	3
		11	7	13

*Capstone Course

Total Credits Required for Communications-Television Broadcasting Degree. 61

Communications-Radio/TV Broadcasting Enhanced Skills Certificate

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
RTVB 1445	Broadcast Engineering	3	3	4
RTVB 2335	TV Production	2	3	3

Total Credits Required for Enhanced Skills Certificate Communications 68

Communications - Radio/TV Broadcasting Certificate

Length: Two-Semester (One-Year) Program
Purpose: The program prepares the student for entry into occupations in radio broadcasting, sound reinforcement and recording, or television. Completion of this program also enhances the effectiveness of those presently employed in the field of communications.
Program Requirements: The student will be awarded a certificate upon completion of the program in his/her particular area of interest.

OPTION 1 - Radio Broadcasting

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
RTVB 1301	Broadcast News Writing	2	4	3
RTVB 1317	Survey of Electronic Media	3	0	3
RTVB 1329	Writing for Electronic Media	2	4	3
RTVB 1380	Cooperative Education-Radio/TV Broadcasting	1	20	3
RTVB 1409	Audio/Radio Production I	2	6	4
		10	34	16
Second Semester				
MUSC 1327	Audio Engineering I	2	2	3
RTVB 1355	Radio/TV Announcing	2	4	3
*RTVB 2380	Cooperative Education-Radio/TV Broadcasting	1	20	3
RTVB 2339 or	Broadcast Sales	2/3	4/0	3
MRKG 1313	Public Relations	7/8	30/26	12

*Capstone Course

Total Credits Required for Communications-Radio Broadcasting Certificate. 28

OPTION 2 - Television Broadcasting

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
RTVB 1317	Survey of Electronic Media	3	0	3
RTVB 1325	TV Studio Production	2	4	3
RTVB 1329	Writing for Electronic Media	2	4	3
RTVB 1421	TV Field Production	2	6	4
RTVB 2339	Broadcast Sales	2	4	3
		11	18	16
Second Semester				
COMM 2366	Introduction to Film	2	3	3
MRKG 1313	Public Relations	3	0	3
RTVB 1355	Radio and Television Announcing	2	4	3
*RTVB 1381	Cooperative Education-Radio/TV Broadcasting	1	20	3
RTVB 2335	TV Production Workshop I	2	4	3
		10	31	15

*Capstone Course

Total Credits Required for Communications -Television Certificate 31

Computer Science Technology - Computer Programming Degree (281) 756-3782

Degree: Associate of Applied Science Degree (A.A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The Computer Science Technology curriculum develops in students the skills, knowledge, attitudes, and abilities which will enable them to function in positions of responsibility in the current employment market. Special emphasis is given to computer programming, and each student is urged to consult with the Counseling Center or faculty advisor.
Program Requirements: This curriculum in computer science is a two-year program encompassing instruction in the many areas required for competence as a technician in the computer science industry. Approximately one-half of the curriculum includes courses in computer technology, with the remaining courses in technically related areas: mathematics, business, and general education. This curriculum provides a broad background, qualifying the student to perform effectively in several different occupational areas of the computer science technology field. Upon completion of the two-year curriculum, with an overall grade point average of 2.0 for all computer science courses attempted, the student will be awarded the Associate in Applied Science Degree with a major in Computer Science Technology, specializing in business computer programming.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
COSC 1401	Microcomputer Applications	3	3	4
ITSE 1410 or	Pascal Programming or	3	3	4
ITSE 1422 or	Introduction to C Programming or			
COSC 1418	Pascal Programming Language			
ENGL 1301	Composition and Rhetoric I	3	0	3
HIST 1301	The United States to 1877	3	0	3
MATH 1314	College Algebra	3	0	3
		15	6	17
Second Semester				
ITSE 1431 or	Introduction to Visual BASIC Programming or	3	3	4
BCIS 1431	Computer Programming - Visual Basic			
ITSE 1407 or	Introduction to C++ Programming or	3	3	4
COSC 1420	Computer Programming - C++			
ENGL 1302 or	Composition and Rhetoric II or	3	0	3
ENGL 2311	Technical Communication			
HIST 1302 or	The United States Since 1877 or	3	0	3
HIST 2301	Texas History			
MATH 2412 or	Pre-Calculus Math or	3/4	0	3/4
MATH 1324	Math for Business & Social Sciences I	15/16	6	17/18
SECOND YEAR				
First Semester				
ITSE 2413 or	Web Authoring or	3	3	4
ITSE Elective	ITSE Elective			
BMGT 1303	Principles of Management	3	0	3
Elective	Visual & Performing Arts/Humanities	3	0	3
GOVT 2301	American, National & State Government I	3	0	3
SPCH 1315	Public Speaking	3	0	3
PHED	Physical Activity	0	3	1
		15	6	17
Second Semester				
ITSE 2417	JAVA Programming	3	3	4
*ITSE 2449	Advanced Visual BASIC Programming	3	3	4
ITSE 2387 or	Internship - Computer Programming or	0/3	18/0	3
Elective	College Level Elective			
GOVT 2302	American, National & State Government II	3	0	3
PHED	Physical Activity	0	3	1
		9/12	27/9	15

* Capstone Course

Total Credits Required for A.A.S. Computer Programming Degree..... 66-67

Computer Science Field of Study Curriculum

Course Number	*Course Title*	*Semester Credits Hours*
COSC 1336 or 1436	Programming Fundamentals I	3 or 4
COSC 1337 or 1437	Programming Fundamentals II	3 or 4
COSC 2336 or 2436	Programming Fundamentals III	3 or 4
COSC 2325 or 2425	Computer Organization and Machine Language	3
MATH 2313 or 2413	Calculus I	3 or 4
MATH 2314 or 2414	Calculus II	3 or 4
PHYS 2425	Physics I	4
PHYS 2426	Physics II	4
		26-32 SCH Total

Computer Science - Networking

Length: Four Semesters (Two Year) Program
Purpose: The Computer Science Networking program would prepare students for careers in many areas of LAN/WAN administration and design. ACC is a valued member of the Microsoft IT Academy program and thus holds a leveraged position for success in a variety of career opportunities (e.g. installing, managing and maintaining Microsoft servers and networks worldwide). This 65 credit A.A.S. program is designed to include the Microsoft Certified System Administrator (MCSA) and/or Microsoft Certified System Engineer (MCSE) sequence. Program graduates will be prepared for both of these industry leading certification examinations as well as the more basic CompTIA Network+ generic certification. This College has one networked classroom lab on the main campus dedicated exclusively to the Network Administrator/Engineer curriculum.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
ITNW 1321	Introduction to Networking	3	1	3
ITNW 1325	Fundamentals of Networking	3	1	3
CPMT 1411	Intro to Computer Maintenance	3	3	4
MATH 1314	College Algebra	3	0	3
CPMT 2445	Computer Systems Troubleshooting	3	3	4
		15	8	17
Second Semester				
PHED	Physical Activity	0	3	1
ITMC 1319	Installing & Administering Windows Server Operating Systems	2	2	3
ITMC 1341	Implementing MS Windows Professional and Server	2	2	3
POFT 1301	Business Communications	3	0	3
ITNW 2321	Networking with TCP/IP	2	2	3
ITSY 1342	Information Technology Security	2	2	3
ENGL 1301	Composition and Rhetoric 1	3	0	3
		14	11	19
SECOND YEAR				
First Semester				
Elective	Visual & Performing Arts/Humanities	3	0	3
ITMC 1342	Implementing MS Windows Networking Infrastructure	2	2	3
ITMC 1343	Implementing and Administering MS Directory Services	2	2	3
*ITMC 2371	Managing a Windows Network	3	3	4
ENGL 2311	Technical Communication	3	0	3
		13	7	16

Second Semester				
SOCI 1301	Principles of Sociology	3	0	3
PHED	Physical Activity	0	3	1
ITMC 2331	Designing Windows	2	2	3
ITMC 2333 or	Directory Services Infrastructure			
ITMC 2330	Designing a Secure Windows Network	2	2	3
ITMC 2335	Updating Support Skills for Microsoft Windows			
	Deploy-Manage Microsoft ISA Server	2	2	3
		9	9	13

*Capstone Course

Total Credits Required for A.A.S of Computer Networking 65

Computer Science Technology - General Computer Data Processing Certificate Program

Length: Two-Semester (One-Year) Program

Purpose: The general computer data processing curriculum provides students with an introduction to data processing and allows persons already engaged in business and industry to increase their computer knowledge.

Program Requirements: The curriculum includes technical courses in computer science. Each student is urged to consult with the Office of Admissions & Academic Advising or faculty advisor. Upon satisfactory completion of the two semester curriculum, with an overall 2.0 grade point average for all computer science courses attempted, the student will be awarded the Certificate in Computer Science (General Computer Data Processing).

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
COSC 1401	Microcomputer Applications	3	3	4
ITSE 1410 or	Pascal Programming or	3	3	4
ITSE 1422 or	Introduction to C Programming or			
COSC 1418	Pascal Programming Language			
ENGL 1301	Composition and Rhetoric I	3	0	3
HIST 1301	The United States to 1877	3	0	3
MATH 1314	College Algebra	3	0	3
		15	6	17
Second Semester				
ITSE 1431 or	Introduction to Visual BASIC Programming or	3	3	4
BCIS 1431	Programming in Visual Basic			
*ITSE 2413	Web Authoring	3	3	4
ENGL 1302	Composition and Rhetoric II	3	0	3
HIST 1302	The United States Since 1877	3	0	3
		12	6	14

*Capstone Course

Total Credits Required for General Computer Data Processing Certificate 31

Computer Science Networking Certificate Program

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester				
COSC 1401	Microcomputer Applications	3	3	4
CPMT 1411	Introduction to Computer Maintenance	3	3	4
CETT 1425	Digital Fundamentals	3	3	4
ITNW 1321	Introduction to Networking	2	2	3
		11	11	15
Second Semester				
ITNW 1325	Fundamentals of Networking	2	2	3
ITMC 1319	Installing & Administering Windows Server Operating Systems	2	2	3
*ITMC 1341	Implementing MS Windows Professional and Server	2	2	3
CPMT 2445	Computer System Troubleshooting	3	3	4
		9	9	13

This plan provides courses for preparation for the following certifications:
CompTIA Network+ (Net+) Certification (ITNW 1325) / CompTIA A+ certification (CPMT 1411 and CPMT 2445)
Microsoft Certified Professional (MCP) certification (ITMC 1319 and 1341).
This plan provides 2 out of the 7 courses required for the Microsoft Certified Systems Engineer (MCSE) certification.

*Capstone Course

Total Credits Required for Computer Science Networking Certificate 28

Computer Repair Technology Degree Program

Degree: Associate of Applied Science (A.A.S.)
Purpose: A computer system technologist from ACC is a well paid semiprofessional person who has developed computational skills, analytic abilities, and computer programming techniques to work with computer systems and networks. Employment opportunities in the exploding computer industry are virtually unlimited. Generally, a computer system technologist will be involved in the installation, repair and maintenance, troubleshooting and upgrading of computer systems and networks. A computer system technologist will spend one year in building a strong foundation in electronics and computer programming related to computer systems and networking. The second year will focus on computer systems and networking. Principles and skills necessary to operate, troubleshoot, install and repair various types of computer systems and networks are stressed. At the completion of the degree, the student will be prepared for the A+ certification exams, both CORE and Microsoft Windows/DOS module. The student will also be prepared for two modules of the MCSE certification program, both networking essentials and Windows NT Server.
Program Requirements: In addition to the general admission requirements for ACC, entry into the Associate of Applied Science Curriculum in Computer Repair Technology requires a proficiency in Algebra, English, and Reading. Students who lack proficiency will be required to complete developmental courses in the above subjects prior to enrolling in electronics courses.

Associate of Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester				
CETT 1425	Digital Fundamentals	3	3	4
CPMT 1411	Introduction to Computer Maintenance	3	3	4
MATH 1314	College Algebra	3	0	3
ENGL 1301	Composition & Rhetoric I	3	0	3
PHED	Physical Activity	0	3	1
		12	9	15
Second Semester				
CETT 1403	DC Circuits	3	3	4
ITNW 1325	Fundamentals of Networking	2	2	3
CETT 1449 or CETT 1431	Digital Systems Technical Programming	3	3	4
Elective	Visual & Performing Arts/Humanities	3	0	3
PHED	Physical Activity Elective	0	3	1
		11	11	15

Third Semester				
SOCI 1301	Principles of Sociology	3	0	3
CPMT 2433	Computer Integration	3	3	4
ITSE 1431	Visual Basic Programming	3	3	4
CETT 1429	Solid State Devices	3	3	4
SPCH 1315	Public Speaking	3	0	3
		15	9	18
Fourth Semester				
EECT 2439	Communications Circuits	3	3	4
CPMT 2437	Microcomputer Interfacing	3	3	4
*CPMT 2445	Computer System Troubleshooting	3	3	4
Elective	CSCI/CETT/CPMT	3	0	3
		12	9	15

*Capstone Course

Total Credits Required for Computer Repair Degree 63

Computer Repair Certificate

Length: Two-Semester Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CETT 1425	Digital Fundamentals	3	3	4
CPMT 1411	Introduction to Computer Maintenance	3	3	4
CPMT 2433	Computer Integration	3	3	4
		9	9	12
Second Semester				
CPMT 2437	Microcomputer Interfacing	3	3	4
*CPMT 2445	Computer System Troubleshooting	3	3	4
ITNW 1325	Fundamentals of Networking	2	2	3
		8	8	11

*Capstone Course

Total Credits Required for Computer Repair Certificate. 23

Court Reporting Degree Program

(281) 756-3757

Degree: Associate of Applied Science (A.A.S.)
Length: Six-Semester Program
Purpose: The Associate of Applied Science Degree curriculum in Court Reporting prepares students for job entry positions in court reporting and for positions related to court reporting, e.g., scoping and captioning. This curriculum meets a need which exists due to the greatly expanding Gulf Coast area, the increasing demand for qualified court reporters and captioning/CART providers throughout the nation, and the lack of institutions to provide the necessary training.
Program Description: The curriculum is two years. However, the machine shorthand courses are offered in such a way as to allow students to progress at their own individual rates. Maximum use of live dictation exists in the program, as practice tapes are encouraged for use off-campus. Accommodations are made for students to secure credit for work previously accomplished through the credit-by-examination procedure.
Program Objectives: The objective of the two-year curriculum is for the student to attain the machine shorthand speed of 225 words per minute on testimony, 200 words per minute on jury charge, and 180 words per minute on literary material exceeding the standards of the National Court Reporters Association (NCRA). Accompanying objectives are the attainment of the Court Reporting Scopist Certificate for those students who desire it and an enhanced skills certificate in captioning/CART.

Program Requirements:

1. To be considered for admission to the Associate Degree Court Reporting Program, the applicant must:
   a. be a high school or GED graduate;
   b. make application to ACC and fulfill the admission requirements of the College;
   c. fill out a Court Reporting application and return it to the Chairperson of the Court Reporting Department;
   d. have a personal interview with the Court Reporting Department Chairperson or his/her designee to develop a degree plan and secure a beginning schedule;
   e. submit official copies of transcripts of all previous high school and college work to the ACC Registrar's Office;
   f. be able to type 45 words per minute with not more than 5 errors on a five-minute test before entering Machine Shorthand Theory.

Note: A person convicted of a criminal offense involving moral turpitude, fraud, or corruption may be refused certification to the Supreme Court by the Texas Court Reporters Certification Board. Please contact the Texas Court Reporters Certification Board, Austin, Texas, for more information.

2. Any student who has accumulated the equivalent of any five full days absence in any subject may be dropped from the course. Students withdrawing from the program for reasons other than academic problems will be considered for readmission on an individual basis. CRTR students may be limited to two semesters of CRTR 1404 (Machine Shorthand I). Students who do not complete all requirements for this course, including three 40 wpm five-minute tests with a grade above a D, within this time frame may be redirected to another program. Grades will be issued on the following basis:

A	90 – 100
B	80 - 89
C	75 - 79
D	70 - 74
F	0 - 69

No grade below a C (75%) in any CRTR English class (CRTR 1312, CRTR 2311) will be accepted for progression. A grade of D or below will not be accepted for advancement in machine shorthand classes.

3. Transfer students:
   a. must provide the ACC Registrar's Office with official transcripts for each institution attended and request evaluation by the Graduation Advisor and the Court Reporting Department Chairperson.
   b. may apply for credit by examination by testing in the following areas: Legal Terminology; Medical Reporting; Reporting Communications I.

4. The Court Reporting Department will assist all graduates of the program in obtaining employment.

5. Advancement in the machine shorthand courses involves utilization and development of skills, which may be more difficult for some individuals; therefore, successful completion of these courses may require more than the two years outlined in the degree plan.

Associate of Applied Science Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
FIRST YEAR				
First Semester (Fall)				
CRTR 1213	Reporting Orientation	2	0	2
CRTR 1404	Machine Shorthand I	2	8	4
*CRTR 1312	Reporting Communications I	2	3	3
CRTR 1302	Law and Legal Terminology	3	0	3
PHED	Physical Activity	0	3	1
		9	14	13
Second Semester (Spring)				
CRTR 1406	Machine Shorthand II	2	8	4
*CRTR 2311	Reporting Communications II	2	3	3
CRTR 2306	Medical Reporting	3	0	3
CRTR 1314	Reporting Technology I	2	3	3
		9	14	13
Third Semester (Summer)				
CRTR 2401	Intermediate Machine Shorthand	2	8	4
SOCI 1301	Principles of Sociology	3	0	3
CRTR 1308	Realtime Reporting I	2	3	3
PHED	Physical Activity	0	3	1
		7	14	11
SECOND YEAR				
First Semester (Fall)				
CRTR 2403	Advanced Machine Shorthand	2	8	4
CRTR 1310	Realtime Reporting II	2	3	3
CRTR 2343	Simulated Courtroom Procedures	2	3	3
GOVT 2301 or	American National & State Government I	3	0	3
HIST 1301	The U.S. to 1877			
		9	14	13
Second Semester (Spring)				
CRTR 2435	Accelerated Machine Shorthand	2	8	4
CRTR 2331	CSR/RPR Preparation	2	3	3
CRTR 2315	Reporting and Office Procedures	2	3	3
MATH 1314 or	College Algebra	3	0	3
MATH 1332	Contemporary Mathematics I			
		9	14	13
Third Semester (Summer)				
SPCH 1318	Interpersonal Communications	3	0	3
Elective	Visual & Performing Arts/Humanities	3	0	3
CRTR 2381	Cooperative Education	1	20	3
		7	20	9

*Students must take CRTR 1312 and 2311 in the Court Reporting Department regardless of prior English classes completed at ACC or other institutions.

Total Credits Required A.A.S. Court Reporting 72

1. The student shall pass the following exams:
- One 180 wpm five-minute literary test with no more than 10 errors-98.9%
- One 180 wpm five-minute testimony test with no more than 10 errors-98.9%
- One 200 wpm five-minute jury charge test with no more than 25 errors-97.8%
- Two 225 wpm five-minute testimony tests with no more than 25 errors-97.8%
- Two mock CSR exams. EACH exam consists of the following:
- One 180 wpm five-minute literary test with no more than 45 errors-95%
- One 200 wpm five-minute jury charge test with no more than 50 errors-95%
- One 225 wpm five-minute testimony test with no more than 56 errors-95%

2. Each student shall complete an internship (CRTR 2381) of at least 15 verified hours per week for one semester with a practicing reporter plus 5 hours per week transcribing proceedings taken during the internship

Students are encouraged to utilize the tape library for home practice and skill building during free periods and before and after school.

Court Reporting Enhanced Skills Certificate (Captioning)

Purpose: The captioning enhanced skills certificate prepares the student seeking the A.A.S. degree in court reporting to also work in the captioning arena: off-line and on-line captioning and also realtime translation of meetings, seminars, conferences, and classroom realtime translation.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
CRTR 1346	Captioning Reporting I	2	3	3
CRTR 2333	Captioning Reporting II	2	3	3

Total Credits Required Court Reporting Enhanced Skills Certificate 78

Court Reporting Certificate Program

Length: Six-Semester Program

Purpose: The certificate in Court Reporting prepares the student for full-time employment immediately in a specialized business occupation. This course provides a job outlet for those students who desire to work in the court reporting field, but do not wish to pursue an A.A.S. degree plan.

Program Requirements: Students entering this program must be high school graduates or possess a GED equivalency certificate. Each student is urged to consult with the Office of Admissions & Academic Advising and the Court Reporting Department Chairperson in planning his/her program. The Court Reporting Certificate will be awarded upon satisfactory completion of the six-semester program.

Note: The A.A.S. program requirements also apply to the certificate program in Court Reporting.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester (Fall)				
CRTR 1213	Reporting Orientation	2	0	2
CRTR 1404	Machine Shorthand I	2	8	4
*CRTR 1312	Reporting Communications I	2	3	3
CRTR 1302	Law and Legal Terminology	3	0	3
		9	11	12
Second Semester (Spring)				
CRTR 1406	Machine Shorthand II	2	8	4
*CRTR 2311	Reporting Communications II	2	3	3
CRTR 2306	Medical Reporting	3	0	3
CRTR 1314	Reporting Technology I	2	3	3
		9	14	13
Third Semester (Summer)				
CRTR 2401	Intermediate Machine Shorthand	2	8	4
CRTR 1308	Realtime Reporting I	2	3	3
		4	11	7
SECOND YEAR				
First Semester (Fall)				
CRTR 2403	Advanced Machine Shorthand	2	8	4
CRTR 1310	Realtime Reporting II	2	3	3
CRTR 2343	Simulated Courtroom Procedures	2	3	3
		6	14	10
Second Semester (Spring)				
CRTR 2435	Accelerated Machine Shorthand	2	8	4
CRTR 2331	CSR/RPR Preparation	2	3	3
CRTR 2315	Reporting and Office Procedures	2	3	3
		6	14	10
Third Semester (Summer)				
*CRTR 2381	Cooperative Education	1	20	3

*Capstone Course

Total Credits Required for Court Reporting Certificate 55

Court Reporting Scopist Certificate Program

Length: Three-Semester Program

Purpose: The Court Reporting Scopist Certificate prepares the student for full-time employment immediately in a specialized business occupation. This course provides a job outlet for those students who desire to work in the court reporting field, but do not desire to become a court reporter, or who find they must secure employment within a shorter time. Those seeking the Court Reporting Scopist Certificate will attain the speed of 80 words per minute on machine shorthand tests.

Program Requirements: Students entering this program must be high school graduates or possess a GED equivalency certificate. Students entering the scoping program must possess keyboarding skills of at least 50 words per minute. Each student is urged to consult with the Office of Admissions & Academic Advising and the Court Reporting Department Chairperson in planning his/her program. The Court Reporting Scopist Certificate will be awarded upon satisfactory completion of the three-semester program.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester (Fall)				
CRTR 1213	Reporting Orientation	2	0	2
CRTR 1302	Law and Legal Terminology	3	0	3
CRTR 1312	Reporting Communications I	2	3	3
CRTR 1404	Machine Shorthand I	2	8	4
		9	11	12
Second Semester (Spring)				
CRTR 1314	Reporting Technology I	2	3	3
CRTR 1406 or CRTR 1455	Machine Shorthand II or Dictation Speedbuilding	2	8	4
CRTR 2306	Medical Reporting	3	0	3
CRTR 2311	Reporting Communications II	2	3	3
		9	14	13
Third Semester (Summer)				
*CRTR 2380 or CRTR Elective	Cooperative Education or Court Reporting Elective	1	20	3

*Capstone Course

Total Credits Required for Court Reporting Scopist Certificate 28

Criminal Justice-Correctional Science Degree

(281) 756-3779

Degree: Associate of Applied Science (A.A.S.) - Tech Prep
Length: Four-Semester (Two-Year) Program
Purpose: The curriculum in correctional science prepares individuals for career services with the Texas Department of Corrections, with juveniles in institutions, and with related correctional occupations. Supported by a broad general education, training is given to develop professional competence in the field of contemporary corrections. This curriculum is applicable to both the preparatory student and the experienced correctional worker.
Admission Requirements: In addition to the general requirements for admission to the College, entry into the correctional science program requires the following:

1. Degree plan must be approved by the Criminal Justice Department Chairperson.
2. Satisfactory results on required tests.
3. Special Requirements: For employment with correctional agencies, the following qualifications are often prerequisites: (a) excellent physical condition free from any physical or mental condition which might adversely affect acceptance or performance as a correctional officer; (b) normal hearing, color vision, and eye functions; (c) weight in proportion to height; and (d) excellent moral character.

Program Requirements: Approximately one-half of the curriculum includes courses in correctional science with the remaining courses in related areas, general education, and electives. Instruction includes both the theoretical concepts and practical applications needed for future success in correctional work. Students are urged to consult with their faculty advisor and the Office of Admissions & Academic Advising in planning their program and selecting electives. Upon satisfactory completion of the program, the graduate will be awarded the Associate in Applied Science Degree.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CRIJ 1301	Introduction to Criminal Justice	3	0	3
CRIJ 1306	Court Systems and Practices	3	0	3
CRIJ 2323	Legal Aspects of Law Enforcement	3	0	3
ENGL 1301	Composition and Rhetoric I	3	0	3
COSC 1401	Microcomputer Applications	3	3	4
PHED	Physical Activity	0	3	1
		15	6	17
Second Semester				
CJCR 1304	Probation and Parole	3	0	3
CRIJ 1310	Fundamentals of Criminal Law	3	0	3
CRIJ 1307	Crime in America	3	0	3
Elective	Visual & Performing Arts/Humanities	3	0	3
MATH 1314 or	College Algebra			
MATH 1332	Contemporary Mathematics I	0	3	1
PHED	Physical Activity	15	3	16
Third Semester				
CRIJ 2313	Correctional Systems and Practices	3	0	3
CRIJ 2301	Community Resources in Corrections	3	0	3
CJSA 1364	Practicum - Criminal Justice Studies	1	21	3
CJCR 1300	Basic Jail Course	3	0	3
SOCI 1301	Principles of Sociology	3	0	3
		13	21	15
Fourth Semester				
CJSA 1365	Practicum - Criminal Justice Studies	1	21	3
CRIJ 2328	Police Systems & Practices	2	3	3
CJSA1325	Criminology	3	0	3
SPCH 1318	Interpersonal Communication	3	0	3
Elective	College Level	3	0	3
		12	24	15

Total Minimum Credits Required for the Correctional Science Degree 63

Criminal Justice-Law Enforcement and Police Administration Degree

Degree: Associate of Applied Science (A.A.S.) - Tech Prep
Length: Four-Semester (Two-Year) Program
Purpose: The curriculum in Law Enforcement and Police Administration prepares individuals for career services in law enforcement and related occupations. Supported by a broad general education, training is given to develop professional competence in the fields of law enforcement administration, police science, prevention and control of delinquency and crime, correctional administration, and industrial security administration. This curriculum is applicable to both the preparatory student and the experienced officer.
Admission Requirements:
1. General requirements for admission to the College.
2. Degree plan approved by the Criminal Justice Department Chairperson.

Program Requirements:
1. Complete ACC graduation requirements (see Table of Contents, Academic Policies and Regulations).
2. Complete a minimum of 63 approved credit hours.

Upon satisfactory completion of program and ACC graduation requirements, the student will be awarded the Associate of Applied Science Degree.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CRIJ 1301 or	Introduction to Criminal Justice or			
CJLE 1506	Basic Peace Officer I	3	0	3
CRIJ 2314	Criminal Investigation	3	0	3
CRIJ 1306	Court Systems and Practices	3	0	3
ENGL 1301	Composition and Rhetoric I	3	0	3
COSC 1401	Microcomputer Applications	3	3	4
PHED	Physical Activity	0	3	1
		15	6	17
Second Semester				
CRIJ 2323 or	Legal Aspects of Law Enforcement or			
CJLE 1512	Basic Peace Officer II	3	0	3
CRIJ 1310	Fundamentals of Criminal Law	3	0	3
Elective	Visual & Performing Arts/Humanities	3	0	3
MATH 1314 **or**	College Algebra			
MATH 1332	Contemporary Mathematics I	3	0	3
SOCI 1301	Principles of Sociology	3	0	3
PHED	Physical Activity	0	3	1
		15	3	16
Third Semester				
CRIJ 1307	Crime in America	3	0	3
CRIJ 2328	Police Systems and Practices	3	0	3
CRIJ 2301	Community Resources in Corrections	3	0	3
CJSA 2364 **or**	Practicum-Criminal Justice Studies or			
CJLE 1518	Basic Peace Officer III	0	21	3
Elective	College Level	3	0	3
		12	21	15
Fourth Semester				
CRIJ 2313	Correctional Systems and Practices	3	0	3
CRIJ 1313	Juvenile Justice System	3	0	3
Elective	Criminal Justice Elective	3	0	3
CJSA 2365 or	Practicum - Criminal Justice Studies or			
CJLE 1524	Basic Peace Officer IV	0	21	3
SPCH 1318	Interpersonal Communication	3	0	3
		12	21	15

Students who finish high school program may be given college credit for the college level courses completed.

Total Credits Required for Law Enforcement and Police Administration Degree. 63

Criminal Justice-Field of Study

Degree: ASSOCIATE IN ARTS DEGREE WITH A FIELD OF STUDY IN CRIMINAL JUSTICE (AA.FS. Criminal Justice)
Length: Four-Semester (Two-Year) Program
Purpose: This degree plan is a field of study approved by the Texas Higher Education Coordinating Board which is designed to meet the needs of students who plan to major in Criminal Justice and transfer all of the hours to a four year university or college. Although, this plan has been approved for transfer the student should still verify the transferability of this plan with the intended university or college.
Admission Requirements: The student must meet the general admission requirements to the college.
Program Requirements: The student must complete the college graduation requirements which include completion of the Core Curriculum, the Field of Study Curriculum for Criminal Justice and two (2) hours in Physical Activity for a total of 62 hours.

Associate in Arts Degree with a Field of Study in Criminal Justice Program

45 Credits	Core Curriculum
2 Credits	Physical Activity
15 Credits	Field of Study Curriculum for Criminal Justice (below)

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
CRIJ 1301	Introduction to Criminal Justice	3	0	3
CRIJ 1306	Court Systems & Practice	3	0	3
CRIJ 1310	Fundamentals of Criminal Law	3	0	3
CRIJ 2313	Correctional Systems & Practices	3	0	3
CRIJ 2328	Police Systems & Practice	3	0	3
	Core Curriculum	45	0	45
PHED	Physical Activity	2	0	2

Note: Core Curriculum course are found on page __ of this catalog. All courses in this degree plan which begin with the numbers 1 (eg. CRIJ 1301) should be taken during the First and Second Semester and courses which begin with numbers 2 (eg. CRIJ 2313) should be taken during the Third and Fourth Semester.

Total Credits for Associate In Arts Degree With A Field Of Study In Criminal Justice 62

Criminal Justice-Correctional Administration Certificate

Length: Thirty-One Semester Hours
Purpose: The certificate program is designed for individuals who are working in the correctional field in management-type positions. Interested non-inservice persons should obtain permission from the Criminal Justice Department Chairperson.
Program Requirements: The certificate program includes required courses in correctional science and management development.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
BMGT 1303	Principles in Management	3	0	3
COSC 1401	Microcomputer Applications	3	3	4
CRIJ 1301	Introduction to Criminal Justice	3	0	3
CRIJ 1306	Court Systems and Practices	3	0	3
CRIJ 2301	Community Resources in Corrections	3	0	3
		15	3	16
Second Semester				
BMGT 2303	Problem Solving and Decision Making	3	0	3
CJSA 1364	Practicum-Criminal Justice Studies	0	21	3
CRIJ 2313	Correctional Systems and Practices	3	0	3
SOCI 1301	Principles in Sociology	3	0	3
SPCH 1318	Interpersonal Communications	3	0	3
		12	21	15

Total Credits Required for Correctional Administration Certificate 31

Correctional Science Certificate

Length: Two Semester (One-Year) Program
Purpose: The certificate program is designed for individuals working in the correctional field.
Program Requirements: A certificate student takes thirty (30) hours of prescribed courses. Upon successful completion of the approved course work, the student will be awarded a Correctional Science Certificate. Interested non-inservice persons should obtain permission from the Criminal Justice Chairperson.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CRIJ 1301	Introduction to Criminal Justice	3	0	3
CRIJ 1306	Court Systems and Practices	3	0	3
CRIJ 1307	Crime in America	3	0	3
CRIJ 1310	Fundamentals of Criminal Law	3	0	3
SOCI 1301	Principles of Sociology	3	0	3
		15	0	15
Second Semester				
CJCR 1304	Probation and Parole	3	0	3
CRIJ 2301	Community Resources in Corrections	3	0	3
CRIJ 2313	Correctional Systems and Practices	3	0	3
CRIJ 2314	Criminal Investigation	3	0	3
CJCR 1300	Basic Jails Course	3	0	3
		15	0	15

Total Credits for Correctional Science Certificate 30

Criminal Justice-Crime Scene Technician Certificate

Length: Thirty-Three Semester Hours
Purpose: This course provides the student with the goals and principles of physical evidence and defines the application of forensic sciences to the criminal investigation. It identifies the goals of crime scene management and provides the methodologies employed in recording the crime scene and in locating, collecting, and preserving the evidence. The importance and procedures for establishment of the chain of custody are presented, as are the methods utilized for requesting laboratory analysis of the recovered items of evidence. Emphasis is placed on providing each student with hands-on experience with lecture.
Program Requirements: A certificate student takes thirty-three (33) hours of prescribed courses. Upon successful completion of the approved course work, the student will be awarded a Crime Scene Certificate.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CRIJ 1301	Introduction to Criminal Justice	3	0	3
CRIJ 1306	Court Systems and Practices	3	0	3
CRIJ 2328	Police Systems and Practices	3	0	3
CRIJ 1310	Fundamentals of Criminal Law	3	0	3
CRIJ 2314	Criminal Investigation	3	0	3
CJSA 1308	Criminalistics I	3	0	3
		18	0	18
Second Semester				
CJSA 2323	Criminalistics II	2	4	3
CJLE 2345	Vice and Narcotics Investigation	3	0	3
CRIJ 1307	Crime In America	3	0	3
CJSA 2332	Criminalistics III	2	4	3
CJSA 1325	Criminology	3	0	3
		13	8	15

Total Credits Required for Crime Scene Technician 33

Criminal Justice - Law Enforcement and Police Administration Certificate (Texas Peace Officers Program)

Length: Thirty-four semester hours
Purpose: The certificate program offers Law Enforcement/Criminal Justice students the opportunity to complete all Texas Commission on Law Enforcement Officer Standards and Education basic training requirements as part of their regular associate or baccalaureate program courses of study.
Program Requirements: The Texas Peace Officer Academic Certificate program consists of a sequence of ten courses. The first seven are those stipulated by the Texas College and University System Coordinating Board as a Criminal Justice transfer curriculum. The remaining three are also Coordinating Board approved. After successful completion of the Certificate Program, a student is eligible to take the TCLEOSE Basic Peace Officer Licensing Exam, provided there are no rule changes implemented by TCLEOSE. However, after September 2003, in addition to the below listed curriculum, all of the Texas Commission on Law Enforcement rules which are listed in the "Criminal Justice - Basic Law Enforcement Academy Certificate" apply to courses with an asterisk (*). Also special fees, rules and dress will apply to the courses with two asterisks. All the required information can be obtained from the Criminal Justice Department. Requires Department Chairperson approval.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CRIJ 1301	Introduction to Criminal Justice	3	0	3
CRIJ 1306	Court Systems and Practices	3	0	3
CRIJ 1307	Crime in America	3	0	3
CRIJ 1310	Fundamentals of Criminal Law	3	0	3
CRIJ 2314	Criminal Investigation	3	0	3
		15	0	15
Second Semester				
*CJLE 2420	Texas Peace Officer Procedures	3	4	4
*CJLE 2421	Texas Peace Officer Law	3	4	4
*CJLE 2522	Texas Peace Officer Skills	4	4	5
CRIJ 2323	Legal Aspects of Law Enforcement	3	0	3
CRIJ 2328	Police Systems and Practices	3	0	3
		16	12	19

Total Credits Required for Law Enforcement & Police Administration Certificate 34

Criminal Justice - Basic Law Enforcement Academy Certificate

Length: Approximately 16 weeks - The day academy is conducted and completed during each of the regular semesters (fall and spring). Classes are conducted between 7:30 am and 5:30 pm, Monday through Friday, however, Defensive Driving and other skills classes may be conducted occasionally on weekends or at night. The night academy starts in the Fall Semester and completed with the Spring Semester. Classes are 6 pm to 10 pm, Monday thru Friday, however some classes may occasionally be conducted on weekends.
Purpose: The Alvin Community College Law Enforcement Academy train women and men for a career in Law Enforcement. The course curriculum is designed so the student can meet the testing objectives of the Texas Commission on Law Enforcement Officers Standards and Education (TCLEOSE) and be certified to take the TCLEOSE licensing examination. In addition, students will earn a total of 22 credit hours, 10 hours of which apply directly to the A.A.S. Law Enforcement and Police Administrative degree plan at Alvin Community College. The Academy has graduated over 50 classes during the last 3 decades.
Accreditation: The Alvin Community College-Law Enforcement Academy is an approved training academy by the Texas Commission on Law Enforcement Officers Standards and Education.
Admission Requirements: to be eligible for the program the student must:

1. Be a high school graduate or hold a certificate of equivalency (GED) with 12 college hours;
2. Be 21 years of age at the time of completion of the course or seek special approval from the Department Chair;
3. Agree to **purchase during the pre-registration** and then wear the prescribed uniform;
4. Complete and negotiate the TCLEOSE L-2 Declaration of medical condition **during the pre-registration**;
5. Complete and accurately answer a personal history statement **during pre-registration**;
6. Sign waiver forms as presented by the college **during pre-registration**;
7. Abide by the special written rules of the Academy and administrative orders issued during special circumstances;
8. Meet the minimal standards for licensing as required by TCLEOSE (Texas Administrative Code 217.1) which are applicable to a training environment. (TCLEOSE rules are subject to change without notice)

The following is a summary of the standards and should any conflict occur between the summarized standards and the TCLEOSE standards, then

the TCLEOSE standards will govern: (TCLEOSE rules are subject to change without notice)

a. Be 21 years of age upon graduation of the Academy or fall within an exception (see department chair).
b. Be fingerprinted and pay the necessary fees **during pre-registration**.
c. Not be on probation for any offense above a class "C" misdemeanor.
d. No convictions in past 10 years for misdemeanor offenses above a Class "C".
e. No felony convictions.
f. No convictions or served no probation for offenses relating to the responsibilities of the office as a peace officer.
g. Be of good moral character.
h. Prior military must have honorable discharge.

9. Pay special fees associated with the Academy courses **during pre-registration**.

Special Registration Requirements: since this course is governed by the TCLEOSE rules the following special conditions apply:

1. No late registration-all special conditions to registration must be completed prior to the first class meeting.
2. The student must contact the Criminal Justice Department **at least 30 days** in advance of the first class meeting in order to be measured for uniforms and special equipment. The student will be expected to pay the vendor for the items ordered.
3. A special pre-academy entry exam is required prior to registration and is administered by the Criminal Justice Department. If a student fails the test by less than 6 points, one retake is allowed. If a student fails the re-take then the student must wait for the next academy and begin the testing series anew. The test can be arranged by contacting the Criminal Justice Department.
4. A check off sheet listing the course prerequisites is required at the time of registration approved by the Academy Coordinator/Commander or the Chair of Criminal Justice.
5. Space is limited so the pre-registration conducted by the Criminal Justice Department will determine the order of acceptance to the academy.
6. **THE PRE-REGISTRATION WITH THE CRIMINAL JUSTICE DEPARTMENT MUST BE COMPLETED 30 DAYS PRIOR TO THE FIRST CLASS.**
7. Assume the risk of a highly intense and physically challenging training program which involves the use of firearms and hand-to-hand combat.

Course Requirements:

Day Academy students must enroll in Basic Police Officer I, II, III, and IV and the Basic Firearms course in the same semester to attend the Academy and these courses are available only to those attending the Academy. The student must successfully complete the entire series to receive credit in any of the courses. Night Academy students must meet the same requirements as the Day Academy students, but have the Fall and Spring semester to complete the series.

Special fees charged by the College:

1. Ammunition $195.00
2. Driving $ 15.00
3. Criminal history check $ 15.00

Purchases expected by the student:

1. TCLEOSE - testing fee-currently $25.00
2. Uniforms: (3) shirts, (3) pants, (5) t-shirts, (1) shoes, (1) Jacket optional, (1) belt
3. Books/Course Information at the book store
4. PE clothes, shoes
3. General supplies
4. Handgun approved by the Co-Coordinator/Commander

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
CJLE 1506	Basic Peace Officer I	3	6	5
CJLE 1512	Basic Peace Officer II	3	6	5
CJLE 1518	Basic Peace Officer III	3	6	5
CJLE 1524	Basic Peace Officer IV	3	6	5
CJLE 1211	Basic Firearms	1	2	2
		13	26	22

Total Credits Required for Basic Law Enforcement Academy Certificate. 22

Diagnostic Cardiovascular Sonography Degree Program

(281) 756-3656

Degree: Associate Degree of Applied Science (A.A.S.) in either Echocardiography or Vascular Technology
Length: 24 months, New program begins each summer semester.
Purpose: The Diagnostic Cardiovascular Sonography Program offers a two-year curriculum to prepare individuals for an allied health career in either Echocardiography or Vascular Technology which are branches of Diagnostic Medical Sonography. Upon graduation, students will possess the skills necessary to perform ultrasound and related diagnostic exams of the heart and blood vessels. Echocardiographers and Vascular Technologists practice in a variety of settings including hospitals, diagnostic centers, doctors offices, contract services, self-employment, sales, education, and research. The Diagnostic Cardiovascular Sonography core curriculum consists of classroom, laboratory, and clinical instruction on subjects including basic healthcare skills, professional issues, medical terminology, ethics, cardiovascular anatomy and physiology, hemodynamics, pathophysiology, pharmacology, electrocardiography, ultrasound physics, echocardiographic techniques and vascular diagnostic techniques. The program has many clinical affiliations including St. Luke's Episcopal Hospital, Christus St. John's Hospital, Memorial Herman Southeast Hospital, Clear Lake Medical Center, Mainland Medical Center, Angleton Medical Center,NASA, and UTMB just to name a few. Graduates of the program earn their credentials by taking the national registry exam offered by the American Registry of Diagnostic Medical Sonographers (ARDMS).
This program is in the process of gaining accreditation through the Joint review Committee for Diagnostic Medical Sonography (JRC-DMS) which is under the umbrella of the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

I. Admission Requirements: Application Deadline February 15

A. To be considered for admission to the Diagnostic Cardiovascular Sonography Program, the applicant must:
1. Be a high school or GED graduate and provide copies of transcripts and diploma.
2. Apply to ACC and fulfill the college admission requirements, including THEA.
3. Complete the application to the Diagnostic Cardiovascular Sonography Program and interview with the Program Director.
4. Submit official transcripts of all previous college work to both the program and the admissions/Registrar's Office.
5. Score 19 or higher on the ACT composite or a minimum of 840 combined on the SAT if taken after 1995, or a minimum of 713 combined on the SAT if taken before 1995. (ACT/SAT scores do not expire)
6. Demonstrate understanding of the responsibilities, personal qualities, duties and skills required by the profession through a professional observation.
7. Complete a physical examination including chest x-ray, TB skin test, and verification of immunization status upon acceptance to the program.
8. Not currently on suspension or academic probation from ACC or any other college.
9. Complete all pre-requisites with a grade of C or better including: ENGLISH 1301, BIOLOGY 2401, MATH 1314, PHYSICS 1401 (high school physics accepted as pre-requisite, but college physics or equivalent must be taken to fulfill degree requirements.)
10. Submit two (2) letters of references.
11. Once accepted, pass a criminal background check and possible drug screen.

B. Science courses should have been taken within the past 5 years to satisfy the degree requirements.
C. Transfer and non-traditional students must:
1. Meet the above criteria
2. Have a cumulative GPA of 2.0 or higher on all courses being transferred to the DCVS program.
3. Provide program and Registrar's Office with official transcripts from each prior institution.
4. Provide the DCVS program with a course description or syllabus for each course being considered for transfer.
5. Not currently on suspension or academic probation from another college.
6. Credit may be awarded for support courses equivalent to these included in the DCVS program as determined by examination of the syllabus of the transfer course. A grade of C or better must be achieved for transfer courses.
7. Transfer students must complete a minimum of 24 credit hours at ACC to be awarded a Degree from this institution.

II. Alternate Enrollment:

A. Practicing Echocardiographers and Vascular Technologists who wish to earn their degree.
1. This option applies to those who are registered in Echocardiography or Vascular Technology with at least 2 years of experience and would like to earn their Associate Degree.
2. DCVS program courses may be challenged in sequence. Credit is awarded by examination. Admission requirements, pre-requisites and academic courses are still required.

B. Practicing Echocardiographers and Vascular Technologists who wish to take courses for refresher or registry exam review.
1. This option is available to all Echo and Vascular techs.
2. These students may register through continuing education to sit in on any course offered through the DCVS Program for refresher or registry review.

III. Progression Policies:

A. Students will abide by the admission and curriculum requirements of the Diagnostic Cardiovascular Sonography department at the time they are admitted or re-admitted to the program.
B. Once a student is enrolled in the program, all core courses must be completed in the proper sequence as shown in the catalog degree plan, or must have prior approval of the program director.

C. A grade of C or better is required in all core and academic courses for progression.
D. A student may be terminated from the program if clinical performance is unsatisfactory as determined by the clinical instructor and the program director. This action may be taken at any time during the semester.
E. A student who makes a D or F in any core or academic course may repeat that course once in order to obtain a satisfactory grade of C or better. If the failing course is one of the program core courses, the student may have to sit out for a year until that course is offered again depending on pre and co-requisites for that course.
F. Any student requiring hospitalization, pregnant, or injured will be required to obtain written documentation from his/her physician verifying the health status of the student before returning to clinical. A student may not be allowed to return to clinical if taking medication or if health status may interfere with the ability to perform satisfactorily.
G. Students have five years to complete the program after initial acceptance.

A.A.S. Diagnostic Cardiovascular Sonography - Echocardiography

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
Program Pre-requisites				
ENGL 1301	Composition and Rhetoric I	3	0	3
BIOL 2401	Anatomy and Physiology I	3	3	4
MATH 1314	College Algebra	3	0	3
PHYS 1401	General Physics (or CTEC1401 or SCIT 1420)	3	2	4
		12	5	14
FIRST YEAR				
First Semester (Summer 12 weeks)				
DSAE 1407	Basic Patient Care Skills	3	2	4
DMSO 1210	Introduction to Sonography	2	0	2
DSAE 2303	Cardiovascular Concepts	3	1	3
		8	3	9
Second Semester (Fall)				
ELECTIVE or	Fine Arts/Humanities or			
SPAN 2316	Career Spanish I (Spanish for Healthcare Providers)	3	0	3
BIOL 2402	Anatomy and Physiology II	3	3	4
DSAE 1340	Cardiac Diagnostic Concepts	2	4	3
CVTT 1161	Clinical - Cardiovascular Technology	0	6	1
		8	13	11
Third Semester (Spring)				
DSAE 1318	Sonographic Instrumentation	2	2	3
DSAE 1303	Intro to Echocardiography Techniques	2	4	3
DSAE 1360	Clinical - DMST, Intro Echocardiography	0	16	3
		4	22	9
SECOND YEAR				
First Semester (Summer 12 weeks)				
DSAE 2404	Echocardiography Evaluation of Pathology I	2	4	4
DSAE 2361	Clinical - DMST, Echocardiography I	0	12	3
PHED	Physical Activity	0	3	1
		2	19	8
Second Semester (Fall)				
DSAE 2437	Echocardiography Evaluation of Pathology II	2	4	4
DSAE 2461	Clinical - DMST, Echocardiography II	0	16	4
SOCI 1301 or	Principles of Sociology			
PSYC 2301	General Psychology	3	0	3
		5	20	11
Third Semester (Spring)				
PHED	Physical Activity	0	3	1
DSAE 2462	Clinical - DMST Echocardiography III	0	16	4
DSAE 2335	Advanced Echocardiography	2	4	3
		2	23	8

Total Credits Required for A.A.S. Diagnostic Cardiovascular Sonography - Echocardiography 70

A.A.S. Diagnostic Cardiovascular Sonography - Non-Invasive Vascular Technology

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
Program Pre-requisites:				
ENGL 1301	Composition and Rhetoric I	3	0	3
BIOL 2401	Anatomy and Physiology I	3	3	4
MATH 1314	College Algebra	3	0	3
PHYS 1401	General Physics (or CTEC 1401 or SCIT 1420)	3	2	4
		12	5	14
FIRST YEAR				
First Semester (Summer 12 weeks)				
DSAE 1407	Basic Patient Care Skills	3	2	4
DMSO 1210	Introduction to Sonography	2	0	2
DSAE 2303	Cardiovascular concepts	3	1	3
		8	3	9
Second Semester (Fall)				
ELECTIVE or	Visual & Performing Arts/Humanities or	3	0	3
SPAN 2316	Career Spanish I (Spanish for Healthcare Providers)	3	3	4
BIOL 2402	Anatomy and Physiology II	2	4	3
DSAE 1340	Cardiac Diagnostic Concepts	0	6	1
CVTT 1161	Clinical - Cardiovascular Technology	8	13	11
Third Semester (Spring)				
DSAE 1318	Sonographic Instrumentation	2	2	3
DSVT 1300	Principles of Vascular Technology	2	4	3
DSVT 1360	Clinical - DMST, Intro to Vascular	0	16	3
		4	22	9
SECOND YEAR				
First Semester (Summer 12 weeks)				
DSVT 2418	Vascular Evaluation of Pathology I	2	4	4
DSVT 2361	Clinical - DMST, Vascular I	0	12	3
PHED	Physical Activity	0	3	1
		2	19	8
Second Semester (Fall)				
DSVT 2430	Vascular Evaluation of Pathology II	2	4	4
DSVT 2461	Clinical - DMST, Vascular II	0	16	4
SOCI 1301 or	Principles of Sociology or	3	0	3
PSYC 2301	General Psychology	5	20	11
Third Semester (Spring)				
PHED	Physical Activity	0	3	1
DSVT 2462	Clinical - DMST, Vascular III	0	16	4
DSVT 1391	Special Topics - DMST, Vascular Tech	2	4	3
		2	23	8

Total Credits Required for A.A.S. Diagnostic Cardiovascular Sonography - Vascular.....70

Diagnostic Cardiovascular Sonography Advanced Technical Certificate Degree Program

Degree: Advanced Technical Certificate Degree in either Echocardiography or Vascular Technology
Length: 18 months, New program begins each spring semester.
Purpose: The Diagnostic Cardiovascular Sonography Program offers a one and a half year curriculum to prepare those who already have a degree in an allied healthcare related field for a career in either Echocardiography or Vascular Technology which are branches of Diagnostic Medical Sonography. **This is not an entry-level certificate. It is above and beyond the healthcare degree the student already has.** Upon graduation, students will possess the skills necessary to perform ultrasound and related diagnostic exams of the heart and blood vessels. Echocardiographers and Vascular Technologists practice in a variety of settings including hospitals, diagnostic centers, doctors offices, contract services, self-employment, sales, education, and research. The Advanced Technical Certificate Program is a condensed version of the A.A.S. option taking into account the students prior experience and training in allied healthcare. This program utilizes the same clinical sites such as St. Luke's Episcopal Hospital, Christus St. John's Hospital, Memorial Herman Southeast Hospital, Clear Lake Medical Center, Mainland Medical Center, Angleton Medical Center, and UTMB just to name a few. Graduates of this program may also earn their credentials by taking the national registry exam offered by the American Registry of Diagnostic Medical Sonographers (ARDMS) or Cardiovascular Credentialing International (CCI).

This program is in the process of gaining accreditation through the Joint Review Committee for Diagnostic Medical Sonography (JRC-DMS) which is under the umbrella of the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

I. Admission Requirements: Application Deadline October 15

A. To be considered for admission to the Diagnostic Cardiovascular Sonography Program in the Advanced Technical Certificate option, the applicant must:

1. Be a high school or GED graduate and provide copies of transcripts and diploma.
2. Apply to ACC and fulfill the college admission requirements, including THEA.
3. Complete the application to the Diagnostic Cardiovascular Sonography Program and interview with the Program Director.
4. Submit official transcripts of all previous college work to both the program and the admissions/Registrar's Office.
5. Have an Associates degree or higher in an allied healthcare related field from an accredited institution with demonstration of program pre-requisites of: ENGLISH 1301, BIOLOGY 2401, MATH 1314, PHYSICS 1401 or Allied Health Physics course.
6. Demonstrate understanding of the responsibilities, personal qualities, duties and skills required by the profession through a professional observation.
7. Complete a physical examination including chest x-ray, TB skin test, and verification of immunization status upon acceptance to the program.
8. Not currently on suspension or academic probation from ACC or any other college.
9. Submit two (2) letters of references.
10. Once accepted, pass a criminal background check and possible drug screen.

B. Transfer and non-traditional students must:

1. Meet the above criteria
2. Have a cumulative GPA of 2.0 or higher on all courses being transferred to the DCVS program.
3. Provide program and Registrar's Office with official transcripts from each prior institution.
4. Provide the DCVS program with a course description or syllabus for each course being considered for transfer.
5. Not currently on suspension or academic probation from another college.
6. Credit may be awarded for support courses equivalent to these included in the DCVS program as determined by examination of the syllabus of the transfer course. A grade of C or better must be achieved for transfer courses.
7. Transfer students must complete a minimum of 12 credit hours at ACC to be awarded a Certificate from this institution.

II. Alternate Enrollment:

A. Practicing Echocardiographers and Vascular Technologists who wish to earn an Advanced Certificate.

1. This option applies to those who are registered in Echocardiography or Vascular Technology with at least 2 years of experience and would like to earn the Advanced Certificate.
2. DCVS program courses may be challenged in sequence. Credit is awarded by examination. Admission requirements and pre-requisites are still required.

B. Former ACC DCVS program graduates who wish to crosstrain:

1. Must be graduates of ACC - DSVC
2. Must be registered in either Echo or Vascular
3. Must apply by October 15th
4. Number of openings is dependent upon current student volume in regular programs.
5. Graduates who are registered and would like to cross-train without entering the full A.T.C. program may take the lecture and lab courses in sequence.

III. Progression Policies:

See A.A.S. program

Adv Technical Certificate Diagnostic Cardiovascular Sonography - Echocardiography

Program Pre-requisites:
Associate Degree or higher in an Allied Health field from an Accredited Intitution. Prior education must have included: Algebra, Physics, English, and Biology.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester (Spring)				
DMSO 1210	Introduction to Sonography	2	0	2
DSAE 1318	Sonographic Instrumentation	2	2	3
DSAE 1303	Intro to Echocardiography Techniques	2	4	3
DSAE 1360	Clinical - DMST, Intro to Echocardiography	0	16	3
		6	22	11
Second Semester (Summer 12 weeks)				
DSAE 2303	Cardiovascular Concepts	3	1	3
DSAE 2404	Echo Evaluation of Pathology I	2	4	4
DSAE 2361	Clinical - DMST, Echocardiography I	0	12	3
		5	17	10
SECOND YEAR				
First Semester (Fall)				
DSAE 1340	Cardiac Diagnostic Concepts	2	4	3
DSAE 2437	Echo Evaluation of Pathology II	2	4	4
DSAE 2461	Clinical - DMST, Echocardiography II	0	16	4
		4	24	11
Second Semester (Spring)				
DSAE 2335	Advanced Echocardiography	2	4	3
DSAE 2462	Clinical - DMST Echocardiography III	0	16	4
		2	20	7

Total Credits Required for Adv Technical Certificate Diagnostic Cardiovascular Sonography - Echocardiography 39

Adv Technical Certificate Diagnostic Cardiovascular Sonography - Non-Invasive Vascular

Program Pre-requisites:
Associate Degree or higher in an Allied Health Field from an Accredited Institution. Prior education must have included: Algebra, Physics, English, and Biology.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester (Spring)				
DMSO 1210	Introduction to Sonography	2	0	2
DSAE 1318	Sonographic Instrumentation	2	2	3
DSVT 1300	Principles of Vascular Technology	2	4	3
DSVT 1360	Clinical - DMST, Intro to Vascular	0	16	3
		6	22	11
Second Semester (Summer 12 weeks)				
DSAE 2303	Cardiovascular Concepts	3	1	3
DSVT 2418	Vascular Evaluation of Pathology I	2	4	4
DSVT 2361	Clinical - DMST, Vascular I	0	12	3
		5	17	10
SECOND YEAR				
First Semester (Fall)				
DSAE 1340	Cardiac Diagnostic Concepts	2	4	3
DSVT 2430	Vascular Evaluation of Pathology II	2	4	4
DSVT 2461	Clinical - DMST, Vascular II	0	16	4
		4	24	11
Second Semester (Spring)				
DSVT 1391	Special Topics - DMST, Vascular Tech	2	4	3
DSVT 2462	Clinical - DMST, Vascular III	0	16	4
		2	20	7

Total Credits Required for Adv Technical Certificate Diagnostic Cardiovascular Sonography - Vascular.....39

Drafting Technology Degree Program

(281) 756-3784

Degree: Associate of Applied Science (A.A.S.) - Tech Prep
Length: Four-Semester (Two-Year) Program
Purpose: Drafting technicians work as part of a design team with engineers, designers, scientists, supervisors, and skilled craftsmen. As an important aspect of the design process, everything that is built, manufactured, conceptualized, or a portion of a process must be drawn out by drafters/designers first. Drafting techs are always inquisitive about how things work and why. Some areas of opportunity for drafters include electronics and electrical, civil work, aeronautical, marine structures and ship building, architectural - both commercial and residential, machinery, automotive, instrumentation, process equipment and fabrication.
Program Requirements: As an essential member of the technician-engineering team, students should be technically oriented and have good computer skills. The student who pursues the Drafting Technology curriculum will take a series of courses that cover the principles of engineering, civil and architectural graphics and provide extensive hands-on laboratory experience. This well rounded educational experience provides an opportunity for students to explore specialized areas with the necessary qualifications for employment as entry-level drafters.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
DFTG 1315	Architectural Blueprint Reading	3	1	3
DFTG 1405	Technical Drafting	2	4	4
DFTG 1409	Basic Computer-Aided Drafting	3	3	4
ENGL 1301	Composition and Rhetoric I	3	0	3
TECM 1303	Technical Mathematics	3	1	3
		14	9	17
Second Semester				
DFTG 1433	Mechanical Drafting	2	4	4
DFTG 2419	Intermediate Computer-Aided Drafting	2	6	4
DFTG 2423	Pipe Drafting	2	4	4
MATH 1314	College Algebra	3	0	3
		9	14	15
SECOND YEAR				
Third Semester				
DFTG 1417	Architectural Drafting-Residential	2	4	4
DFTG 2410	Structural Drafting	2	4	4
*DFTG 2432	Advanced Computer-Aided Drafting	2	6	4
SOCI 1301 or	Principles of Sociology or	3	0	3
PSYC 2301	General Psychology			
PHED	Physical Activity	0	3	1
		9	17	16
Fourth Semester				
DFTG 2440 or	Solid Modeling/Design or	2	4	4
DFTG 1419 or	Fundamentals of Computer Aided Drafting or			
DFTG 2435	Adv. Technologies in Mechanical Drafting & Design			
DFTG Elective or	Drafting Elective	2/1	4/21	4
DFTG 2481	Cooperative Education for Drafting			
Elective	Visual & Performing Arts/Humanities	3	0	3
SPCH 1318 or	Interpersonal Communications or	3	0	3
SPCH 1315	Public Speaking			
PHED	Physical Activity	0	3	1
		9-10	11-28	15

*Capstone Course

Total Credits Required for Drafting Technology Degree.....63

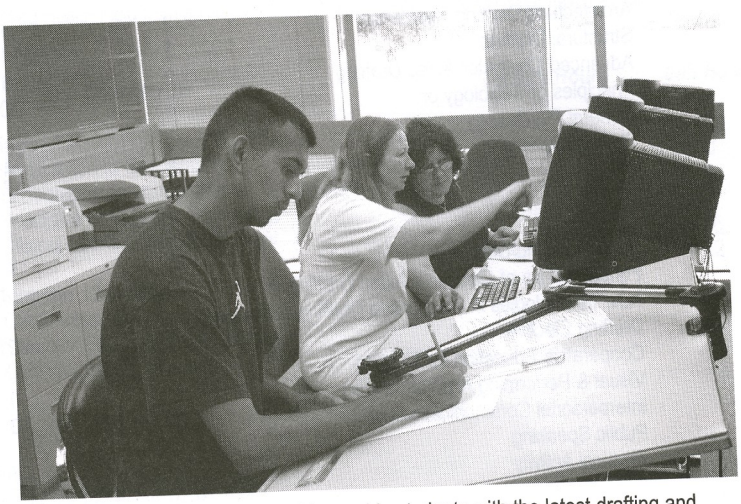
Drafting Technology Certificate Program

Length: Two semester (One-Year) Program
Purpose: The one-year program prepares the student for entry into the drafting occupation.
Program Requirements: A minimum of 33 hours is required for this certificate.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
DFTG 1315	Architectural Blueprint Reading	3	1	3
DFTG 1405	Technical Drafting	2	4	4
DFTG 1409	Basic Computer-Aided Drafting	3	3	4
Elective	College Level	3	0	3
TECM 1303	Technical Mathematics	3	1	3
		14	9	17
Second Semester				
DFTG 1417	Architectural Drafting-Residential	2	4	4
DFTG 1433	Mechanical Drafting	2	4	4
DFTG 2419	Intermediate Computer-Aided Drafting	2	6	4
*DFTG Elective or	Drafting Elective or	2/1	4/21	4
DFTG 2481	Cooperative Education-Drafting	7-8	18-35	16

*Capstone Course

Total Credits Required for Drafting Technology Certificate.....33



ACC recently received a grant to provide students with the latest drafting and designing technology software.

Electronic Technology Degree

(281) 756-3667

Degree: Associate of Applied Science (A.A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: An electronics technician from ACC is a well paid, semiprofessional person who has developed computational skills, analytic abilities, and electronic measurement techniques to work with all kinds of electronic equipment. His or her employment opportunities are unrestricted by community size, environmental conditions, or geographical locale. Generally, the electronic technician will be employed in the development of new equipment or in troubleshooting and maintaining existing equipment. Opportunities also exist in the sales of electronic components and equipment. To qualify, an electronics technician student will spend one year in the study of circuit actions of electronic components separately and in combination, when subjected to both direct current and alternating current. In the second year he or she will study circuits as building blocks in the design and manufacture of digital electronic equipment such as computers, printers, video monitors and information storage devices. The potential technician will also learn to interface the devices using a combination of hardware and software techniques.
Program Requirements: In addition to the general requirements for admission to ACC, entry into the electronics technology program requires proficiency in algebra, English, and reading. Students who lack proficiency will be required to complete developmental courses in the above subjects prior to enrolling in electronics courses.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CETT 1403	DC Circuits	3	3	4
CETT 1425	Digital Fundamentals	3	3	4
COSC	Computer Science Elective	3	3	4
MATH 1314	College Algebra	3	0	3
ENGL 1301	Composition and Rhetoric I	3	0	3
		15	9	18
Second Semester				
CETT 1405	AC Circuits	3	3	4
CETT 1429	Solid State Devices	3	3	4
CPMT 2433	Computer Integration	3	3	4
MATH 1316	PlaneTrigonometry	3	0	3
SOCI 1301	Principles of Sociology	3	0	3
		15	9	18
Third Semester				
CETT 1457	Linear Integrated Circuits	3	3	4
ELEC Elective	CETT/CPMT/EECT	3	3	4
*CPMT 2437	Microcomputer Interfacing	3	3	4
ENGL 2311	Technical Communication	3	0	3
PHED	Physical Activity	0	3	1
		12	12	16
Fourth Semester				
EECT 2439	Communication Circuits	3	3	4
SPCH 1315	Public Speaking	3	0	3
ITNW 1325	Fundamentals of Networking	2	2	3
Elective	Visual & Performing Arts/Humanities	3	0	3
PHED	Physical Activity	0	3	1
		11	8	14

*Capstone Course

Total Credits Required for Electronics Technology Degree.....66

Electronic Technology Certificate Program

Length: Two-Semester (One-Year) Program

Purpose: The one-year certificate in electronic technology is designed to prepare the student for full-time employment in the field of electronics. The basic objective of the program is to develop electronic skills and knowledge to provide entry level positions in electronics.

Program Requirements: A certificate student will take the following curriculum to achieve the certificate in electronic technology.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CPMT 1403	Introduction to Computer Technology	3	3	4
CETT 1403	DC Circuits	3	3	4
CETT 1405	AC Circuits	3	3	4
MATH 1314	College Algebra	3	0	3
		12	9	15
Second Semester				
ITSE 1422	Computer Programming C	3	3	4
CETT 1429	Solid State Devices	3	3	4
*CETT 1457	Linear Integrated Circuits	3	3	4
CETT 1425	Digital Fundamentals	3	3	4
		12	12	16

*Capstone Course

Total Credits Required for Electronic Technology Certificate.....31

Electronic Communications Certificate

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CETT 1403	DC Circuits	3	3	4
CETT 1405	AC Circuits	3	3	4
CETT 1425	Digital Fundamentals	3	3	4
EECT 2439	Communication Circuits	3	3	4
		12	12	16

Total Credits Required for Electronic Communications Certificate.....16

Electronic Technology - Instrumentation Technology Certificate

Length: Forty-Six Semester Hours

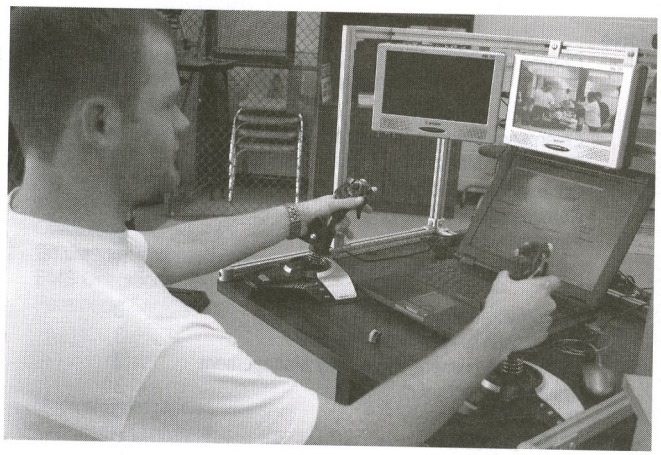
Purpose: The Certificate in Instrumentation Technology provides an approved educational curriculum designed to prepare the student for entry into the field of instrumentation and automation technology. The students will study the eight major domains in the control industry identified by the International Society for Measurement and Control.

Program Requirements: In addition to general requirements for admission to ACC, entry into the instrumentation technology program requires proficiency in algebra, English and reading. Students who lack proficiency in these areas will be required to complete developmental courses in the above subjects prior to enrolling in electronics courses.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CPMT 1403	Introduction to Computer Technology	3	3	4
CETT 1403	DC Circuits	3	3	4
MATH 1314	College Algebra	3	0	3
		9	6	11
Second Semester				
COSC 1401	Microcomputer Applications	3	3	4
CETT 1405	AC Circuits	3	3	4
CETT 1429	Solid State Devices	3	3	4
INTC 1453	Analog Electronic Instrumentation II	3	3	4
		12	12	16
Third Semester				
INTC 2436	Instrumentation and Installation	3	3	4
EECT 2439	Communication Circuits	3	3	4
SPCH 1311	Fundamentals of Speech	3	0	3
*ELMT 2433	Industrial Electronics	3	3	4
		12	9	15

*Capstone Course

Total Credits Required for Certificate in Instrumentation Technology.....42



Technology programs prepare students for a variety of technical careers.

Emergency Medical Technology Program

(281) 756-3650

Degree: Associate of Applied Science (A.A.S.) - Tech Prep
Length: Four Semesters
Purpose: The Emergency Medical Technology (EMT) curriculum includes a combination of class lectures, skills training and clinical training in hospital and ambulance settings. Program meets Texas Department of State Health Services (TDSHS) requirements for certification eligibility, and successful students may take the TDSHS Emergency Medical Services Examination for Certification. Students must meet departmental standards to take the TDSHS certification examinations. A fee is charged by the TDSHS for certification examinations. There may also be additional charges for field experiences.The basic EMT program is designed for persons in the emergency health care field, such as ambulance personnel, safety engineers, industrial nurses, rescue squad workers, child care personnel, policemen and firemen, as well as anyone who supervises or is responsible for the safety and well-being of a number of people.The Department of Emergency Medical Technology adheres to the curricula set forth by the U.S. Department of Transportation, the Texas Department of State Health Services, the American Heart Association, and the National Basic Trauma Life Support Association.
Components of the curriculum include anatomical and physiological functions and dysfunctions, treatment modalities, rescue, management, Advanced Cardiac Life Support, Basic Trauma Life Support, and ethical-legal responsibilities.

Student Objectives

1. Demonstrate the knowledge base and skills necessary for pre-hospital emergency medical care and management.
2. Utilize the knowledge and skills principles to provide emergency medical care in the pre-hospital setting.
3. Utilize communication skills to establish and maintain effective interpersonal relationships in the aspects of emergency medical care.
4. Assume responsibility for continuing education to maintain professional education and competency.
5. Assume legal, ethical, and professional accountability.
6. Participate as a member of the emergency medical services community in providing pre-hospital care, development, and education.
7. Successfully pass the Texas Department of Health registry examination for certification in the field of emergency medical services.

Program Requirements

Qualified applicants will be admitted according to space available each semester. To be considered for admission to the EMT Program, applicants must:

1. be admitted to ACC for the EMT program (through Office of Admissions & Academic Advising);
2. complete an application in the EMT office and provide copies of any current certifications;
3. be potentially eligible to write the Texas Department of State Health Services certification exam upon successful completion of the program. Note: Applicants convicted of a felony and/or misdemeanor offense may or may not be eligible to write the state exam.
4. be 18 years-of-age or older;
5. pay the Texas Department of State Health Services registry application fees and all other associated fees.
6. purchase appropriate clinical attire and equipment.
7. purchase student liability insurance annually (subject to rate applicable at time of registration);
8. complete a physical examination which includes TB skin test and immunizations upon enrollment in the program.
9. have current basic CPR certification for health professionals dated within one year prior to the course starting date; and
10. adhere to clinical sites and times as arranged by the College and its affiliates. (Sites and times are subject to change without notice.)

Student Accountability

1. Students are responsible for their transportation to and from the clinical facilities.
2. Students will abide by the EMT curriculum requirements in effect at the time they are accepted into the program.
3. No grade below a "B" in an EMT or "C" in an academic course will be acceptable for progression.
4. Students must complete the program within five years after initial acceptance.

Associate of Applied Science Degree

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
EMSP 1501	Emergency Medical Technician - Basic	4	4	5
EMSP 1160	Emergency Medical Technician-Basic Clinical	0	6	1
MATH 1332	Contemporary Mathematics I	3	0	3
ENGL 1301	Composition and Rhetoric I	3	0	3
PHED	Physical Activity	0	3	1
		10	13	13
Second Semester				
BIOL 2401	Anatomy and Physiology I	3	3	4
EMSP 1338	Introduction to Advanced Practice	3	1	3
EMSP 1356	Patient Assessment and Airway Management	2	3	3
EMSP 1355	Trauma Management	3	1	3
EMSP 1261	Paramedic Clinical I	0	8	2
EMSP 1166	EMS Practicum I	0	7	1
		11	23	16
Third Semester				
BIOL 2402	Anatomy and Physiology II	3	3	4
EMSP 2444	Cardiology	3	3	4
EMSP 2248	Emergency Pharmacology	2	1	2
EMSP 2338	EMS Operations	2	2	3
EMSP 2160	Paramedic Clinical II	0	6	1
		10	15	14

SECOND YEAR				
First Semester				
EMSP 2434	Medical Emergencies	3	3	4
EMSP 2261	Paramedic Clinical III	0	9	2
COSC 1401	Microcomputer Applications	3	3	4
EMSP 2352	EMS Research	2	4	3
Elective	Visual & Performing Arts/Humanities	3	0	3
		11	19	16
Second Semester				
EMSP 2330	Special Populations	2	2	3
EMSP 2243	Assessment Based Management	1	3	2
EMSP 2166	EMS Practicum II	0	7	1
SOCI 1301	Principles of Sociology	3	0	3
EMSP	EMS Elective	3	0	3
PHED	Physical Activity	0	3	1
		9	15	13

Total Credits Required for AAS Emergency Medical Technology.....72

EMT ENHANCED SKILLS CERTIFICATE

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
EMSP 2358	Critical Care Paramedic	2	4	3
EMSP 2345	EMS Supervision/ Management	2	4	3
		4	8	6

Total Credits Required for Enhanced Skills Certificate.....78

Emergency Medical Technology Certificate Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
EMSP 1501	Emergency Medical Technician-Basic	4	4	5
EMSP 1160	Emergency Medical Technician-Basic Clinical	0	6	1
		4	10	6
Second Semester				
EMSP 1338	Introduction to Advanced Practice	4	1	3
EMSP 1356	Patient Assessment and Airway Management	2	3	3
EMSP 1355	Trauma Management	3	1	3
EMSP 1261	Paramedic Clinical I	0	8	2
EMSP 1166	EMS Practicum I	0	7	1
		9	20	12
Third Semester				
EMSP 2444	Cardiology	3	3	4
EMSP 2248	Emergency Pharmacology	3	3	2
EMSP 2338	EMS Operations	2	2	3
EMSP 2160	Paramedic Clinical II	0	6	1
		8	14	10
SECOND YEAR				
First Semester				
EMSP 2434	Medical Emergencies	3	3	4
EMSP 2261	Paramedic Clinical III	0	9	2
		3	12	6
Second Semester				
EMSP 2330	Special Populations	2	2	3
EMSP 2243	Assessment Based Management	1	3	2
EMSP 2166	EMS Practicum II	0	7	1
		3	12	6

Total Credits Required for Certificate in Emergency Medical Technology.....40

Management Development Degree Program

(281) 756-3812

Degree: Associate of Applied Science (A.A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The management development program prepares individuals for career occupations in the field of general management development. The objective of the program is to develop management skills and allow the student a chance to utilize these skills at an approved work station.
Program Requirements: The management development curriculum contains a core of required courses including nine (9) management/human resources courses, three semesters of cooperative education, general education courses, and a recommended list of electives.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
BMGT 1303	Principles of Management	3	0	3
BMGT 1382	Cooperative Education - Business Administration & Management, General I	1	20	3
BMGT 2303	Problem Solving & Decision Making	3	0	3
ENGL 1301	Composition & Rhetoric I	3	0	3
PHED	Physical Activity	0	3	1
Elective	College Level	3	0	3
		13	23	16
Second Semester				
HRPO 1311	Human Relations	3	0	3
BMGT 2382	Cooperative Education-Business Administration and Management, General II	1	20	3
MATH 1314 or MATH 1332	College Algebra / Contemporary Mathematics I	3	0	3
MRKG 2333	Principles of Selling	3	0	3
PHED	Physical Activity	0	3	1
Elective	College Level	3	0	3
		13	23	16
Third Semester				
BUSG 2309	Small Business Management	3	0	3
HRPO 2307	Organizational Behavior	3	0	3
*BMGT 2383	Cooperative Education-Business Administration and Management, General III	1	20	3
HRPO 1391 or MRKG 1302	Special Topics in Human Resource Management / Principles of Retailing	3	0	3
SOCI 1301 or ECON 2301	Principles of Sociology / Principles of Economics I	3	0	3
SPCH 1315 or SPCH 1318	Public Speaking / Interpersonal Communication	3	0	3
		16	20	18
Fourth Semester				
HRPO 2301	Human Resources Management	3	0	3
MRKG 1311	Principles of Marketing	3	0	3
COSC 1401	Microcomputer Applications	3	3	4
Elective	Visual & Performing Arts/Humanities	3	0	3
Elective	College Level	3	0	3
		15	3	16

*Capstone Course

Total Credits Required for A.A.S. Management Development Degree.....66

Management Development Certificate Program

(281) 756-3812

Length: Two-Semester (One-Year) Program
Purpose: The one-year Certificate in Management Development prepares the student for full-time employment in the field of management. The basic objective of the program is to develop management skills and allow the student a chance to utilize these skills at an approved work station.
Program Requirement: A certificate student takes 12 hours of management courses and 3 hours of cooperative education in the first semester. In the second semester, the certificate student takes another cooperative education, and twelve hours of management/human resources and marketing courses.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
BMGT 1303	Principles of Management	3	0	3
BMGT 1382	Cooperative Education I-Business Administration & Management	1	20	3
HRPO 1311	Human Relations	3	0	3
BMGT 2303	Problem Solving & Decision Making	3	0	3
BUSG 2309 or MRKG 2333	Small Business Management or Principles of Selling	3	0	3
		13	20	15
Second Semester				
HRPO 2307	Organizational Behavior	3	0	3
*BMGT 2382	Cooperative Education II-Business Administration & Management	1	20	3
HRPO 1391 or MRKG 1302	Special Topics in Human Resource Management or Principles of Retailing	3	0	3
MRKG 1311	Principles of Marketing	3	0	3
HRPO 2301	Human Resource Management	3	0	3
		13	20	15

*Capstone Course

Total Credits Required for Management Development Certificate.....30

An advantage at ACC is personal instruction.

Marine Robotics Technology Degree Program

(281) 756-3667

Length: Four -Semesters (Two-Year) Program

Purpose: The Marine Robotics Technology program will prepare students to work on electronic and electro-mechanical equipment in the marine environment, offshore or onshore. Typical occupations include Remote Operated Vehicle Technicians and Pilots, Hydrographic Survey Technicians, Aquaculture Technicians, Sonograph Operators, oil spill response technicians, or marine technicians who work aboard ocean going vessels doing research, cable laying, or underwater mapping. Graduates will have a strong background in electronics, including data acquisition and fiber optics. Graduates would have the ability to operate, troubleshoot, and repair equipment, with exposure to the special requirements of working in a harsh or remote environment. Students would be exposed to the sub-disciplines of high voltage power transmission, electro-mechanical control systems, and hydraulic and pneumatic applications.

This program is designed to meet the specific needs of the Marine Technology industry while at the same time being general enough to provide an academic and technical background appropriate for a wider range of occupations. The exposure to control systems and electro-mechanical and hydraulic systems can lead to occupations in materials handling, robotic systems, and automated control. The exposure to data acquisition, electronics, and fiber optics can lead to occupations in the communications industry, the medical technology industry, and the electronics instrumentation industry.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CETT 1403	DC Theory	3	3	4
CETT 1425	Digital Fundamentals	3	3	4
MATH 1314	College Algebra	3	0	3
ENGL 1301	Comp and Rhetoric I	3	0	3
MRTC 1471 or	Introduction to Marine Technology or			
Elective **	CETT/CPMT/DFTG	3	3	4
		15	9	18
Second Semester				
CETT 1429	Solid State Devices	3	3	4
MRTC 2472	Introduction to Submersible Technology	3	3	4
CETT 1405	AC Theory	3	3	4
SOCI 1301	Principles of Sociology	3	0	3
PHED	Physical Education	0	3	1
		12	12	16
Third Semester				
HYDR 1445	Hydraulics and Pneumatics	3	3	4
MRTC 2474	Advanced Marine Technology	3	3	4
Vis/Perf Arts/Humanities	College level elective	3	0	3
SPCH 1315	Public Speaking	3	0	3
POFT 1301	Business Communications I	3	0	3
		15	6	17
Fourth Semester				
ELMT 2441	Electromechanical Systems	3	3	4
EECT 2439	Communications Systems	3	3	4
MRTC 2473 *	Marine Operations and Safety	3	3	4
Electronics Elective **	CETT/CPMT/CSCI/ELMT	3	3	4
PHED	Physical Education	0	3	1
		12	15	17

*Capstone course

** - These classes are designed to allow a student to specialize. Specializations include electronics, drafting, computer repair,electro-mechanical systems, and hydraulics.

Students are strongly encouraged to undergo an internship in order to compliment their educational experience.

An internship would have 336 external hours.

Total Credits Required for Marine Robotics Technology Degree Program 68

Marine Robotics Technology Certificate Program

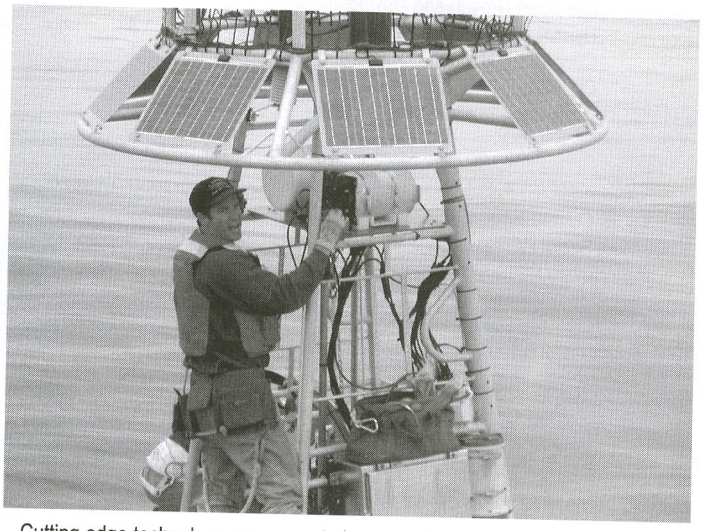
(281) 756-3667

Length: Three Semester Program

Purpose: The Marine Robotics Technology program will prepare students to work on electronic and electro-mechanical equipment in the marine environment, offshore or onshore.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
CETT-1403	DC Theory	3	3	4
CETT-1425	Digital Fundamentals	3	3	4
MRTC-1471	Introduction to Marine Technology	3	3	4
		9	9	12
Second Semester				
CETT-1429	Solid State Devices	3	3	4
HYDR-1445	Hydaulics and Pneumatics	3	3	4
MRTC-2472	Intro to Submersible Technology	3	3	4
CETT-1405	AC Theory	3	3	4
		12	12	16
Third Semester				
ELMT-2441	Electromechanical Systems	3	3	4
EECT-2439	Communications Systems	3	3	4
MRTC-2473	Marine Operations and Safety	3	3	4
		9	9	12

Total Credits Required for Marine Robotics Technology Certificate 40



Cutting edge technology prepares students to work in the marine environment.

Mental Health Degree Program

(281) 756-3652

Degree: Associate of Applied Science (A.A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The Associate of Applied Science Degree curriculum in Mental Health provides theory, skills and knowledge used in the field of mental health-mental retardation and alcohol and drug abuse. The program prepares the graduate to obtain employment in a variety of human service and mental health settings under the supervision of a professional or as a part of a service team, including agencies that provide counseling services, rehabilitation training, direct care to clients, probation, corrections, treatment for alcohol and drug dependency, and psychiatric care. Students who complete courses and field work required by the Texas Department of State Health Services Professional Licensing and Certification (formerly the Texas Commission on Alcohol and Drug Abuse - TCADA) will be eligible to take the licensure exam for Licensed Chemical Dependency Counselors.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
ENGL 1301	Composition and Rhetoric I	3	0	3
PSYC 2301	General Psychology	3	0	3
PMHS 1301	Intro to Mental Health and Retardation	3	0	3
DAAC 1317	Basic Counseling Skills	3	0	3
DAAC 1304	Pharmacology of Addiction	3	0	3
PHED	Physical Activity	0	3	1
		15	3	16
Second Semester				
ENGL 1302	Composition and Rhetoric II	3	0	3
SOCI 1301	Principles of Sociology	3	0	3
DAAC 1309	Assessment Skills of Alcohol and Other Drug Addictions	3	0	3
DAAC 1311	Counseling Theories	3	0	3
DAAC 1380 or PMHS 1380	Coop Ed I - Alcohol/Drug Abuse Counseling Coop Ed I - Psychiatric/Mental Health Services	1	20	3
PHED	Physical Activity	0	3	1
		13	23	16
SECOND YEAR				
First Semester				
BIOL 2401 or BIOL 1406	Anatomy and Physiology or General Biology	3	3	4
PSYC 2314	Life-Span Growth and Development	3	0	3
DAAC 1314	Dynamics of Group Counseling	3	0	3
DAAC 1341	Counseling Alcohol & Other Drug Addictions	3	0	3
DAAC 1381 or PMHS 1381	Coop Ed II-Alcohol/Drug Abuse Counseling Coop Ed II-Psychiatric/Mental Health Services	1	20	3
		13	23	16
Second Semester				
DAAC 1307	Addicted Family Intervention	3	0	3
DAAC 1343	Current Issues	3	0	3
SOCI 1306	Social Problems	3	0	3
*DAAC 2380 or *PMHS 2380	Coop Ed III-Alcohol/Drug Abuse Counseling Coop Ed III-Psychiatric/Mental Health Services	1	20	3
Elective	Mental Health Elective	3	0	3
Elective	Visual & Performing Arts/Humanities	3	0	3
		16	20	18

*Capstone Course

Total Credits Required for A.A.S. Mental Health Technology.....66

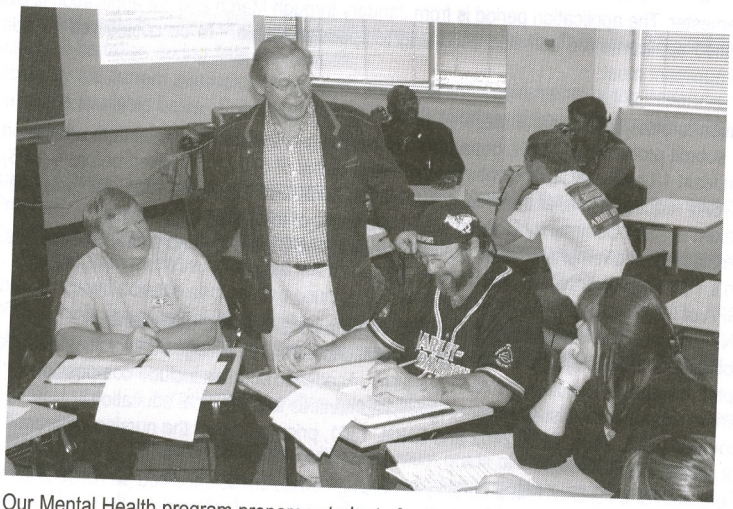
Mental Health Certificate Program

Length: Two-Semester (One-Year) Program

Purpose: The one-year program prepares the student to meet the educational requirements for eligibility to test for Licensed Chemical Dependency Counselors.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
PMHS 1301	Introduction to Mental Health and Retardation	3	0	3
DAAC 1304	Pharmacology of Addiction	3	0	3
DAAC 1309	Assessment and Procedures	3	0	3
DAAC 1341	Counseling Alcohol and Other Drug Addictions	3	0	3
DAAC 1380 or	Coop Ed I - Alcohol/Drug Abuse Counseling	1	20	3
PMHS 1380	Coop Ed I - Psychiatric/Mental Health Services Technician	13	20	15
Second Semester				
CMSW 1341	Behavior Modification and Cognitive Disorder	3	0	3
DAAC 1343	Current Issues	3	0	3
DAAC 1391 or	Special Topics in Alcohol/Drug Abuse Counseling (Children of Alcoholics)	3	0	3
PMHS 1391	Special Topics in Psychiatric/Mental Health Service Technician			
DAAC 1307	Addicted Family Intervention	3	0	3
DAAC 1381 or	Coop Ed II - Alcohol/Drug Abuse Counseling	1	20	3
PMHS 1381	Coop Ed II - Psychiatric/Mental Health Services Technician	13	20	15

Total Credits Required for Mental Health Certificate 30



Our Mental Health program prepares students for the workforce as licensed chemical dependant counselors.

Nursing Degree Program

(281) 756-3634

Degree: Associate of Applied Science (A.A.S.)
Length: Two Year Program
Purpose: The program seeks to prepare graduates who are critical thinkers and competent practitioners. As Associate Degree Nursing graduates, they will practice within the defined roles and competencies of the Associate Degree nurse. In response to community and societal needs, they will be prepared to care for individuals and families in structured settings. Courses are presented according to their content and effectiveness toward successful fulfillment of state board competencies.

At the successful completion of a minimum of two (2) academic years and all program requirements, the graduate is qualified to make application to write the National Council Licensure Exam for Registered Nurses (NCLEX-RN).

The program is accredited by the Board of Nurse Examiners for the State of Texas (BNE) and by the National League for Nursing Accrediting Commission (NLNAC). The mission of the BNE is to protect and promote the welfare of the people of Texas by ensuring that each person holding a license as a nurse in the State of Texas is competent to practice safely. The NLNAC is recognized by the U.S. Department of Education as the national accrediting body for all types of nursing education programs.

The accrediting agencies can be contacted at:

Board of Nurse Examiners for the State of Texas
333 Guadalupe #3-460
Austin, TX 78701
512/305-7400
www.bne.state.tx.us

NLNAC
61 Broadway, 33rd Floor
New York, NY 10006
212/363-5555
www.nlnac.org

A person who has been convicted of or received deferred adjudication for anything other than a minor traffic violation, diagnosed with mental illness, or has a history of substance abuse, should contact the Board of Nurse Examiners for the State of Texas to determine their eligibility to take the NCLEX-RN (National Council Licensure Examination for Registered Nurses). For eligibility criteria and specific information, contact the Board at www.bne.state.tx.us.

Admission Requirements:
A new class begins each fall semester. The application period is from January through March and the application is available from the ADN department or www.alvincollege.edu. Qualified applicants are admitted according to space available. To be considered for admission to the Associate Degree Nursing (A.D.N.) Program, the applicant must:

1. Be fully admitted to ACC.
2. Submit the A.D.N. application to the A.D.N. department.
3. At the time of application, submit proof to the A.D.N. department of having met the following minimum admission standards:
   a. Composite score of at least 19 on the ACT or combined math and verbal of 870 (750 if taken before 4-1-95) on the SAT. The applicant is exempt from the ACT/SAT requirement if, at the time of application, BIOL 2401 & ENGL 1301 are complete with a minimum GPA of 2.5 and the BIOL 2401 was taken at Alvin Community College within five years of the time of application.
   b. TSI (Texas Success Initiative) requirement satisfied as determined by ACC's testing and placement policies. Transfer students must meet the transfer institution's TSI requirements if not enrolled at ACC.
   c. Have a cumulative GPA of 2.0 or better.
4. Attend a scheduled A.D.N. Applicant session discussing specific program policies and requirements.
5. Submit to both the ADN office and ACC Registrar's office official transcripts from all colleges/universities attended. No academic course with a grade below C is accepted for transfer credit in the ADN program. Academic courses include composition/written communication, social/behavioral/biological sciences, humanities, visual/performing arts, humanities and physical education.
6. Complete pre-requisite courses, BIOL 2401, BIOL 2402 and ENGL 1301, prior to start of the nursing program.
7. Students are ineligible for admission if:
   a. Transcripts reflect more than one (1) D or F in a nursing or nursing curriculum science course (BIOL 2401, 2402, 2420) taken in the past five years. The student is ineligible even if the course is repeated and the student earns an A, B, or C in the subsequent attempt.
   b. The student is currently on suspension or academic probation from Alvin Community College or another college or university.

Selection for Admission
Admission to the program is competitive. Applicants are ranked according to their academic performance and if applicable, their ACT/SAT scores. Academic performance criteria include the number of required courses completed, GPA in those courses, and successful completion of the coursework on the first attempt. Applicants who complete the required coursework at ACC and/or are residents of the college district will receive additional consideration.

Program information:

1. BIOL 2401, 2402, 2420 and Psych 2314 must be taken within five years at the time of application. Courses completed more than five years prior to the time the student is accepted do not satisfy program requirements.
2. Requirements to be completed after initial acceptance and before the start of the program:
   a. Satisfactory criminal background check. The individual must have a satisfactory check as determined by the licensure eligibility criteria established by the Board of Nurse Examiners for the State of Texas (BNE). A person with a criminal history is eligible for admission if the BNE indicates in a letter that a "Declaratory Order" was received and the individual is eligible to apply to take the licensure examination. The BNE website, www.bne.state.tx.us, contains eligibility questions and the declaratory order.
   b. CPR Certification American Heart Association class "C" for Health Care Providers
   c. Physical examination (form provided by the department)
   d. Up-to-date immunizations as required by the Texas Department of Health (measles, mumps, rubella, tetanus, diphtheria, varicella, hepatitis "B" series)
   e. Negative tuberculin screen (yearly)
   f. Negative drug screen
   g. Purchase of a school uniform and lab supplies.
3. Each student is required to pay for standardized, computerized tests that are administered throughout the program.

Transfer of Nursing Credits:

1. Applicants seeking to transfer nursing credits will be admitted only if space is available. Transfer students must:
   a. meet above admission criteria.
   b. have a written recommendation from the Dean/Director of their previous nursing program.
   c. have a cumulative GPA of 2.0 or better on all courses being transferred into the nursing curriculum;
   d. not currently be on suspension or academic probation from another college or university;
   e. demonstrate competency in previously completed nursing courses prior to admission through a written examination;
   f. must meet the criteria for admission to the ADN program at Alvin Community College.
2. Any nursing course completed more than five (5) years prior to the time the student is accepted, is not accepted for transfer.
3. No grade below a B in any nursing course is accepted for transfer. Only nursing courses that are equivalent to courses listed in the nursing curriculum are considered for transfer.
4. BIOL 2401, 2402, 2420 and Psych 2314 must be taken within five years at the time of application. Courses completed more than five years prior to the time the student is accepted do not satisfy program requirements.
5. Courses accepted for transfer must be similar in content and credit to the ACC course(s).

Readmission of Former ACC ADN Students:

A student not enrolled in a nursing course for one (1) or more semesters (excluding summer), for any reason, is termed a withdrawal from the ADN Program and must apply for readmission.

1. A student who has withdrawn from the ADN program and wishes to re-enter must submit a re-admission application at least eight (8) weeks prior to the requested date of readmission. Students wishing to re-enter the first semester must reapply during the program application period in the spring.
2. Evidence of competency in previously completed nursing courses will be required prior to readmission. This will be accomplished through a written examination. This exam will be taken during final exam week.
3. Re-entering students must abide by the current admission, curriculum and program requirements of the department.
4. Students are readmitted on a space available basis. Following a second (2nd) withdrawal from the program, a student will not be readmitted.

Progression Policies:

1. Students will abide by the current ADN admission, curriculum and program requirements at the time they are admitted or readmitted to the Associate Degree Nursing Program.
2. Once a student has enrolled in the ADN Program, all nursing courses and related courses must be completed in proper sequence as shown in the catalog and degree plan. The program must be completed within five (5) years of the initial acceptance.
3. No grade below a C in nursing curriculum science and nursing courses will be acceptable for progression.
4. In order to receive a grade of C, a minimum grade of 75% must be attained in each nursing course.
5. A student who received a D, F, or W in a nursing course or drops a nursing course, must, if eligible, reenroll in that course before enrolling in a subsequent nursing course.
6. A student who receives a grade of D or F in a nursing course with a related clinical component must, if eligible, reenroll in both the theory and clinical sections of that course.
7. Each semester's co requisite RNSG courses must be completed with a minimum grade of C in order to progress.
8. A student must achieve an overall GPA of 2.0 in all courses in the nursing curriculum in order to progress to the next nursing course.
9. A student who receives a grade of D, F, or W in a nursing course or who is not enrolled in a nursing course for one (1) or more semesters (excluding summer) is termed a withdrawal and must apply for readmission. Consideration for readmission will be on an individual basis and as space permits. Following a second D, F, or W during the program, a student will not be readmitted. Any student not enrolled in a nursing course for one or more semesters (excluding summer) will be required to demonstrate competency in previously completed nursing courses prior to readmission by means of a written examination.
10. A student will be terminated from the ADN Program if they have received more than one (1) D or F in a Nursing, BIOL 2401, BIOL 2402 and/or BIOL 2420 course. This includes courses which have been repeated and a passing grade (A, B or C) received in a subsequent attempt, regardless of the college or university where the initial grade (D or F) was received.

Associate Of Applied Science Nursing Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
Prerequisite Courses				
ENGL 1301	Composition & Rhetoric I	3	0	3
BIOL 2401+	Anatomy and Physiology I	3	3	4
BIOL 2402+	Anatomy and Physiology II	3	3	4
		9	6	11
FIRST YEAR				
Fall Semester				
RNSG 1215*	Health Assessment	1	2	2
RNSG 1108*	Dosage Calculations for Nursing	1	0	1
RNSG 1513+	Foundations for Nursing Practice	4	3	5
RNSG 1260	Clinical Nursing: Foundations for Nursing Practice	0	6	2
PSYC 2314*+	Life Span Growth & Development	3	0	3
		9	11	13
Spring Semester				
RNSG 1441+	Common Concepts of Adult Health	3	2	4
RNSG 1561	Clinical Nursing: Common Concepts of Adult Health	0	15	5
PSYC 2301*+	General Psychology	3	0	3
PHED*	Physical Activity	0	3	1
		6	20	13
SECOND YEAR				
Summer Semester				
BIOL 2420*+	Microbiology	3	3	4
RNSG 2213+	Mental Health Nursing	2	0	2
RNSG 1162	Clinical: Mental Health Nursing	0	3	1
		5	6	7
Fall Semester				
RNSG 1443+	Complex Concepts of Adult Health	3	2	4
RNSG 2563	Clinical: Complex Concepts of Adult Health	0	15	5
RNSG 2121	Management of Client Care	1	0	1
ENGL 1302*	Composition and Rhetoric II	3	0	3
PHED*	Physical Activity	0	3	1
		7	20	14
Spring Semester				
RNSG 1512+	Nursing Care of Childbearing & Childrearing Family	4	2	5
RNSG 2463	Clinical: Nursing Care of Childbearing & Childrearing Family	0	12	4
RNSG 1246	Legal and Ethical Issues for Nurses	2	0	2
Elective*	Visual and Performing Arts / Humanities	3	0	3
		9	14	14

* May be taken prior to admission to the ADN program.
+This course is included in the Field of Study Curriculum for Nursing.

Total Credits Required for A.A.S. Nursing.....72

Nursing Transition (LVN to ADN) Program

Degree: Associate of Applied Science (A.A.S.)
Length: One-Year Program
Purpose: The transition program is to provide a pathway from Licensed Vocational Nurse (LVN) to Associate Degree Nursing (ADN). The program seeks to prepare graduates who are critical thinkers and competent practitioners. As Associate Degree Nursing graduates, they will practice within the defined roles and competencies of the Associate Degree nurse. In response to community and societal needs, they will be prepared to care for individuals and families in structured settings. Courses are presented according to their content and effectiveness toward successful fulfillment of state board competencies.

Upon successful completion of the program, the graduate is eligible to make application to write the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

Program Requirements: A new class will begin in May each year. Qualified applicants will be admitted according to space available. To be considered for admission to the Transition Pathway of the Associate Degree Nursing Program, the applicant must:

1. Apply to ACC and fulfill the admission requirements of the college.
2. Apply to the ADN Program and meet all admission requirements for that program. ACT is not required.
3. Hold a valid license to practice vocational nursing in the State of Texas.
4. Have a minimum of six (6) months of recent work experience as a licensed vocational nurse in an acute care setting or scheduled to graduate from the ACC/VN program.
5. Complete prerequisite courses before the start of the nursing program.
6. Have a cumulative GPA of 2.0 or better.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
Prerequisite Courses (Must be completed prior to enrollment in RNSG 1262 and RNSG 1417)				
ENGL 1301	Composition & Rhetoric I	3	0	3
PSYC 2301+	General Psychology	3	0	3
PSYC 2314+	Life-Span Growth & Development	3	0	3
BIOL 2401+	Anatomy & Physiology I	3	3	4
BIOL 2402+	Anatomy & Physiology II	3	3	4
BIOL 2420+	Microbiology	3	3	4
PHED	Physical Activity	0	3	1
		18	12	22
3 Week Mini Semester (May)				
RNSG 1215*	Health Assessment	1	2	2
		1	2	2
Summer Semester				
RNSG 1262	Clinical Nursing: Concepts of Nurse Practice for Articulating Students	2	6	2
RNSG 1417	Concepts of Nursing Practice I for Articulating	3	2	4
	Credit for Prior Learning	0	0	14
		5	8	20
Fall Semester				
RNSG 1443	Complex Concepts of Adult Health	3	2	4
RNSG 2121	Management of Client Care	1	0	1
RNSG 2563	Clinical Nursing: Complex Concepts of Adult	0	15	5
ENGL 1302*	Composition and Rhetoric II	3	0	3
PHED*	Physical Activity	0	3	1
		7	20	14
Spring Semester				
RNSG 1246	Legal Ethical Issues for Nurses	2	0	2
RNSG 1512+	Nursing Care of the Childbearing and Childrearing Family	4	2	5
RNSG 2463	Clinical Nursing: Nursing Care of the Childbearing and Childrearing Family	0	12	4
ELEC	Visual and Performing Art / Humanities	3	0	3
		9	14	14

+This course is included in the Field of Study Curriculum for Nursing.

Total Credits Required for A.A.S. Nursing.....72

Note: Lecture, lab, and clinical hours are the number of contact hours per week in a semester.

Vocational Nursing Certificate Program

(281) 756-3636

Length: Twelve months; three semesters, 44 credit hours.

Purpose: The purpose of the ACC Vocational Nursing program is to provide an approved educational curriculum designed to prepare the vocational nurse to function as a vital member of the health care team. The vocational nurse gives nursing care to patients in varied situations under the supervision of a registered nurse and/or physician. Graduates are eligible to write the National Counsel of State Boards of Nursing Licensure Exam for Practical Nurses (NCLEX-PN). Those passing this examination will be licensed to practice as a Licensed Vocational Nurse (LVN) in the State of Texas.

Accreditation: The program is accredited by the Board of Vocational Nurse Examiners of the State of Texas and the Texas Higher Education Coordinating Board.

Admission Requirements: A new class begins each Summer Session I. Enrollment is limited to 36 qualified applicants per class. To be eligible for admission to the program, each applicant must:

1. be a high school graduate or hold a certificate of equivalency (GED);
2. meet all College admission requirements;
3. submit an application with ACT or SAT scores to the Vocational Nursing department. Minimum acceptable scores are a composite ACT score of 18, or a combined SAT score of 860. Scores must be less than five (5) years old.
4. attend an information meeting with the chairperson of Vocational Nursing before registration;
5. upon registration, provide documentation of: (1) a physical examination which includes blood studies, serology, tuberculosis screening, and immunization updates in accordance with the department's immunization guidelines; and (2) current certification in American Heart Association Class "C" CPR for Healthcare Providers.
6. Individuals that have been convicted of a felony may not be licensed in the State of Texas.
7. Deadline for 2006 class applications is November 1, 2005.

Program Requirements:

1. Expenses for the entire program are approximately $4,000. This includes ACT/SAT test fee, CPR certification requirement, all tuition and fees, malpractice insurance, books, miscellaneous supplies, uniforms, and costs related to graduation and licensure. Additional costs of health insurance and transportation are the student's responsibility.
2. A passing average of at least 75 must be attained in every course. In courses that have both a lecture and a clinical component, the student must maintain at least a 75 average in each component. An average below 75 will constitute grounds for student withdrawal from the program.
3. Maximum allowable absences is four (4) days per semester. Tardiness is defined as more than 15 minutes past the scheduled class/clinical hour. Three (3) tardies equals one absence. Excessive absences or chronic tardiness will constitute grounds for student withdrawal from the program.
4. The Vocational Nursing department reserves the right to at any time request the withdrawal or dismissal of any student whose attendance, conduct, personal qualities or abilities, and/or scholastic records (clinical or academic proficiency) indicate that it would be inadvisable for the student to continue in the program.
5. Transfer and re-entry students will be admitted only as space permits, and must fulfill current admission criteria, including current physical examination, current CPR certification, and current CDC instruction. Students will be allowed to transfer into the program or re-enter the program one time only. Only courses having a letter grade of C or higher, awarded within 5 years of enrollment in the program, will apply towards the vocational nursing certificate. Transfer students must complete a minimum of 12 semester hours in the Alvin Community College Vocational Nursing program in order to graduate. Students who withdraw and later wish to re-enroll must reapply within one year from the date of withdrawal in order to finish the curriculum.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester - Summer 12 Week				
VNSG 1122	Vocational Nursing Concepts	1	0	1
VNSG 1160	Clinical - Practical Nurse I	0	5	1
VNSG 1420	Anatomy & Physiology for Allied Health	4	0	4
VNSG 1423	Basic Nursing Skills	3	4	4
		8	9	10
Second Semester - Fall				
VNSG 1226	Geriatrics	2	0	2
VNSG 1227	Essentials of Medication Administration	1	2	2
VNSG 1230	Maternal-Neonatal Nursing	2	0	2
VNSG 1331	Pharmacology	3	0	3
VNSG 1234	Pediatrics	2	0	2
VNSG 1660	Clinical - Practical Nurse II	0	24	6
		10	26	17
Third Semester - Spring				
VNSG 1136	Mental Health	1	0	1
VNSG 1219	Professional Development	2	0	2
VNSG 1238	Mental Illness	2	0	2
VNSG 1329	Medical-Surgical Nursing I	3	0	3
VNSG 1332	Medical-Surgical Nursing II	3	0	3
VNSG 1661	Clinical - Practical Nurse III	0	24	6
		11	24	17

Total Credits Required for Vocational Nursing Certificate 44

Office Administration - Office Professional Degree Program (281) 756-3810

Degree: Associate of Applied Science (A.A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The Associate of Applied Science Degree curriculum in Office Administration offers courses which prepare the student for employment in the business office. It is designed for those seeking first employment and for those currently employed who are seeking promotion.
Program Requirements: The two-year curriculum in office administration provides instruction in areas required for competence as an administrative assistant in an office environment. The student will gain at least eight months work experience related to this field. Upon satisfactory completion of the two-year curriculum, the student will be awarded the Associate in Applied Science Degree in Office Administration.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
POFT 1301	Business English	3	0	3
ACNT 1303	Introduction to Accounting I	3	1	3
POFT 1309	Administrative Procedures I	3	0	3
POFT 1429	Keyboarding and Document Formatting	3	3	4
POFT 1425	Business Math and Machine Application	3	3	4
		15	7	17
Second Semester				
ENGL 1301	Composition and Rhetoric	3	0	3
Math 1314 or	College Algebra or			
Math 1332	College Mathematics for Liberal Arts	3	0	3
POFI 1401	Computer Applications I	3	3	4
POFI 2401	Word Processing	3	3	4
POFT 2401	Document Formatting and Skillbuilding	3	3	4
		15	9	18
Third Semester				
POFI 1441	Computer Applications II	3	2	4
SPAN 2316 or	Career Spanish I or			
SPAN 2317	Career Spanish II	3	0	3
ACNT 1311 or	Introduction to Computerized Accounting	3	1	3
IMED 1316 or	Web Page Design I			
POFT 1380	Cooperative Education - Administrative Assistant/Secretarial Science General	1	20	3
POFT 2433	Advanced Document Formatting and Skillbuilding	3	3	4
PHED	Physical Activity	0	3	1
		13	29	18
Fourth Semester				
POFT 1419	Records and Information Management I	3	3	4
POFT 2331	Administrative Systems	3	0	3
POFT 2380	Cooperative Education - Admin Assistant/ Secretarial Science General	1	20	3
SOCI 2319	American Minorities	3	0	3
SPCH 1315	Public Speaking	3	0	3
PHED	Physical Activity	0	3	1
		13	26	17

Total Credits Required for A.A.S. Office Professional.....70

Office Administration- Legal Office Professional Degree Program

Degree: Associate of Applied Science (A.A.S.)
Length: Five-Semester (Two-Year) Program
Purpose: The Associate of Applied Science Degree curriculum in Office Administration offers courses which prepare the student for employment in the legal secretarial field.
Program Requirements: The two-year curriculum in office administration provides instruction in areas required for competence as an administrative assistant in a legal office environment. The student will gain at least eight months work experience related to this field. Upon satisfactory completion of the two-year curriculum, the student will be awarded the Associate of Applied Science Degree in Office Administration.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
POFT 1301	Business English	3	0	3
HIST 1302 or	The United States Since 1877 or			
GOVT 2302	American National and State Governments II	3	0	3
LGLA 1311	Introduction to Law	3	0	3
POFL 1305	Legal Terminology	3	0	3
PHED	Physical Activity	0	3	1
POFT 1429	Keyboarding and Document Formatting	3	3	4
		15	6	17
Second Semester				
ACNT 1303	Introduction to Accounting I	3	1	3
LGLA 1301	Legal Research & Writing	3	0	3
Math 1314 or	College Algebra or			
Math 1332	College Mathematics for Liberal Arts	3	0	3
POFI 1401	Computer Applications I	3	3	4
PHED	Physical Activity	0	3	1
POFT 2401	Document Formatting and Skillbuilding	3	3	4
		15	10	18
Summer Semester				
LGLA 1355	Family Law	3	0	3
POFL 1303	Legal Office Procedures	3	0	3
POFT 1419	Records and Information Management I	3	3	4
		9	3	10
SECOND YEAR				
First Semester				
LGLA 1347	Civil Litigation II	3	0	3
POFI 1441	Computer Applications II	3	2	4
SPAN 2316 or	Career Spanish I or			
SPAN 2317	Career Spanish II	3	0	3
POFL 1380	Cooperative Ed – Legal Adm Asst/Secretary	1	20	3
		10	22	13
Second Semester				
LGLA 2305	Interviewing & Investigating	3	0	3
ENGL 1301	Composition and Rhetoric I	3	0	3
SPCH 1315	Public Speaking	3	0	3
POFL 2380	Cooperative Ed – Legal Adm Asst/Secretary	1	20	3
		10	20	12

Total Credits Required for Legal Office Professional 70

Enhanced Skills Certificate - Legal Office Professional				
LGLA 2309	Real Property	3	0	3
LGLA 2303	Torts and Personal Injury Law	3	0	3
LGLA 1353	Wills, Trust, and Probate Administration	3	0	3
		9	0	9

Total Credits Required for Enhanced Skills Certificate - Legal Office Professional 79

Office Administration - Medical Office Professional Degree Program

Degree: Associate of Applied Science (A.A.S.)
Length: Four-Semester (Two-Year) Program
Purpose: The Associate of Applied Science Degree curriculum in Office Administration offers courses which prepare the student for employment in the medical secretarial field. The program is designed to meet the need for efficient medical secretaries in the medical field.
Program Requirements: The two-year curriculum in office administration provides instruction in areas required for competence as an administrative assistant in a medical office environment. The student will gain at least eight months work experience related to this field. Upon satisfactory completion of the two-year curriculum, the student will be awarded the Associate of Applied Science Degree in Office Administration.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
ACNT 1303	Introduction to Accounting I	3	1	3
ENGL 1301	Composition and Rhetoric I	3	0	3
POFM 1313	Medical Terminology I	3	0	3
POFM 1317	Medical Administrative Procedures	3	0	3
POFT 1429	Keyboarding and Document Formatting	3	3	4
PHED	Physical Activity	0	3	1
		15	7	17
Second Semester				
POFI 1401	Computer Applications I	3	3	4
POFM 2323	Medical Terminology II	3	0	3
PHED	Physical Activity	0	3	1
POFT 2401	Document Formatting and Skillbuilding	3	3	4
PSYC 2314	Life Span-Growth & Development	3	0	3
SPAN 2316 or	Career Spanish I or	3	0	3
SPAN 2317	Career Spanish II			
		15	9	18
SECOND YEAR				
First Semester				
POFM 1333	Pharmacology for Office Personnel	3	0	3
POFM 1353	Medical Coding	3	0	3
POFM 1380	Cooperative Ed Medical Admin Assistant/Secretary	1	20	3
POFT 1419	Records and Information Management I	3	3	4
POFI 1441	Computer Applications II	3	2	4
		13	25	17
Second Semester				
MATH 1314 or	College Algebra or	3	0	3
MATH 1332	College Mathematics for Liberal Arts			
POFT 1425	Business Math and Machine Applications	3	3	4
SPCH 1315	Public Speaking	3	0	3
POFM 2380	Cooperative Ed Medical Admin Assistant/Secretary	1	20	3
POFT 1301	Business English	3	0	3
		13	23	16

Total Credits Required for A.A.S. Medical Office Professional 68

Office Administration - Office Assistant Certificate Program

Length: Two-Semester (One-Year) Program
Purpose: The one-year program prepares the student for employment in office occupations.
Program Requirements: The one-year programs for the Office Assistant, Lawyer's Assistant, Medical Coding and Billing Specialist and Medical Transcriptionist combine instruction and classroom participation on competencies required in the office environment. Upon satisfactory completion of the one-year program, the student will be awarded a one-year certificate.

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester				
ACNT 1303	Introduction to Accounting I	3	1	3
POFT 1301	Business English	3	0	3
POFT 1309	Administrative Office Procedures I	3	0	3
POFT 1425	Business Math and Machine Application	3	3	4
POFT 1429	Keyboarding and Document Formatting	3	3	4
		15	7	17
Second Semester				
POFI 1401	Computer Applications I	3	3	4
POFI 2401	Word Processing	3	3	4
POFT 1419	Records and Information Management I	3	3	4
POFT 2401	Document Formatting and Skillbuilding	3	3	4
		12	12	16
Third Semester				
POFT 1382	Cooperative Ed - Gen Office/Clerical	1	20	3
POFT 2331	Administrative Systems	3	0	3
SPAN 2316 or	Career Spanish I or			
SPAN 2317	Career Spanish II	3	0	3
		7	20	9

Total Credits Required for Certificate Office Assistant 42

Office Administration - Legal Office Assistant Certificate

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester				
POFT 1419	Records and Information Management I	3	3	4
LGLA 1311	Introduction to Law	3	0	3
POFL 1305	Legal Terminology	3	0	3
POFT 1429	Keyboarding and Document Formatting	3	3	4
		12	6	14
Second Semester				
POFT 1301	Business English	3	0	3
LGLA 1301	Legal Research & Writing	3	0	3
POFL 1303	Legal Office Procedures	3	0	3
POFI 1401	Computer Applications I	3	3	4
POFT 2303	Speed and Accuracy Building	3	1	3
		15	4	16
Third Semester				
LGLA 2305	Interviewing & Investigating	3	0	3
LGLA 1347	Civil Litigation II	3	0	3
SPAN 2316 or	Career Spanish I or			
SPAN 2317	Career Spanish II	3	0	3
POFT 1382	Cooperative Ed – Gen Office/Clerical	1	20	3
		10	20	12

Total Credits Required for Lawyer's Assistant Certificate 42

Office Administration - Medical Coding and Billing Specialist Certificate

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester				
POFM 1313	Medical Terminology I	3	0	3
SPAN 2316 or	Career Spanish I or	3	0	3
SPAN 2317	Career Spanish II			
POFM 1317	Medical Administrative Procedures	3	0	3
POFT 1329	Keyboarding and Document Formatting	3	1	3
HPRS 2301	Pathophysiology	3	0	3
		15	1	15
Second Semester				
POFM 1353	Medical Coding	3	0	3
POFM 2323	Medical Terminology II	3	0	3
POFI 1401	Computer Applications I	3	3	4
POFM 1333	Pharmacology for Office Personnel	3	0	3
HITT 1341	Coding and Classification Systems	3	0	3
		15	3	16
Third Semester				
HITT 2346	Advanced Medical Coding	3	0	3
HITT 2335	Coding and Reimbursement Methodologies	3	0	3
POFM 1380	Cooperative Ed – Medical Admin Assistant	1	20	3
		7	20	9

Total Credits Required for Medical Coding and Billing Specialist Certificate 40

Office Administration - Medical Transcriptionist Certificate

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Semester				
POFT 1301	Business English	3	0	3
POFM 1313	Medical Terminology I	3	0	3
POFT 1429	Keyboarding & Document Formatting	3	3	4
HPRS 2301	Pathophysiology	3	0	3
		12	3	13
Second Semester				
POFI 1401	Computer Applications I	3	3	4
POFT 2303	Speed & Accuracy Building	3	1	3
POFM 1331	Medical Transcription I	3	1	3
POFM 2323	Medical Terminology II	3	0	3
POFM 1333	Pharmacology for Office Personnel	3	0	3
		15	5	16
Third Semester				
POFM 2313	Medical Transcription II	3	1	3
POFM 2331	Administrative Systems	3	0	3
POFI 1441	Computer Applications II	3	2	4
MRMT 1382	Cooperative Ed – Medical Transcription	1	20	3
		10	23	13

Total Credits Required for Medical Transcriptionist Certificate 42

Paralegal Degree Program

(281) 756-3642

Degree: Associate of Applied Science

Length: Four-Semester (Two-Year) Curriculum

Purpose: The Associate of Applied Science Degree for Paralegal is designed to prepare the successful student for a career as a Paralegal. In this program, the student gains knowledge of legal and court procedures in rendering a variety of legal services, including research, case management, drafting of documents, client interviews, and law firm operations. The need for persons to assist the legal profession has expanded greatly with population increases and the growing demand for legal services. The qualified Paralegal may find employment with law firms or industry, including banks, title companies, insurance firms, and governmental agencies.

Program Requirements: Attorneys generally set high standards of character and education for Paralegals. Paralegals must be responsible and mature individuals thoroughly conversant in legal terminology and procedures. The curriculum consists of several Paralegal courses, plus an internship. An internship provides the opportunity for students to make a practical application of their classroom education. **Courses for the Paralegal Program do not need to be taken in the order shown in this catalog. Please use semester schedules as a guideline and/or contact department chair for assistance.**

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
ENGL 1301	Composition & Rhetoric I	3	0	3
LGLA 1301	Legal Research & Writing	3	0	3
LGLA 1311	Introduction to Law	3	0	3
PHED	Physical Activity	0	3	1
POFT 1329	Keyboarding & Document Formatting	3	1	3
SOCI 1301	Principles of Sociology	3	0	3
		15	4	16
Second Semester				
LGLA 1353	Wills, Trust and Probate Administration	3	0	3
LGLA 1355	Family Law	3	0	3
LGLA 1380	Cooperative Ed - Paralegal	1	20	3
MATH 1314 or MATH 1332	College Algebra or Contemporary Mathematics I	3	0	3
PHED	Physical Activity	0	3	1
POFI 1401	Computer Applications 1	3	3	4
		13	26	17
SECOND YEAR				
First Semester				
GOVT 2301	American National & State Government I	3	0	3
LGLA 1342	Federal Civil Litigation	3	0	3
LGLA 2303	Torts and Personal Injury Law	3	0	3
LGLA 2305	Interviewing and Investigating	3	0	3
LGLA 2313	Criminal Law & Procedure	3	0	3
Elective	Visual & Performing Arts/Humanities	3	0	3
		18	0	18
Second Semester				
LGLA 1344	Texas Civil Litigation	3	0	3
LGLA 1349	Constitutional Law	3	0	3
LGLA 2239	Certified Legal Assistant Review	2	0	2
LGLA 2309	Real Property Law	3	0	3
*LGLA 2381	Cooperative Ed - Paralegal	1	20	3
SPCH 1318	Interpersonal Communication	3	0	3
		15	20	17

*Capstone Course

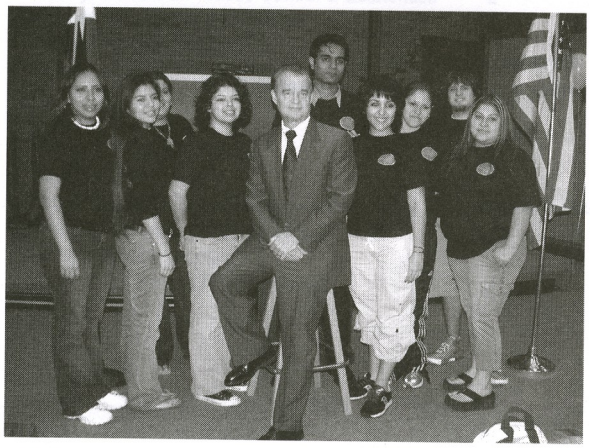
Total Credits Required for A.A.S. Paralegal 68

Paralegal Certificate Program

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
FIRST YEAR				
First Semester				
LGLA 1301	Legal Research & Writing	3	0	3
LGLA 1311	Introduction to Law	3	0	3
LGLA 1342	Federal Civil Litigation	3	0	3
LGLA 1353	Wills, Trust, and Probate Administration	3	0	3
LGLA 1355	Family Law	3	0	3
		15	0	15
Second Semester				
LGLA 1344	Texas Civil Litigation	3	0	3
LGLA 2303	Torts and Personal Injury Law	3	0	3
LGLA 2305	Interviewing and Investigating	3	0	3
LGLA 2313	Criminal Law & Procedure	3	0	3
POFT 1329	Keyboarding & Document Formatting	3	1	3
		15	1	15
Third Semester				
LGLA 1349	Constitutional Law	3	0	3
*LGLA 1380	Cooperative Ed - Paralegal	1	20	3
POFI 1401	Computer Applications 1	3	3	4
		7	23	10

*Capstone Course

Total Credits Required for Paralegal Certificate.....40



College president Dr. A. Rodney Allbright keeps an open line of communication with students.

Polysomnography - Advanced Technical Certificate

(281) 756-3658

Degree: Advanced Technical Certificate

Length: One Year Program

Purpose: Polysomnographic (PSG) Technology is an allied health specialty for the diagnosis and treatment of disorders of sleep and daytime alertness. The range of the sleep disorders is varied but includes common disorders such as narcolepsy, sleep apnea, insomnias, and many others. PSG technologists operate a variety of sophisticated electronic monitoring devices, which record brain activity (EEG), muscle and eye movement, respiration, blood oxygen and other physiological events. Technologists are also involved in evaluation of various treatment methods.

PSG technologists are employed in Sleep Disorders Centers, which can be located in medical centers, hospitals, or clinic/office settings. PSG program offers a certificate that includes lectures, laboratory experience on campus, clinical experience at accredited sleep centers, and physician lectures. A major emphasis of the program is to prepare technologists for Board Registration by the Board of Registered Polysomnographic Technologists (BRPT).

Admission Requirements

To be considered for admission to the Polysomnography program, the applicant must:

a. Make application to Alvin Community College and fulfill the admission requirements.
b. Make application to the Polysomnography program.
c. Be a graduate from one of the following areas: Nursing, Respiratory Care, Electroneurodiagnostics, or National Registry Paramedic.
d. Submit official transcripts from college where above degree was granted.
e. Submit appropriate state licensure and/or credentials from one of the disciplines in (c) above.
f. Complete physical examination and immunization upon acceptance.
g. Not currently be on suspension or academic probation.
h. Current CPR certification - AHA Health Care Provider.
i. Background checks are conducted as a condition of full acceptance into the Polysomnography Program.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
Spring Semester				
PSGT 1371	Neuroanatomy and Physiology	3	0	3
PSGT 1272	Introduction to Sleep	1	2	2
PSGT 1470	Beginning Polysomnography	3	4	4
		7	6	9
PSGT 1370	Sleep Disorders	3	0	3
PSGT 1417	Polysomnography Clinical I	0	18	4
		3	18	7
Fall Semester				
PSGT 2670	Polysomnography Clinical II	0	24	6
PSGT 2178	Infant and Pediatric Polysomnography	1	1	1
		1	25	7

Total Credits Required for Polysomnography Certificate 23

Process Technology Degree

(281) 756-3785

Degree: Associate Degree of Applied Science (A.A.S.)
Length: Four Semester (Two Year) Program
Purpose: The Process Technology associate level program offers students core courses related to Process Operations that will prepare them to become process technicians in the refining, petrochemical, power generation, oil and gas production, food and other process industries. Technical knowledge and skills will be gained in areas such as operating equipment, instrumentation systems, process systems, process troubleshooting and computer applications. The associate program will take four semesters to complete. Graduates from the program will be prepared for entry level employment as process operators.
Program Requirements: In addition to the general requirements for admission to ACC, entry into the Process Technology program requires basic proficiency in English, Reading, and Math.

Associate of Applied Science Degree Program

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
FIRST YEAR				
First Semester				
COSC 1401	Microcomputer Applications	3	3	4
CTEC 1401	Applied Petrochemical Technology (Physics)	3	2	4
PTAC 1302	Introduction to Process Technology	2	2	3
SOCI 1301	Principles of Sociology	3	0	3
PHED	Physical Activity	0	3	1
MATH 1332 or	Contemporary Mathematics I	3	0	3
MATH 1314	College Algebra	14	10	18
Second Semester				
ENGL 1301	Composition and Rhetoric I	3	0	3
PTAC 1308	Safety, Health & Environment I	3	1	3
PTAC 1352	Process Instrumentation I	2	2	3
PTAC 1410	Process Technology I (Equipment)	3	2	4
SCIT 1414	Applied General Chemistry I	3	3	4
PHED	Physical Activity	0	3	1
		14	11	18
SECOND YEAR				
First Semester				
BMGT 2303	Problem Solving and Decision Making	3	0	3
PTAC 2314	Quality, Statistical Process Control & Economics	2	2	3
PTAC 2420	Process Technology II (Systems)	3	2	4
PTAC 2436	Process Instrumentation II	3	2	4
SPCH 1318	Interpersonal Communications	3	0	3
		14	6	17
Second Semester				
ENGL 2311	Technical Communications	3	0	3
PTAC 2434 or	Industrial Processes	3	2	4
CTEC 2480	Cooperative Education-Process Technology	1	21	4
*PTAC 2438	Process Technology III (Operations)	3	2	4
PTAC 2446	Process Troubleshooting	3	2	4
Elective	Visual & Performing Arts/Humanities	3	0	3
		13/15	6/25	18

*Capstone Course

Total Credits Required for A.A.S. Process Technology Degree 71

Process Technology Certificate Program

Length: Three Semesters

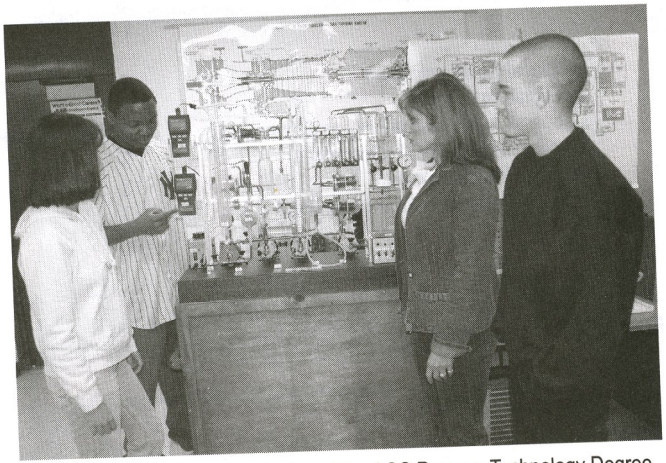
Purpose: The Process Technology certificate level program is designed to prepare students for entry level jobs in the process industries. Time for completion is one-and-one-half years.

Program Requirements: A certificate student will take the following curriculum to achieve the certificate in Process Technology.

Course Number	*Course Title*	*Lecture Hours*	*Lab Hours*	*Credits*
First Semester				
COSC 1401	Microcomputer Applications	3	3	4
CTEC 1401	Applied Petrochemical Technology (Physics)	3	2	4
PTAC 1302	Introduction to Process Technology	2	2	3
SOCI 1301	Principles of Sociology	3	0	3
MATH 1332 or MATH 1314	Contemporary Mathematics I College Algebra	3	0	3
		14	7	17
Second Semester				
BMGT 2303	Problem Solving and Decision Making	3	0	3
ENGL 1301	Composition and Rhetoric I	3	0	3
PTAC 1410	Process Technology I (Equipment)	3	2	4
SCIT 1414	Applied General Chemistry I	3	3	4
		12	5	14
Third Semester				
ENGL 2311	Technical Communications	3	0	3
PTAC 1308	Safety, Health and Environment I	3	1	3
PTAC 1352	Process Instrumentation I	2	2	3
*PTAC 2420	Process Technology II (Systems)	3	2	4
		11	5	13

*Capstone Course

Total Credits Required for Process Technology Certificate 44



100% job placement for graduates of the ACC Process Technology Degree program.

Respiratory Care Degree Program

(281) 756-3658

Degree: Associate Degree of Applied Science (A.A.S.)
Length: 21 months
Purpose: The Respiratory Care Department offers a two-year program that prepares individuals for an allied health specialty in the clinical care and management of respiratory disorders. The graduate will possess advanced, intensive-care skills to assess, monitor and evaluate adult, pediatric and neonatal patients on mechanical ventilation. Respiratory therapists practice in a variety of settings, including intensive care units, neonatal/pediatric special care areas, general hospital floors, emergency/trauma units, extended care and rehabilitation facilities, and the home care environment. Respiratory Care courses consist of classroom, laboratory and supervised hospital experience. Graduates of the associate degree program may become Registered Respiratory Therapists (RRT) by passing the Entry Level Exam and the Advanced Practitioners Exam. Texas, along with many states, requires that respiratory care practitioners obtain a state license to practice respiratory care. The program is affiliated with several community hospitals including Ben Taub, Texas Children's, Memorial-Hermann, UTMB-Galveston and eleven other clinical affiliates.
The program is fully accredited by the Committee on Accreditation for Respiratory Care (CoARC) and the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Admission Requirements:

1. To be considered for admission to the respiratory care program, the applicant must:
   a. be a high school or GED graduate.
   b. make application to ACC and fulfill the admission requirements, including THEA.
   c. make application to the respiratory care program.
   d. submit official transcripts of all previous college work to ACC Registrar's Office.
   e. applicants are required to demonstrate an understanding of the responsibilities and duties of the profession through observation and discussion with a practicing therapist. Contact the director for details.
   f. score 19 or higher on ACT composite or minimum combined math/verbal SAT score of 713 if taken prior to April 1, 1995 or SAT score of 870 if taken prior to April 1, 1995, or complete BIOL 2401 and ENGL 1301 with a grade no lower than a "C" prior to admission in lieu of the ACT/SAT exam.
   g. complete a physical examination form which includes TB skin test, and immunizations upon acceptance to the program and proof of current CPR class "C" for healthcare providers from the American Heart Association.
   h. criminal background check conducted as a condition of full acceptance.
   i. not currently be on suspension or academic probation from ACC or another college or university.
2. Any science or respiratory care course completed more than five years prior to the student being accepted may not satisfy requirements for a degree in respiratory care.
3. Transfer students must complete the following:
   a. meet the above admission criteria.
   b. have a cumulative GPA of 2.0 or higher on all courses being transferred into the respiratory care curriculum.
   c. provide the ACC Registrar's Office with an official transcript from each institution attended.
   d. provide the Respiratory Care Department with a copy of transcript from each institution attended.
   e. provide the Respiratory Care Department with a description and/or syllabus of each course being considered for transfer.
   f. not currently be on suspension or academic probation from another college.
   g. credit will be given for support courses equivalent to those included in the respiratory care program at ACC as determined by examination of the syllabus of the transfer course. A grade of C or higher must have been earned in transfer courses.
   h. Must complete a minimum of 24 semester hours at ACC in order to be considered a graduate.
4. Early entry program starts in May. Regular program begins in August.

Alternate Enrollment:

1. Alternate enrollment applies to those respiratory care personnel who are licensed and have not completed the associate degree.
2. Respiratory care professionals with at least two years' full-time experience in the field will have the opportunity to challenge respiratory care courses. These courses must be challenged in sequence unless permission is otherwise granted by the program director.

Progression Policies:

1. Respiratory care students will abide by the admission and curriculum requirements of the Respiratory Care Department at the time they are admitted or re-admitted to the program.
2. Once a student has enrolled in the respiratory care program, all respiratory care courses must be completed in the proper sequence as shown in the catalog and degree plan, or must have the approval of the program director.
3. No grade below a **C** in a respiratory care or academic course will be acceptable for progression.
4. A student will be terminated from the program if clinical performance is unsatisfactory as determined by the clinical instructor and the program director. This action may be taken at any time during the semester or at the end of the semester.
5. A student who makes a **D** or **F** in any science/respiratory care course may repeat that course once in order to obtain a **C** or better.
6. A student requiring hospitalization or sustaining an injury will be required to obtain a written statement from his/her physician verifying that the health status of the student is adequate for performance in the clinical agency. A student may not be allowed to return to the clinical area if he/she must be on medications which may interfere with the ability to perform satisfactorily.
7. A student who is pregnant must present a physician's statement giving evidence of her ability to perform the work required.
8. Students must complete the program within five years after initial acceptance.

Associate of Applied Science Respiratory Care Degree Program

Course Number	Course Title	Lecture Hours	Lab Hours	Credits
First Year				
First Semester				
BIOL 2401	Anatomy & Physiology I	3	3	4
RSPT 1160	Clinical - Respiratory Therapy Technician	0	6	1
RSPT 1207	Cardiopulmonary Anatomy & Physiology	2	1	2
RSPT 1316	Basic Respiratory Care Procedures II	2	3	3
RSPT 1227	Applied Physics for Respiratory Care	2	0	2
RSPT 1429*	Respiratory Care Fundamentals I	3	3	4
		12	16	16
Second Semester				
BIOL 2402	Anatomy & Physiology II	3	3	4
ENGL 1301	Composition & Rhetoric I	3	0	3
RSPT 1266	Practicum - Respiratory Therapy Technician I	0	16	2
RSPT 1317	Respiratory Care Pharmacology	3	0	3
RSPT 2210	Cardiopulmonary Diseases I	2	1	2
RSPT 2414	Mechanical Ventilation I	3	2	4
		14	22	18
Third Semester				
RSPT 1267	Practicum - Respiratory Therapy Technician II	0	15	2
RSPT 2305	Pulmonary Diagnostics	2	3	3
RSPT 2314	Mechanical Ventilation II	2	2	3
		4	20	8
SECOND YEAR				
First Semester				
BIOL 2420	Microbiology	3	3	4
PHED	Physical Activity	0	3	1
RSPT 1191	Special Topics in Respiratory Therapy	0	4	1
RSPT 2239	Adv Cardiac Life Support	1	4	2
RSPT 2255	Critical Care Monitoring	2	1	2
RSPT 2266	Practicum - Respiratory Therapy Technician III	0	16	2
RSPT 2310	Cardiopulmonary Disease II	2	2	3
		8	33	15
Second Semester				
Elective	Visual & Performing Arts/Humanities	3	0	3
PHED	Physical Activity	0	3	1
PSYC 2301	General Psychology	3	0	3
RSPT 2131	Clinical Simulations for Respiratory Care	0	2	1
RSPT 2135	Pediatric Adv Life Support	0	3	1
RSPT 2166	Practicum - Respiratory Therapy Technician V	0	8	1
RSPT 2267	Practicum - Respiratory Therapy Technician IV	0	18	2
RSPT 2353	Neonatal/Pediatric Cardiopulmonary Care	3	0	3
		9	34	15

Total Credits Required for A.A.S.Respiratory Care 72

* Tech Prep students would take RSPT1101, Introduction to Respiratory Care, and RSPT1338, Respiratory Care Technology I, instead of RSPT1429.

Accounting

Norman Bradshaw, Department Chairperson, Tom Branton

ACCT 2301
Financial Accounting
(3 credits)
This course concentrates on accounting for merchandise operations, proprietorships, partnerships, negotiable instruments, specialized books of original entry, and the voucher system, including emphasis on the financial aspects of accounting. (3 lecture and 1 laboratory hours per week). **[CB5203015125]**

ACCT 2302
Managerial Accounting
(3 credits)
This course provides a study of partnerships corporations, cost accounting, assets, theory, and interpretation of financial statements, with special emphasis on the managerial aspects of accounting. (3 lecture and 1 laboratory hours per week). Prerequisite:ACCT2301. **[CB5203015125]**

Agriculture

Steve Wheeler, Department Chairperson

AGRI 1307
Fundamentals of Crop Production
(3 credits)
This course presents a scientific approach to commonly grown field crops by exploring their importance, value, use, characteristics, classification, distribution, climatic and soil requirements, production, storage, improvement, and seed technology. (3 lecture hours per week). **[CB0204025121]**

AGRI 1319
Animal Husbandry
(3 credits)
This basic course acquaints the student with the production systems, basic facility requirements, and markets for various types and breeds of livestock. The course also presents basic phases of feeding, breeding, disease control, and production of livestock. (3 lecture hours per week). **[CB0202015121]**

Anthropology

Nancey Lobb, Department Chairperson

ANTH 2346 {SOCI}2346
General Anthropology
(3credits)
Following principles of physical and cultural anthropology, this course analyzes the cultures of prehistoric and existing preliterate people and the impact of modern western culture (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4502015125]**

Arts

Dennis LaValley, Department Chairperson

ARTS 1301
Art Appreciation
(3 credits)
This general course in Art Appreciation is open to all college students. It includes critical evaluation of selected works of painting, sculpture, architecture, and industrial design and a study of the principles of design from a layman's standpoint and of art in relation to everyday life. (3 lecture hours per week). Prerequisites: ENGL 0310 and READ 0310. **[CB5007035130]**

ARTS 1303
Art History I
(3 credits)
This course includes a critical and analytical study of the great historical works of art in architecture, sculpture, painting, and the minor arts from pre-historic times through the medieval period. (3 lecture hours per week). Prerequisites: ENGL 0310 and READ 0310.
[CB5007035230]

ARTS 1304
Art History II
(3 credits)
This course provides a critical and analytical study of the great historical works of art in architecture, sculpture, painting, and the minor arts from the medieval period to contemporary art. (3 lecture hours per week). Prerequisites: ENGL 0310 and READ 0310. **[CB5007035230]**

ARTS 1311
Design I
(3 credits)
This course familiarizes the student with the basic elements and fundamentals of two-dimensional design and their application to works of art. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. (3 lecture & 3 lab hours per week). **[CB5004015330]**

ARTS 1312
Design II
(3 credits)
This course provides the student with a knowledge of the application of design principles to three-dimensional work. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. (3 lecture & 3 lab hours per week). **[CB5004015330]**

ARTS 1316
Drawing I
(3 credits)
This beginning course investigates a variety of media, techniques, and subjects and explores descriptive and perceptual possibilities of drawing. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects.
(3 lecture & 3 lab hours per week) **[CB5007055230]**

ARTS 1317
Drawing II
(3 credits)
This course is an expansion of the concepts presented in Drawing I, and it stresses the expressive and conceptual aspects of drawing in various media. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. (3 lecture & 3 lab hours per week). Prerequisite: ARTS 1316 **[CB5007055230]**

ARTS 2316
Painting I
(3 credits)
This course explores the potentials of various painting media with stress on color and composition. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. (3 lecture & 3 lab hours per week). **[CB5007085230]**

ARTS 2317
Painting II
(3 credits)
This course is an expansion of the concepts presented in Painting I with unrestricted subject matter. In addition to scheduled class hours, students should arrange three additional hours per week to paint. (3 lecture & 3 lab hours per week). Prerequisite: ARTS 2316. **[CB5007085230]**

ARTS 2326
Sculpture I
(3 credits)
This course provides students with experience in sculpture in clay, wood, and found object materials. Art majors are expected to take a sculpture course. Students should arrange three additional hours per week to work in sculpture.(3 lecture & 3 lab hours per week) **[CB5007095126]**

ARTS 2327
Sculpture II
(3 credits)
This course provides students with experience in sculpture in clay, wood, and found object materials. It is an expansion of the concepts presented in Sculpture I. Students should arrange three additional hours per week to work in sculpture. (3 lecture & 3 lab hours per week) **[CB5007095126]**

ARTS 2333
Printmaking I
(3 credits)
This course introduces students to printmaking techniques and principles. The student will explore woodcut, etching, dry point, monoprint and linocut methods. In addition to scheduled class hours, students should arrange three additional hours per week to work on projects. (3 lecture & 3 lab hours per week) **[CB5007105126]**

ARTS 2334
Printmaking II
(3 credits)
This course is an extension of Printmaking I with the enclusion of serigraphy and lithography. In addition to scheduled class hours, students should arrange three additional hours per week to work on projects. (3 lecture & 3 lab hours per week) **[CB5007105126]**

ARTS 2341
Art Metals I
(3 credits)
This course explores various methods of metal fabrication with an emphasis on jewelry making. The principles of two and three dimensional design are given careful consideration. The history and contemporary trends of art metals are examined. (3 lecture & 3 lab hours per week) **[CB5007135126]**

ARTS 2342
Art Metals II
(3 credits)
This course is a continuation of Art Metals I: It explores metal fabrication, jewelry making, history and contemporary trends. Prerequisite: ARTS 2341. (3 lecture & 3 lab hours per week). **[CB5007135126]**

ARTS 2346
Ceramics I
(3 credits)
This course includes an introduction to hand building processes and glaze application. Students learn to use the potter's wheel with emphasis on individual expression. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. (3 lecture & 3 lab hours per week) **[CB5007115130]**

ARTS 2347
Ceramics II
(3 credits)
This course includes the combining of hand building and wheel thrown objects. Students learn the techniques of section pottery throwing. In addition to glaze application and kiln firing, Raku pottery will be introduced. Students should arrange at least three additional hours per week. (3 lecture & 3 lab hours per week) Prerequisite: ARTS 2346. **[CB5007115130]**

ARTS 2348
Digital Art I
(3 credits)
This course includes an introduction to the processes and techniques of advertising art. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. (3 lecture & 3 lab hours per week) **[CB5004025126]**

ARTS 2349
Digital Art II
(3 credits)
This course is an advanced study of advertising art and production. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. (3 lecture & 3 lab hours per week) **[CB5004025126]**

ARTS 2356
Photography I
(3 credits)
This course introduces the student to the fundamental elements of black & white techniques, knowledge of chemistry, and presentation skills with an emphasis on design, history and contemporary trends as a means of developing an understanding of photographic aesthetics. (3 lecture & 3 lab hours per week) **[CB5006055130]**

ARTS 2357
Photography II
(3 credits)
This course builds upon the techniques and concepts presented in Photography I and focuses on continued development of printing and developing skills with emphasis placed on the development individual expression. (3 lecture & 3 lab hours per week) Prerequisite: ARTS 2356 **[CB5005025230]**

ARTS 2366
Watercolor I
(3 credits)
Students explore the watercolor medium as a means of artistic expression through interpretation of still life, landscape, and figure subjects. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. (3 lecture & 3 lab hours per week) **[CB5007085330]**

ARTS 2367
Watercolor II
(3 credits)
This course presents a deeper exploration in the field of the watercolor medium as a means of artistic expression through interpretation of still life, landscape, figure, and non-objective approaches. In addition to scheduled class hours, students should arrange three additional hours per week to work on art projects. Prerequisite: ARTS 2366.(3 lecture & 3 lab hours per week) **[CB5007085330]**

ARTS 2377
Studies in Contemporary Art
(3 credits)
This course is an in-depth study of current concerns and practices in the visual arts. (1 lecture and 5 laboratory hours per week). Department chairperson approval required. **[CB50070352130]**

Biology

Steve Wheeler, Department Chairperson
Bill Horine, Dwight Rhodes, John Matula

BIOL1308
Contemporary Biology I
(3 credits)
This course covers fundamental characteristics of living matter from the molecular level to the ecological community. The course stresses basic biological principles relevant to animals. (3 lecture hours per week). Prerequisite: READ 0310. **[CB2601015124]**

BIOL1309
Contemporary Biology II
(3 credits)
This course covers fundamental characteristics of living matter from the molecular level to the ecological community. This course stresses basic biological principles relevant to plants. (3 lecture hours per week). Prerequisite: READ 0310. **[CB2601015124]**

BIOL1406
General Biology I
(4 credits)
An introductory survey of contemporary biology. Topics emphasized will include the chemical basis of life, structure and function of cells, energy transformations, and molecular biology and genetics. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0310. **[CB2601015124]**

BIOL 1407
General Biology II
(4 credits)
An ntroductory survey of current biological concepts. Emphasis will be placed on topics which include evolution, biological diversity, ecology, and comparative structure and function of organisms. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0310. **[CB2601015124]**

BIOL 2306
Environmental Conservation
(3 credits)
This course includes a study of the management of natural resources, the problems caused by population and pollution, the balance of nature, and man's importance in the environment. (3 lecture hours per week). Prerequisite: READ0310, ENGL1301 **[CB0301025124]**

BIOL 2401
Anatomy and Physiology I
(4 credits)
This course includes a study of the structure and function of organ system of the human body. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0310. **[CB2607065124]**

BIOL 2402
Anatomy and Physiology II
(4 credits)
This course continues the study of the structure and function of organ system of the human body. (3 lecture and 3 laboratory hours per week). Prerequisite: BIOL 2401. **[CB2607065124]**

BIOL 2420
Basic Microbiology
(4 credits)
This one-semester course in microbiology stresses the principles and applications of microbial activity, with emphasis given to the bacterial types. This course stresses the role of micro-organisms in disease, ecology, sanitation, industry, and public health as well as considering sterilization techniques, pure culture techniques, and other aspects of microbial control. Basic Microbiology is recommended for students in biology, pre-med, pre-dental, nursing, and related medical fields. (3 lecture and 3 laboratory hours per week). Prerequisites: EITHER BIOL1408, or BIOL 1409, or BIOL 2401, or BIOL 2402. **[CB2605015124]**

Business Administration

Norman Bradshaw, Department Chairperson

BUSI 1301
Introduction to Business
(3 credits)
An overview of the American system of free enterprise, this course concentrates on business and its environment, organization and management of the enterprise, management of human resources, production, marketing, and finance. Primary emphasis is placed on the way American businesses work, what they can do well, and what they do poorly. (3 lecture hours per week). **[CB5201015125]**

BUSI 2301
Business Law I
(3 credits)
This course covers the principles of law which form the legal framework for business activities. (3 lecture hours per week).
[CB2201015125]

BUSI 2302
Business Law II
(3 credits)
This course explores the role of law in business and society, government regulations of business and legal reasoning, source of law, social policy and legal institutions, antitrust, and other laws affecting business. (3 lecture hours per week). **[CB22010151225]**

Chemistry

William R. Bitner, Department Chairperson
Betty Graef

CHEM 1405
Introductory Chemistry I
(4 credits)
Topics covered in this course include atomic-molecular theory, valence, oxidation numbers, formulae, chemical equations, gas laws, and solutions. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0310.
[CB4005015139]

CHEM 1407
Introductory Chemistry II
(4 credits)
This course surveys organic and biochemistry, and it may include polymer chemistry and heterocyclic. (3 lecture and 3 laboratory hours per week). Prerequisite: CHEM 1405. **[CB4005015139]**

CHEM 1411
General Chemistry and Analysis I
(4 credits)
The topics presented in this course include atomic structure, the periodic classification, the gas laws, reactions involving oxygen and hydrogen, solutions of electrolytes, ionization, and acids, bases, and salts. (3 lecture and 4 laboratory hours per week). Prerequisites: READ 0310 and MATH 0310.
[CB4005015203]

CHEM 1412
General Chemistry and Analysis II
(4 credits)
The topics presented in this course include oxidation-reduction, the chemistry of the common elements and their compounds, coordination chemistry, and electro-chemistry. This course also emphasizes the qualitative analysis of the common cations and anions using semi-micro techniques in the laboratory and the study of systems involving chemical equilibria. (3 lecture and 4 laboratory hours per week). Prerequisite: CHEM 1411. **[CB4005015203]**

CHEM 2401
Quantitative Analysis
(4 credits)
This course emphasizes the fundamental principles of quantitative analysis. Students make determinations involving gravimetric and volumetric methods and carry out acid-base titration. Students use some of the more modern techniques, including spectrophotometric and electroanalytical procedures (2 lecture and 6 laboratory hours per week). Prerequisite: CHEM 1412.
[CB4005025139]

CHEM 2423
Organic Chemistry I
(4 credits)
This course covers general principles and theories of elementary organic chemistry, with special emphasis on characteristics, structures, preparation, reactions, and nomenclature of hydrocarbons, alkyl halides, alcohols, phenols and ethers. (3 lecture and 4 laboratory hours per week). Prerequisite: CHEM 1412. **[CB4005045239]**

CHEM 2425
Organic Chemistry II
(4 credits)
This course covers general principles and theories of elementary organic chemistry, with special emphasis on characteristics, structures, preparation, reactions, and nomenclature of aldehydes, ketones, carboxylic acids, and amines. This course also covers stereochemistry and some elementary concepts in biochemistry. (3 lecture and 4 laboratory hours per week). Prerequisite: CHEM 2423. **[CB4005045239]**

Child Development / Early Childhood

Sandra Horine, Department Chairperson

CDEC 1270
Early Childhood Games and Recreation
(2 credits)
An introduction to the fundamental principles of child development through physical activity, this course explores physical activities appropriate to motor development and movement education. (1 lecture and 2 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0708]**

CDEC 1313
Curriculum Resources for Early Childhood Programs
(3 credits)
A study of the fundamentals of curriculum design and implementation in developmentally appropriate programs for children. The student will define developmentally appropriate practices; describe the process of child-centered curriculum development; and develop guidelines for creating developmentally appropriate indoor and outdoor learning environments. The student will apply an understanding of teacher roles in early childhood classrooms; prepare a developmentally appropriate schedule including routines and transitions; and select, plan, implement, and evaluate developmentally appropriate learning experiences for children. (3 lecture hours per week). Corequisite: READ 0309. **[CIP19.0709]**

CDEC 1317
Child Development Associate Training I
(3 credits)
Based on the requirements for the Child Development Associate National Credential (CDA). Topics on CDA overview, general observation skills, and child growth and development overview. The four functional areas of study are creative, cognitive, physical, and communication. The student will identify methods to advance physical and intellectual competence; describe the CDA process, develop general observation skills and summarize basic child growth and development; utilize skills in writing, speaking, teamwork, time management, creative thinking, and problem solving. (3 lecture and 2 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0709]**

CDEC 1319
Child Guidance
(3 credits)
An exploration of guidance strategies for promoting prosocial behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement and cultural influences. Practical application through direct participation with children. The student will summarize theories related to child guidance; explain how appropriate guidance promotes autonomy, self-discipline and life-long social skills in children; recognize the importance of families and culture in guiding children; and promote development of positive self-concept and prosocial behaviors in children. The student will apply appropriate guidance techniques to specific situations relating to children's behaviors and demonstrate skills in helping children resolve conflicts. (3 lecture and 1 laboratory hour per week). Corequisite: READ 0309. **[CIP19.0709]**

CDEC 1321
The Infant and Toddler
(3 credits)
A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality caregiving routines, appropriate environments, materials and activities, and teaching/guidance techniques. The student will summarize prenatal development and the birth process; discuss theories of development as they apply to infants and

toddlers; outline growth and development of children from birth to age 3; analyze components of quality infant/toddler caregiving and elements of appropriate indoor and outdoor environments. The student will provide developmentally appropriate materials and activities and use developmentally appropriate teaching/guidance techniques. (3 lecture hours per week). Corequisite: READ 0309. **[CIP19.0709]**

CDEC 1356
Emergent Literacy for Early Childhood
(3 credits)
An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based integrated curriculum. The student will define literacy and emergent literacy; analyze various theories of language development; and describe the teacher's role in promoting emergent literacy. The student will create literacy environments for children; and select and share appropriate literature with children. (2 lecture and 3 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0706]**

CDEC 1358
Creative Arts for Early Childhood
(3 credits)
An exploration of principles, methods, and materials for teaching children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking. The student will define the creative process; describe the role of play in a child's growth and development and developmental sequences for creative arts; analyze teacher roles in enhancing creativity; describe concepts taught through the creative arts and components of creative environments. The student will plan, implement, and assess child-centered activities for music, movement, visual arts, and dramatic play. (2 lecture and 3 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0709]**

CDEC 1359
Children With Special Needs
(3 credits)
A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role, and legislative issues. The student will summarize causes, incidences and characteristics of exceptionalities related to the domains of development; discuss current terminology and practices for intervention strategies; identify appropriate community resources and referrals for individual children and families; review legislation and legal mandates and their impact on practices and environments; explain the role of advocacy for children with special needs and their families. The student will use various types of materials and resources, including current technology, to support learning in all domains for all children. (3 lecture hours per week). Corequisite: READ 0309. **[CIP19.0709]**

CDEC 1384
Cooperative Ed. In Child Development I
(3 credits)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student will, as outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry. (1 lecture and 20 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0706]**

CDEC 2307
Math and Science for Early Childhood
(3 credits)
An exploration of principles, methods, and materials for teaching children math and science concepts through discovery and play. The student will relate the sequence of cognitive development to the acquisition of math and science concepts and describe the scientific process and its application to the early childhood indoor and outdoor learning environments. The student will develop strategies which promote thinking and problem-solving skills in children; utilize observation and assessment as a basis for planning discovery experiences for the individual child; and create, evaluate, and/or select developmentally appropriate materials, equipment and environments to support the attainment of math and science concepts. (2 lecture and 3 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0709]**

CDEC 2322
Child Development Associate Training II
(3 credits)
A continuation of the study of the requirements for the Child Development Associate National Credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance. The student will explain methods to establish and maintain a safe, healthy learning environment, describe ways to support social and emotional development, and describe techniques used to provide positive guidance. The student will utilize skills in writing, speaking, problem solving, time management, and record keeping. (1 lecture and 8 laboratory hours per week). Corequisite: **READ** 0309. **[CIP19.0709]**

CDEC 2324
Child Development Associate Training III
(3 credits)
A continuation of the study of the requirements for the Child Development Associate National Credential (CDA). Three of the 13 functional areas of study include family, program management, and professionalism. The student will describe methods to establish positive and productive relationships with families; explain methods to ensure a well-run, purposeful program responsive to participant needs; and identify how to maintain a commitment to professionalism; utilize skills in writing, speaking, problem-solving, time management, and record keeping. (1 lecture and 8 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0709]**

CDEC 2384
Cooperative Ed. In Child Development II
(3 credits)
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. The student will, as outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry. (1 lecture and 20 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0706]**

CDEC 2426
Administration of Programs for Children I
(4 credits)
A practical application of management procedures for early child care education programs, including a study of planning, operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication. The student will analyze the planning functions; evaluate the operational functions and interpret the supervisory functions of an administrator. The student will summarize the evaluation of functions in an early care and education program and explore methods of effective communication and utilize skills in speaking, writing, computation, and computer utilization. (3 lecture and 2 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0708]**

CDEC 2428
Administration of Programs for Children II
(4 credits)
An in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis and planning parent education/partnerships, and technical applications in programs. The student will discuss codes of conduct; describe communication skills needed in effectively administering an early care and education program; discuss the importance of parent education/partnerships in early care and education programs; explain the administrator's role in advocacy; describe personnel management skills necessary to administer programs; explain legal issues which impact programs; evaluate fiscal responsibilities of an administrator; and examine current technology and issues in early care and education administration. The student will utilize skills in speaking, writing, computation, and computer utilization. (3 lecture and 2 laboratory hours per week). Corequisite: READ 0309. **[CIP19.0708]**

EDUC 1301
Introduction to the Teaching Profession
(3 credits)
An enriched integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields; provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations; provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms; and includes 16 hours of field-experience activities in P-12 schools. Prerequisite: ENGL 0310, READ 0310. **[CB1301015109]**

EDUC 2301
Introduction to Special Populations
(3 credits)
An enriched integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic, and academic diversity and equity with an emphasis on factors that facilitate learning; provides students with opportunities to participate in early field observations of P-12 special populations; and includes 16 hours of field-based activities, which must be with special populations in P-12 schools. (3 lecture hours per week). Prerequisite: EDUC 1301, ENGL 0310, READ 0310. **[CB13.1001.5109]**

TECA 1303
Family, School and Community
(3 credits)
A study of the child, family, community, and schools, including parent education and education and involvement, family and community lifestyles, child abuse, and current family life issues. Requires students to participate in field experiences of 16 hours with children from infancy through age 12 in a variety of settings with varied and diverse populations. (3 lecture hours per week). Prerequisite: ENGL 0310, READ 0310. **[CB1907015109]**

TECA 1311
Educating Young Children
(3 credits)
An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities, and current issues. Requires students to participate in field experiences of 16 hours with children from infancy through age 12 in a variety of settings with varied and diverse populations. (3 lecture hours per week). Prerequisite: ENGL 0310, READ 0310. **[CB1907085109]**

TECA 1318
Wellness of the Young Child
(3 credits)
A study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness, and safety practices. Focus on local and national standards and legal implications of relevant policies and regulations. Requires students to participate in field experiences of 16 hours with children from infancy through age 12 in a variety of settings with varied and diverse populations. (3 lecture hours per week). Prerequisite: ENGL 0310, READ 0310. **[CB1907085209]**

TECA 1354
Child Growth and Development
(3 credits)
A study of the principles of normal child growth and development from conception to adolescence. Focus on physical, cognitive, social, and emotional domains of development. The student will summarize principles of growth and development and developmental processes on early childhood practices and types and techniques of observation; and explain the importance of play. The student will demonstrate skills in practical application of developmental principles and theories, observation techniques and recognition of growth and developmental patternsn. (3 lecture hours per week). Corequisite: ENGL 0310, READ 0310. **[CB1907065209]**

Communications

Cathy Forsythe, Department Chairperson
William C. Lewis, Mark Moss

COMM 1335
Survey of Radio and TV
(3 credits)
This course presents a survey of the broadcasting industry. It includes discussion of historical highlights, technical developments, and regulation of radio and television, and it explains the operation of the radio and TV equipment. The course also covers radio and television programming, cable TV, and new electronic media. (3 lecture hours per week). **[CB0904035226]**

COMM 1336
Television Production I
(3 credits)
A practical approach to the presentation of commercials, news, and live programs as encountered in the daily opeeration of commercial TV stations. This course gives basic instruction in camera work, video and autio control, and editing. (2 lecture and 3 lab hours per week).
[CB0907010079]

COMM 1337
Television Production Workshop
(3 credits)
This course continues instruction in camera work, video, and editing. Students will actually produce public affairs/news oriented shows for broadcast on local cable TV station. (2lecture and 3 lab hours per week). Prerequisite: COMM 1336
[CB0907010079]

COMM 2303
Basic Radio Production
(3 credits)
This course presents a practical approach to the presentaton of announcements and live programs as encountered in the daily operation of the average radio station. The course begins with instruction in audio control and utilizes production facilities at the college radio station. (2 lecture and 2 lab hours per week). **[CB1002025106]**

COMM 2311
Writing for Mass Media
(3 credits)
This course provides an introduction to the fundamentals of the writing and fact-gathering stills of journalism, advertising, and public relations for print and electronic media. Students create and write effective commercials and public service announcements for radio and TV. (3 lecture hours per week). Prerequisites: ENGL 0310 and READ 0310
[CB 0904015706]

COMM 2314
Advanced Radio Production
(3 credits)
In this course, the student utilizes skills mastered in COMM 2301, and assists in the production of underwriting announcements, music beds and editing projects to be aired on the College radio Station. (2 lecture and 3 lab hours per week).
[CB0907010079]

COMM 2331
Radio & Television Announcing
(3 credits)
This speech couse specifically addresses broadcast journalism, giving students and actual on air training for news anchoring, commercial work, on-camera interviews, and field reporting. The course will analyze the trends of broadcasting and provide practical experience. (3 lecture hours per week).
Prerequisite: READ 0130
[CB0907015406]

COMM 2366
Introduction to Film
(3 Credits)
This course focuses on the analysis of the visual and aural aspects of selected motion pictures. Dramatic aspects of narrative films, historical growth of the film indistry and the sociological impact of film as an art will also be studied. Consideration will be given to the technical production achievements and techniques used by the motion picture industry. (2 lecture hours and discussion and a 2-hour laboratory viewing session with discussion per week).

MRKG 1313
Public Relations
(3 credits)
Exploration of theories, techniques, and processes of public relations including means of influencing methods of building good will, analysis of media, obtaining publicity, and implementation of public relations programs. (3 Lecture hours per week).
[CIP521401]

MUSC 1327
Audio Engineering I
(3 credits)
An overview of the modern recording studio and related personnel. Topics include basic studio electronics and acoustic principles, waveform analysis, microphone concepts and miking techniques, studio set up and signal flow, recording console theory, signal processing concepts, tape machine principles and operation, and an overview of mixing and editing. (2 lecture and 4 lab hours per week). **[CIP10.0199]**

MUSC 2427
Audio Engineering II
(4 credits)
A continuation of Audio Engineering I with emphasis on implementation of the techniques and theories of the recording process. Topics include applications on microphones, the audio console, the multitrack tape recorder and signal processing devices in recording session environments. (2 lecture and 4 lab hours per week) **[CIP10.0199]**

MUSC 2447
Audio Engineering III
(4 credits)
Presentation of advanced procedures and techniques utilized in recording and manipulating audio information. Topics include advanced computer-based console automation, hard disk based digital audio editing, nonlinear digital multitrack recording and advanced engineering project completions. (2 lecture hours and 4 lab hours per week)
[CIP10.0199]

RTVB 1301
Broadcast News Writing
(3 credits)
Instruction in the writing and organization of news copy. Topics include proper style and format used for broadcast news scripts, organization of newscasts, use of Teleprompters and computerized news editing systems. Students will experience the creation of newscasts for live, on-air broadcasts. (2 lecture and 4 lab hours per week) **[CIP09.0701]**

RTVB 1317
Survey of Electronic Media
(3 credits)
A survey of the broadcast and cable industry. Topics include the history of the broadcast and cable industries, operation of radio and TV stations, cable facilities, programming practices of radio stations and FCC organization and regulatory activity. Also includes career opportunities in broadcasting and cable and the impact of the new media. Historical lessons from the various media forms will be analyzed. (3 Lecture hours per week) **[CIP09.0701]**

RTVB 1325
TV Studio Production
(3 credits)
A study of basic television production as it applies to live and taped studio programming. Topics include studio camera operation, television audio and television directing with an emphasis on underlying principles of video technology. The course will examine the essential elements necessary for editing videotape. (2 lecture and 4 lab hours per week)
[CIP09.0701]

RTVB 1329
Writing for Electronic Media
(3 credits)
An introduction to the writing of commercials, public service announcements, promos, news documentaries, and other broadcast and film materials. Emphasis on the format and style of each type of writing and development of a professional writing style. (2 lecture and 4 lab hours per week) Prerequisite: READ 0309, ENGL 0309 **[CIP09.0701]**

RTVB 1355
Radio and Television Announcing
(3 credits)
An introduction to radio and TV announcing emphasizing the development of skills including voice quality, articulation, enunciation, and pronunciation. Topics include typical announcing types such as news, sports, commercial and disc jockey and a survey of the fields of radio and TV announcing. (2 lecture and 4 lab hours per week) **[CIP09.0701]**

RTVB 1380, 1381, 2380, 2381
Cooperative Education - Radio/TV Broadcasting
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture and 20 lab hours per week) **[CIP09.0701]**

RTVB 1391
Special Topics in Radio and Television Broadcasting
(3 credits)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (2 lecture and 4 lab hours per week) **[CIP09.0701]**

RTVB 1409
Audio/Radio Production I
(4 credits)
An introduction to the concepts and techniques of sound productions including mixing, recording, and editing techniques. (2 lecture and 6 lab hours per week) **[CIP09.0701]**

RTVB 1421
TV Field Production
(4 credits)
A study of the pre-production, production and post-production techniques involved in field television production. Elements include field camera setup and operation, field audio, television directing, and in-camera or basic continuity editing with an emphasis on underlying principles of video technology. Basic videotape editing will be utilized in the construction of news-style video packages. Non-linear editing concepts and applications will be examined.
(2 lecture and 6 lab hours per week) **[CIP09.0701]**

RTVB 1445
Broadcast Engineering
(4 credits)
Instruction in the basics of engineering video productions including the basic alignment/ adjustment of cameras, test equipment, storage devices, and other studio equipment. Also includes basic system design and construction and digital standards for broadcast, cable, satellite, and network distribution. (3 lecture hours and 3 lab hours per week) **[CIP10.0104]**

RTVB 2335
TV Production Workshop I
(3 credits)
Study of advanced application and design of video productions in location or studio shoots with real deadlines and quality control restrictions. Students will produce programming for KACC-TV. (2 lecture and 4 lab hours per week) **[CIP09.0701]**

RTVB 2339
Broadcast Sales
(3 credits)
Instruction in sales methods, audience measurement, demographics, station promotion, advertising and public relations. (2 lecture and 4 lab hours per week) Prerequisites: READ 0310, ENGL 0310 **[CIP09.0701]**

RTVB 2431
Audio Radio Production III
(4 credits)
Presentation of advanced concepts in audio/radio recording and editing. Topics include digital editing, sound processing systems, and multi-track mixdown recording techniques. (2 lecture and 6 lab hours per week) **[CIP09.0701]**

Computer Science

Gerald Pullen, Department Chair
Thomas Magliolo, Richard Melvin

It is the responsibility of all students taking a computer science internet course(s) to contact their instructor(s) at the beginning of the semester.

In the COSC 1401, internet course, it is necessary for students to use the same textbook and software version that is being used at Alvin Community College Computer Science Department. This allows students to locate correct assignments and examples. Internet students taking a computer science course have access to the computer laboratories when space is available.

In internet programming courses, it is recommended that students use the same software that is used at ACC. The student accepts the responsibility of installing the necessary software and creating the necessary files. Internet students taking a computer science programming course have access to the laboratories when space is available.

BCIS 1405
Business Computer Applications
(4 credits)
This course contains an overview of computer concepts, computer vocabulary, and microcomputer applications. The course requires the use of a microcomputer (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CB5212025227]**

BCIS 1420
Introductory C Programming
(4 credits)
Introduction to business programming techniques. Includes structured programming methods, designing customized software applications, testing documentation, input specification, and report generation. (3 lecture and 3 lab hours per week). Prerequisite: READ 0309 and MATH 0310. **[CB52120225227]**

BCIS 1431
Programming in Visual Basic
(4 credits)
Introduction to business programming techniques. Includes structured programming methods, designing customized software applications, testing documentation, input specification, and report generation. (3 lecture and 3 lab hours per week). Prerequisite: READ 0309 and MATH 0310. **[CB52120225227]**

BCIS 2431
Advanced Programming Visual Basic
(4 credits)
Further applications of business programming techniques. Advanced topics may include varied file access techniques, system profiles and security, control language programming, data validation program design and testing, and other topics not normally covered in an introductory information systems programming course. (3 lecture and 3 lab hours per week). Prerequisites: READ 0309, MATH 1314 and BCIS 1431. **[CB52120225227]**

COSC 1401
Microcomputer Applications
(4 credits)
This course contains an overview of computer concepts, computer vocabulary, and microcomputer applications. The course requires the use of a microcomputer. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CB1101015227]**

COSC 1415
Fundamentals of Programming - Java
(4 credits)
Introduction to computer programming. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files. (3 lecture and 3 laboratory hours per week. Prerequisite: READ 0309 and MATH 0310. **[CB52120225227]**

COSC 1418
Pascal Programming
(4 credits)
Introduction to computer programming using Pascal. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input-output devices, and files. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309 and MATH 0309 **[CB1102015227]**

COSC 1420
Computer Programming -- C++
(4 credits)
Emphasis on the fundamentals of structured design with development, testing, implementation, and documentation. Includes language syntax, data, input/output devices, and files. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309, COSC 1418 or equivalent, MATH 0312. Corequisite: MATH 1314 **[CB1102015227]**

COSC 1430
Computer Programming
(4 credits)
Introduction to computer programming in various programming languages. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language systax, data and file structures, input/output devices, and disks/files. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309 and MATH 0310. **[CB1102015227]**

COSC 2315
Data Structures
(3 credits)
This course is an introduction to data structures and algorithm development. Topics include: arrays, records, linked list, stacks, queues, binary trees, sorting, and searching. (3 lecture hours per week). Prerequisite: READ 0309 and ITSE1410. **[CB1102015327]**

COSC 2420
Advanced Computer Programming - C++
(4 credits)
Topics include object-oriented programming, dynamic memory allocation, classes, function overloading, inheritance, polymorphism, streams, templates, exception handling. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309 and COSC 1420. **[CB1102015327]**

CPMT 1411
Introduction to Computer Maintenance
(4 credits)
This course is an introduction to the various components that make up a microcomputer system. The student will identify and learn the operation of the individual modules and assemble and connect them to create a complete microcomputer system. In addition, the student will also learn the evolution of the microprocessor and microprocessor bus systems. (3 lecture and 3 laboratory hours per week). **[CIP15.0402]**

CPMT 2445
Computer System Troubleshooting
(4 credits)
This course teaches the principles and practices involved in troubleshooting hardware and software problems in computer systems. The student will be aided by advanced diagnostic test programs and specialized test equipment that can give information on a specific troubleshooting technique to use. (3 lecture and 3 laboratory hours per week). Prerequisite: CETT 1425, CPMT 1411. **[CIP15.0402]**

IMED 1416
Web Page Design 1
(4 credits)
Instruction in web page design and related graphic design issues including mark-up languages, web sites, and browsers. (3 lecture and 3 laboratory hours per week) Prerequisite: READ 0309 **[CIP10.0101]**

ITMC 1319
Installing and Administering Microsoft Windows Server Operating Systems
(3 credits)
An introduction to Microsoft Windows server operating system in a single domain environment. Topics include basic installation, configuration tasks, and day-to-day administration tasks in a Windows based network. (2 lecture and 2 laboratory hours per week). Prerequisite ITNW 1321 or ITNW 1325. **[CIP11.0901]**

ITMC 1341
Implementing MS Windows Professional and Server
(3 credits)
This course provides students with the knowledge and skills necessary to install and configure Windows Professional on stand-alone computers, and on client computers that are part of a workgroup or domain. In addition, this course provides the skill and knowledge necessary to install and configure Windows Server to create file and print servers. (2 lecture and 2 laboratory hours per week). Prerequisite ITMC 1301. **[CIP11.0901]**

ITMC 1342
Implementing MS Windows Networking Infrastructure
(3 credits)
This course provides students with the skills necessary for configuring, installing, managing and supporting a network infrastructure that uses the Windows server family of products. Skills covered include automating IP address assignment using DHCP, implementing name resolution using DNS and WINS, configuring and supporting remote access to a network, configuring network security using public key infrastructure, integrating the network services in Windows , and deploying Windows Professional using remote installation services. (2 lecture and 2 laboratory hours per week). Prerequisite ITMC 1341. **[CIP11.0901]**

ITMC 1343
Implementing and Administering MS Directory Services
(3 credits)
This course provides students with the knowledge and skills necessary to install, configure, and administer the Windows Active Directory service. This course also focuses on implementing Group Policy, and understanding the Group Policy tasks required to centrally manage users and computers. Skills covered also include configuring the DNS server service to support Active Directory, creating and administering user accounts and group resources, delegating and administrative control of Active Directory objects, managing replication of Active Directory, and maintaining and restoring the database of Active Directory. (2 lecture and 2 laboratory hours per week). Prerequisite ITMC 1342. **[CIP11.0901]**

ITMC 1358
Supporting Microsoft Windows Client Network Operating Systems
(3 credits)
Skill development for customizing, configuring, supporting, and troubleshooting Windows. Identify

the features of Windows network operating systems; configure the Windows environment using Control Panel and Registry Editor; configure and manage disk storage; configure network protocols and configure network services. Plan and implement Active Directory in a single tree environment; plan and support group policies; configure a remote access server and client; support Dial Up Networking; troubleshoot the boot process and publish and assign applications. Deploy Windows unattended installation; monitor and optimize system performance and develop and implement a plan for preventing data loss. (2 lecture and 2 laboratory hours per week) Prerequisite: ITNW 1321 or ITNW 1325. **[CIP11.0901]**

ITMC 2330
Updating Support Skills for Microsoft Windows
(3 credits)
Provides Microsoft Windows support professionals with the knowledge and skills necessary to support newer versions of Microsoft Windows. Introduce and install new versions of Windows; explore, implement, and administer directory system; manage software and desktop environments; manage file resources; and install and configure terminal services. Configure remote access; support DHCP and WINS; perform disk management; and implement disaster protection. Prerequisite ITMC 1341. **[CIP11.0901]**

ITMC 2331
Designing Microsoft Windows Directory Services Infrastructure
(3 credits)
This course provides students with the knowledge and skills necessary to design a Microsoft Windows directory services infrastructure. Strategies are presented to assist the student in identifying the information technology needs of an organization, so the student may then design the Active Directory structure that meets those needs. Specific skills include design of a naming strategy for Active Directory, design of a schema policy, design of Active Directory to support Group Policies, design of an Active Directory domain, design of a multiple domain structure, and design of an Active Directory infrastructure. (2 lecture and 2 laboratory hours per week). Prerequisite ITMC 1343. **[CIP11.0901]**

ITMC 2332
Designing a Microsoft Windows Networking Service Infrastructure
(3 credits)
This course provides students with the knowledge and skills necessary to create a networking services infrastructure design that supports the required network applications. Topics covered include DHCP, OSPF, RIP, and Internet Group Management Protocol. Skills covered include design of a networking services foundation, designing Internet connectivity solutions, designing extranet connectivity solutions, design and creation of an integrated network services infrastructure, and design of networking services to support applications. (2 lecture and 2 laboratory hours per week). Prerequisite ITMC 1343. **[CIP11.0901]**

ITMC 2333
Designing a Secure Microsoft Windows Network
(3 credits)
This course provides students with the knowledge and skills necessary to design a security framework for small, medium and enterprise networks using Microsoft Windows technologies. Specific skills include providing secure access to local network users, providing secure access to remote users and remote offices, providing secure access between private and public networks, and providing secure access to partners. (2 lecture and 2 laboratory hours per week). Prerequisite: ITMC 1343. **[CIP11.0901]**

ITMC 2334
Designing a Microsoft Windows Upgrade Strategy
(3 credits)
Topics cover the knowledge and skills necessary to select and design a strategy to migrate from Microsoft Windows NT Server directory services infrastructure to a Microsoft Windows Active Directory service by describing the planning processes and implications involved. (2 lecture and 2 laboratory hours per week). Prerequisite: ITMC 2331 **[CIP11.0901]**

ITMC 2355
Deploying & Managing Microsoft Internet Security & Acceleration Server
(3 credits)
Advanced concepts of deploying and managing Microsoft Internet Security and Acceleration (ISA) Server in an enterprise environment. Explain the use of ISA Server as a cache server and as an enterprise firewall; Install and configure ISA Server as a cache server and as a firewall; configure access policies to enable secure internet access for client computers; configure ISA Server as a cache server; configure ISA Server as a virtual private network (VPN); configure ISA Server as a firewall; configure access to selected internal resources; monitor ISA Server activities by using alerts, logging, reporting, and real-time monitoring; install and configure ISA Server for an enterprise environment. (2 lecture and 2 laboratory hours per week) Prerequisite ITMC 1342 **[CIP11.0901]**

ITMC 2371
Managing a Microsoft Network
(3 credits)
This course is designed to teach strategies for Microsoft Windows network management to individuals who desire to learn about this topic as well as those who wish a review course for the Microsoft Certification Exam #70-218.
(2 lecture and 2 laboratory hours per week). Prerequisite ITMC 1342. **[CIP11.0901]**

ITNW 1321
Introduction to Networking
(3 credits)
Introduction to the fundamentals, basic concepts, and terminology of networks. Topics include the access and use of the Internet and networking hardware and software, including current developments in networking. (2 lecture and 2 laboratory hours per week).**[CIP11.0901]**

ITNW 1325
Fundamentals of Networking
(3 credits)
Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. (2 lecture and 2 laboratory hours per week). **[CIP11.0901]**

ITNW 2321
Networking with TCP/IP
(3credits)
Set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems. Configure IP addressing and routing; design and implement a domain name server; implement static and dynamic IP addressing; explain subnets and supernets; and use network management utilities to manage and troubleshoop IP networks. (2 lecture and 2 laboratory hours per week). Prerequisite: ITNW 1321 or ITNW 1325.**[CIP11.0901]**

ITSE 1407
Introduction to C++ Programming
(4 credits)
Introduction to computer programming using C++. Emphasis on the fundamentals of structured design with development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CIP11.0201]**

ITSE 1410
Pascal Programming
(4 credits)
Introduction to computer programming using Pascal. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input-output devices, and files. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CIP11.0201]**

ITSE 1411
Web Page Programming
(4 credits)
Instruction in Internet Web page programming and related graphic design issues including mark-up languages, Web sites, Internet access software, and interactive topics. May include use of HTML, CGI, JAVA, JAVASCRIPT, OR ASP. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309 **[CIP11.0201]**

ITSE 1422
Introduction to C Programming
(4 credits)
Introduction to programming using C. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CIP11.0201]**

ITSE 1431
Introduction to Visual BASIC Programming
(4 credits)
Introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CIP11.0201]**

ITSE1445
Introduction to Oracle SQL
(4 credits)
An introduction to the design and creation of relational databases using Oracle. topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL). (3 hours lecture and 3 laboratory hours per week). Prerequisite: BCIS 1431 or BCIS 1420 or another programming language course. **[CIP11.0201]**

ITSE 1491
Special Topics in Computer Programming
(4 credits)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CIP11.0201]**

ITSE 2387
Internship - Computer Programming
(3 credits)
An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. (20 laboratory hours per week). Prerequisite: READ 0309 and at least 3 computer programming languages from ITSE 1410, ITSE 1422, COSC 1420, ITSE 1431 or ITSE 2417.**[CIP11.0201]**

ITSE 2402
Intermediate Web Programming
(4 credits)
Intermediate applications for web authoring. Topics may include server side include (SSI), Perl, HTML, Java, Javascript, and/or ASP. (3 lecture and 2 laboratory hours per week). Prerequisite: ITSE 1411. **[CIP11.0201]**

ITSE 2409
Database Programming
(4 credits)
Application development using database programming techniques emphasizing database structures, modeling, and database access.
(3 lecture and 3 laboratory hours per week). Prerequisite: COSC 1401. **[CIP11.0201]**

ITSE 2413
Web Authoring
(4 credits)
Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CIP11.0201]**

ITSE 2417
JAVA Programming
(4 credits)
Introduction to JAVA programming with object-orientation. Emphasis on the fundamental syntax and semantics of JAVA for applications and web applets. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309 and (ITSE1422 or ITSE1410 or COSC1418). **[CIP11.0201]**

ITSE 2449
Advanced Visual BASIC Programming
(4 credits)
Further applications of programming techniques using Visual BASIC. Topics include file access methods, data structures and modular programming, program testing and documentation. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309 and ITSE 1431. **[CIP11.0201]**

ITSY 1300
Fundamentals of Information Security
(3 credits)
Basic information security goals of availability, integrity, accuracy, and confidentiality are studied. Vocabulary and terminology specific to the field of information security are discussed. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning and administrative controls is also discussed. (3 lecture hours per week) **[CIP11.0901]**

ITSY 1342
Information Technology Security
(3 credits)
Basic information security goals of availability, integrity, accuracy, and confidentiality. Vocabulary and terminology specific to the field of information security are discussed. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning and administrative controls is also discussed.(2 lecture and 2 laboratory hours per week) Prerequisite: ITNW 1321 or ITNW 1325. **[CIP11.0901]**

Court Reporting

Bill Cranford, Department Chairperson
Debbie Cunningham, Karen Downey, Micki Kincaide, Laura Noulles, Robin McCartney, Jim Preston, Roland Scott

CRTR 1213
Reporting Orientation
(2 credits)
Overview of reporting procedures, including introduction to official and realtime reporting through observation of practicing reporters. Guest speakers will address topics such as judicial reporting, captioning, and CART services. (2 lecture hours per week). **[CIP520405]**

CRTR 1302
Law and Legal Terminology
(3 credits)
Instruction in civil law, criminal law, the judicial system (discovery trial and appellate process), methods of researching legal citations, and the legal terms used in the reporting profession. (3 lecture hours per week). Prerequisite: READ 0310. **[CIP52.0405]**

CRTR 1308
Realtime Reporting I
(3 credits)
Development of skills necessary for writing conflict-free theory and dictation practice using computer-aided technology and instructional interaction. Emphasis will be placed on writing techniques to ensure a conflict-free system of machine writing by drill and dictation of geographical matter, names in current events and history, number inputting, along with methods of preparing transcripts. (2 lecture and 3 laboratory hours per week).
Prerequisites: CRTR 1314. **[CIP52.0405]**

CRTR 1310
Realtime Reporting II
(3 credits)
Continued development of skills necessary for writing conflict-free theory and dictation practice using computer-aided technology and instructional interaction. Extensive instruction in dictionary building for realtime, captioning, and CART.
(2 lecture and 3 laboratory hours per week).
[CIP520405]

CRTR 1312
Reporting Communications I
(3 credits)
Study of basic rules of English grammar and spelling, punctuation, capitalization and proofreading skills as they apply to the production of transcripts of the spoken word in the reporting field. (2 lecture and 3 laboratory hours per week). Prerequisite: READ 0310. **[CIP52.0405]**

CRTR 1314
Reporting Technology I
(3 credits)
Introduction to computer-aided transcription terminology and systems based on computer-compatible theory. The course includes lectures, dictation, and practical applications of word processing, videotaping, and computer-aided transcription, including proofreading of rough drafts and production of the finished transcript. (2 lecture and 3 laboratory hours per week). Prerequisite: CRTR 1404. **[CIP52.0405]**

CRTR 1346
Captioning Reporting I
(3 credits)
Introduction to realtime/caption production procedures with transcription of materials produced in proper form. Topics include specialized vocabulary (legal, medical, media, education, etc.), utilizing realtime/caption equipment, the psychology for writing realtime, and the procedures for operation of realtime/captioning software and hardware (2 lecture and 3 laboratory hours per week.) Prerequisite: CRTR 2401. **[CIP52.0405]**

CRTR 1404
Machine Shorthand I
(4 credits)
Instruction in general principles of conflict-free machine shorthand theory and skill building through readback of dictation notes, machine practice, and transcription. (2 lecture and 8 laboratory hours per week). Prerequisite: READ 0310. **[CIP52.0405]**

CRTR 1406
Machine Shorthand II
(4 credits)
Continued development of conflict-free shorthand skills through readback of dictation notes, machine

practice and transcription. The student's objective is to pass tests at 60 wpm, 80 wpm, and 100 wpm. (2 lecture and 8 laboratory hours per week). Prerequisites: CRTR 1404. **[CIP52.0405]**

CRTR 1455
Dictation Speedbuilding
(4 credits)
Development of conflict-free machine writing skills. This includes the development of vocabulary and skill building through concentrated emphasis through live dictation and the transcription of machine shorthand notes. The student's objective is to pass tests at 80 wpm.Emphasis is placed on production of transcripts, including daily, supervised transcription practice. This course is for students enrolled in the Scopist Certificate Program. (2 lecture and 8 laboratory hours per week). Prerequisite:CRTR 1404. **[CIP52.0405]**

CRTR 2306
Medical Reporting
(3 credits)
Orientation to medical terms and anatomy as needed in the reporting profession. Topics include medical reporting transcription techniques and production of machine shorthand medical transcripts. Lectures, study guides, tests, and exercises designed to ensure the student's knowledge of the components in building a medical vocabulary and the application thereof. (3 lecture hours per week). Prerequisite: CRTR 1404. **[CIP52.0405]**

CRTR 2311
Reporting Communications II
(3 credits)
In-depth coverage of grammar, spelling, punctuation, capitalization, vocabulary and proofreading skills necessary to produce reporting and/or spoken word documents. The student is given dictation for transcribing and is tutored in voice and speech patterns while reading notes aloud. (2 lecture hours and 3 laboratory hours per week). Prerequisites: CRTR 1312. **[CIP52.0405]**

CRTR 2315
Reporting and Office Procedures
(3 credits)
Instruction in the duties and responsibilities of the freelance reporter including the preparation of depositions. Techniques of billing, basic bookkeeping, tax rules pertaining to the reporter are covered. Each student will prepare a personal resume and emphasis will be placed on attending mock depositions and producing saleable transcripts thereof. (2 lecture and 3 laboratory hours per week). Prerequisite: CRTR 2401. **[CIP52.0405]**

CRTR 2331
Certified Shorthand Reporter (CSR) and Registered Professional Reporter (RPR) Preparation
(3 credits)
Preparation for taking the Texas CSR and the RPR examinations through the use of mock examinations. (2 lecture and 3 laboratory hours per week). Prerequisites: CRTR 2403 and CRTR 2343. **[CIP52.0405]**

CRTR 2333
Captioning Reporting II
(3 credits)
In-depth presentation of realtime/caption production procedures with transcription of materials produced in proper form. Topics include the techniques utilized in reporting for seminars, conferences, and conventions and in the broadcast environments. Emphasis is placed on off-line and on-line captioning. The course includes extensive supervised community interaction. (2 lecture and 3 laboratory hours per week). Prerequisite: CRTR 1346. **[CIP52.0405]**

CRTR 2343
Simulated Courtroom Proceedings
(3 credits)
Instruction in the role of the reporter in a courtroom environment. Emphasis on writing multiple-voice testimony and the production of transcripts utilizing realtime technology. (2 lecture and 3 laboratory per week). Prerequisites: CRTR 2401 and CRTR 1314.
[CIP52.0405]

CRTR 2380
Cooperative Education - Court Reporter
(3 credits)
An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course is designed for students pursuing the Court Reporting Scopist Certificate. The student will gain experience in scoping transcripts for reporters, general office procedures utilized in reporting firms, and the methods used in binding and preparing the final transcript for delivery. (1 lecture and 20 laboratory hours per week). Prerequisite: CRTR 1314, CRTR 2311. **[CIP52.0405]**

CRTR 2381
Cooperative Education - Court Reporter
(3 credits)
An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institutional and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. The student may begin the cooperative upon completion of all 180 wpm requirements, and the student will achieve a minimum of 40 actual writing hours with a court reporter on job assignments. The student will produce a saleable transcript of no less than 50 pages (unpaid work). A journal will be kept by the student recounting his/her experiences on the job. The student will keep a record of actual machine writing hours. (1 lecture and 20 laboratory hours per week). Prerequisites: CRTR 2403 and CRTR 1314. **[CIP52.0405]**

CRTR 2401
Intermediate Machine Shorthand
(4 credits)
Continued development of conflict-free machine shorthand skills through readback of dictation notes, machine practice and transcription. The student's objective is to pass dictated tests at 120 and 140 wpm. (2 lecture and 8 laboratory hours per week). Prerequisite: CRTR 1406. **[CIP52.0405]**

CRTR 2403
Advanced Machine Shorthand
(4 credits)
In-depth coverage of conflict-free shorthand theory and continued skill building through readback of dictation notes, machine practice, and transcription. The student's objective is to pass tests at 160 and 180 wpm. (2 lecture and 8 laboratory hours per week). Prerequisite: CRTR 2401. **[CIP52.0405]**

CRTR 2435
Accelerated Machine Shorthand
(4 credits)
Mastery of high-speed dictation including readback of dictation notes, machine practice and transcription. The student's objective is to pass dictated tests at 200 and 225 wpm. (2 lecture and 8 laboratory hours per week). Prerequisite: CRTR 2403. **[CIP52.0405]**

Criminal Justice

Maurice Cook, Department Chairperson
Jeff Gambrell

CJCR 1300
Basic Jail Course
(3 credits)
Provides instruction in human relations, observation, evaluation of prisoners, booking procedures, classification, mug shots, fingerprinting, strip searches, meals, medical services, visitation, inmates rights and privileges, detention areas, key, knife and tool control, disturbances, riots, fire procedures and release procedures. Taught in accordance with the current TCLEOSE instructor guides provided by the Commission for course #1005. (3 lecture hours per week). **[CIP53.0102]**

CJCR 1304
Probation and Parole
(3 credits)
A survey of the structure, organization, and operation of probation and parole services. Emphasis on applicable state statutes and administrative guidelines. (3 lecture hours per week). **[CIP43.0102]**

CJCR 2325
Legal Aspects of Corrections
(3 credits)
A study of the operation, management, and legal issues affecting corrections. analysis of constitutional issues involving rights of the convicted, as well as civil liability of correctional agencies and staff. (3 lecture hours per week). **[CIP43.0102]**

CJLE 1506
Basic Peace Officer I
(5 credits)
This course is one of a series of courses taught in the Police Academy. The course provides instruction and participation in U.S. & Texas Constitution & Bill of Rights, Penal Code, Use of Force, Traffic Law & Accident Investigation, Code of Criminal Procedure, Juvenile Issues - Texas Family Code, Professionalism & Ethics. (3 lecture hours / 6 lab hours) Prerequisites: Approval from Department Chair and enrollment in the Police Academy. **[CIP43.0107]**

CJLE 1512
Basic Peace Officer II
(5 credits)
This course is one in a series of courses taught in the Police Academy. The course provides instruction and participation in Arrest, SEarch & Seizure, Patrol Procedures, Civil Process & Liability, Field Note Taking, Texas Alcoholic Beverage Code, Emergency Commun ications, Family Violence, MHMR. (3 lecture hours / 6 lab hours) Prerequisites: Approval from Department Chair and enrollment in the Police Academy. **[CIP43.0107]**

CJLE 1518
Basic Peace Officer III
(5 credits)
This course is one is a series of courses taught in the Police Academy. The course provides instruction and participation in Fitness & Wellness, Multiculturalism, History of Policing, Criminal Justice System, Drugs, Stress Management, Hazardous Materials Awareness, Victims of Crime, Problem Solfing, Professional Policing Approaches, Criminal Investigation. (3 lecture hours / 6 lab hours) Prerequisites: Approval from Department Chair and enrollment in the Police Academy. **[CIP43.0107]**

CJLE 1524
Basic Peace Officer IV
(5 credits)
This course is one in a series of courses taught in the Police Academy. The course provides instruction and participation in Mechanics of Arrest, Emergency Medical Assistance, Professional Police Driving. (3 lecture hours / 6 lab hours) Prerequisites: Approval from Department Chair and enrollment in the Police Academy. **[CIP43.0107]**

CJLE 1211
Basic Peace Office V
(2 credits)
This course is one in a series of courses taught in the Police Academy. The course provides instruction and participation in Basic Firearms Training. (1 lecture hour / 2 lab hours) Prerequisites: Approval from Department Chair and enrollment in the Police Academy. **[CIP43.0107]**

CJLE 2345
Vice and Narcotics Investigation
(3 credits)
Study of various classifications of commonly used narcotics, dangerous drugs, gambling, sex crimes, fraud, gangs and investigative techniques; and identify proper interaction procedures and techniques. (3 lecture hours per week).**[CIP43.0107]**

CJLE 2420
Texas Peace Officer Procedures
(4 credits)
Study of the techniques and procedures used by police officers on patrol. Includes controlled substance identification, handling abnormal persons, traffic collision investigation, notetaking and report writing, vehicle operation, traffic direction, crowd control, and jail operations. This is a TCLEOSE-approved sequencing course to satisfy requirements to sit for the Basic Peace Officer licensure exam in addition to obtaining an Associate's or Bachelor's Degree with approval of the department chair. (3 lecture and 4 laboratory hours per week).
[CIP43.0107]

CJLE 2421
Texas Peace Officer Law
(4 credits)
Study of laws directly related to police field work. Topics include Texas Transportation Code, intoxicated driver, Texas Penal Code, elements of crimes, Texas Family Code, Texas Alcoholic Beverage Code, and civil liability. This is a TCLEOSE-approved sequencing course to satisfy requirements to sit for the Basic Peace Officer licensure exam in addition to obtaining an Associate's or Bachelor's Degree and approval of the department chair. (3 lecture and 4 laboratory hours per week).
[CIP43.0107]

CJLE 2522
Texas Peace Officer Skills
(5 credits)
Requires the demonstration and practice of the skills of a police officer including patrol, driving, traffic stop skills, use of force, mechanics of arrest, firearm safety, and emergency medical care. This is a TCLEOSE-approved sequencing course to satisfy requirements to sit for the Basic Peace Officer licensure exam in addition to obtaining an Associate's or Bachelor's Degree and approval of the department chair. (3 lecture and 5 laboratory hours per week).
[CIP43.0107]

CJSA 1308
Criminalistics I
(3 credits)
Introduction to the field of criminalistics. Topics include the application of scientific and technical methods in the investigation of crime including location, identification, and handling of evidence for scientific analysis. (3 lecture hours per week).
[CIP43.0104]

CJSA 1325
Criminology
(3 credits)
This course examines the cases, treatment and prevention of crime and delinquency. Students will analyze the various aspects of deviant behavior, criminological and methodological, relative to the social sciences. (3 lecture hours per week).
[CIP43.0104]

CJSA 1351
Use of Force
(3 credits)
A study of the use of force including introduction to and statutory authority for the use of force, force options, deadly force, and related legal issues. Fulfills the TCLEOSE Use of Force Intermediate Certificate requirement. (3 lecture hours per week).
[CIP43.0104]

CJSA 1364, CJSA 1365
Practicum (or Field Experience) - Criminal Justice Studies, Corrections
(3 credits)
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Student may enroll in only one Practicum course per semester. (21 external hours per week). **[CIP43.0104]**

CJSA 2302
Police Management, Supervision, and Related Topics
(3 credits)
Techniques and theories regarding dealing with people, their performance and problems. Topics include basic supervision, leadership, time management, first-line supervision, and management by objectives. (3 lecture hours per week). **[CIP43.0103]**

CJSA 2323
Criminalistics II
(3 credits)
Theory and practice of crime scene investigation. Topics include report writing, blood and other body fluids, document examination, etchings, casts and molds, glass fractures, use of microscope and firearms identification. (2 lecture and 4 laboratory hours per week). **[CIP43.0104]**

CJSA 2332
Criminalistics III
(3 credits)
A study of the practical aspects of criminalistics procedures. Topics include crime scene investigation, collecting and preserving evidence, and testifying in court. (2 lecture and 4 laboratory hours per week).
[CIP43.0104]

CJSA 2364, CJSA 2365
(3 credits)
Practicum (or Field Experience) - Criminal Justice Studies, Law Enforcement
(3 credits)
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Student may enroll in only one Practicum course per semester. (21 external hours per week). **[CIP43.0104]**

CRIJ 1301
Introduction to Criminal Justice
(3 credits)
History and philosophy of criminal justice and ethical considerations; crime defined; its nature and impact; overview of the criminal justice system; law enforcement; court system; prosecution and defense; trial process; corrections. (3 lecture hours per week). **[CB4301045124]**

CRIJ 1306
Court Systems and Practices
(3 credits)
The judiciary in the criminal justice system; structure of the American court system; prosecution; right to counsel; pre-trial release, grand juries; adjudication process, types and rules of evidence, and sentencing. (3 lecture hours per week). **[CB2201015424]**

CRIJ 1307
Crime in America
(3 credits)
This course explores American crime problems in a historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime. (3 lecture hours per week). **[CB4504015242]**

CRIJ 1310
Fundamentals of Criminal Law
(3 credits)
A study of the nature of criminal law; philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties using Texas statutes as illustrations; criminal responsibility. (3 lecture hours per week). **[CB2201015324]**

CRIJ 1313
Juvenile Justice System
(3 credits)
A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. (3 lecture hours per week). **[CB4301045224]**

CRIJ 2301
Community Resources in Corrections
(3 credits)
An introductory study of the role of the community in corrections; community programs for adults and juveniles; administration of community programs; legal issues; future trends in community treatment. (3 lecture hours per week). **[CB4301045324]**

CRIJ 2313
Correctional Systems and Practices
(3 credits)
Corrections in the criminal justice system, organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues. (3 lecture hours per week). **[CB4301045442]**

CRIJ 2314
Criminal Investigation
(3 credits)
Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation. (3 lecture hours per week). **[CB4301045542]**

CRIJ 2323
Legal Aspects of Law Enforcement
(3 credits)
Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; police liability. (3 lecture hours per week).**[CB4301045642]**

CRIJ 2328
Police Systems and Practices
(3 credits)
The police profession; organization of law enforcement systems; the police role; police discretion; ethics, police-community interaction, current and future issues. (3 lecture hours per week). **[CB4301045742]**

Diagnostic Cardiovascular Sonography

Jessica Murphy, Department Chairperson

CVTT 1161
Clinical - Cardiovascular Technology
(1 Credit)
A method of instruction providing detailed education, training, work-based experience, and direct patient care generally at a clinical site in the specialty of electrodiagnostics. Specific learning objectives related to ECG, stress testing, and holter monitoring will be met. Students will be instructed, supervised, and evaluated at the clinical site. (6 clinical hours per week). Corequisite: DSAE 1340. **[CIP51.0901]**

DMSO 1210
Introduction to Sonography
(2 credits)
This course is an introduction to the profession of Sonography and the role of the technologists. Emphasis will be placed on medical terminology ethical/legal issues, oral and written communication, management, professional issues related to registry, accreditation, sonography organizations, and the history of ultrasound and the branches of Diagnostic Medical Sonography. (2 lecture hours per week). **[CIP51.0910]**

DSAE 1303
Introduction to Echocardiography Techniques (Echo I)
(3 Credits)
The purpose of this course is an introduction to scanning techniques and procedures with hands-on experience in the lab setting. Emphasis will be placed on the sonographic explanation of the normal adult heart by performing a basic scan protocol to include two-dimensional, M-Mode, and Doppler along with the standard measurements for each modality. (2 lecture and 4 lab hours per week) Corequisite: DSAE 1360. **[CIP51.0910]**

DSAE 1318
Sonographic Instrumentation
(3 credits)
The purpose of this course is to provide an overview of basic acoustical physics, properties of ultrasound, interaction of ultrasound with tissue, transducers, Doppler, instrumentation, image display, artifacts, quality assurance, bioeffects and safety of ultrasound. (2 lecture and 2 lab hours per week) **[CIP51.0910]**

DSAE 1340
Cardiodiagnostic Concepts
(3 credits)
A course of study related to electrocardiography procedures such as Electrocardiography (ECG), Stress testing, and Holter monitoring. Emphasis will be placed on performing and interpreting procedures, arrhythmia recognition, cardiovascular pharmacology concepts and treatment methods. Additional topics may also include patient assessment skills, vital signs, history, and clinical monitoring. (2 lecture and 4 lab hours per week) **[CIP51.0910]**

DSAE 1360
Clinical– DMST, Introduction to Echocardiography
(3 credits)
This course is an introductory clinical for learning basic echocardiography skills. Students will observe, assist, and begin to gain hands-on experience in clinical. Emphasis will be placed on instrumentation, transducer handling, patient positioning, image orientation, and identification of anatomic structures found in basic echocardiographic views. (16 clinical hours per week) Corequisite: DSAE 1303, DSAE 1318. **[CIP51.0910]**

DSAE 1407
Basic Patient Care Skills
(4 credits)
This course presents an overview of basic health and patient care concepts. Topics in this course may include personal/patient safety, infection control, patient monitoring, vital signs, assessment, physical exam, history, and patient transport. (3 lecture and 2 lab hours per week) **[CIP51.0910]**

DSAE 2303
Cardiovascular Concepts
(3 credits)
This course offers a detailed study of anatomy, physiology, and pathophysiology of the cardiovascular system. Focus will be on cardiac and vascular structural anatomy, relationships, electrical innervation, embryology, and hemodynamics of the heart and vascular system. Pathophysiology concepts are also covered including the etiology, pathology, signs and symptoms, risk factors, and treatment of cardiovascular disease. 3 lecture and 1 lab hours per week). **[CIP51.0910]**

DSAE 2335
Advanced Echocardiography
(3 credits)
This course will cover topics in the ever-changing world of diagnostic cardiac sonography. Potential topics may include transesophageal echo, stress echo, 3D echo, tissue and doppler harmonics, power

doppler, tissue doppler, digital echo, contrast echo, intra-operative and intra-cardiac echo. Students will attend conferences and local society meetings as well as review current journals and prepare for the registry examination. (2 lecture and 4 lab hours per week) Prerequisite: DSAE 2437 Corequisite: DSAE 2462. **[CIP51.0910]**

DSAE 2361
Clinical – DMST, Echocardiography I
(3 credits)
The purpose of this course is to provide education, training, work-based experience and direct patient care, generally at a clinical site. This will include instruction, supervision, and evaluation of students in the field of echocardiography. Emphasis will be on gaining hands-on experience to develop scanning ability for the evaluation of the normal adult echocardiogram utilizing a standard scan protocol. (12 clinical hours per week)
Prerequisite: DSAE 1360, Corequisite: DSAE 2404 **[CIP51.0910]**

DSAE 2404
Echocardiographic Evaluation of Pathology I (Echo II)
(4 credits)
The purpose of this course is to emphasize the methods for evaluating adult acquired cardiac pathologies. Topics may include cardiovascular pathophysiology, quantitative measurements, and the application of 2D, Mmode, and Doppler to evaluate for abnormalities. Emphasis will be placed on valvular heart disease, endocarditis, ischemic heart disease, systemic and pulmonary hypertension, pericardial disease, and cardiomyopathy. (2 lecture and 4 lab hours per week) Prerequisite: DSAE 1303 Corequisite: DSAE 2361. **[CIP51.0910]**

DSAE 2437
Echocardiographic Evaluation of Pathology II (Echo III)
(4 credits)
This course is a continuation of Echocardiographic Evaluation of Pathology I with emphasis on cardiac disease. Topics may include congenital heart disease, diseases of the aorta and great vessels, cardiac missiles, masses, and myxomas, arrhythmias' effect on echo findings and other syndromes and diseases relevant to echocardiography with continued emphasis on quantitative measurements and calculations used during 2D, Mmode, and doppler to evaluate for these diseases. (2 lecture and 4 lab hours per week) Prerequisite: DSAE 2404, Corequisite: DSAE 2461. **[CIP51.0910]**

DSAE 2461
Clinical – DMST, Echocardiography II
(4 credits)
This course is to provide additional clinical education, training, experience, and direct patient care. It will include instruction, supervision and evaluation of students in the field of echocardiography. Emphasis will be on broadening and improving existing skills, recognition, evaluation, and measurements of acquired heart disease. (16 clinical hours per week) Prerequisite: DSAE 2361, Corequisite: DSAE 2437 **[CIP51.0910]**

DSAE 2462
Clinical – DMST, Echocardiography III
(4 credits)
This course will provide advanced clinical education, training, experience, and patient care. It will include instruction, supervision, and evaluation of students in the field of echocardiography. Emphasis will be placed on recognition and quantification of pathology, improving accuracy, speed and proficiency of the student's skills. (16 clinical hours per week) Prerequisite: DSAE 2461, Corequisite: DSAE 2335. **[CIP51.0910]**

DSVT 1300
Principles of Vascular Technology (Vasc I)
(3 credits)
The purpose of this course is to introduce non-invasive vascular technology modalities including two-dimensional imaging, duplex, doppler, plethysmography, and segmental pressures. Emphasis will be on performing basic exam protocols for carotid duplex, arterial duplex and non-imaging, and venous duplex along with basic measurements and features of the normal exam. (2 lecture and 4 lab hours per week) Corequisite: DSVT 1360, DSAE 1318. **[CIP51.0910]**

DSVT 1360
Clinical – DMST, Introduction to Vascular
(3 credits)
This is an introductory clinical for learning basic non-invasive vascular techniques. Students will observe, assist, and begin to gain hands-on experience in clinical. Emphasis will be on instrumentation, patient positioning, transducer handling, image orientation, and identification of anatomic structures and waveforms. (16 clinical hours per week) Corequisite: DSVT 1300, DSAE 1318. **[CIP51.0910]**

DSVT 1391
Special Topics in DMST - Emerging Technologies in Vascular Technology
(3 credits)
This course will cover advances in the ever changing world of diagnostic medical sonography specifically, peripheral non-invasive vascular technology. Possible topics may include intravascular ultrasound, transcranial imaging, 3D, power doppler, intra-operative, and abdominal vascular concepts. Students will attend conferences and local society meetings as well as review current journals and prepare to take the registry examination. (2 lecture and 4 lab hours per week) Prerequisite: DSVT 2430 Corequisite: DSVT 2462. **[CIP51.0910]**

DSVT 2361
Clinical – DMST, Vascular Technology I
(3 credits)
The purpose of this course is to provide education, training, work-based experience, and direct patient care, generally at a clinical site. This will include instruction, supervision, and evaluation of students in the field of non-invasive vascular technology. Emphasis will be placed on hands-on experience to develop peripheral non-invasive vascular techniques used to evaluate the appearance of normal exams utilizing a standard scan protocol. (12 clinical hours per week) Prerequisite: DSVT 1360, Corequisite: DSVT 2418. **[CIP51.0910]**

DSVT 2418
Vascular Technology Evaluation of Pathology I (Vasc II)
(4 credits)
This course is an integration of basic concepts and application of prior knowledge and skills to the understanding and evaluation of peripheral vascular diseases utilizing non-invasive vascular techniques. Emphasis will be placed on venous and arterial diseases of the extremities. (2 lecture and 4 lab hours per week) Prerequisite: DSVT 1300, Corequisite: DSVT 2361. **[CIP51.0910]**

DSVT 2430
Vascular Technology Evaluation of Pathology II (Vasc III)
(4 credits)
This course is a continuation of Vascular Technology Evaluation of Pathology I with emphasis on recognition, evaluation and quantification of cerebrovascular diseases and interventions utilizing duplex ultrasonography, transcranial doppler, and non-imaging techniques used to evaluate the cerebrovascular circulation. (2 lecture and 4 lab hours per week) Prerequisite: DSVT 2418, Corequisite: DSVT 2461. **[CIP51.0910]**

DSVT 2461
Clinical – DMST, Vascular Technology II
(4 credits)
This course will provide additional clinical education, training, experience, and direct patient care. It will include instruction, supervision, and evaluation of students in the field of peripheral non-invasive vascular technology. Emphasis will be placed on recognition and evaluation of pathology, broadening and improving existing skills. (16 clinical hours per week) Prerequisite: DSVT 2361, Corequisite: DSVT 2430. **[CIP51.0910]**

DSVT 2462
Clinical – DMST, Vascular Technology III
(4 credits)
This course will provide advanced clinical education, training, experience, and patient care. It will include instruction, supervision, and evaluation of students in the field of non-invasive vascular technology. Emphasis will be placed on improving identification and quantification of pathology, accuracy, speed and proficiency of student's skills. (16 clinical hours per week) Prerequisite: DSVT 2461, Corequisite: DSVT 1391. **[CIP51.0910]**

SCIT 1420
Physics for Allied Health
(4 credits)
An introduction to physics with emphasis on applications to health related fields of study. Topics include forces, motion, work and energy, fluids, heat, electricity and magnetism, wave motion, sound, electromagnetic radiation, and nuclear radiation. (4 lecture hours and 2 lab hours per week.) **[CIP40.8081]**

Drafting Technology

David Goza, Department Chairperson

DFTG 1315
Architectural Blue Print Reading
(3 credits)
A course for those who desire a knowledge of basic blueprint reading and construction drawings. Discussions of theory and practice with drafting methods and the terminology required to prepare working drawings in various occupational fields. (3 lecture and 1 laboratory hour per week). **[CIP15.1303]**

DFTG 1405
Technical Drafting
(4 credits)
Introduction to the principles of drafting to include terminology and fundamentals, including size and shape description, projection methods, geometric construction, sections, auxillary views and reproduction processes. (2 lecture and 4 lab hours per week). **[CIP15.1301]**

DFTG 1409
Basic Computer Aided Drafting
(4 credits)
AutoCAD. An introduction to basic computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects; adding text; using layers; coordinating systems; and print/plot to scale. (3 lecture and 3 laboratory hours per week). **[CIP15.1302]**

DFTG 1417
Architectural Drafting-Residential
(4 credits)
Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods.
(2 lecture and 4 laboratory hours per week). Prerequisite: DFTG 2419 **[CIP15.1303]**

DFTG 1419
Fundamentals of Computer-Aided Drafting
(4 credits)
Smart Sketch. The fundamentals of computer aided-drafting using an alternative computer-aided drafting program. Emphasis is placed on drawing set-up; creating and modifying geometry; storing and retrieving predefined shapes, placing, rotating, and scaling objects; adding text and dimensions, using layers and coordinating systems; as well as using input and output devices. (2 lecture and 4 laboratory hours per week).Prerequisite: DFTG 1409 **[CIP15.1302]**

DFTG 1433
Mechanical Drafting
(4 credits)
An intermediate course covering detail drawings with proper dimensioning and tolerances, use of sectioning techniques, common fasteners, isometric and oblique drawings, including bill of materials.
(2 lecture and 4 laboratory hours per week). Prerequisite: DFTG 1405 **[CIP15.1301]**

DFTG 2410
Structural Drafting
(4 credits)
Discussion of detail drawing of structural shapes for fabrication with emphasis on framed and seated connectors and beam and column detailing. Designed to meet the standards of American Institute of Steel Construction, including units on concrete detailing conforming to American Concrete Institute standards. (2 lecture and 4 laboratory hours per week). Prerequisite: DFTG 2419 **[CIP15.1301]**

DFTG 2419
Intermediate Computer-Aided Drafting
(4 credits)
AutoCAD. A continuation of practices and techniques used in basic computer-aided drafting emphasizing advanced dimensioning techniques, the development and use of prototype drawings, construction of pictorial drawings, construction of 3 dimensional drawings, interfacing 2d and 3d environments and extracting data. (2 lecture and 6 laboratory hours per week). Prerequisite: DFTG 1409 **[CIP15.1302]**

DFTG 2423
Pipe Drafting
(4 credits)
A study of pipe fittings, symbols, specifications and their applications to a piping process system. This application will be demonstrated through the creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. . (2 lecture and 4 laboratory hours per week). Prerequisite: DFTG 2419 **[CIP15.1301]**

DFTG 2432
Advanced Computer-Aided Drafting
(4 credits)
AutoCAD. Exploration of the use of the customization for drawing production enhancement and the principles of data manipulation. Presentation of advanced application such as three-dimensional objects creation and linking graphic entities to external nongraphic data. (2 lecture and 6 laboratory hours per week). Prerequisite: DFTG 2419 **[CIP15.1302]**

DFTG 2435
Advanced Technologies in Mechanical Design and Drafting
(4 credits)
Pro/Entineer Wildfire. An advanced course in the use of parametric design techniques to design, assemble, evaluate and render mechanical assemblies; develop orthographic drawings, auxiliary views and details from three-dimensional models. (2 lecture and 6 lab hours per week) Prerequisite: DFTG 2419 **[CIP15.1306]**

DFTG 2440
Solid Modeling/Design
(4 credits)
Solid Works Series. A computer-aided modeling course. Development of three dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. (2 lecture and 4 laboratory hours per week). Prerequisite: DFTG 2432 **[CIP15.1302]**

DFTG 2448
Plane Surveying
(4 credits)
Plane surveying includes use of surveying instruments, basic measuring procedures, vertical and horizontal control, and tranverse closure. Students will learn the use of surveying terminology and become familiar with the history of land ownership in Texas; surveying equipment and field books, and making surveying calculations. (2 lecture and 4 laboratory hours per week). Prerequisite: DFTG 1409. **[CIP15.1301]**

DFTG 2481
Cooperative Education-Drafting
(4 credits)
Career related activities encountered in the student's area of specialization are offered through an individualized agreement. Under the supervision of the college and the employer, the student combines class-room learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture and 21 laboratory hours per week). **[CIP15.1301]**

TECM 1303
Technical Mathematics
(3 credits)
A review of mathematical functions including fractions, decimals, proportions, perimeters, areas, volumes of geometric figures, and certain algebraic/trigonometric functions, as required by specific businesses and industries for successful on-the-job performance. Students will learn to calculate area and volume geometric figures; calculate triangular objects using trigonometry; transpose algebraic formulas to seek and solve unknown; and use ratios and proportions to solve business and industrial applications. (2 lecture and 2 laboratory hours per week). **[CIP27.0301]**

Drama

C. Jay Burton, Department Chairperson

DRAM 1220
Theatre Practicum I
(2 credits)
This course is an activities course in which the student participates in Theater productions either as an actor or crew member. (6 laboratory hours per week). **[CB5005015230]**

DRAM 1221
Theatre Practicum II
(2 credits)
This course is an activities course in which the student participates in Theater productions either as an actor or crew member. (6 laboratory hours per week). **[CB5005015230]**

DRAM 1310
Introduction to Theater
(3 credits)
This course is the study of the principles of drama and the development of the Theater as an art as evidenced through study of areas of productions past and present. (3 lecture and 2 laboratory hours per week). Prerequisite: READ 0309 . **[CB5005015130]**

DRAM 1322
Stage Movement and Dance
(3 credits)
This course provides instruction and participation in stage movement and beginning dance. (1 lecture and 3 laboratory hours per week). **[CB5003015230]**

DRAM1330
Stagecraft I
(3 credits)
This course is a study of the basics for working in the areas of construction, properties, and sets. (2 lecture and 4 laboratory hours per week). Prerequisite: READ 0309. **[CB5005025130]**

DRAM 1341
Stage Makeup
(3 credits)
This course provides a survey of the reasons for stage makeup and the types of makeup available. It includes principles for defining makeup for characters in a play and intensive practical application. (2 lecture and 4 laboratory hours per week). Prerequisite: READ 0309. **[CB5005025230]**

DRAM 1351
Acting I
(3 credits)
This course is a study of the basic techniques of acting. Included in the course are relaxation, concentration, objectives and intentions, scene work, and improvisional acting. (2 lecture and 4 laboratory hours per week). **[CB5005035130]**

DRAM 1352
Acting II
(3 credits)
This course is a study of script analysis, character analysis, characterization, and situation. (2 lecture and 4 laboratory hours per week). **[CB5005035130]**

DRAM 2120
Theatre Practicum III
(1 credit)
This course is an activities course in which the student participates in Theater productions either as actor or crew member. (6 laboratory hours per week). **[CB5005015230]**

DRAM 2121
Theatre Practicum IV
(1 credits)
This course is an activities course in which the student participates in Theater productions either as actor or crew member. (6 laboratory hours per week). **[CB5005015230]**

DRAM 2331
Stagecraft II
(3 credits)
This course is a study of the basic concepts of stage lighting, including principles and practice. The course also presents the basic principles of lighting design. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0309. **[CB5005025130]**

DRAM 2336
Voice for the Theatre
(3 credits)
This course is a study of the necessary development of the voice for use for the stage. The course includes voice development, placement, projection, and diction. (3 lecture hours per week). Prerequisites: READ 0309, ENGL 0309. **[CB5005035230]**

DRAM 2361
History of the Theatre I
(3 credits)
This course is an historical investigation of the theatre and dramatic literature from ancient Greece through 1800. (3 lecture hours per week). Prerequisites: READ 0309 and ENGL0309. **[CB5005055126]**

DRAM 2362
History of the Theatre II
(3 credits)
This course is an historical investigation of the theatre and dramatic literature from 1800 to the present. (3 lecture hours per week). Prerequisites: READ 0309, ENGL0309. **[CB5005055126]**

DRAM 2366
Development of the Motion Picture
(3 credits)
Emphasis in this course is on the analysis of the visual and aural aspects of selected motion pictures. Dramatic aspects of narrative films, historical growth, and sociological impact of film as an art will also be studied. (2 hours lecture and discussion and a 2-hour laboratory viewing session with discussion per week). Corequisites: READ 0310 and ENGL 0310. **[CB5006025130]**

Economics

Kevin Jefferies, Department Chairperson
Tim Reynolds, Gregory Roof

ECON 2301
Principles of Economics I
(3 credits)
An introduction to the macro-economics of a modern industrial society. This course is an analysis of economic aggregates: inflation, unemployment, economic growth, and the distribution of income (including current policies and problems). The course presents problems of fiscal and monetary policy and places primary emphasis on critical understanding of the economy's ability to meet the needs of its people participating as workers, consumers, and citizens. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4506015142]**

ECON 2302
Principles of Economics II
(3 credits)
An introduction to the micro-economics of a modern industrial society. This course provides a study of supply-demand relationships, economics of the firm and resource allocation (price and output determination, pure competition, monopolistic competition, oligopoly, and monopoly), economic problems (business, agriculture, labor, etc.), and international economic relations. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4506015142]**

Electronics

Ike Coffman, Department Chairperson

CETT 1403
D.C. Circuits
(4 credits)
This course is a study of direct current electricity that examines the relationships between voltage, current and resistance. The student learns the basic concepts of electricity and magnetism and studies circuit analysis using Ohm's Law, Kirchoff's Laws and special methods of analysis including Network Theorems. The student is also introduced to the Digital Multimeter (DMM), scientific calculator, computer based circuit simulation and the resistor color code with its electronic symbol. (3 lecture and 3 lab hours per week). Corequisites: MATH 1314 **[CIP15.0301]**

CETT 1405
A.C. Circuits
(4 credits)
This course introduces alternating current and analyzes its effect on passive electronic components such as capacitors, inductors and transformers. Studies include series and parallel AC circuits, phasors, capacitive and inductive networks and resonance. Students are also introduced to the oscilloscope, where they learn to analyze and troubleshoot circuits using real-time waveforms. (3 lecture and 3 laboratory hours per week. Prerequisite: CETT 1403. Corequisite: MATH 1316. **[CIP15.0301]**

CETT 1425
Digital Fundamentals
(4 credits)
This course introduces the student to digital electronics. It covers number systems, binary mathematics, truth tables, logic gates, combinational circuits, timing diagrams, flip-flops and counters. Analysis is done through Boolean algebra incorporating DeMorgans theorem and Karnaugh maps. Students are encouraged to tackle design problems using simulation software in the lab in addition to hands-on prototyping and troubleshooting. (3 lecture and 3 laboratory hours per week). **[CIP15.0301]**

CETT 1429
Solid State Devices
(4 credits)
This course is an introduction to active semiconductor devices such as diodes, bipolar and field effect transistors and thyristors including other special purpose devices. The student studies the internal construction of each device including static and dynamic electrical characteristics and gets a chance to see the device in action in various circuit configurations. (3 lecture and 3 laboratory hours per week). Prerequisite: CETT 1403. **[CIP15.0301]**

CETT 1431
Technical Programming
(4 credits)
Introduction to a high level programming language such as BASIC, PASCAL, or "C." Topics include structured programming and problem solving as they apply to technical applications. (3 lecture and 3 lab hours per week). Prerequisite: CETT 1425.
[CIP15.0301]

CETT 1449
Digital Systems
(4 credits)
A course in electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital-to-analog circuits, and large-scale integrated circuits. (3 lecture and 3 lab hours per week). Prerequisite: CETT 1425.
[CIP15.0301]

CETT 1457
Linear Integrated Circuits
(4 credits)
This course is an in-depth study of the operational amplifier. The student is introduced to the op-amp with a discussion of its electrical characteristics, operation, stabilization, testing and feedback techniques followed by an analysis of basic and advanced circuits including active filters, instrumentation and oscillators. This course also includes a brief look at other linear IC's that are used in phase locked loops and voltage regulators. (3 lecture and 3 laboratory hours per week). Prerequisite: CETT 1429. **[CIP15.0301]**

CETT 2488
Internship-Computer
Engineering Technology
(4 credits)
Under the supervision of the employer and the Electronics Instructional Advisor, the student receives on the job training in his or her area of specialization through a cooperative agreement between the college, employer and the student. The student gets a chance to combine classroom learning with work experience to master concepts and skills involving tools, materials, equipment and procedures associated with the particular occupation in the industry. (20 internship hours per week)
[CIP15.0301]

CPMT 1403
Introduction to Computer Technology
(4 credits)
This is a fundamental computer course that provides information on procedures to properly utilize computer hardware and software. The student will become familiarized with the terminology and various acronyms associated with computers and the computer industry. The course also informs the student about the wide variety of career opportunities available in Computer Technology. (3 lecture and 3 laboratory hours per week). **[CIP15.0402]**

CPMT 1411
Introduction to Computer Maintenance
(4 credits)
This course is an introduction to the various components that make up a microcomputer system. The student will identify and learn the operation of the individual modules and assemble and connect them to create a complete microcomputer system. In addition, the student will also learn the evolution of the microprocessor and microprocessor bus systems. (3 lecture and 3 laboratory hours per week).
[CIP15.0402]

CPMT 2433
Computer Integration
(4 credits)
An advanced course in integration of computer hardware, software, and applications. Student will examine the architecture of modern microprocessors and microcomputer systems. Introduction to design and analysis for specialized applications. (3 lecture and 3 laboratory hours per week). Prerequisites: CETT 1425, CPMT 1411. **[CIP15.0402]**

CPMT 2437
Microcomputer Interfacing
(4 credits)
Emphasizes the hardware aspects of microprocessor and microcomputer interfacing. Utilization of machine language programming to communicate with digital circuits and other commonly used external devices. (3 lecture and 3 laboratory hours per week. Prerequisite: CETT 1425, CPMT 1411.
[CIP15.0402]

CPMT 2445
Computer System Troubleshooting
(4 credits)
This course teaches the principles and practices involved in troubleshooting hardware and software problems in computer systems. The student will be aided by advanced diagnostic test programs and specialized test equipment that can give information on a specific troubleshooting technique to use. (3 lecture and 3 laboratory hours per week). Prerequisite: CETT 1425, CPMT 1411.
[CIP15.0402]

EECT 2439
Communications Circuits
(4 credits)
This course is an introduction to basic communication theory with emphasis on data communication. Common demodulation and modulation techniques with its associated circuitry will be studied. (3 lecture and 3 laboratory hours per week). Prerequisite: CETT 1425. **[CIP15.0303]**

ELMT 2433
Industrial Electronics
(4 credits)
This course is a study of devices, circuits and systems used in automated manufacturing and process control. The student will explore the basic elements used for interfacing between mechanical and electronic inputs and outputs in process control. The course will also demonstrate how software programming can alter system operation. (3 lecture and 3 laboratory hours per week). **[CIP15.0403]**

INTC 1453
Analog Electronic Instrumentation II
(4 credits)
This course is a study of analog electronic controllers and complete electronic instrumentation systems. Topics covered include testing of discrete components, basic power supplies, amplifiers, oscillators and printed circuit board testing. The student will also get hands-on experience repairing and calibrating transmitters, recorders and controllers. (3 lecture and 3 laboratory hours per week). Prerequisite: INTC 1452. **[CIP15.0404]**

INTC 2436
Instrumentation and Installation
(4 credits)
This is an advanced course that integrates material from INTC 1452 and INTC 1453 to design, size, install, connect and start up a small pilot plant. The student will learn how to tune controller loops and analyze process response, lay out process and control specifications, draw wiring and piping diagrams and assemble, align and calibrate instruments. (3 lecture and 3 laboratory hours per week). Prerequisite: INTC1453. **[CIP15.0404]**

Emergency Medical Technology

Douglas Stevenson, Department Chairperson
David Suffian, MD Medical Director

EMSP 1160
Emergency Medical Technician Basic - Clinical
(1 credit)
A course of instruction that provides detailed education, training, and work-based experience in the hospital and ambulance arena. Clinical experiences are unpaid external learning experiences. (6 hours per week external experience). Co-Requisites: American Heart Association or Red Cross CPR certification. Enrollment in EMSP 1501. **[CIP51.0904]**

EMSP 1166
EMS Practicum I
(1 credit)
A course of instruction that provides detailed education, training, and work-based experience in various ambulance services. All EMS practicuml experiences are unpaid external learning experiences. (7 hours per week external experience). Prerequisite: Completion of EMSP 1501/ EMSP 1160. Co-Requisite: Enrollment in EMSP 1338, EMSP 1355, EMSP 1356, EMSP 1261. **[CIP51.0904]**

EMSP 1208
Emergency Vehicle Operations
(2 credits)
Instruction, demonstration, and driving range practice to prepare drivers of emergency vehicles to operate their vehicles safely in the emergency and non-emergency mode. (1 hour per week lecture and 2 hours per week laboratory). **[CIP51.0904]**

EMSP 1209
Emergency Medical Dispatching
(2 credits)
Study of the principles and procedures used in emergency medical dispatching. Emphasis on general principles of information exchange and communication theory including various types of emergency medical services communication services and their operating principles and procedures. (2 hours of lecture per week). **[CIP51.0904]**

EMSP 1261
Paramedic Clinical I
(2 credits)
A course of instruction that provides detailed education, training, and work-based experience in the hospital clinical areas. Clinical experiences are unpaid external learning experiences. (8 hours per week external experience). Prerequisite: Completion of EMSP 1501/ EMSP 1160. Co-Requisite: Enrollment in EMSP 1338, EMSP 1356, EMSP 1355, EMSP 1166. **[CIP51.0904]**

EMSP 1338
Introduction to Advanced Practice
(3 credits)
An exploration of the foundations necessary for mastery of the advanced topics or prehospital care. (3 hours of lecture and 1 hour of laboratory hours per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160. Co-Requisite: Enrollment in EMSP 1356, EMSP 1355, EMSP 1261, EMSP 1166. **[CIP51.0904]**

EMSP 1355
Trauma Management
(3 credits)
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. (3 hours of lecture and 1 hour of laboratory per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160. Co-Requisite: Enrollment in EMSP 1338, EMSP 1356, EMSP 1261, EMSP 1166. **[CIP51.0904]**

EMSP 1356
Patient Assessment and Airway Management
(3 credits)
A detailed study of the knowledge and skills required to reach competency in performing patient assessment and airway management. (2 hours of lecture and 3 hours of laboratory per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160. Co-Requisite: Enrollment in EMSP 1338, EMSP 1355, EMSP 1261, EMSP 1166. **[CIP51.0904]**

EMSP 1391
Special Topics in EMS
(3 credits)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (2 hours lecture, and 2 hours laboratory per week). **[CIP51.0904]**

EMSP 1501
Emegency Medical Technician - Basic
(5 credits)
Introduction to the level of Emergency Medical Technician (EMT) - Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized service. (4 lecture and 4 laboratory hours per week). Co-Requisites: American Heart Association or Red Cross CPR certification. Enrollment in EMSP 1160. **[CIP51.0904]**

EMSP 2160
Paramedic Clinical II
(1 credit)
A course of instruction that provides detailed education, training, and work-based experience in the hospital emphasizing cardiovascular care. Clinical experiences are unpaid external learning experiences. (6 hours per week external experience). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/ EMSP 1261/ EMSP 1166. Co-Requisite: Enrollment in EMSP 2248, EMSP 2338, EMSP 2444. **[CIP51.0904]**

EMSP 2166
Paramedic Practicum II
(1 credit)
A course of instruction that provides detailed education, training, and work-based experience in the pre-hospital area. Clinical experiences are unpaid external learning experiences. (7 hours per week external experience). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/ EMSP 1261/ EMSP 1166/ EMSP 2444/ EMSP 2248/ EMSP2338/ EMSP 2160/ EMSP 2434/ EMSP 2261. Co-Requisite: Enrollment in EMSP 2330/ EMSP 2243. **[CIP51.0904]**

EMSP 2243
Assessment Based Management
(2 credits)
The capstone course of the EMSP program. Designed to provide for teaching and evaluating comprehensive, assessment-based patient care management. (1 hour of lecture and 3 hours of laboratory per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/ EMSP 1261/ EMSP 1166/ EMSP 2444/ EMSP 2248/ EMSP2338 /EMSP 2160/ EMSP 2434/ EMSP 2261. Co-Requisite: Enrollment in EMSP 2330/ EMSP 2166. **[CIP51.0904]**

EMSP 2248
Emergency Pharmacology
(2 credits)
A comprehensive course covering all aspects of the utilization of medications in treating emergency situations. Course is designed to complement Cardiology, Special Populations, and Medical Emergency courses. (2 hours of lecture hours and 1 hour of laboratory per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/EMSP 1261/ EMSP 1166. Co-Requisite: Enrollment in EMSP 2444, EMSP 2338, EMSP 2160. **[CIP51.0904]**

EMSP 2261
Paramedic Clinical III
(2 credits)
A course of instruction that provides detailed education, training, and work-based experience in the hospital areas specializing in the care of patients with medical emergencies.. Clinical experiences are unpaid external learning experiences. (9 hours per week external experience). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/ EMSP 1261/ EMSP 1166/ EMSP 2444/ EMSP 2248/ EMSP2338/ EMSP 2160. Co-Requisite: Enrollment in EMSP 2434. **[CIP51.0904]**

EMSP 2300
Methods of Teaching - Emergency Medical Services
(3 credits)
Instruction in teaching methodology for instructors of emergency medical services. (3 hours of lecture per week). Sponsorship by a Texas Department of Health EMS Coordinator required. **[CIP51.0904]**

EMSP 2330
Special Populations
(3 credits)
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in non-traditional populations. (2 hours of lecture and 2 hours of laboratory per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/EMSP 1261/ EMSP 1166/ EMSP 2444/ EMSP 2248/ EMSP2338/EMSP 2160/ EMSP 2434/ EMSP 2261. Co-Requisite: Enrollment in EMSP 2243/ EMSP 2166. **[CIP51.0904]**

EMSP 2338
EMS Operations
(3 credits)
A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. (2 hours of lecture and 2 hours of laboratory per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/EMSP 1261/ EMSP 1166. Co-Requisite: Enrollment in EMSP 2444, EMSP 2248, EMSP 2160. **[CIP51.0904]**

EMSP 2345
EMS Supervision/ Management
(3 credits)
Instruction, literary review, group discussions, and case study on topics pertinent to the emergency medical service (EMS) supervisor or manager. (2 hours of lecture, and 4 hours of laboratory per week). **[CIP51.0904]**

EMSP 2352
EMS Research
(3 credits)
Primary and/or secondary research in current and emerging issues in EMS. Basic research principles, scientific inquiry, and interpretation of professional literature are emphasized. (2 hours of lecture, and 2 hours of laboratory per week). **[CIP51.0904]**

EMSP 2358
Critical Care Paramedic
(3 credits)
Prepares paramedics and nurses to function as a critical care transport team. (2 hours of lecture and, 2 hours of laboratory). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/ EMSP 1261/ EMSP 1166/ EMSP 2444/ EMSP 2248/ EMSP2338/ EMSP 2160/ EMSP 2434/ EMSP 2261/ EMSP 2330/ EMSP 2243/ EMSP 2166 Or current Texas Department of Health Paramedic certification or Paramedic Licensure.
[CIP51.0904]

EMSP 2434
Medical Emergencies
(4 credits)
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies. (3 hours of lecture and 3 hours of laboratory per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/ EMSP 1261/ EMSP 1166/ EMSP 2444/ EMSP 2248/ EMSP2338/ EMSP 2160. Co-Requisite: Enrollment in EMSP 2261 **[CIP51.0904]**

EMSP 2444
Cardiology
(4 credits)
A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. (3 hours of lecture and 3 hours of laboratory and per week). Prerequisite: Completion of EMSP 1501/ EMSP 1160/ EMSP 1338/ EMSP 1356/ EMSP 1355/ EMSP 1261/ EMSP 1166.
Co-Requisite: Enrollment in EMSP 2248, EMSP 2338, EMSP 2160. **[CIP51.0904]**

HITT 1305
Medical Terminology
(3 credits)
Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures.
(3 lecture hours per week). **[CIP51.0707]**

English

Bea Hugetz, Department Chairperson
Mike Bass, Gilbert Benton, James Creel, Dickie Fox, Rick Faulkner, Ann Guess

NOTE: The basics of writing are taught in ENGL 0309 and ENGL 0310. These courses benefit students needing additional preparation for college-level work and those desiring only to improve their writing skills.

One or both of these course may be required by state law for students whose scores on either the local placement test or the TASP fall below the established cutoff levels.

ENGL 0309
Developmental Writing I
(3 credits)
Beginning with a study of basic grammar, this course concentrates on correct sentence patterns and gives some attention to paragraph writing. (3 lecture hours and 1 laboratory hour per week). **[CB3201085335]**

ENGL 0310
Developmental Writing II
(3 credits)
Extensive practice in writing paragraphs and short papers follows a review of grammar. (3 lecture hours and 1 laboratory hour per week). **[CB3201085535]**

ENGL 1301
Composition I
(3 credits)
This standard course focuses on correct and effective writing through a review of grammar and progression of written assignments. Reading assignments in the short story provide topics for required themes. (3 lecture hours per week). Prerequisite: ENGL 0310 or passing score on THEA or equivalent test. Corequisite: READ 0310. **[CB2304015135]**

ENGL 1302
Composition II
(3 credits)
This course is a continuation of ENGL 1301. There is more intensive practice in theme writing, including a research paper, and reading assignments include drama and poetry as well as fiction. (3 lecture hours per week). Prerequisite: ENGL 1301. **[CB2304015135]**

NOTE: To fulfill the sophomore English requirements of ACC programs of study, the English Department recommends either ENGL 2332-2333 or 2322-2323, taken in sequence. However, a combination of one course from Group A and one from Group B, taken in any order, is acceptable. Group A: 2332 or 2322. Group B: 2333, or 2323, or 2326. Under appropriate circumstances, ENGL 2311 may be allowed as one of the two required sophomore courses.

ENGL 2307
Creative Writing
(3 credits)
Designed for students interested in writing poetry, fiction, or nonfiction, this humanities elective course presents a study of literary techniques in contemporary published examples, but it emphasizes writing and revising original works. (3 lecture hours per week). Prerequisite: ENGL 1302. **[CB2305015135]**

ENGL 2311
Technical Communication
(3 credits)
Designed primarily for students working toward a four-year science or technology degree, this course stresses accurate and effective writing in formal reports and other professional communication forms. Brief attention is also given to the oral report. (3 lecture hours per week). Prerequisite: ENGL 1302 or approval of department chair. **[CB2311015135]**

ENGL 2322
Survey of English Literature I
(3 credits)
This course covers British literature from its beginning to the eighteenth century. Collateral reading and reports are required. (3 lecture hours per week). Prerequisite: ENGL 1302. **[CB2308015135]**

ENGL 2323
Survey of English Literature II
(3 credits)
As a continuation of ENGL 2322, this course is a study of British literature from the Romantic Period to the present. Collateral reading and reports are required. (3 lecture hours per week). Prerequisite: ENGL 1302. **[CB2308015135]**

ENGL 2326
American Literature
(3 credits)
This course examines our national literary heritage dating from colonial times to the present. Collateral readings and reports are required. (3 lecture hours per week). Prerequisite: ENGL 1302. **[CB230701535]**

ENGL 2332
Survey of Literature I
(3 credits)
Readings in world masterpieces dating from ancient times to the eighteenth century provide topics for various kinds of written analysis. Collateral reading and reports are required. (3 lecture hours per week). Prerequisite: ENGL 1302. **[CB2303015235]**

ENGL 2333
Survey of Literature II
(3 credits)
This course is a continuation of ENGL 2332. World literature ranging from seventeenth-century Europe to twentieth-century America is the subject area of reading and writing assignments. Collateral reading and reports are required. (3 lecture hours per week). Prerequisite: ENGL 1302. **[CB2303015235]**

English for Speakers of Other Languages

ESOL 0300
Reading and Vocabulary for Non-Native Speakers
(3 credits)
Develop reading fluency and vocabulary in speakers of languages other than English and prepares them to function in an English speaking society. (3 lecture hours per week). **[CB3201085635]**

ESOL 0306
Oral Communication
(3 credits)
Develop listening and speaking skills, preparing students to function in an English speaking society. (3 lecture hours per week). **[CB3201085535]**

French

Amalia D. Parra, Department Chairperson

NOTE: All foreign language classes aim to integrate acquisition with culture, cultural comparisons, connections to other disciplines, and participation in other language communities. Students with two or more years of high school French are urged to take a placement examination to determine at which level to begin French.

FREN 1411
Elementary French I
(4 credits)
This course provides the fundamental skills in listening, speaking, reading, and writing French. It includes basic vocabulary, grammatical structures, and an introduction to French culture. (3 lecture and 2 laboratory hours per week). **[CB1609015131]**

FREN 1412
Elementary French II
(4 credits)
This course provides the fundamental skills in listening, speaking, reading, and writing French. It includes basic vocabulary, grammatical structures, and further study of French culture. (3 lecture and 2 laboratory hours per week). Prerequisite: FREN 1411 with grade of C or above or an appropriate placement test. **[CB1609015131]**

FREN 2311
Intermediate French
(3 credits)
This course offers the opportunity to develop listening, speaking, reading, and writing skills in French through conversation, vocabulary acquisition, reading, composition, and culture. It includes a grammar review and further study of the French culture. (3 lecture and 1 laboratory hours per week). Prerequisite: FREN 1412 or an appropriate placement test. **[CB1609015231]**

FREN 2312
Intermediate French II
(3 credits)
This course offers the opportunity to develop listening, speaking, reading, and writing skills in French through conversation, vocabulary acquisition, reading, composition, and culture. It includes a grammar review and further study of the French culture. (3 lecture and 1 laboratory hours per week). Prerequisite: FREN 2311 or an appropriate placement test. **[CB1609015231]**

Geography

John Duke, Department Chairperso

GEOG 1301
Physical Geography
(3 credits)
This course is designed to enhance student understanding of the physical and human elements that have shaped the present physical environments and cultures of the world. Emphasis is placed on scientific principles and explanations underlying the distribution of tectonic activities and landforms, elements and factors of local and world climates, population, economic activities, cultures, urban landscapes, and political systems. The important role of maps in geography is also discussed. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4507015142]**

GEOG 1303
World Regional Geography
(3 credits)
A survey of the world's major geographic regions, with emphasis on intra-regional and inter-regional similarities and differences in climates, land and water resources, population distribution, and the extent of resource utilization. Physical and human factors that enhance, hinder, or threaten economic development and living conditions in the respective regions are also stressed. (3 lecture hours per week).Prerequisites: READ 0310, ENGL0310 **[CB4507015342]**

Geology

Dick Graef, Department Chairperson
Dora Devery

GEOL 1301
Investigating the Earth, Sea and Sky
(3 credits)
This is a survey course to introduce non-majors to the solid Earth, the oceans, the atmosphere, and the Earth's neighbors in space. (3 lecture hours per week). **[CB4007035139]**

GEOL 1303
Physical Geology
(3 credits)
An introductory class designed for non-majors to study the composition, internal structure, and physical processes of the earth. (3 lecture hours per week). Prerequisite: READ 0310. **[CB0301025339]**

GEOL 1305
Environmental Geology
(3 credits)
Topics covered in this course include geologic hazards, energy resourses, waste disposal, air and water pollution, medical geology, environmental law as well as land use planning. The emphasis is on geologic processes and how they influence human activities. (3 lecture hours per week). Prerequisite: READ 0310. **[CB4007035139]**

GEOL 1401
Earth Science
(4 credits)
Topics covered in this course include geology, oceanography, meteorology and astronomy. The course integrates information about the earth and how it works. Emphasis is placed on the study of the structure and composition of the earth, natural hazards; such as tornadoes and hurricanes, as well as discussions about the solar system. This course is particularly well suited for students planning a career teaching in the elementary grades. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0310. **[CB4007035139]**

GEOL 1403
General Geology I
(4 credits)
This course provides an introduction to the study of rocks, minerals and physical processes that modify the surface of the earth, and it gives special attention to the practical aspects of geology in society, such as mineral, energy, and water resources, volcanism, and geologic factors that influence the environment. (3 lecture and 3 laboratory hours per week). Prerequisite: READ 0310. **[CB4006015139]**

GEOL 1404
General Geology II
(4 credits)
This course presents a survey of the evolution of the earth and life through geologic time. The course includes such topics as earthquakes and the earth's interior, mountain building, drifting continents, the Ice Ages, the solar system, the history of life, and the geological aspects of the environment and its effect on the future of mankind. (3 lecture and 3 laboratory hours per week). Prerequisite: GEOL 1403. **[CB400601539]**

German

Amalia D. Parra, Department Chairperson

NOTE: All foreign Language classes aim to integrate language acquisition with culture, cultural comparisons, connections to other disciplines, and participation in other language communities. Students with two or more years of high school German are urged to take a placement examination to determine at which level to begin German.

GERM 1411
Elementary German I
(4 credits)
This course provides the fundamental skills in listening, speaking, reading, and writing German. It includes basic vocabulary, grammatical structures, and an introduction to German culture. (3 lecture and 2 laboratory hours per week). **[CB1605015131]**

GERM 1412
Elementary German II
(4 credits)
This course provides the fundamental skills in listening, speaking, reading, and writing German. It includes basic vocabulary, grammatical structures, and further study of German culture. (3 lecture and 2 laboratory hours per week). Prerequisite: GERM 1411 or an appropriate placement test. **[CB1605015131]**

GERM 2311
Intermediate German I
(3 credits)
This course offers the opportunity to develop listening, speaking, reading, and writing skills in German through conversation, vocabulary acquisition, reading, composition, and culture. It includes a grammar review and further study of the German culture. (3 lecture and 1 laboratory hours per week). Prerequisites: GERM 1412. or an appropriate placement test. **[CB1605015231]**

GERM 2312
Intermediate German II
(3 credits)
This course offers the opportunity to develop listening, speaking, reading, and writing skills in German through conversation, vocabulary acquisition, reading, composition, and culture. It includes a grammar review and further study of the German culture. (3 lecture and 1 laboratory hours per week). Prerequisite: GERM 2311or an appropriate placement test. **[CB1605015231]**

Government

Kevin Jefferies, Department Chairperson
Tim Reynolds, Gregory Roof

GOVT 2301
American National & State Governments I
(3 credits)
This course surveys the origin and development of the federal system and includes an analysis of the federal constitution and various state constitutions, particularly the Texas constitution. The course focuses on federal, state and interstate relations, Texas state government, and citizenship in a modern democratic society. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4510025142]**

GOVT 2302
American National and State Governments II
(3 credits)
The primary focus of this course is the federal system. Particular emphasis is placed on national issues and the executive, judicial and legislative branches of the federal government. The course also surveys the functions and services of the federal system and those of the various state governments, including the Texas state government. Prerequisites: READ 0310 and ENGL 0310. **[CB4510025142]**

History

John Duke, Department Chairperson
Tom Bryan, Johanna Hume, Darryl Stevens

HIST 1301
The United States to 1877
(3 credits)
This course surveys United States history from colonial origins through reconstruction, including exploration and colonization of the new world, the American Revolution, westward expansion, the Civil War, and reconstruction. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4508025142]**

HIST 1302
The United States Since 1877
(3 credits)
This course surveys United States history from 1877 to the present. Topics include big business, big labor, the United States as a world power, the Great Depression, and the Cold War. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4508025142]**

HIST 2301
Texas History
(3 credits)
This course surveys social, economic and political developments in Texas from the arrival of the first Native Americans in Texas to present. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4508025242]**
**Texas law stipulates that three hours in Texas history may be applied toward satisfying the United States history requirement.*

HIST 2311 {2321}
Western Civilization to 1660
(3 credits)
This course surveys the primary political, social, intellectual, and religious developments of near eastern and western human societies with emphasis on the Mesopotamian, Egyptian, Greek, and Roman civilizations; the development of Judaism, Christianity, and Islam; the Byzantine empire; feudalism in eastern and western Europe; the Renaissance and the Reformation; national monarchies and statebuilding in the early modern period; and the Scientific Revolution. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4508015442]**

HIST 2312 {2322}
Western Civilization Since 1660
(3 credits)
A continuation of HIST 2311, this course will trace the historical roots of contemporary western societies from early modern Europe to the present. Topics examined include: mercantilism, capitalism, and the rise of the middle class; the Enlightenment and the French Revolution; Napoleon and the development of modern nationalism; the Industrial Revolution; Marx, Darwin, and Nietzsche; World War I and the Russian Revolution; the rise of fascism and World War II; the Cold War and the global society; the European community. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB4508015442]**

HIST 2341
Selected Topics in U.S. History
(3 credits)
This course offers an in-depth treatment of specific areas of United States history (i.e., ethnohistory, minority studies, foreign policy, military and social history) and may be repeated for credit as topics vary. The course is an elective and will not satisfy degree requirements in United States history. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310.
[CB4508015642]

Horticulture

Steve Wheeler, Department Chairperson
Dwight Rhodes

HORT 1401
Principles of Horticulture
(4 credits)
This course presents the fundamental principles and practices of structure, growth, development, maintenance, and use of horticultural plants. The course outlines the commercial horticulture industry and occupational opportunities. The laboratory experience provides an introduction to growing, grounds maintenance, planting, and transplanting. (3 lecture and 3 laboratory hours per week). **[CB0106015121]**

Humanities

Amalia D. Parra, Department Chairperson

HUMA 1301
Introduction to Humanities I
(3 credits)
This course is an interdisciplinary, multi-media study of the cultural, political, philosophical, and aesthetic factors critical to the formulation of values and the historical development of the individual and of society. This course examines Ancient and Medieval thought and culture through works from Mesopotamia, Egypt, the early Greeks, the Roman Empire, Judaism, Christianity, Islam, the Byzantine Empire, and the Middle Ages. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB2401035142]**

HUMA1302
Introduction to Humanities II
(3 credits)
This course is an interdisciplinary, multimedia study of the cultural, political, philosophical, and aesthetic factors critical to the formulation of values and the historical development of the individual and of society. This semester focuses on works from the Renaissance, the Reformation and counter-Reformation, the Baroque world, the age of Reason and Neoclassicism, the Romantic era, and the twentieth century. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB2401035142]**

Journalism

Bea Hugetz, Department Chairperson

JOUR 1120
Journalism Activities
(1 credit)
This course gives basic journalism training to students through experience on college publications. (2 laboratory hours per week). **[CB0904015426]**

Management Development

Rochelle R. Brunson, Department Chairperson

BMGT 1301
Supervision
(3 credits)
This course consists of a study of the role of the supervisor. Managerial functions as applied to leadership, counseling, motivation, and human skill are examined. The student will explain the role, characteristics, and skills of a supervisor and the principles of planning, leading, controlling, staffing and organizing at the supervisory level. The student will identify and discuss the human skills necessary for supervision. (3 lecture hours per week). **[CIP52.0201]**

BMGT 1303
Principles of Management
(3 credits)
The concepts, terminology, principles, theory, and issues that are the substance of the practice of

management are examined. The student will explain the various theories and processes of management including its functions; identify roles of leadership in business; and recognize elements of the communication process and the guidelines for organizational design. (3 lecture hours per week). **[CIP52.0201]**

BMGT 1313
Principles of Purchasing
(3 credits)
The purchasing process as it relates to such topics as inventory control, prices determination, vendor selection, negotiation techniques, and ethical issues. The student will describe the purchasing function as it relates to other departments within the company and identify the basic concepts used in purchasing decisions. (3 lecture hours per week).**[CIP52.0202]**

BMGT 1341
Strategic Management
(3 credits)
Strategic management process involving analysis of how organizations develop and implement a strategy for achieving organizational objectives in a changing environment. The student will explain the processes involved in management strategy development and develop a strategic management plan for an organization. (3 lecture hours per week). **[CIP52.0201]**

BMGT 1382
Cooperative Education-Business Administration and Management, General I
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid or unpaid work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture and 20 laboratory hours per week). **[CIP52.0201]**

BMGT 1391
Special Topics in Business Administration and Management, General
(3 credits)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business industry trends. (3 lecture hours per week). **[CIP52.0201]**

BMGT 2303
Problem Solving and Decision Making
(3 credits)
Decision making and problem solving processes in organizations, utilizing logical and creative problem solving techniques. Application of theory is provided by experiential activities such as small group discussions, case studies, and the use of other managerial decision aids. Skills and attitudes will be built around a series of critical questions. These critical questions provide a structure for critical thinking that support a continual, ongoing search for better opinions, decisions, or judgments. (3 lecture hours per week). **[CIP52.0201]**

BMGT 2311
Management of Change
(3 credits)
Knowledge, skills, and tools that enable a leader/organization to facilitate change in a pro-active participative style. The student will explain the roles of change agent and champion in the process of change within the organization; show the progression of change from introduction to completion, examining barriers to successful implementation; and demonstrate ability to analyze internal and external environments as well as stakeholder issues in showing need for change. (3 lecture hours per week). **[CIP52.0201]**

BMGT 2382
Cooperative Education - Business Administration & Management, General II
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid or unpaid work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture and 20 laboratory hours per week). **[CIP52.0201]**

BMGT 2383
Cooperative Education - Business Administration & Management, General III
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid or unpaid work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture and 20 laboratory hours per week.) **[CIP52.0201]**

BUSG 2309
Small Business Management
(3 credits)
A course on how to start and operate a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues.(3 lecture hours per week). **[CIP52.0701]**

HRPO 1311
Human Relations
(3 credits)
Practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment. (3 lecture hours per week). **[CIP52.1003]**

HRPO1391
Special Topics in Human Resources Management
(3 credits)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry needs. (3 lecture hours per week). **[CIP52.1001]**

HRPO 2301
Human Resources Management
(3 credits)
Behavioral and legal approaches to the management of human resources in organizations. The student will describe and explain the development of human resources management; evaluate current methods of job analysis, recruitment, selection, training/development, performance appraisal, promotion, and separation; discuss management's ethical, socially responsible, and legally required actions; assess methods of compensation and benefits planning; and examine the role of strategic human resource planning in support of organizational mission and objectives. (3 lecture hours per week). **[CIP52.1001]**

HRPO 2307
Organizational Behavior
(3 credits)
The analysis and application of organizational theory, group dynamics, motivations theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. Experiences in managing and resolving organizational problems as well as team dynamics, team building strategies, and cultural diversity will be examined. (3 lecture hours per week.) **[CIP52.1003]**

IBUS 2341
International Comparative Management
(3 credits)
This course covers a study of cross-cultural comparisons of management and communications processes. Emphasis on cultural geographic distinctions and antecedents that affect individual, group, and organizational behavior. Topics include sociocultural demographic, economic, technological, and political-legal environment of cluster countries and their relationship to organizational communication and decision making. (3 lecture hours per week). **[CIP52.1101]**

MRKG 1302
Principles of Retailing
(3 credits)
Introduction to the retailing environment and its relationship to consumer demographics, trends, and traditional/nontraditional retailing markets. The employment of retailing techniques and the factors that influence modern retailing. (3 lecture hours) **[CIP52.1401]**

MRKG 1311
Principles of Marketing
(3 credits)
This course is an introduction to basic marketing

functions, identification of consumer and organizational needs, explanation of economic, psychological, sociological, and global issues, and description and analysis of the importance of marketing research. The student will identify the marketing mix components in relation to market segmentation and interpret market research data to forecast industry trends and meet customer demands. (3 lecture hours per week). **[CIP52.1401]**

MRKG 2333
Principles of Selling
(3 credits)
This course serves as an introduction to the selling process and its application to all forms of sales. Identification of all the elements of the communication process between buyers and sellers in business and examination of the legal regulations and ethical issues of business which affect salespeople. The student will define the selling process and its application to all forms of sales, identify the elements of the communications process between buyers and sellers in business; and examine ethical issues and legal restrictions of American business which affect salespeople. (3 lecture hours per week). **[CIP08.0706]**

Marine Robotics Technology

Ike Coffman, Department Chairperson

HYDR 1445
Hydraulics and Pneumatics.
(4 credits)
This class will be based upon requirements outlined by the National Fluid Power Association, heavily focused on content developed by the Fluid Power Educational Foundation. Fluid power crosses over several disciplines including physics, mathematics, and mechanics. There will be an emphasis on hands-on, including the design and construction of a hydraulic circuit, with the introduction to the various standards used in the fluid power industry. Appropriate symbols and language are introduced, circuit analysis and component selection are performed, and control systems and power transmission will be covered. (3 lecture and 3 laboratory hours per week) **[CIP15.1103]**

ELMT 2441
Electromechanical systems
(4 credits)
This class incorporates the sum of knowledge developed over the entire program, integrating aspects of electronics, hydraulics, mechanics, and robotics to create and control electromechanical devices. Again, there will be an emphasis on hands-on, with the design, construction, and operation of a complex electromechanical device. By necessity, there will be a focus on robotics. A major component of this class will involve programming and control of the device or vehicle. PLC's and programmable logic will be used extensively. Students will build some type of robotic vehicle or device, then program the device to go through a series of operations independent of human control. The device will incorporate sensing and decision making features to complete a task.(3 lecture and 3 laboratory hours per week) **[CIP15.0403]**

MRTC 1471
Introduction to Marine Technology.
(4 credits)
Here we introduce marine concepts, such as buoyancy, ballast, hydrodynamics, and other aspects of the marine environment such as corrosion. Safety is presented here as a central theme. This class concentrates on physics and physical characteristics of the ocean environment. Pressure, density, and structural characteristics of vehicles are included. We use this class to incorporate any industry specific topics or concerns, things that industry describes as important. (3 lecture and 3 laboratory hours per week) **[CIP15.0303]**

MRTC 2472
Introduction to Submersible Technology
(4 credits)
This class builds an ROV to complete a specific mission, and using this building process as a frame work are instructed on various properties and principles of underwater vehicles, propulsion, navigation, operation, instrumentation, communication, and other aspects. The mission should require some type of actuator or mechanical device to complete. A lot of hands-on in this class, with lecture and theory specifically geared to principles involved in underwater operation. As in the previous class, we continue to present and develop information and training that industry wants.
(3 lecture and 3 laboratory hours per week) **[CIP15.0303]**

MRTC 2473
Marine Operations & Safety
(4 credits)
This class is designed to be an internship, where students spend time working with and for local marine companies. Students will undergo a pre-internship safety orientation that involves hazard communications, OSHA requirements, HAZMAT and MSDS training, and offshore safety. Students are given exposure to actual working conditions, and develop a better understanding of whatever knowledge and skills are required to work in this field. This on the job training is supplemented with classroom instruction by industry professionals.
(3 lecture and 3 laboratory hours per week) **[CIP15.0303]**

Mathematics

Bette Nelson, Department Chairperson
James Boler, Jennifer Hopkins, Tammi Lansford, Deanna Dick, Charles Kilgore

NOTE: The basics of arithmetic and algebra are taught in MATH 0309, MATH 0310, and MATH 0312. These courses benefit students needing additional preparation for college level work and those desiring only to improve their mathematical skills. One or all of these courses may be required by state law, or by the ACC Developmental Education Plan, for students whose scores on placement tests fall below established cutoff levels.

MATH 0309
Pre-Algebra
(3 credits)
This course offers instruction and practice in the basic arithmetic operations, geometry, and statistics. Topics covered include operations on whole numbers, fractions, decimals, percents, descriptive statistics, geometry and a study of signed numbers. The purpose of MATH 0309 is to prepare the students for MATH 0310. Enrollment in this course is based upon a self-perceived need to develop the skills covered or upon the college placement test. (3 lecture hours and 1 lab hour per week). **[CB3201045137]**

MATH 0310
Developmental Mathematics - Algebra
(3 credits)
This course includes linear equations and inequalities, applications, polynomial, and rational expression operations and equations. The purpose of MATH 0310 is to prepare students for MATH 0312. Students enrolling in this course must meet the developmental algebra standard on the placement test or have passed MATH 0309 with a grade of A, B, or C. (3 lecture hours and 1 lab hour per week). **[CB3201045137]**

MATH 0312
Developmental Mathematics - Intermediate Algebra
(3 credits)
Topics of this course include graphing linear equations, solving systems of equations, laws of exponents, radicals, solving quadratic equations, and functions. The purpose of MATH 0312 is to prepare students for MATH 1314. Students enrolling in this course must meet the intermediate algebra standard on the placement test or have passed MATH 0310 with a grade of A, B, or C. (3 lecture hours per week). **[CB3201045237]**

MATH 1314
College Algebra
(3 credits)
This course includes a review of the fundamental concepts of intermediate algebra, followed by a more intensive study of algebraic equations and inequalities, functions and graphs, graphs and zeros of polynomial functions, rational functions, exponential and logarithmic functions, systems of equations, matrices and the binomial theorem. Graphing calculators (TI-83 or comparable models) are required. Students enrolling in this course must meet the college algebra standard on the placement test or have passed MATH 0312 with a grade of A, B, or C. (3 lecture hours per week). **[CB2701015437]**

MATH 1316
Plane Trigonometry
(3 credits)
This course covers a review of algebraic operations, trigonometric functions, trigonometric identities and equations, applications of trigonometry, exponential and logarithmic functions, and analytic geometry. Graphing calculators (TI-83 or comparable models) are required. (3 lecture hours per week). Prerequisite: MATH 1314 or departmental approval. **[CB2701015337]**

MATH 1324
Mathematics for Business & Social Science I
(3 credits)
This course is designed for business, economics, management, and finance students. The course begins with a review of linear equations and functions followed by a study of matrices, inequalities and linear programming, quadratic functions, exponential and logarithmic functions, mathematics of finance, and concludes with a study of probability and statistics. Applications in business and economics will be emphasized (3 lecture hours per week). Prerequisite: MATH 1314. **[CB2703015237]**

MATH 1325
Mathematics for Business & Social Science II
(3 credits)
This course is designed for business, economics, management, and finance students. The course includes a study of derivatives, higher order derivatives, indefinite integrals, definite integrals, and functions of two or more variables. Applications in business and economics will be emphasized. (3 lecture hours per week). Prerequisite: MATH 1314 or MATH 1324. **[CB2703015237]**

MATH 1332
Contemporary Mathematics I
(3 credits)
This course is designed for liberal arts, humanities and human/social sciences. It is not intended for mathematics, science, engineering, elementary education or business majors. The course emphasizes an appreciation of the art, history, beauty, and application of mathematics. Topics include sets, logic, number theory, measurement, geometric concepts, and an introduction to probability and statistics. Prerequisite: MATH 0312 with a grade of A,B, or C or meeting the college algebra standard on a placement test. (3 lecture hours per week). **[CB2701015137]**

MATH 1342
Elementary Statistical Methods
(3 credits)
This course includes such topics as permutations and combinations, probability, testing hypotheses, sample theory, parameter estimation, frequency functions, and correlation and regression. Students enrolling in this course should have previously taken two years of high school algebra and/or passed MATH 1314. (3 lecture hours per week). Prerequisites: MATH 1314. **[CB2705015137]**

MATH 1348
Analytic Geometry
(3 credits)
The course is designed to meet the needs of mathematics, engineering and science students. The course details the solution of geometric problems through applied algebra by the graphical representation of points, lines, and curves and the transformation of coordinates, polar coordinates, transcendental curves, vectors, parametrics, and space formulas, with special emphasis on rapid curve sketching. The purpose of MATH 1348 is to prepare the student for MATH 2413. Students enrolling in this course should have previously taken two years of high school algebra and a course in plane trigonometry or passed MATH 1314 and MATH 1316. (3 lecture hours per week). Prerequisite: MATH 1316. **[CB2701015537]**

MATH 1350
Fundamentals of Mathematics I
(3 credits)
This course is designed specifically for students who seek teacher certification. Topics and concepts in this course include concepts of sets, functions, numeration systems, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314 or equivalent or higher level math. **[CB2701015619]**

MATH 1351
Fundamentals of Mathematics II
(3 credits)
This course is designed specifically for students who seek teacher certification. Topics and concepts in this course include concepts of geometry, probability, and statistics, as well as applications of algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314 or MATH 1350 or equivalent. **[CB2701015619]**

MATH 2318
Linear Algebra
(3 credits)
This course includes such topics as vector spaces, linear independence, bases, linear transformations, matrices, determinants, eigenvalues, eigenvectors, and applications. (3 lecture hours per week). Prerequisite: MATH 2413. **[CB2701016137]**

MATH 2320
Differential Equations
(3 credits)
The course includes the following topics: equations of the first order, singular solutions, linear equations with coefficient, and miscellaneous methods of solving equations of high order than the first, with geometric and physical applications. (3 lecture hours per week). Prerequisite: MATH 2414. **[CB2703015137]**

MATH 2412
Pre-Calculus Math
(4 credits)
This course covers a review of algebraic operations, trigonometric functions, trigonometric identities and equations, applications of trigonometry, exponential and logarithmic functions, and analytic geometry. Graphing calculators (TI-83 or comparable models) are required. (4 lecture hours per week). Prerequisite: MATH 1314 or departmental approval. **[CB2701015819]**

MATH 2413
Calculus I
(4 credits)
This course is designed to meet the needs of mathematics, engineering, and science students. Topics included in this course are vectors and vector operations, limits, continuity, differentation and integration of algebraic and transcendental functions, with applications such as optimization, curve sketching, and finding area under a curve. Students enrolling in this course should have previously taken two years of high school algebra, a course in plane trigonometry, and a course in analytic geometry, or passed MATH 1314 and MATH 1316, or MATH 1314 and MATH 2412. (4 lecture hours per week). Prerequisites: MATH 2412 or departmental approval. **[CB2701015937]**

MATH 2414
Calculus II
(4 credits)
This course is a continuation of MATH 2413. Topics include differentiation and integration of hyperbolic and inverse trigonometric functions, techniques of intergration, sequences and series, and applications such as the area between curves. (4 lecture hours per week). Prerequisites: MATH 2413 or equivalent course. **[CB2701015937]**

MATH 2415
Calculus III
(4 credits)
This course is a continuation of MATH 2414. Topics covered include vector-valued functions, functions of several variables, partial differentiation, multiple integrals, vector fields, line integrals, Green's Theorem, Stoke's Theorem, and the Divergence Theorem. (4 lecture hours per week). Prerequisite: MATH 2414 or equivalent course. **[CB2701015937]**

Mental Health

G. E. Carrier, Department Chairperson

CMSW 1341
Behavior Modification and Cognitive Disorder
(3 credits)
In depth study of the theories and principles of behavioral science and skill development in the methods of modifying and controlling behavior. Clinical and personal settings. Emphasis on techniques as managing self behavior. Topics include stimulus controls, shaping, relaxation training, reinforcement scheduling and taken economics. (3 lecture hours per week) (3 lecture and 3 laboratory hours per week) **[CIP51.1503]**

DAAC 1304
Pharmacology of Addiction
(3 credits)
Psychological, physiological, and sociological effects of mood altering substances and behaviors and their implications for the addiction process are discussed. Emphasis is placed on pharmacological effects of tolerance, dependency/withdrawal, cross addiction, and drug interaction. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1307
Addicted Family Intervention
(3 credits)
An introduction to the family as a dynamic system focusing on the effects of addiction pertaining to family roles, rules, and behavior patterns. Discuss the impact of mood altering substances and behaviors and therapeutic alternatives as they relate to the family from a multicultural and transgenerational perspective. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1309
Assessment Skill of Alcohol and Other Drug Addictions
(3 credits)
Examines procedures by which a counselor/program identifies and evaluates an individual's strengths, weaknesses, problems, and needs which will be used in the development of a treatment plan. Prepares the student to appropriately explain assessment results and individual rights to clients. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1311
Counseling Theories
(3 credits)
An introduction to major theories of various treatment modalities including Reality Therapy, Psycho-dynamic, Grief Therapy, Client Centered Therapy, Rational Emotive Therapy, cognitive-behavioral approaches such as life skills training, behavior modification, and the introduction to experiential therapies as they relate to detoxification, residential, outpatient, and extended treatment. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1314
Dynamics of Group Counseling
(3 credits)
An introduction to the patterns and dynamics of group interactions across the life span. Focus includes group therapy, structure, types, stages, development, leadership, therapeutic factors, the impact of groups on the individual, group growth, and behavior. Effective group facilitation skills and techniques used to address special population issues and needs are covered. Effective case management and record keeping are addressed. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1317
Basic Counseling Skills
(3 credits)
This course is designed to facilitate development of the basic communication skills necessary to develop an effective helping relationship with clients. Includes the utilization of special skills to assist individuals, families, or groups in achieving objectives through exploration of a problem and its ramification of attitudes and feelings; consideration of alternative solutions; and decision making. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1319
Introduction to Alcohol and Other Drug Addictions
(3 credits)
Causes and consequences of addiction as they relate to the individual, family, community, and society are discussed. Response alternatives regarding intervention, treatment, education, and prevention are reviewed. Competencies and requirements for licensure in Texas are explained. Addiction issues related to diverse populations are presented. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1341
Counseling Alcohol and Other Drug Addictions
(3 credits)
This course will focus on special skills and techniques in the application of counseling skills for the Alcohol and Other Drug (AOD) client. Design and utilization of treatment planning using a treatment team approach will be introduced. Confidentiality and ethical issues will be reviewed and practiced. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1343
Current Issues
(3 credits)
A study of issues that impact addiction counseling. Special populations, dual diagnosis, ethics, gambling, and infectious diseases associated with addiction counseling will be investigated. (3 lecture hours per week) **[CIP51.1501]**

DAAC 1380
Cooperative Education I - Alcohol/Drug Abuse Counseling
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objective guide the student through the work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture hour and 20 laboratory hours per week) **[CIP51.1501]**

DAAC 1381
Cooperative Education II - Alcohol/Drug Abuse Counseling
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objective guide the student through the work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture hour and 20 laboratory hours per week) **[CIP51.1501]**

DAAC 1391
Special Topics in Alcohol/Drug Abuse Counseling
(3 credits)
This course is a review of the requirements for licensure in addiction counseling examination. The course is also used to work on topics in the area of mental health or addiction studies - example: research/projects/field work. (3 lecture hours per week) **[CIP51.1501]**

DAAC 2380
Cooperative Education III - Alcohol/Drug Abuse Counseling
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objective guide the student through the work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture hour and 20 laboratory hours per week) **[CIP51.1501]**

GERS 1301
Introduction to Gerontology
(3 credits)
Overview of the social, psychological, and biological changes that accompany aging and an overview of the implications of these changes for the individual, as well as for the larger society. (3 lecture hours per week) **[CIP30.1101]**

PMHS 1301
Introduction to Mental Health and Retardation
(3 credits)
A brief survey of the historical development of social services. Emphasis on current needs, practices, and projected changes. Topics include psychoanalytic theories related to mental retardation, psychotherapy and retarded children, and special problems faced by mentally retarded. We will examine why individuals enter the helping professions. (3 lecture hours per week) **[CIP51.1502]**

PMHS 1380
Cooperative Education I - Psychiatric/Mental Health Services Technician
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objective guide the student through the work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture hour and 20 laboratory hours per week) **[CIP51.1502]**

PMHS 1381
Cooperative Education II - Psychiatric/Mental Health Services Technician
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objective guide the student through the work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture hour and 20 laboratory hours per week) **[CIP51.1502]**

PMHS 1391
Special Topics in Psychiatric/Mental Health Services Technician
(3 credits)
This course will examine the management of psychological technicians and review the duties of training required. A variety of mental health settings, such as mental retardation, mental illness and dual diagnosis units will be discussed. Residential and non-residential settings will be reviewed in terms of training requirements and employment opportunities. (3 lecture hours per week) **[CIP51.1502]**

PMHS 2380
Cooperative Education III - Psychiatric/Mental Health Services Technician
(3 credits)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objective guide the student through the work experience. This course may be repeated if topics and learning outcomes vary. (1 lecture hour and 20 laboratory hours per week) **[CIP51.1502]**

RECT 1301
Introduction to Therapeutic Recreation
(3 credits)
Introduction to the value, history, philosophy, terminology, process, and outcomes of therapeutic recreation. Emphasis on identification of client groups, leisure activities, application of therapeutic recreation in various human services settings, and professional development and career opportunities. (3 lecture hours per week) **[CIP51.2309]**

Music

Kevin Moody, Department Chairperson
David Griffith

General Music

MUSI 1166
Woodwind Class
(1 credit)
This required course for music education majors with instrumental concentrations examines techniques of performing and of instructing beginning instrumentalists on flute, oboe, clarinet, bassoon, saxophone, and piccolo. (1 lecture and 2 laboratory hours per week). **[CB5009035130]**

MUSI 1168
Brass Class
(1 credit)
This required course for music education majors with instrumental concentrations examines techniques of performing and of instructing beginning instrumentalists on trumpet, French horn, trombone, and tuba. (1 lecture and 2 laboratory hours per week). **[CB5009035130]**

MUSI 1181
Class Piano
(1 credit)
Class Piano, a course designed for students with little or no previous experience, provides a study of basic techniques, scales, chords, and basic repertoire. (1 lecture and 1 laboratory hours per week).
[CB5009075130]

MUSI 1182
Class Piano
(1 credit)
This Class piano course for beginners continues the study of basic techniques, scales, chords, and basic repertoire. (1 lecture and 1 laboratory hours per week). **[CB5009085130]**

MUSI 1183
Voice Class
(1 credit)
This laboratory class, designed for students with no previous voice training, provides instruction in breathing, tone production, and diction. (1 lecture and 2 laboratory hours per week). **[CB5009085130]**

MUSI 1188 [1170]
Percussion Class
(1 credit)
This required course for music education majors with instrumental concentrations examines techniques of performing and of instructing beginning instrumentalists on snare drum, tympani, xylophone, cymbals, and other percussion instruments. (1 lecture and 2 laboratory hours per week). **[CB5009035130]**

MUSI 1192 [1179]
Guitar Class
(1 credit)
This course, designed for beginning guitar students, provides a study of basic techniques, chords, and basic repertoire. (1 lecture and 2 laboratory hours per week). **[CB5009035130]**

MUSI 1211
Music Theory
(2 credits)
This course provides a study of the fundamentals of musicianship, including scales, intervals, diatonic triads, inversions, written and keyboard harmony, and dominant seventh chords and inversions. (3 lecture hours per week). Prerequisite: READ 0310. **[CB5009045130]**

MUSI 1212
Music Theory
(2 credits)
This course continues the study of scales, intervals, diatonic triads, inversions, written and keyboard harmony, and dominant seventh chords and inversions. (3 lecture hours per week). Prerequisite: READ 0310. **[CB5009045130]**

MUSI 1216
Ear Training and Sight-Singing
(2 credits)
This required course for music majors is the first part of a four-semester presentation of basic aural, visual, and vocal experiences in dictation and in sight-singing. (3 laboratory hours per week). Corequisite: MUSI 1211. **[CB5009045630]**

MUSI 1217
Ear Training and Sight-Singing
(2 credits)
This required course for music majors is the second part of a four-semester presentation of basic aural, visual, and vocal experiences in dictation and sight-singing. (3 laboratory hours per week). Corequisite: MUSI 1212. **[CB5009045630]**

MUSI 1263
Improvisation
(2 credits)
This course presents the techniques of improvising music through the analysis of melodic motives, chordal construction, and sequencing, and it applies this analysis to traditional and contemporary materials. (1 lecture and 2 laboratory hours per week).
[CB5009036530]

MUSI 1301
Introduction to Music
(3 credits)
This course is an introduction to the elements of music including notation, rhythm, melody, scales, keys, and chords. The course meets the needs of elementary education majors and other students who wish to gain a working knowledge of music. It is beneficial, but not required, for the student to also enroll in Class Piano. (3 lecture hours per week). Prerequisite: READ 0309. **[CB5009045526]**

MUSI 1306
Music Appreciation
(3 credits)
This general survey course provides the student with a foundation for the enjoyment and understanding of music. The course presents a study of representative composers and their works through recorded music. (3 lecture hours per week). Prerequisites: READ 0309 . **[CB5009025126]**

MUSI 1308
Survey of Music Literature I
(3 credits)
This course is a study of instrumental and vocal music forms. It includes representative compositions from sacred and secular music. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310. **[CB5009025226]**

MUSI 1309
Survey of Music Literature II
(3 credits)
This course continues the study of instrumental and vocal music forms. It includes representative compositions from sacred and secular music. (3 lecture hours per week). Prerequisites: READ 0310 and ENGL 0310 **[CB5009025226]**

MUSI 1310
History of Rock/Jazz
(3 credits)
This course consists of discussion and listening experiences reflecting the development of jazz music and its impact on American culture. The course traces the music from its African roots through ragtime, blues, the big-band swing era, be-bop, cool jazz, and free jazz. (3 lecture hours per week). Prerequisite: READ 0309 **[CB5009025326]**

MUSI 1386
Composition
(3 credits)
This course provides instruction in music composition in small forms for simple media in both traditional and contemporary electronic styles. (3 lecture hours per week). **[CB5009045326]**

MUSI 2181
Class Piano
(1 credit)
This class piano course is for students who have taken 1 year of piano and is a continuation of basic techniques. (1 lecture and 1 laboratory hours per week). **[CB5009075126]**

MUSI 2182
Class Piano
(1 credit)
This class piano course is for students who have taken 3 semesters of class piano and is a continuation of basic techniques. (1 lecture and 1 laboratory hours per week). **[CB5009075126]**

MUSI 2211
Music Theory
(2 credits)
This course continues the study begun in MUSI 1311 and MUSI 1312 with advanced aural and written study and with emphasis on chromatic harmony, harmonic analysis, and twentieth-century techniques. (3 lecture hours per week). Prerequisite: MUSI 1212. **[CB5009045226]**

MUSI 2212
Music Theory
(2 credits)
This course continues the study began in MUSI 1311, MUSI 1312, and MUSI 2312 with advanced aural and written study and with emphasis on chromatic harmony, harmonic analysis, and twentieth-century techniques. (3 lecture hours per week). Prerequisite: MUSI 2211. **[CB5009045226]**

MUSI 2216
Ear Training and Sight-Singing
(2 credits)
This required course for music majors is the third part of a four-semester presentation of basic aural, visual, and vocal experiences in dictation and sight-singing. (3 laboratory hours per week). Prerequisite: MUSI 1217. Corequisite: MUSI 2211. **[CB5009045726]**

MUSI 2217
Ear Training and Sight-Singing
(2 credits)
This required course for music majors is the last part of a four-semester presentation of basic aural, visual, and vocal experiences in dictation and sight-singing. (3 laboratory hours per week). Prerequisite: MUSI 2216. Corequisite: MUSI 2212. **[CB5009045726]**

Ensembles

MUSI 1125, 1126, 2125, 2126
Stage Band
(1 credit each)
This course can be repeated for credit. This organization rehearses and performs contemporary jazz and rock music as well as standard big band literature. Performances include concerts and participation in area festivals. membership is open to all College students by approval of the instructor. (4 laboratory rehearsal hours per week).
[CB5009035526]

MUSI 1127, 1128, 2127, 2128
Concert Band
(1 credit each)
This course can be repeated for credit. This concert group of brass, woodwind, and contemporary works for wind ensembles. (5 laboratory rehearsal hours per week). **[CB5009035526]**

MUSI 1135, 2135
Jazz Lab
(1 credit each)
This course can be repeated for credit. This organization performs for many special occasions on and off campus. Music includes small band jazz-rock with emphasis on individual improvisation. Membership is open to all College students by approval of the instructor. (3 laboratory hours per week). **[CB5009035526]**

MUSI 1141, 1142, 2141, 2142
Concert Choir
(1 credit each)
This course can be repeated for credit. This organization rehearses and performs traditional and contemporary choral literature. In addition to local concerts, the group participates in campus activities and makes several concert tours to other cities. In order to obtain credit, members must attend all called rehearsals and public performances. (5 laboratory rehearsal hours per week). **[CB5009035526]**

MUSI 1143, 1144, 2143, 2144
College Singers
(1 credit each)
This course can be repeated for credit. This organization is limited in membership. Students are selected through auditions from the membership of the College choir. The student must have previous experience in choral music, a member in good standing of the concert choir, ability to sight-read, and instructor approval. (4 laboratory rehearsal hours per week). **[CB5009035526]**

MUSI 1154
Chambers Singers
(1 credit)
This organization is limited in membership. Students are selected by auditions from membership of the College choir. (4 laboratory rehearsal hours per week). **[CB5009035526]**

MUSI 1158
Opera Workshop
(1 credit)
This course provides practical experience for the singing actor in the integration of music, acting, and staging of portions of operas. (1 lecture and 2 laboratory hours per week). **[CB5009085226]**

MUSI 1159/2159
Musical Theater
(1 credit)
This course can be repeated for credit. This course stresses the study and performance of works selected from the music Theater repertoire. (1 lecture and 4 laboratory hours per week). **[CB5009036126]**

Applied Music

All applied music courses are under [CB5009035426]

MUAP 1231, 1232
Applied Music - Wood-wind
(2 credits each)
These courses provide one hour of individual instruction per week in bassoon, clarinet, flute, oboe, and saxophone. (1 lecture and 4 laboratory practice hours per week).

MUAP 1241, 1242
Applied Music - Brass
(2 credits each)
These courses provide one hour of individual instruction per week in trumpet, trombone, French horn, and tuba. (1 lecture and 4 laboratory practice hours per week).

MUAP 1257, 1258
Applied Music - Percussion
(2 credits each)
These courses provide one hour of individual instruction a week in the use of percussion instruments. (1 lecture and 4 laboratory practice hours per week).

MUAP 1261, 1262
Applied Music - Guitar
(2 credits each)
These courses provide one hour of individual instruction a week in guitar. (1 lecture and 4 laboratory practice hours per week).

MUAP 1271, 1272
Applied Music - Piano
(2 credits each)
These courses provide one hour of individual instruction a week. (1 lecture and 4 laboratory practice hours per week).

MUAP 1281, 1282
Applied Music - Voice
(2 credits each)
These courses provide one hour of individual instruction per week. (1 lecture and 4 laboratory practice hours per week).

MUAP 1291, 1292
Applied Music - Composition
(2 credits each)
These courses provide one hour of instruction per week in music composition. Composing in small forms for simple media in both traditional styles and styles of the student's choice. (2 lecture hours per week).

MUAP 2231, 2232
Applied Music - Wood-wind
(2 credits each)
These courses provide one hour of individual instruction per week in bassoon, clarinet, flute, oboe, and saxophone. The student must have the approval of the department chairperson. (1 lecture and 4 laboratory practice hours per week).

MUAP 2241, 2242
Applied Music - Brass
(2 credits each)
These courses provide one hour of individual

instruction per week in trumpet, trombone, French horn, and tuba. The student must have the approval of the department chairperson. (1 lecture and 4 laboratory practice hours per week).

MUAP 2257, 2258
Applied Music - Percussion
(2 credits each)
These courses provide one hour of individual instruction a week in the use of percussion instruments. The student must have the approval of the department chair-person. (1 lecture and 4 laboratory practice hours per week).

MUAP 2261, 2262
Applied Music - Guitar
(2 credits each)
These courses provide on hour of individual instruction a week in guitar. The student must have the approval of the department chair-person. (1 lecture and 4 laboratory practice hours per week).

MUAP 2271, 2272
Applied Music - Piano
(2 credits each)
These courses provide one hour of individual instruction a week. The student must have the approval of the department chair-person. (1 lecture and 4 laboratory practice hours per week).

MUAP 2281, 2282
Applied Music - Voice
(2 credits each)
These courses provide one hour of individual instruction per week. The student must have the approval of the department chair-person. (1 lecture and 4 laboratory practice hours per week).

Nursing (Associate Degree)

Sally Durand, Director
Debra Fontenot, Sharon Hightower, Michael Hutton, Beverly Howard, Debra Krupa, Christy Scales, Laurine Seal, Miriam Villageliu Bixler

RNSG 1108
Dosage Calculations for Nursing
(1 credit)
Dosage calculations include reading, interpreting and solving calculation problems encountered in the preparation of medications; and conversion of measurements within the apothecary, avoirdupois, and metric system. This course emphasizes critical thinking skills and techniques needed to accurately and safely calculate medication dosages. Concepts of society, client/family, health and nursing roles are incorporated. (1 lecture hour per week)
Prerequisite: MATH 0310 **[CIP51.1601]**

RNSG 1162
Clinical Nursing: Mental Health Nursing
(1 credit)
An intermediate type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience. A method of instruction providing detailed education, training and work-based experiences and direct patient/client care, generally at a clinical site. Concurrent theory enrollment is required in RNSG 2213. (3 lab hours per week). Prerequisites: RNSG 1441. Corequisites: RNSG 2213 **[CIP51.1601]**

RNSG 1215
Health Assessment
(2 credits)
Development of skills and techniques required for a comprehensive health assessment within a legal/ethical framework. This course emphasizes critical thinking skills and techniques needed to perform health assessments of the adult and family. Concepts of society, client/family, health and nursing roles are incorporated. (1 lecture and 2 lab hours per week).
Prerequisites: BIOL 2401
[CIP51.1601]

RNSG 1246
Legal and Ethical Issues for Nurses
(2 credits)
Study of the laws and regulations related to the provision of safe and effective professional nursing care; attention given to the development of a framework for addressing ethical issues; and topics to include confidentiality, the Nursing Practice Act, professional boundaries, ethics, and health care legislation. Emphasis is on collaboration to analyze and integrate legal/ethical issues as related to professional nursing practice. Concepts of society, client/family, health and nursing roles are incorporated. (2 lecture hours per week).
Prerequisites: RNSG 2213 or RNSG 1417.
Co-requisites: RNSG 1443 or RNSG 1512.
[CIP51.1601]

RNSG 1260
Clinical Nursing: Foundations for Nursing Practice
(2 credits)
A basic type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical experiences allow the student opportunities to begin utilizing nursing skills in caring for adults and family in acute care settings. Clinical education is an unpaid learning experience. Concurrent theory enrollment in RNSG 1513 is required.(6 lab hours per week) Prerequisites: Admission into the ADN Program, BIOL 2401, BIOL 2402, ENGL 1301. Corequisites: , PSYC 2314, RNSG 1513, RNSG 1215, RNSG 1108. **[CIP51.1601]**

RNSG 1262
Clinical Nursing: Concepts of Nursing Practice I for Articulating Students
(2 credits)
A basic to intermediate type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience. Concurrent theory enrollment is required in RNSG 1417.(6 lab hours per week) Prerequisites: Admission into the ADN Program, RNSG 1215, BIOL 2401, BIOL 2402, BIOL 2420, PSYC 2301, PSYC 2314, ENGL 1301, and PHED (activity).Corequisites: RNSG 1417. **[CIP51.1601]**

RNSG 1417
Concepts of Nursing Practice I for Articulating Students
(4 credits)
Provides the articulating student the opportunity to examine the role of the professional nurse; application of a systematic problem solving process and critical thinking skills which includes a focus on the adult population in selected settings; and competency in knowledge, judgment, skill, and professional values within a legal/ethical framework. Concepts of society, client/family, health and nursing roles are incorporated. Concurrent clinical enrollment is required in RNSG 1262. (3 lecture and 2 lab hours per week)
Prerequisites: Admission into the ADN Program, RNSG 1215, BIOL 2401, BIOL 2402, BIOL 2420, PSYC 2301, PSYC 2314, ENGL 1301, and PHED (activity). Corequisites: RNSG 1262. **[CIP51.1501]**

RNSG 1441
Common Concepts of Adult Health
(4 credits)
Study of the general principles of caring for selected adult clients and families in structured settings with common medical-surgical health care needs related to each body system. Preparing the associate degree nurse as a provider of care, coordinator of care, and member of the profession emphasizing the clinical decision-making, knowledge, judgment, skills, and professional values within a legal/ethical framework. It includes biological, cultural, and psychosocial components with a focus on the adult population in selected settings. Emphasis is on application of systematic problem solving processes and critical thinking skills. Concepts of society, client/family, health and nursing roles are incorporated. Concurrent clinical enrollment is required in RNSG 1561 (3 lecture and 2 lab hours per week). Prerequisites: RNSG 1513, RNSG 1215, RNSG 1108. Corequisites: BIOL 2420, PSYC 2301, RNSG 1561. **[CIP51.1601]**

RNSG 1443
Complex Concepts of Adult Health
(4 credits)
Integration of previous knowledge and skills related to common adult health needs into the continued development of the professional nurse as provider of care, coordinator of care, and member of a profession in the care of adult clients/families in structured health care settings with complex medical-surgical health care needs associated with each body system. Emphasis is on knowledge, judgments, skills, and professional values within a legal/ethical framework. Concepts of society, client/family, health and nursing roles are incorporated. Concurrent clinical enrollment is required in RNSG 2563. (3 lecture and 2 lab hours per week) Prerequisites: RNSG 2213 or RNSG 1417. Corequisites: RNSG 2563. **[CIP51.1601]**

RNSG 1512
Nursing Care of the Childbearing and Childrearing Family
(5 credits)
Study of the concepts related to the provision of nursing care for childbearing and childrearing families; application of systematic problem solving processes and critical thinking skills, including a focus on the childbearing family during preconception, prenatal, antepartum, neonatal and postpartum periods and the childrearing family from birth to adolescence; and competency in knowledge, judgment, skill and professional values within a legal/ethical framework. Analysis and synthesis of knowledge and skills are based upon normal and abnormal assessment findings. Concepts of society, client/family, health and nursing roles are incorporated. Concurrent clinical enrollment is required in RNSG 2463. (4 lecture and 2 lab hours per week.) Prerequisites: RNSG 2213 or RNSG 1417. Corequisites: RNSG 2463. **[CIP51.1601]**

RNSG 1513
Foundations for Nursing Practice
(5 credits)
Introduction to the role of the professional nurse as a provider of care, coordinator of care, and member of a profession. Topics include but are not limited to the fundamental concepts of nursing practice, history of professional nursing, a systematic framework for decision-making, mechanisms of disease, the needs and problems that nurses help patients manage, and basic psychomotor skills. Emphasis is on knowledge, judgment, skills and professional values within a legal/ethical framework. Concepts of society, client/family, health and nursing roles are incorporated. Concurrent clinical enrollment in RNSG 1260 is required. (4 lecture and 3 lab hours per week)
Prerequisites: Admission into the ADN Program, BIOL 2401, BIOL 2402, ENGL 1301.
Corequisites: PSYC 2314, RNSG 1215, RNSG 1108, RNSG 1260. **[CIP51.1601]**

RNSG 1561
Clinical Nursing: Common Concepts of Adult Health
(5 credits)
An intermediate type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Specific detailed learning objectives are developed for each course by the faculty. Clinical education is an unpaid learning experience. Concurrent theory enrollment is required in RNSG 1441. (15 lab hours per week) Prerequisites: RNSG 1513, RNSG 1215, RNSG 1108. Corequisites: PSYC 2301, RNSG 1441. **[CIP51.1601]**

RNSG 2121
Management of Client Care
(1 credit)
Exploration of leadership and management principles applicable to the role of the nurse as a provider of care, coordinator of care, and member of a profession. Includes application of knowledge, judgment, skills, and professional values within a legal/ethical framework. This course emphasizes leadership and management theories, personal qualities, and tasks necessary to positively influence patient care and outcomes of the health care facility. Concepts of society, client/family, health and nursing roles are incorporated. (1 lecture hour per week).Co-requisites: RNSG 1443 or RNSG 1512.
[CIP51.1601]

RNSG 2213
Mental Health Nursing
(2 credits)
Principles and concepts of mental health, psychopathology, and treatment modalities related to the nursing care of clients and their families will be stressed. The course focuses on the study of behavioral patterns considered to be deviations from normal. Concepts of society, client/family, health and nursing roles are incorporated. Concurrent clinical enrollment in RNSG 1162 is required. (2 lecture hours per week) Prerequisites: RNSG 1441, PSYC 2301. Corequisites: RNSG 1162. **[CIP51.1601]**

RNSG 2463
Clinical Nursing: Nursing of the Childbearing and Childrearing Family
(4 credits)
An intermediate to advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and /or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience. Clinical experience provides the student with opportunities to care for and observe the family during pregnancy, childbirth and childrearing in the hospital and clinic settings. Concurrent theory enrollment is required in RNSG 1512. (12 lab hours per week)
Prerequisites: RNSG 2213 or RNSG 1417.
Corequisites: RNSG 1512. **[CIP51.1601]**

RNSG 2563
Clinical Nursing: Complex Concepts of Adult Health
(5 credits)
An intermediate to advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional (faculty or preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience. Concurrent theory enrollment is required in RNSG 1443. (15 lab hours per week).
Prerequisites: RNSG 2213 or RNSG 1417.
Corequisites: RNSG 1443. **[CIP51.1601]**

Nursing (Vocational)

Karen Briza, Department Chairperson
Michael Cooper

VNSG 1122
Vocational Nursing Concepts
(1 credit)
Introduction to the nursing profession and its responsibilities and the legal and ethical issues in nursing practice. Concepts related to the physical, emotional, and psychosocial self-care of the learner/professional. Learning Outcomes: The student will discuss the personal adjustments essential to the development of the vocational nurse; identify the role of the licenced vocational nurse; and discuss the legal and ethical responsibilities in vocational nursing practice. (1 lecture hour per week). **[CIP51.1613]**

VNSG 1136
Mental Health
(1 credit)
Introduction to the principles and theories of positive mental health and human behaviors. Topics include emotional responses, coping mechanisms, and therapeutic communi-cation skills. Learning Outcomes: The student will describe the characteristics of positive mental health; identify the coping mechanisms utilized by individuals to assist in alleviating stress and anxiety; and demonstrate the use of therapeutic communication skills. (1 lecture hour per week). **[CIP51.1613]**

VNSG 1160
Clinical - Practical Nurse I
(1 credit)
A method of instruction providing detailed education, training and work-based experience , and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experience. Course may be repeated if topics and learning outcomes vary. Learning Outcomes: As outlined in the learning plan, the student will apply the theory, concepts, and skills involving specialized materials, equipment, procedure, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the particular occupation and the business/industry, and demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable language of the occupation and the business or industry. (5 clinical hours per week). Corequisite: VNSG 1423. **[CIP51.1613]**

VNSG 1219
Professional Development
(2 credits)
Study of the importance of professional growth. Topics include the role of the licensed vocational nurse in the multi-disciplinary health care team, professional organizations, and continuing education. Learning

Outcomes: The student will describe the role of the licensed vocational nurse in multi-disciplinary settings inclusive of basic principles of leadership and management; discuss the role of professional organizations and regulatory agencies; and identify criteria and appropriate resources for continuing education. (2 lecture hours per week). **[CIP51.1613]**

VNSG 1226
Geriatrics
(2 credits)
Overview of the normal physical, psychological, and cultural aspects of the aging process. Addresses common disease processes of aging and explores attitudes towards care of the elderly. Topics include but are not limited to introduction to aging; the aging adult; geriatric mental health; sexuality and aging; pain management; geriatric medications; assisting the dying client and family; hospice care. (2 lecture hours per week). **[CIP51.1613]**

VNSG 1227
Essentials of Medication Administration
(2 credits)
General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs, IV administration is not included. Instruction includes various systems of measurement. Lab required. Learning Outcomes: The student will demonstrate accurate dosage calculation; discuss the principles of medication administration safety; and identify the elements of accurate documentation of medication administration. (1 lecture and 2 laboratory hours per week). **[CIP51.1613]**

VNSG 1230
Maternal - Neonatal Nursing
(2 credits)
Utilization of the nursing process in the assessment and management of the child bearing family. Emphasis on the bio-psycho-socio-cultural needs of the family during the phases of pregnancy, childbirth , and the neonatal period including abnormal conditions. Learning Outcomes: The student will discuss the bio-psycho-socio-cultural needs of the childbearing family; and utilize the nursing process to assist in planning the care of the childbearing family. (2 lecture hours per week). Corequisite: VNSG 1660. **[CIP51.1613]**

VNSG 1234
Pediatrics
(2 credits)
Study of childhood growth & development childhood diseases and childcare from infancy through adolescence. Focus on the care of the well and the ill child utilizing the nursing process. Learning Outcomes: The student will identify principles of growth & development and utilize the nursing process to assist in planning care for the well or ill child. (2 lecture hours per week). Corequisite: VNSG 1660. **[CIP51.1613]**

VNSG 1238
Mental Illness
(2 credits)
Study of human behavior with emphasis on emotional and mental abnormalities and modes of treatment incorporating the nursing process. Learning Outcomes: The student will identify common mental illnesses and maladaptive behavior, utilize the nursing process to assist in planning care for the individual with mental illness or maladaptive behavior; and discuss trends in the management of the individual requiring psychotherapeutic treatment. (2 lecture hours per week). **[CIP51.1613]**

VNSG 1329
Medical Surgical Nursing I
(3 credits)
Application of the nursing process to the care of adult and geriatric patients experiencing respiratory, gastrointestinal, genitourinary, musculoskeletal, and dermatological medical-surgical conditions in the health-illness continuum. A variety of health care settings are utilized. Learning Outcomes: The student will identify the components of the health-illness continuum; identify prevalent respiratory, gastrointestinal, genitourinary, musculoskeletal, and dermatological medical surgical conditions affecting the adult and gerian and utilize the nursing process to assist in developing a plan of care for selected medical-surgical conditions. (3 lecture hours per week). Corequisite: VNSG 1661. **[CIP51.1613]**

VNSG 1331
Pharmacology
(3 credits)
Fundamentals of medications and their diagnostic, therapeutic, and curative effects. Includes nursing interventions utilizing the nursing process. Learning Outcomes: The student will identify properties, effects, and principles of pharmacotherapeutic agents; and list common nursing interventions associated with the various pharmacotherapeutic agents. (3 lecture hours per week). **[CIP51.1613]**

VNSG 1332
Medical - Surgical Nursing II
(3 credits)
Continuation of Medical-Surgical Nursing I with application of the nursing process to the care of adult and geriatric patients experiencing cardiovascular, neurosensory, endocrine, and oncological medical-surgical conditions in the health-illness continuum. Includes a variety of health care settings. Learning Outcomes: The student will identify the components of the health-illness continuum; identify prevalent cardiovascular, neurosensory, endocrine, and oncological medical surgical conditions affecting the adult and gerian and utilize the nursing process to assist in developing a plan of care for selected medical-surgical conditions. (3 lecture hours per week). Corequisite: VNSG 1661. **[CIP51.1613]**

VNSG 1420
Anatomy & Physiology for Allied Health
(4 credits)
Introduction to the normal structure and function of the body including an understanding of the relationship of body systems in maintaining homeostasis. Learning Outcomes: The student will identify the structure of each of the major body systems; describe the function of each of the major body systems; and discuss the interrelationship of systems in maintaining homeostasis. (4 lecture hours per week). **[CIP51.1613]**

VNSG 1423
Basic Nursing Skills
(4 credits)
Mastery of entry level nursing skills and competencies for a variety of health care settings. Utilization of the nursing process as the foundation for all nursing interventions. Lab required. Learning Outcomes: The student will demonstrate competency in basic nursing skills; identify the steps in the nursing process and how each relates to nursing care; and discuss the delivery of basic nursing skills in a variety of health care setting. (3 lecture and 4 laboratory hours per week). Corequisite: VNSG 1160. **[CIP51.1613]**

VNSG 1660
Clinical - Practical Nurse II
(6 credits)
A method of instruction providing detailed education, training, and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experience. Course may be repeated if topics and learning outcomes vary. Learning Outcomes: As outlined in the learning plan, the student will apply the theory, concepts, and skills involving specialized materials, equipment, procedure, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the particular occupation and the business/ industry, and demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable language of the occupation and the business or industry. (24 clinical hours per week). Corequisites: VNSG 1330 and VNSG 1334. **[CIP51.1613]**.

VNSG 1661
Clinical - Practical Nurse III
(6 credits)
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experience. Course may be repeated if topics and learning outcomes vary. Learning Outcomes: As outlined in the learning plan, the student will apply the theory, concepts, and skills involving specialized materials, equipment, procedure, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the particular occupation and the business/ industry, and demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable language of the occupation and the business or industry. (24 clinical hours per week). Corequisites: VNSG 1329 and VNSG 1332. **[CIP51.1613]**