COLLEGE OF ARTS AND SCIENCES

Administrative Officers

Dean	Jaimie L. Hebert, Ph.D. (936) 294-1401; hebert@shsu.edu
Associate Dean	Mary F. Plishker, Ph.D. (936)294-1326; plishker@shsu.edu
Associate Dean	Dana E. Nicolay, M.F.A. (936)294-1117; nicolay@shsu.edu
Associate Dean	Keri L. Rogers, Ph.D. (936)294-3422; krogers@shsu.edu
Department of Agricultural Sciences	TBA, Chair
Department of Art	Sharon A. King, M.A., Chair
Department of Biological Sciences	Matthew P. Rowe, Ph.D., Chair
Department of Chemistry	Richard E. Norman, Ph.D., Chair
Department of Computer Science	Peter A. Cooper, Ph.D., Chair
Department of Geography and Geology	Marcus Gillespie, Ph.D., Chair
Department of Mathematics and Statistics	Mark Klespis, Ph.D., Interim Chair
School of Music	TBA, Chair
Department of Physics	E. Rex Isham, Ph.D., Chair
Department of Theatre and Dance	Penelope A. Hasekoester, M.F.A., Chair

Mission

The College of Arts and Sciences embraces the traditional aims of a liberal arts education: a critical understanding of diverse cultures as expressed in their literature, art, ideas and values. The College also strives to foster analytic, interpretive, creative, and interpersonal abilities, as well as communication skills, both oral and written, which are fundamental to functioning effectively in the University and in the larger community. In providing educational foundations which enable students to develop, evaluate and express ideas critically, the College hopes to contribute to the formation of responsible citizens and competent professionals.

Academic Programs

The College of Arts and Sciences is comprised of 10 academic units: Agricultural Sciences; Art; Biological Sciences; Chemistry; Computer Science, Geography and Geology; Mathematics and Statistics; Music; Physics; and Theatre and Dance.

Major	Degree(s)	Page
Agriculture	B.S.	109
Agriculture-Agricultural Business	B.S.	109
Agriculture-Agricultural Mechanization	B.S.	110
Agriculture-Animal Science	B.S.	111
Agriculture-Horticulture and Crop Science	B.S.	113
Applied Arts and Sciences	B.A.A.S.	124
Art-Advertising and Graphic Design	B.F.A.	135
Art-Photography	B.F.A.	135
Art-Studio Art	B.A., B.F.A.	136
Biology	B.A., B.S.	147
Chemistry	B.S.	159
Computing Science	B.S.	156
Dance	B.A., B.F.A.	215

Environmental Science	B.S.	155
Forensic Chemistry	B.S.	160
Geography	B.A., B.S.	175
Geology	B.S.	180
Industrial Technology	B.S.	126
Industrial Technology-Construction Management	B.S.	127
Industrial Technology-Design and Development	B.S.	127
Industrial Technology-Electronics	B.S.	128
Industrial Technology-Industrial Management	B.S.	128
Mathematics	B.A., B.S.	186
Music	B.A., B.M.	196
Music Therapy	B.M.	200
Music Therapy-Correctional	B.M.	200
Musical Theatre	B.F.A.	220
Photography	B.A., B.S.	142
Physics	B.S.	207
Theatre	B.F.A.	219

Note: This listing of undergraduate degree programs is correct as of December, 2005 and does not include those degree programs being phased out.

Highlights

- Faculty members in the College of Arts and Sciences have been recognized nationally and internationally for their expertise through national grants and awards, publications, presentations, and performances.
- Undergraduate research is encouraged through partnerships with faculty members.
- Students in the College of Arts and Sciences have presented, published and performed nationally and internationally.
- Mathematics Tutoring Center – The Mathematics Tutoring Center provides free tutoring in mathematics and statistics courses.
- The College of Arts and Sciences collaborates with the College of Criminal Justice to coordinate the program in Forensic Science.
- The College of Arts and Sciences houses the Sam Houston State University Center of Excellence in Digital Forensics.
- The Theatre/Dance program has been rated as at top 10 Musical Theatre program in the nation by Broadway Theatre Project.
- Departments in the College of Arts and Sciences host state and regional conferences, symposiums, and festivals.
- Numerous fine arts events are scheduled on campus throughout the year including art gallery exhibits, interdisciplinary musical theatre performances, dance performances, music recitals, and theatre productions.

Scholarships

Sam Houston State University offers academic scholarship opportunities for **beginning freshmen** who excel in areas of academic achievement and leadership and competitive scholarship opportunities for **current SHSU and transfer undergraduate students**. Information for these scholarships may be obtained from the Academic Scholarship Office, SHSU, Huntsville, TX 77341-2120; Telephone 936-294-1672; E-mail scholarships@shsu.edu.

- Clay & Margaret B. Smith Memorial Arts & Sciences Scholarship – Recipient must be a full-time sophomore, junior or senior in any major within the College of Arts & Sciences, demonstrate financial need, and have 2.8 grade point average. The amount of the scholarship is $1000 per year. The application submission deadline is April 15. Contact the College of Arts & Sciences, (936)294-1401 for more information.

Contact Information
College of Arts and Sciences
Sam Houston State University
Lee Drain Building, Suite 200
Box 2209
Huntsville, TX 77341-2209

(936) 294-1401
(281) 657-6436 (Houston number)
(936) 294-1598 (Fax)

www.shsu.edu/coas
coas@shsu.edu

DEPARTMENT OF AGRICULTURAL SCIENCES

Chair: TBA

Website: www.shsu.edu/agr

The success of all great civilizations has been closely linked to their ability to feed, clothe and provide shelter for their population. Modern western society relies on a complex array of high tech agricultural production and technology systems, multi-faceted marketing programs, and an understanding of social, political, environmental and economic conditions that influence global trade. Advancements and innovations in technology have allowed our society to flourish and prosper. The Department of Agricultural Sciences consists of three major programs of study; Agricultural Sciences, Technology, and Career and Technology Education. Within each program are a number of specialized programs or majors, offering students the opportunity to tailor degree programs with career goals. Specific requirements for each degree are outlined under the respective program headings.

AGRICULTURAL SCIENCES PROGRAM

Coordinator: Stanley F. Kelley (936)294-1189; sfkelley@shsu.edu

Faculty: Marcy Beverly, Roger Hanagriff, Phil Hamilton, Billy Harrell, Stanley Kelley, Robert Lane, Michael Lau, Joe Muller, Tim Pannkuk, Dwayne Pavelock, Lesley Rakowitz, Carolyn Robinson, Doug Ullrich, Barry Williams, Art Wolfskill

Academic Programs

The Agricultural Sciences program offers a Bachelor of Science degree in Agriculture* with the following emphasis areas:

- Agriculture (Teaching option available)
- Agricultural Business (Teaching option available)
- Agricultural Mechanization (Teaching option available)
- Animal Science (Preveterinary Medicine, Teaching, and Wildlife Ecology options available)
- Horticulture and Crop Sciences (Teaching option available)

*Students may add the secondary teacher certification courses to any of the above emphasis areas to gain certification to teach agricultural sciences in Texas.

Highlights

The Agricultural Sciences program maintains four locations with working laboratories. The Agriculture Center is home to the Indoor Arena, Meat Science Lab, Soils Lab, Horse Husbandry Lab, Poultry Science Lab and a state-of-the-art greenhouse. Nearby is the Horticulture Center with two additional greenhouses and laboratory facilities. The Agricultural Mechanization Center provides students with hands-on experience in metal project fabrication, electricity, hydraulics, structures, and soil and water conservation. The 1740 acre Gibbs Ranch is located about 10 minutes north of campus on Highway 75. The ranch serves as a living laboratory for all aspects of agriculture.

Career Opportunities

Approximately twenty percent of our population is involved in occupations directly related to agriculture. From production, banking and marketing, teaching, processing or service in governmental agencies, many rely on the productivity of modern agriculture in meeting the daily needs of society.

Employment opportunities for graduates include but are not limited to:

- agricultural journalist
- agricultural and natural resources researcher
- agricultural equipment specialist
- agricultural producer or manager

- agricultural sales and service
- agricultural sciences teacher
- cooperative extension agent
- farm and real estate appraiser
- credit manager for a bank or agricultural lending institution
- farm and ranch manager
- field representative for agricultural associations
- governmental agencies
- landscape design and maintenance specialist
- real estate specialist
- soil conservationist

Additional career information is given in the introduction to each of the degree programs in agriculture.

Suggested Minors

For those seeking secondary teacher certification, secondary education (SED) is substituted for the minor. The most common major used for this purpose is General Agriculture, but it may be used with the more specific majors as well. Many Agribusiness, Animal Science, and Horticulture-Crop Science majors will select minors from the College of Business, such as Management, Marketing, Accounting, Banking, Finance, or General Business Administration. Animal Science majors often select a minor in Wildlife Ecology. Biology or Composite Science are frequently taken as minors by Animal Science and Horticulture-Crop Science students considering graduate school. Agricultural Mechanization majors often select one of the minors available in the Technology Program or SED. For those interested in a career in agricultural communications, a minor in Mass Communication is often desired. Minors in Horticulture-Crop Science, Animal Science, Agricultural Mechanization and Agribusiness are available for those majoring in other specific agricultural disciplines. For instance, an Agribusiness student may minor in Horticulture-Crop Science to better prepare for career opportunities in that field.

Student Organizations

- Ag Ambassadors
- Agribusiness Association
- Agricultural Mechanization Club
- ALCA/PLANET Landscape
- Contracting Team
- Beef Cattle Show Team
- Block and Bridle
- Collegiate FFA
- Delta Tau Alpha - National Agricultural
- Honor Society
- Ducks Unlimited
- Horticulture and Crop Sciences Club
- Livestock Judging Team
- Minorities in Agriculture, Natural
- Resources and Related
- Sciences
- Rodeo Club
- Wildlife Ecology Club

Internships

An internship in agricultural sciences is intended to provide experience-based learning opportunities for students in their respective discipline of study. Students generally seek an internship experience at the end of their sophomore or junior year. The course identified for internship credit in agriculture is AGR 496 - Directed Studies. Internships may be arranged through student contact with providers or through departmental faculty and staff announcements and postings. All internships must receive departmental approval through application prior to the initiation of the internship. Maximum credit for internship is six (6) credit hours.

Scholarships

- **Arthur Lynn Talk, Jr. Memorial Endowed Scholarship**: $500 - $1000, approximately five scholarships awarded annually to full-time beginning freshmen, major in a field of agriculture. Selection based on academic record (minimum 2.75 GPA), extra-curricular activities, and leadership.
- **Ann T. Crump and Charles T. Mallery Endowed Scholarship:** $1000-$2000/year, full-time beginning freshmen majoring in Agribusiness, academic performance in high school, demonstrated financial need and extracurricular involvement are criteria for selection. Must maintain a minimum 3.0 GPA for scholarship renewal in subsequent years.
- **Houston Livestock Show and Rodeo Endowed Scholarship**: $500 - $2000, awards to incoming freshmen, awards to junior college transfer students, awards to currently enrolled agriculture majors (number of awards may vary), minimum 2.75 GPA, major in a field of agriculture. Selection criteria same as Talk scholarship.
- **San Antonio Livestock Exposition Scholarship**: $10,000/4 years, awards to full-time entering freshmen only, three awards given annually, major in field of agriculture, 12 credit hours per semester minimum, must maintain minimum 3.0 GPA for renewal, Texas residents only. Must comply with S.A.L.E. requirements.
- **James Marcus Smith Trust Scholarship**: $500 - $1000, one award anually, animal science majors. Selection based on academic record (minimum 2.75 GPA), extra-curricular activities, and leadership.
- **Wilson-Warner Endowed Scholarship**: $1000 - $3000, one award annually; major in field of agriculture. Selection criteria based on academic record (minimum 3.5 GPA), extra-curricular activities, and leadership.
- **Willie Frank and Virginia Hall Trust Scholarship**: $1000 - $1500, two awards (may vary) annually; major in agricultural sciences seeking teacher certification; minimum 2.75 GPA. Must have graduated in upper half of high school class; other selection criteria same as previous scholarship.
- **W.E. Lowry Leadership Award**: $300 (approximately), one award annually; must have completed two semesters at SHSU, be active in Collegiate FFA, and possess good character and scholarship; other criteria same as previous scholarships.
- **Seitz Gift Fruit/Golden Valley Farms Scholarship**: $500, two awardsannually (one award to senior prior to student teaching, one award to senior during student teaching block); major in field of agriculture and seeking teacher certification; minimum 2.5 GPA.
- **Letts-Hopper Endowed Scholarship**: $500, one award annually, must be junior or senior at SHSU; major in field of agriculture. Selection on basis of character, academic achievement and financial need.
- **Clemon and Carolyn Montgomery Endowed Scholarship**: $500, one award annually; major in field of agriculture; minimum 2.75 GPA. Selection based on demonstrated financial need.
- **Preston Leo Reeder Endowed Scholarship**: $500, one award annually; , major in field of agriculture; minimum 3.0 GPA. Selection based on demonstrated financial need.
- **Southwest Meat Suppliers Association Scholarship**: $500, one award annually; major in field of agriculture with interest in career in the meat industry.

Note: Scholarships are one-time awards and not automatically renewable. A Student may reapply in subsequent years if eligibility requirements are met. (Exceptions: Ann T. Crump and Charles T. Mallery Endowed Scholarship; San Antonio Livestock Exposition Scholarships)

The program requires a single application form to apply for all of the above scholarships. It may be printed from www.shsu.edu/~agr_www/sch1.html or the associated PDF file.

SHSU Rodeo Scholarships

- **Tommy Castenson Memorial Scholarship**: $500 - $900/year, four to six awards.
- **Copenhagen / Skoal — U.S. Tobacco Scholarship**: $2000 - $5000/year, awarded to NIRA winners at regional and national levels.
- **Rodeo Club Alumni Scholarship**: $300 to $400 average/student, awarded on a per -semester basis.

- **L. N. Sikes Memorial Scholarship**: $400 - $500/year.
- **Wes Neyland Memorial Rodeo Scholarship**: $500/year, one award, 2.25 minimum GPA, agricultural sciences major, competitor in the sport of college rodeo.

Additional information regarding rodeo scholarships may be obtained by contacting Roger Hanagriff at (936) 294-3867; email: agr_rdh@shsu.edu.

Program-Specific Requirements

The **objectives** of the Agricultural Sciences Program are to:

- Provide high quality instruction in agricultural sciences, technology, and business.
- Promote research in agricultural sciences.
- Provide a program of continuing education for teachers of agricultural science and agricultural producers.
- Provide educational and competitive activities for youth involved in or interested in the agricultural sciences.

For additional information regarding admission requirements, degree programs, description of courses, and financial assistance available, please refer to the appropriate sections of this catalog. Brochures and information concerning the department and scholarships may be obtained by calling 936-294-1215 or writing: Sam Houston State University, Department of Agricultural Sciences, Huntsville, Texas 77341-2088 or by emailing a request to sfkelley@shsu.edu. Website: www.shsu.edu/agr.

Curriculum
Major in Agriculture
Bachelor of Science

This program is designed to meet the needs of students desiring a program of study in farm and ranch production management, agricultural journalism, agricultural communications, agricultural education, and several others. The program allows for the selection of a minor in special interest areas such as chemistry, biology, business, environmental science, photography, journalism, or computer science. Specified course requirements for the major are structured to meet the specific needs of an individual student with the approval of the faculty advisor.

First Year	Credit
AGR 110, 162, 164, 165, 169	13
ENG 164, 165	6
HIS 163, 164	6
MTH 164 or MTH 170	3
CS 133 or 143	3
KIN 215	1
	32

Second Year	Credit
AGR (Advanced)	12
Component Area 4 (Literature or PHL)	3
Component Area 3 (prefer BIO161/111 and BIO 162/112)	8
MTH (prefer MTH 199 or STA 169)	3
Component Area 4	3
Minor	3
	32

Third Year	Credit
AGR 344, 373, 289 or 461	10
POL 261, POL (200-level)	6
Component Area 3 (prefer CHM)	8
Minor	6
Component Area 5	3
	33

Fourth Year	Credit
AGR 412, 360, 488	7
AGR electives (Advanced)	12
Minor (6 hr advanced)	9
Component Area 4 (Cultural Studies)	3
	31

Major in Agriculture – Agricultural Business
Bachelor of Science

Agribusiness is a growing program for students interested in management in agriculture. The program includes courses in farm and ranch management, marketing, natural resources, agricultural law, tax planning, budgeting, finance, appraisal, business organization, and other courses related to business and management. The agribusiness curriculum prepares students for employment in

finance, ranch management, business management, state and federal agencies, sales and marketing, and many other fields related to business and economics.

First Year	Credit	Second Year	Credit
AGR 110, 164, 238, 289	10	AGR 162, 165, or 169	6
AGR 162, 165, or 169	3	POL 261	3
ENG 164,165	6	AGR 285, 367, 385	9
HIS 163,164	6	STA 169	3
Component Area 3	4	Component Area 4 (Literature or PHL)	3
KIN 215	1	Component Area 3	8
SCM 282 or ENG 330 or AGR 488	3	Component Area 5	
	33	(prefer ECO 230, 233, or 234)	3
			35

Third Year	Credit	Fourth Year	Credit
AGR 461,462, 474, 412	10	AGR 486	3
MTH 199	3	AGR 377 or 475	3
Minor (3 hr advanced)	9	Advanced AGR elective	3
POL (200-level)	3	Minor (Adv)	12
Component Area 4	3	Component Area 3	4
CS 133 or 143	3	Component Area 4 (Cultural Studies)	3
	31	Electives	1
			29

Note 1: A minor in Banking is available with this degree with minimal modifications to the above curriculum. See requirements for the Minor in Banking in the College of Business Administration section of this catalog for details.
Note 2: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Major in Agriculture – Agricultural Mechanization

Bachelor of Science

The primary purpose of the curriculum is to provide educational experiences for persons who intend to pursue careers related to technical operation and management in agriculture and related industries. It is expected that graduates will assume positions of leadership and responsibility in one of the following areas: agricultural service and sales, agricultural management, agricultural production systems, product service, product testing, service management, or public and governmental service agency management.

First Year	Credit	Second Year	Credit
AGR 110, 162, 165, 169	10	AGR 164 or 289, 284	6
ENG 164, 165	6	Advanced AGR elective	3
HIS 163, 164	6	ENG 330	3
Component Area 3	8	Component Area 4 (Literature or PHL)	3
MTH 164 or 170	3	Component Area 3	4
KIN 215	1	MTH	3
	34	IT 139	3
		PHY 135/115	4
		CS 133 or 143	3
			32

Third Year	Credit	Fourth Year	Credit
AGR 330, 380, 383, 386	12	AGR 412, 461, 481, 485, 487	13
SCM	3	Advanced AGR elective	4
ACC 231	3	GBA elective (advanced)	6
MGT 380	3	Component Area 4 (Cultural Studies)	3
POL 261, POL (200-level)	6	Component Area 4	3
ECO 230	3	Electives	3
Component Area 5	3		32
	33		

NOTE: Degree plan as shown includes 18-hours of specified electives in lieu of a minor. Business, Industrial Technology, or other related agriculture emphasis area minors are available upon request (see Agriculture as a Minor). Secondary agricultural science teacher certification is also available with any agriculture specialization.

Major in Agriculture – Animal Science

Bachelor of Science

The major emphasis in Animal Science prepares students for careers in the livestock and poultry production and support industries. Scientific principles, management, production technologies and skills are covered in appropriate courses. The University maintains herds and flocks for teaching and research. Students may complete pre-veterinary medicine and wildlife ecology requirements under the Animal Science program. Graduates can expect to qualify for positions in sales and service, inspection, regulation, research/teaching, breed associations, extension, or management in an animal and/or wildlife management industry.

First Year	Credit	Second Year	Credit
AGR 110, 162, 164 or 289, 169	10	Component Area 4 (Literature or PHL)	3
BIO 161/111, 162/112	8	Minor	6
CHM 138/118, 139/119	8	MTH 164 or 170	3
ENG 164, 165	6	MTH elective	3
KIN 215	1	HIS 163, 164	6
	33	CS 133 or 143	3
		AGR 165, 373	6
		Animal Science elective (Advanced)*	3
			33

Third Year	Credit	Fourth Year	Credit
AGR 363, 376	6	AGR 412, 489, 494	7
Animal Science electives* (6 hr advanced)	6	SCM	3
AGR 344, 470	7	Component Area 5	3
Component Area 4	3	Minor (9 hr advanced)	12
Component Area 4 (Cultural Studies)	3	ENG 330 or AGR 360	3
POL 261, POL (200-level)	6	Animal Science elective* (Advanced)	3
	31		31

* Animal Science electives to be selected from: AGR 236, 269, 338, 364, 435, 431, 476, 480, 491, or 495.

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Major in Agriculture – Animal Science
Preveterinary Medicine
Bachelor of Science

First Year	Credit	Second Year	Credit
AGR 110, 169	4	Component Area 4 (Literature or PHL)	3
BIO 161/111, 162/112	8	Component Area 4 (Cultural Studies)	3
CHM 138/118, 139/119	8	MTH 164 or 170 or 142	3
ENG 164, 165	6	HIS 163, 164	6
Component Area 4	3	BIO 234	3
KIN 215	1	PHY 138/118, 139/119	8
CS 133 or 143	3	AGR 344, 376	7
	33		33

Third Year	Credit	Fourth Year	Credit
AGR 363, 373	6	BIO 347	4
Animal Science electives* (3 hr advanced)	8	AGR 412, 470, 489, 494	10
CHM 238/218; 239/219	8	STA 379	3
POL 261	3	Component Area 5	3
ENG 330	3	POL (200-level)	3
BIO 345	4	CHM 348	4
	32	SCM 161 or 282	3
			30

* Prevet electives to be selected from AGR 236, 269, 338, 364, 431, 435, 476, 480, 491, or 495.

Major in Agriculture – Animal Science
Wildlife Ecology
Bachelor of Science

The animal science major with wildlife ecology option is an excellent choice for those students wanting to enter management of ag production or wildlife resources or for those wanting to enter graduate school in wildlife fisheries sciences. Students selecting this degree should indicate ANS as their major and AWE as their minor.

First Year	Credit	Second Year	Credit
AGR 110, 164, 165, 169	10	AGR 344, 376	7
BIO 161/111, 162/112	8	ENG 330, AGR 360, or AGR 488	3
ENG 164, 165	6	STA 169	3
MTH 164 or 170	3	HIS 163, 164	6
CS 133 or 143	3	CHM 138/118, 139/119	8
KIN 215	1	AGR 236	3
	31	Animal Science electives*	3
			33

Third Year	Credit	Fourth Year	Credit
AGR 338, 363, 373, 383, 470	15	AGR 412, 476, 480, 483, 489, 494	16
POL 261, POL (200-level)	6	BIO 430, 433, or 470	3
BIO 340, 364, 336	10	Component Area 4 (Cultural Studies)	3
Component Area 4	3	Component Area 4 (Literature or PHL)	3
	34	Animal Science electives* (Advanced)	5
			30

* Animal Science electives to be selected from: AGR 364, 376, 431, 434, 435, 491, or 495.

Major in Agriculture – Horticulture and Crop Sciences

Bachelor of Science

The Horticulture and Crop Sciences curriculum provides educational background to those interested in employment in fields related to the production, marketing and/or management of horticultural or agronomic crops; landscape design, installation, and maintenance; and other related businesses. Employment opportunities include but are not limited to nursery management, greenhouse plant production, turf management, landscape design and maintenance, floral industry, field crop production or consulting, soil conservation programs, chemical and seed production and sales, agricultural extension, and research/teaching.

First Year	Credit
AGR 110, 165	4
BIO 161/111, 162/112	8
CHM 138/118	4
ENG 164, 165	6
HIS 163	3
MTH 164 or 170	3
KIN 215	1
Component Area 4	3
	32

Second Year	Credit
Approved electives*	5
Component Area 4 (Literature or PHL)	3
HIS 164	3
CS 133 or 143	3
CHM 139/119	4
POL 261	3
Major Electives**	3
MTH	3
AGR 295	3
	30

Third Year	Credit
AGR 344, 395, 412	8
ENG 330 or AGR 360	3
Minor	6
Major Electives** (Advanced)	3
SCM	3
Component Area 4 (Cultural Studies)	3
POL (200-level)	3
BIO 369 or BIO 371	3
	32

Fourth Year	Credit
Major Electives** (Advanced)	12
Minor (9 hr advanced)	15
Component Area 5	3
BIO 343	4
	34

* Approved electives include: AGR 162, 164, 284, 289, 382, 383; IT 139, 161; GEL 133, GEO 131/111, 461.

** Major electives include AGR 274, 299, 337, 366, 398, 432, 433, 468, 470, 483, 497.

Agricultural Science Teacher Certification

The primary emphasis of the teacher certification program is the preparation of secondary teachers of agricultural science. Students gain a broad background in the agricultural sciences along with professional preparation courses in agricultural and secondary pedagogy. This comprehensive background prepares students for a wide variety of professional agricultural careers.

The teacher certification option can be chosen with any of the agricultural emphasis majors as shown. If the student chooses to major in agriculture, agricultural business, animal science, agricultural mechanization, or horticulture and crop sciences.

Major in Agricultural Sciences – Teaching Certification

Bachelor of Science

First Year	Credit	Second Year	Credit
AGR 110, 162, 164, 165, 169	13	AGR 289, 331, 344, 360,	13
ENG 164, 165	6	HIS 164	3
MTH 164 or 170 or 199	3	POL 261, POL Elective (200 level)	6
BIO 161/111	4	BIO 162/112	4
CS 133, 138, or 143	3	STA 169	3
AGR 299	3	SOC 168	3
HIS 163	3		32
KIN 215	1		
	36		

Third Year	Credit	Fourth Year	Credit
AGR 332, 373, 460	9	AGR 470, 481, 488	9
AGR Elective (select from 230, 267, 338, 364, 376, 476 or 480)	3	SED 394, 464, 480	9
		RDG 392	3
SCM 384	3	AED 464, 465, 466	9
Component Area 3 (prefer CHM 135/115 and BIO 137/117)	8	Component Area 4 (Literature or PHL)	3
			33
SED 374, 383	6		
AGR 236	3		
	32		

Major in Agriculture – Agricultural Mechanization Teaching Certification

Bachelor of Science

First Year	Credit	Second Year	Credit
AGR 110, 162, 164, 165, 169,	13	AGR 284, 289, 360, 344	13
ENG 164, 165	6	HIS 163, 164	6
MTH 164 or 170 or 199	3	BIO 162/112	4
BIO 161/111	4	STA 169	3
CS 133, 138, or 143	3	AGR 299	3
KIN 215	1	POL 261, POL Elective (200 level)	6
SOC 168	3		35
	33		

Third Year	Credit	Fourth Year	Credit
AGR 380, 383, 386, 332, 373	15	AGR 488, 481, 485, 487	12
AGR 236	3	SED 394, 464, 480	9
Component Area 3 (prefer CHM 135/135 or CHM 136/116 or BIO 137/117)	8	RDG 392	3
		AED 464, 465, 466	9
			33
SED 374, 383	6		
SCM 384	3		
	35		

Major in Agriculture – Animal Science
Teaching Option
Bachelor of Science

First Year	Credit	Second Year	Credit
AGR 110, 162, 164, 165, 169	13	AGR 289, 331, 344, 373, 363	16
ENG 164, 165	6	HIS 163, 164	6
MTH 164 or 170 or 199	3	BIO 162/112	4
BIO 161/111	4	STA 169	3
CS 133, 138, or 143	3	AGR 299	3
SOC 168	3	POL 261	3
KIN 215	1		35
	33		

Third Year	Credit	Fourth Year	Credit
AGR 332, 360, 363, 470	12	AGR 481, 488, 489, 494	12
POL Elective (200 level)	3	SED 394, 464, 480	9
CHM 138/118	4	RDG 392	3
BIO 137/117	4	AED 464, 465, 466	9
SED 374, 383	6	Component Area 4 (Literature or PHL)	3
AGR 236	3		36
SCM 384	3		
	35		

Major in Agriculture – Agricultural Business
Teaching Option
Bachelor of Science

First Year	Credit	Second Year	Credit
AGR 110, 162, 164, 169, 289	16	AGR 331, 334, 338, 360, 367, 385	19
ENG 164, 165	6	HIS 163, 164	6
MTH 199	3	STA 169	3
BIO 161/111	4	BIO 162/112	4
CS 133, 138, or 143	4	AGR 299	3
KIN 215	1	SOC 168	3
	34		38

Third Year	Credit	Fourth Year	Credit
AGR 332, 360, 373, 461, 462, 474,	18	AGR 481, 486, 488, 377 or 475	12
POL 261, POL Elective (200 level)	6	SED 394, 464, 480	9
Component Area 3 – CHM	4	RDG 392	3
Component Area 3 - BIO 137/117	4	AED 464, 465, 466	9
SED 374, 383	6	Component Area 4 (Literature or PHL)	3
Component Area 5	3		36
SCM 384	3		
	44		

Major in Agriculture – Horticulture and Crop Sciences
Teaching Option
Bachelor of Science

First Year	Credit	Second Year	Credit
AGR 110, 162, 164, 165, 169, 289	16	AGR 331, 344, 338, 395	13
ENG 164, 165	6	AGR Horticulture Electives	3
MTH 164 or 170 or 199	3	HIS 163, 164	6
BIO 161/111	4	BIO 162/112	4
CS 133, 138, or 143	3	STA 169	3
KIN 215	1	AGR 299	3
	33	SOC 168	3
			35

Third Year	Credit
AGR 332, 360, 373	9
AGR Horticulture Electives	3
POL 261, POL Elective (200 level)	6
CHM 138/118, 139/119	8
SED 374, 383	6
AGR 236	3
SCM 384	3
	38

Fourth Year	Credit
AGR 481, 488	6
AGR Horticulture Electives	6
SED 394, 464, 480	9
RDG 392	3
AED 464, 465, 466	9
Component Area 4 (Literature or PHL)	3
	36

All students seeking teacher certification must be advised each semester to ensure proper sequencing of classes.

To qualify for certification as a pre-employment teacher in Farm Power and Machinery, a minimum of eighteen hours in Agricultural Mechanics is required. Courses required are AGR 162, 380, 481, 487, and 6 hours from AGR 284, 330, 331, 382, 383, 386, or 485.

To qualify for certification as a pre-employment teacher in General Agricultural Mechanics, a minimum of eighteen hours in Agricultural Mechanics is required. Courses required are AGR 162, 331, 481, and nine hours from AGR 284, 330, 380, 383, 386 or 485. NOTE: Both the General Agricultural Mechanics and Farm Power and Machinery certifications can be attained when AGR 487 is included in this list.

To qualify for certification as a pre-employment teacher in Horticulture, a minimum of 18 hours in Horticulture is required. Courses required are AGR 274, 299, 398 and 9 hours from AGR 165, 235, 337, 344, 366, 375, 385, 395, 432, 433, 468, 470, or 497.

To qualify for certification as a pre-employment teacher in Meat Processing, a minimum of 18 hours in Meat Technology/Animal Science is required. Courses required are AGR 361, 376, and 9 hours from AGR 230, 260, 363, 460 or 480.

Agriculture as a Minor

The minors listed below may be selected to accompany any majors except General Agriculture.

Agricultural Business. A minimum of 21 hours to include AGR 164, 285, 289, and 12 hours of approved advanced Agricultural Business.
Agricultural Mechanization. A minimum of 21 hours to include AGR 162 and 18 hours of approved Agricultural Mechanization.
Animal Science. A minimum of 21 hours to include AGR 169, 373; and 15 hours of approved Animal Science.
Horticulture and Crop Science. A minimum of 21 hours to include AGR 165, 344; and 15 hours of approved Horticulture/Crop Science.

Agriculture Course Descriptions

AGR 110 **Training Requirements for Professional and Managerial Positions in Agriculture.** [AGRI 1131]
An exploration of the career options available to professionals in agricultural sciences, education, and business. Specific requirements for the various professions are discussed by a series of guest speakers. Course is intended for beginning students. (1-0), Credit 1.

AGR 238 **Microcomputer Applications in Agriculture.** [AGRI 1309]
This course is designed to acquaint students with software applications useful to agriculture and how various technological advances are applied in modern agricultural enterprises. (3-0), Credit 3.

AGR 332 **Interdisciplinary Agricultural Science and Technology.**
This course is designed to develop competencies of agricultural science teachers to teach essential elements in agricultural business, agricultural mechanization, animal science, and horticulture and crop science. (3-0), Credit 3.

AGR 410 **Applied Agricultural Technology**.
Arranged developmental learning experiences incorporating an application of agricultural skills and practices in an emphasis area of the student's choice. Individual study plans are devised by faculty to provide student with broad-based knowledge. (0-4). Credit 1.

AGR 412 **Undergraduate Seminar.**
A review of current careers in agriculture with emphasis on professional and managerial opportunities. Includes preparation of resume, interview skills and other means of professional communication. (1-0), Credit 1.

AGR 282 **Man, Food, and Nutrition: A Global Concern.**
This course presents a comprehensive review of the ever changing world food situation and offers technological approaches for expanding world food supply through soil improvement, increasing plant and animal production, use of unconventional sources of food, and by improving the nutritional quality of plant and animal products consumed. (3-0), Credit 3.

AGR 360 **Agricultural Communications.**
Provides an overview of information systems, principles and procedures used in communicating agricultural news and information in various agricultural professions. Emphasis is placed on effective written and oral communication means in professional and media environments in addition to public relations efforts in the fields of agricultural education and agribusiness. Writing enhanced. Prerequisite: ENG 164, 165. (3-0), Credit 3.

AGR 435 **Agricultural Biosecurity.**
The purpose of this course is to study the potential spread and prevalence of contagious organisms, reproductive diseases and contaminants in the agriculture, food, fiber and natural resource industries. Concepts dealing with isolation, resistance, sanitation, containment, transportation, and food safety issues and potential economic impact to the agricultural industry and others are major topics. Prerequisites: AGR 164, BIO 161/111 & BIO 162/112. (3-0), Credit 3.

AGR 464 **International Agriculture**.
An overview of international trade issues, trade imbalances and world food and fiber distribution systems and problems. When offered at the Puebla Field School, students will have the opportunity to tour various sites in Mexico involved with agricultural production and international trade. (3-0), Credit 3.

AGR 488 **Principles of Agricultural Leadership and Community Development**.
Involves study of the characteristics of agricultural leaders, leadership theory, parliamentary procedure, personal development, agricultural youth organizations, organizational structure, community development, and entrepreneurship in agriculture. Writing enhanced. (3-0), Credit 3.

AGR 496 **Directed Studies.**
Arranged professional and developmental learning experiences incorporating a practical application of agricultural skills and practices. To include internships, individual research and industry studies. Writing enhanced. Credit 1-6.

Agricultural Business

AGR 164 **Principles of Agricultural Economics.** [AGRI 2317]
This course is designed to give the student an introduction to economic and business principles related to agriculture. (3-0), Credit 3.

AGR 285 Analysis of the Agricultural Sector.
This course provides an overview of the various sectors and institutions servicing agriculture. Focus is on the marketing efforts and added value that each sector provides to farm products. The course emphasizes the structure of each area, and the trends that shape their activities. An introduction to marketing activities with emphasis on agricultural commodities is also provided. Writing enhanced. (3-0). Credit 3.

AGR 289 Agribusiness Financial Analysis.
Introduction to financial management for agricultural enterprises. Topics include: depreciation, balance sheet, income and expense, production records, income tax principles, enterprise budgeting, partial budgeting, and cash flow budgeting. Analysis and interpretation of farm records. (3-0). Credit 3.

AGR 335 Agribusiness for Agriculture Science Teachers.
This course is designed to present Agribusiness concepts that are included in the curriculum of post secondary schools of Texas. Subjects include budgeting, finance, insurance, organization and management, marketing and government policies. Prerequisite: AGR 164. (3-0). Credit 3.

AGR 367 Agricultural Finance.
Advanced agribusiness management applications of borrowed capital to operations; methods of determining loan needs for farmers; budgeting incomes to facilitate repayment of loans; cost of using borrowed capital; management of financial resources in agribusiness; and time value of money applications. Prerequisite: AGR 289. (3-0), Credit 3.

AGR 377 Farm and Ranch Management.
Focus on planning for the most efficient resource allocation in agricultural operations. This course uses previously taught financial management practices and applies that to an agricultural industry case study. Prerequisite: AGR 367. (3-0), Credit 3.

AGR 385 Agricultural Economic Analysis.
This course presents analysis tools from the fields of economics, statistics, and management as they relate to agricultural business decision making. The analytical and quantitative principles are applied to a variety of agricultural business situations. Topics include forecasting, decision analysis, and linear programming. Computer-based methods are emphasized. Prerequisite: STA 169, MTH 169, or AGR 238. (3-0), Credit 3.

AGR 434 Agribusiness Marketing.
A study of the major marketing strategies and decisions that must be made by agribusiness firms, including target market selection, marketing research, sales forecasting, product policies, distribution channels, pricing, advertising, and market control. The development of a strategic marketing plan for an agribusiness firm will be required. Prerequisites: AGR 164. (3-0), Credit 3.

AGR 461 Agribusiness Organization and Management.
Management principles relevant to agribusiness firms: marketing management, e-commerce and value added agriculture, managerial concepts, human resource management, and business organizations. Writing enhanced. Prerequisite: AGR 164, 289 or 385. (3-0). Credit 3.

AGR 462 Natural Resource Economics.
A contemporary study of issues in land, natural resource and environmental economics. Topics include energy, forests, population, fisheries, world food production, and minerals and pollution. This course discusses market efficiency relative to allocations of natural resources and pollution. Writing enhanced. Prerequisite: AGR 164. (3-0), Credit 3.

AGR 465 Agricultural Law.
Legal concepts with application to agriculture. Topics include: legal process, property and water rights, animal liability and rights, biotechnology/genetic laws, human resource laws, and contracts and warranties. (3-0). Credit 3.

AGR 474 Agricultural Market Analysis and Prices.
Principles of agricultural market analysis to include: price analysis, price forecasting, forward contracting, futures market, market structure analysis, marketing and sales management. Writing enhanced. Prerequisites: AGR 164 and 285. (3-0). Credit 3.

AGR 475 Advanced Agribusiness Management.
This course serves as a capstone course for agribusiness majors. Contemporary issues related to agribusiness are approached using information systems, industry representatives, field trips, and class presentations. Prerequisite: AGR 461. (3-0) Credit 3.

AGR 477 Economics of Land Use and Planning.
This course applies economic principles and legal policy relative to the allocation and conservation of natural resources and the environment. Topics such as land use, energy policy, forestry, fisheries, water rights, animal rights, world food production, and pollution are discussed in an economic and legal framework. Writing enhanced. Prerequisite: AGR 164. (3-0). Credit 3.

AGR 486 Agriculture and Government Programs.
This course examines and analyzes the effects of government participation on farmers, ranchers, agribusiness firms and consumers. Topics include the policy making process and the analysis of commodities, conservation, food safety, international trade, rural development programs, and the interrelationship of agriculture and agribusiness. Writing enhanced. Prerequisite: AGR 164. (3-0), Credit 3.

Agricultural Mechanization

AGR 162 Introduction to Agricultural Mechanization and Engineering. [AGRI 2303]
History and objectives of agricultural mechanization and agricultural engineering. An introduction to the basic skills of agricultural mechanization used in the production, processing and distribution of agricultural products. Skills covered include: arc welding, oxy-gas cutting and welding, wood working, plumbing, metal working, sketching and drawing, and tool selection and maintenance. (2-2), Credit 3.

AGR 284 Fundamentals of Agricultural Power Units and Control Systems. [AGRI 2301]
Selection, maintenance and service of agricultural power units including small engine overhaul and preventive maintenance on agricultural tractors. (2-2), Credit 3.

AGR 330 Agricultural Electrification.
This course includes principles of transmission and distribution of electricity; direct and alternating currents; wiring agricultural buildings for lighting and electric power; installation and care of electrical equipment; and safety as related to electricity. (2-2), Credit 3.

AGR 331 Mechanization in Agriculture.
Training in principles of soil and water management, electrification, engine power and machinery. (2-2), Credit 3.

AGR 380 Agricultural Machinery.
Functional requirements, design, construction, adjustments, operation and testing of agricultural machines. Topics include capacities and costs of operation. (2-2), Credit 3.

AGR 382 Irrigation Engineering.
Principles of furrow, border, sprinkler and drip irrigation; water measurement; sources of water supply; irrigation wells, pumps and power units. Design and selection of irrigation systems for various types of agricultural production, and residential and commercial landscape applications. (3-0), Credit 3.

AGR 383 Soil and Water Conservation Engineering.
Principles of water supply, water distribution and water control for agricultural uses. Plane surveying, mapping, G.I.S. and G.P.S. are explored through laboratory experiences in design of soil and water conservation measures. (2-2), Credit 3.

AGR 386 Agricultural Structures and Environmental Control Systems.
Functional requirements of agricultural buildings; valuation, appraisal and estimating; structural requirements of agricultural buildings; planning and designing major service and processing buildings. Writing enhanced. (2-2), Credit 3.

AGR 481 Advanced Agricultural Mechanics.
A study of basic requirements for the development of safe and efficient agricultural mechanics laboratories, agricultural service centers, and fabrication shops. Skills covered include fabrication and maintenance of metal, wood, and masonry equipment and structures and the selection, operation, and maintenance of power shop tools and equipment. Agricultural projects are designed and constructed in the laboratory. Writing enhanced. Prerequisite: AGR 162. (1-4), Credit 3.

AGR 485 Applied Electronics/Hydraulics in Agriculture.
Electronic and hydraulic principles and applications in agricultural industry. Emphasis will be placed on the use of electronics and hydraulics in agricultural tractors and equipment. (2-2), Credit 3.

AGR 487 Agricultural Engines and Tractors.
Principles of internal combustion engines; compression, ignition and carburetion; analysis and repair of agricultural tractors and their components. (1-4), Credit 3.

Animal Science

AGR 169 Animal Science. [AGRI 1319]
This is a basic course of study to acquaint students with the scope of animal science: origin, history and development of economically important species and breeds of livestock; concepts of selection, breeding, nutrition, management and research as applied to livestock production. Laboratory experiences involve the practical skills needed to manage animal enterprises. (2-2), Credit 3. Fall; Spring.

AGR 230 Livestock Evaluation and Selection. [AGRI 2321]
This course is designed to present the basic principles and concepts in selection and evaluation of beef cattle, sheep, swine, and horses. The ability to present accurate and concise oral reasons for selecting and placing livestock is reviewed. (2-2), Credit 3. Spring.

AGR 236 Animals and Society.
This course will acquaint the student with the broad role of animals in society from national, global and historic perspectives. The impact of animals and domestic livestock on economic, social and political policy will be discussed. Emphasis will be placed on agricultural and non-agricultural uses, societal and cultural perspectives, consumer influences, animal ethics, animal research, appropriate animal care, livestock quality assurance programs, animal welfare, animal rights and the animal-human bond. Writing enhanced. (3-0), Credit 3. Fall.

AGR 269 Confinement Animal Production.
The purpose of this course is to study the principles of confinement animal production. Significant components of the livestock industry have evolved from traditional production systems to full confinement livestock production. The principles of confinement livestock management will be considered including intensive herd management, precise production schedules, herd health, ventilation systems, biosecurity, waste management and building design. Writing enhanced. Prerequisite: AGR 169. (3-0), Credit 3.

AGR 338 Game Animal Production.
A study of the principles and practices of game animal production. Game animals commonly used for economic diversification of agricultural enterprises are the central focus of the course. Topics include animal identification, population dynamics, nutrition, habitat preservation and modification, reproduction, game laws, and economic integration in traditional agricultural enterprises. (3-0), Credit 3. Summer.

AGR 363 Anatomy and Physiology of Domestic Animals.
Introduction to anatomy and physiology of domestic animals. Aspects of the nervous, skeletal, muscular, circulatory, urinary, and endocrine systems are covered. (3-0), Credit 3. Fall.

AGR 364 Horse Science.
A survey of the working and pleasure horse industry; breed selection, breeding, feeding, diseases, unsoundness and management. Laboratory work involves evaluation, care and grooming, tack and equipment, and basic management. (2-2), Credit 3. Spring.

AGR 373 Animal Nutrition.
This course consists of a study of the processes of digestion, absorption, metabolism, physiology, and circulation. Each nutrient is studied from the standpoint of chemistry, sources, function, and metabolism. Prerequisite: AGR 169. (3-0), Credit 3. Fall; Spring.

AGR 376 Meat Science.
Lecture topics will include muscle and skeletal biology, conversion of muscle to meat, food-borne illnesses and HACCP. Labs will focus on the methods of harvesting, preparation, preserving, and storing meat. (1-4), Credit 3. Fall; Spring.

AGR 431 Animal Growth and Performance.
A study of the physiological and endocrine system factors affecting growth and performance of domestic animals. The course includes the study of meat animal growth and developmental processes and factors that affect body/carcass composition, carcass quality and value. Prerequisite: AGR 169. (3-0), Credit 3. Spring.

AGR 460 Livestock Management Techniques.
Skills and knowledge pertaining to the production of beef cattle, swine, goats, sheep, and horses. Laboratory exercises involve various management practices and selection of livestock based on visual evaluation and genetic performance. Writing enhanced. Prerequisite: AGR 169. (2-2), Credit 3. Fall; Spring. This course is not intended for animal science majors.

AGR 476 Sheep and Goat Production and Management.
Application of basic genetic principles, physiology, and nutrition to practical sheep, meat goat and angora goat production systems; management, health care and marketing of animals and fiber. Prerequisites: AGR 169. (2-2), Credit 3. Spring, even years.

AGR 480 Beef Cattle Production and Management.
A study of basic principles and methods of breeding, nutrition, reproduction, management, marketing, and disease control relating to various segments of the beef industry. Application of the latest bovine research is reviewed. Laboratory exercises involve practical skills relating to performance records and management of beef cattle. Writing enhanced. Prerequisites: AGR 169. (2-2), Credit 3. Fall.

AGR 489 Animal Reproduction.
Physiology of the male and female reproductive tract; hormones governing reproduction; the estrus cycle; mating; gestation; parturition; lactation; artificial insemination; embryo transfer technology; and factors affecting reproductive efficiency of common animal species used for agricultural purposes. Writing enhanced. Prerequisite: AGR 169. (2-2), Credit 3. Spring.

AGR 491 Advanced Horse Production and Management.
A study of equine behavior, safety, and training techniques. Laboratory work involves planning record keeping systems, feeding and breeding schedules, tack and equipment, training young stock for work and pleasure, and specialized management practices. (2-2), Credit 3. Spring, odd years.

AGR 494 Animal Feeds and Feeding.
A study of the characteristics of feedstuffs, a review of the essential nutrients and digestion, ration and mixture formulation, feeding methods, and nutritional management of beef, swine, sheep, goats, poultry, and horses. Exercises will consist of practical applications in formulating rations for livestock using conventional techniques and computers. Writing enhanced. Prerequisite: AGR 169 and 373. (3-0), Credit 3. Fall.

AGR 495 Animal Breeding and Genetics.
This course integrates general principles of genetics with practical selection procedures used to identify and produce superior livestock. Students will explore the latest technology applicable to the breeding of livestock. Prerequisite: AGR 169. (3-0). Credit 3. Fall.

Horticulture and Crop Sciences

AGR 165 Plant Science. [AGRI 1307 or AGRI 1315]
Basic plant morphology, classification, propagation, and crop improvement are topics discussed along with growth and development of crop plants. An introduction to soils, climate, and plant protection follow with a final overview of the major groups of cultivated plants. (2-2), Credit 3.

AGR 235 Horticulture for the Home.
A course primarily designed for non-horticulture majors. Introduction to basic concepts, principles, and practices of horticulture. Emphasis is placed on study of horticultural practices and techniques used commonly for home gardening. Topics of study include planning, preparation and management of vegetable and herb gardens, landscape gardening, turfgrass management, and horticultural therapy. (2-2), Credit 3. This course is not intended for Horticulture and Crop Sciences majors/minors.

AGR 274 Production and Management of Ornamentals.
This course is designed to cover the principles and techniques involved in the production and management of nursery and greenhouse crops such as ornamental trees, shrubs, annuals, and perennials. Writing enhanced. (2-2), Credit 3.

AGR 295 Ornamental Landscape Plants.
Identification, growth characteristics, culture and use of common landscape and greenhouse plants. Materials include trees, shrubs, vines, groundcovers, turf grasses and floriculture crops. Emphasis is placed on temperate region plants. (2-2), Credit 3.

AGR 299 Floral Design.
Principles and elements of design illustrated with the use of floral materials; techniques involved in design and construction of floral arrangements; history and utilization of floral art in society. (2-2), Credit 3.

AGR 337 Management of Horticultural Enterprises.
The purpose of this course is to study principles and fundamentals of management. Emphasis will be placed on application of principles and techniques in management of a variety of horticultural enterprises such as nursery and greenhouse industries, landscape management, floral business, and other allied businesses. Writing enhanced. (3-0), Credit 3.

AGR 344 Soil Science.
An introduction to the physical, biological, and chemical properties of soils and their relationships to soil formation, soil fertility, soil temperature, soil-plant-water relations, pH and liming, and conservation of soils. Environmental issues are also discussed. Prerequisite: CHM 135, 136, 138, or 139. (3-2), Credit 4.

AGR 366 Crop Science.
A detailed study of the world's major food, feed, and fiber crops. Includes discussion of their origin, botany, identification and classification, climatic and soil preparation requirements, grain and seed quality, utilization, and culture. (3-0), Credit 3.

AGR 375 Turfgrass Science.
A study of the major turfgrass species grown in the U.S. and throughout much of the world. Explores differences in management, culture, and varietal selection for athletic, ornamental, and utility turfs. Writing enhanced. Prerequisite: AGR 165. (2-2). Credit 3.

AGR 395 Plant Propagation Techniques.
Principles and practices involved in propagation of plants are discussed in detail. Emphasis is placed on sexual and asexual methods of propagation and the factors involved. Propagation techniques of several horticultural crops will be covered and practiced. Prerequisite: AGR 165. (2-2), Credit 3.

AGR 398 Landscape Design I.
This course covers principles, elements, and factors to be considered in preparation, planning, and design of a residential landscape. Emphasis will be placed on the incorporation of plant materials into basic landscape design. Writing enhanced. Prerequisites: AGR 295 or instructor approval. (2-2), Credit 3.

AGR 432 **Fruit and Vegetable Production.**
This course is a comprehensive study of the fruit and vegetable industry in Texas and the United States. The topics of study include climatic requirements, growth characteristics, cultural practices, and pest control. Writing enhanced. (2-2), Credit 3.

AGR 433 **Soil Fertility Management and Fertilizers.**
Principles of soil fertility, water, nutritional, and climatic relationships. Emphasis will be placed on sources of soil nutrients including commercial fertilizers and biological resources. Writing enhanced. Prerequisites: AGR 344 or concurrent enrollment. (3-0), Credit 3.

AGR 468 **Landscape Design II.**
This course is a continuation of AGR 398. Design skills will be refined as students will experience more variety in design opportunities. Both small residential and larger public spaces will be the subjects of student designs. Effective graphic presentations will be stressed. Installation, maintenance, and management of residential landscapes will also be discussed. Prerequisite: AGR 398 or instructor approval. (2-2), Credit 3.

AGR 470 **Forage Crops and Pasture Management**.
Quality evaluation, adaptation, selection, culture and management of the more important plants used for pasture, hay and silage. Particular attention is given to those species grown commonly throughout the southeastern US. Writing enhanced. (2-2), Credit 3.

AGR 483 **Range Management.**
With rangelands comprising the majority of lands in the western US, this course deals with forage-animal management topics common to the semi-arid and arid regions of the US. Addresses the unique management requirements of rangelands, the use of government-owned lands, and the competing uses of rangelands for livestock production, wildlife habitat, and recreational areas for humans. Prerequisite: AGR 169. (3-0), Credit 3.

AGR 497 **Integrated Pest Management**.
A comprehensive review of current cultural, biological, mechanical, and chemical techniques used in managing or controlling agricultural and residential pests. Attention is given to environmental hazards, application methods, and safety precautions in handling and storage of pesticides. Writing enhanced. Prerequisite: AGR 165. (3-0), Credit 3.

Agriculture Education Course Descriptions

AED 464 **Methods of Teaching Agricultural Science.**
A study of the professional competencies required for the teaching of agricultural science. Included is the development of curriculum and occupational education programs as well as evaluation of teaching techniques, procedures, and resource materials. Methods of teaching the handicapped will be discussed. Writing enhanced. (3-0). Credit 3.

AED 465, AED 466 **Student Teaching in Agricultural Science.**
Directed observation and student teaching in an approved high school agricultural science classroom are required. Participation is essential in related agricultural science and F.F.A. activities such as fairs, shows, contests, F.F.A. alumni and young farmer programs, etc. Prerequisite: Approval of admission to student teaching. Credit 6.

CAREER AND TECHNOLOGY PROGRAM

Coordinator: Douglas R. Ullrich (936)294-1188; agr_dru@shsu.edu

Mission

The mission of the Career and Technology Program is to provide an educational program to allow students with technical Associates of Applied Sciences degrees from accredited community/junior colleges to seamlessly continue into the Bachelor of Applied Arts and Sciences degree program.

Career and Technology Education is dedicated to the preparation of youth and the support of adults who seek marketable skills for today's economy. Students interested in the Career and Technology Education Program should contact Dr. Douglas Ullrich, Thomason Building, (936) 294-1188, email: agr_dru@shsu.edu.

Curriculum
Bachelor of Applied Arts and Sciences

Students who have majored in a career and technology, vocational, or technical program at an accredited community/junior college and decide to seek a baccalaureate degree at SHSU may review the requirements for the Bachelor of Applied Arts and Sciences degree. Upon successful completion of the requirements for the Bachelor of Applied Arts and Sciences degree, the student's diploma and transcript indicate the Bachelor of Applied Arts and Sciences degree with a major indicating an Applied Arts and Sciences degree was conferred. Students with an Associate of Applied Science (AAS) Degree or Certificate in any business discipline are not eligible for a BAAS degree. Students who have received a Certificate in any discipline are not eligible unless and AAS has been completed.

Students desiring to major in a technical specialty area for the Bachelor of Applied Arts and Sciences must:

1. **Present evidence of the development of an area of technical specialty with an Associate of Applied Arts and Sciences degree from a junior/community college.**
   A. Sixty-six semester hours (plus four semester hours of activity physical education) may be transferred from another educational institution. This should include thirty-six to forty-eight hours in block coursework in an organized technical program.
   B. The specialty title of the Associates of Applied Sciences degree must be posted to the transcript for approval for entry into the BAAS program
   C. Students MUST be advised by the program coordinator to have transcripts reviewed and a declaration of major/minor submitted before full acceptance into the BAAS program is finalized.

2. **Complete a baccalaureate degree plan from residence and transfer credit which contains a minimum of 128 semester credit hours and includes the following:**
   A. Forty-two semester hours of advanced level credits (courses taken at the junior-senior level at a senior institution).
   B. An eighteen-hour minor in a field related to the student's technical specialty. A minimum of 12 of these hours must be at the advanced level (these 12 hours may be included in the requirement for 42 advanced hours).
   C. A six-hour internship preferably as part of the minor is required. If the minor department does not offer an internship the Career and Technology Program will administer the internship.
   D. Complete 45 hours in general education as follows (may include community college courses):

Bachelor of Applied Arts and Sciences (B.A.A.S.)

Major (A.A.S. degree – in-block courses)	36 to 48 hours
Minor	18 hours
General Education Requirements (Core Curriculum)	45 hours
Electives	11 to 29 hours
Internship	6 hours
Total	128 hours

This degree program is administered by the Department of Agricultural Sciences and the College of Arts and Sciences.

TECHNOLOGY PROGRAM

Coordinator: To be named (936)294-1191
Faculty: Keith Coogler, Thomas Higgins, Billy Moore, Nedom Muns

Mission

The mission of the Technology Program is to provide an educational program designed to assist students in acquiring the knowledge, skills, and experiences through which they may prepare themselves for rewarding and meaningful roles in a technological society.

Academic Programs

The program offers a Bachelor of Science degree with a major in Industrial Technology with programs in the following areas:

- Construction Management
- Design and Development
- Electronics
- Industrial Education
- Industrial Management

Highlights

The Construction Management Center, located on Avenue M, provides students with hands-on experiences with residential and commercial structures.

Career Opportunities

- Construction management
- Electronics
- Industrial design
- Industrial management
- Industrial education

Technology students learn to draw upon the principles of management, physical sciences, technology of industry, liberal arts and basic engineering for the solution of problems involving industrial products, services, materials and processes, and the supervision and management of personnel.

Suggested Minors

Industrial Technology students typically choose minors from the College of Business such as General Business Administration, Management, Marketing, etc. They also choose minors from the Computer Science department. These are typical minors; however, students should choose a minor that best suits their needs and interests.

Student Organizations

- National Association of Industrial Technology
- National Association of Home Builders

Internships

The internship in industrial technology is intended to provide experience-based learning opportunities for students in their respective discipline of study. Students generally seek internship experience at the end of their sophomore or junior year. The course identified for internship credit in industrial technology is IT 490 - Directed Studies. Internships may be arranged through student contact with providers or through departmental faculty and staff announcements and postings. All internships must receive departmental approval through application prior to the initiation of the internship. Maximum credit for internship is six (6) credit hours.

Scholarships

- **Stephen Randel Scholarship:** Awarded to an outstanding student participating in the Brazos Valley Regional Technology Student Competition held at Sam Houston State University each year during the month of April.

- **Dale Benke Scholarship:** Awarded to an outstanding Sam Houston student majoring in the Technology Program. This award is based on student need, contribution to Sam Houston State University, the Technology Program, and participation in technology-related student clubs/organizations.

Program Specific Requirements

For additional information regarding admission requirements, degree programs, description of courses, and financial assistance available, please refer to the appropriate sections of this catalog. Brochures and information concerning the department and scholarships may be obtained by calling 936-294-1191 or writing: Sam Houston State University, Department of Agricultural Sciences, Industrial Technology Program, Huntsville, Texas 77341-2266. Website: www.shsu.edu/agr.

Curriculum
Major in Industrial Technology
Certification in Teacher Education
Bachelor of Science

First Year	Credit	Second Year	Credit
IT 134, 139, 161, 163	12	IT 166 or 267	3
ENG 164	3	IT or IE Electives	9
Component Area 3	8	MTH	6
Component Area 4 (prefer AGR 299)	3	KIN 215	1
CS 133 or 143	3	Component Area 3 (Second field)	8
MTH or Natural Science	3	HIS 163	3
	32	POL 261	3
			33

Third Year	Credit	Fourth Year	Credit
IT 330, 468	6	IE 464, 491	6
IT or IE electives	3	IT Electives (Adv)	9
SED 374, 383, 392, 394	12	SED 480, 496, 497	9
HIS 164	3	SCM 384 OR 161	3
POL (200-level)	3	Component Area 5 (prefer AGR 236)	3
Component Area 4 (Literature or PHL)	3	Component Area 4 (Cultural Studies)	3
ENG 165	3		33
	33		

No minor is required, but if an additional teaching field is desired, the student must meet the requirements of that teaching field. For the degree of Bachelor of Science and a teaching certificate with an integrated teaching field in technology, the student must complete a minimum of 48 semester hours in Industrial Technology and 18 semester hours in Professional Education. The courses listed above are required of all students who are majoring in Industrial Technology and seeking a teaching certificate. The student should refer to the Certification section of this catalog or obtain information in Room 213 of the Teacher Education Center.

Major in Industrial Technology
Certification in Trade and Industry
Bachelor of Science

The Technology Program is approved to offer vocational trades and industry certification courses. These courses may be applied toward certification or a Bachelor of Science degree. Students may enroll in the State required courses as either inservice or preservice employees. Inservice students must complete the required seven courses within two years of employment.

First Year	Credit
IT 139, IE 430, 431	9
ENG 164, 165	6
Component Area 3	8
Component Area 4 (prefer AGR 299)	3
CS 133 or 143	3
MTH or Natural Science	3
KIN 215	1
	33

Second Year	Credit
IE 463, 464, 479	9
IT Electives (Adv)	3
Component Area 3 (Second field)	8
MTH (prefer MTH 163 & 170)	6
HIS 163	3
POL 261	3
	32

Third Year	Credit
IE 491, IT 490 (6 hrs. Internship)	9
IT Advanced Electives	9
SCM 384, SED 374	6
Component Area 4 (Literature or PHL)	3
HIS 164	3
POL (200-level)	3
	33

Fourth Year	Credit
Component Area 5 (prefer AGR 236)	3
Component Area 4 (Cultural Studies)	3
Work Experience (12-30 Hrs)	27
	33

The Technology Program provides a number of options for students preparing to enter industry upon graduation. The student may earn a Bachelor of Science degree with a major in Construction, Design and Development, Electronics, or Industrial Management.

Major in Industrial Technology – Construction

Bachelor of Science

First Year	Credit
IT 134, 139, 163, 267	12
ENG 164, 165	6
Component Area 3	8
Component Area 4 (prefer AGR 299)	3
CS 133 or 143	3
KIN 215	1
	33

Second Year	Credit
IT 263, 368, 370, 371	12
Component Area 3 (Second field)	8
HIS 163	3
MTH 163, MTH (prefer MTH 170)	6
POL 261	3
	32

Third Year	Credit
IT 330, 372, 468, 470	12
Minor	12
Component Area 4 (Literature or PHL)	3
HIS 164	3
POL (200-level)	3
	33

Fourth Year	Credit
IT 472, 484	6
IT 490 (Internship)	6
Minor (9 hr adv)	9
Component Area 5 (prefer AGR 236)	3
Component Area 4 (Cultural Studies)	3
MTH or Natural Science	3
	30

Major in Industrial Technology – Design and Development

Bachelor of Science

First Year	Credit
IT 134, 139, 161, 171	12
ENG 164, 165	6
Component Area 3	8
Component Area 4 (prefer AGR 299)	3
CS 133 or 143	3
KIN 215	1
	33

Second Year	Credit
IT 163, 263, 371, 372	12
Component Area 3 (Second field)	8
HIS 163	3
MTH 164 or 170, MTH (prefer MTH 163)	6
POL 261	3
	32

Third Year	Credit	Fourth Year	Credit
IT 330W	3	IT Drafting (Advanced electives)	9
IT Drafting (Advanced electives)	9	IT 472W	3
Minor (3 Advanced hours)	9	Minor (6 advanced hours)	12
Component Area 4 (Literature or PHL)	3	Component Area 5 (prefer AGR 236)	3
HIS 164	3	Component Area 4 (Cultural Studies)	3
POL (200-level)	3	Electives (3 hr adv)	3
MTH or Natural Science	3		33
	33		

Major in Industrial Technology – Electronics

Bachelor of Science

First Year	Credit	Second Year	Credit
IT 134, 139, 163, 232	12	IT 267, 379, 484	9
ENG 164, 165	6	Component Area 4 (Literature or PHL)	3
PHY 136/116, 395/315	8	Component Area 3 (Second field)	8
Component Area 4 (prefer AGR 299)	3	MTH (prefer MTH 163 & 170)	6
CS 133 or 143	3	HIS 163	3
KIN 215	1	POL 261	3
	33		32

Third Year	Credit	Fourth Year	Credit
IT 330, 373	6	IT 472, 473	6
Minor	12	IT (Adv)	3
HIS 164	3	IT 490 (Internship)	6
POL (200-level)	3	Minor (Adv))	9
Component Area 5 (prefer AGR 236)	3	Component Are 4 (Cultural Studies)	3
Electives (3 hr adv)	6	MTH	3
	33		30

Major in Industrial Technology – Industrial Management

Bachelor of Science

First Year	Credit	Second Year	Credit
IT 134, 139, 163, 166	12	IT 374, 472, IT (Adv)	9
ENG 164, 165	6	Component Area 4 (Literature or PHL)	3
PHY 136/116, CHM 135/115	8	Component Area 3 (Second field)	8
Component Area 4	3	MTH (prefer MTH 163 & 170)	6
CS 133 or 143	3	HIS 163	3
KIN 215	1	POL 261	3
	33		32

Third Year	Credit	Fourth Year	Credit
IT 330, 468, 470	9	IT 480, 484	6
IT electives (Adv)	3	IT electives (Adv)	3
Minor	12	IT 490 (Internship)	6
HIS 164	3	Minor (6 advanced hours)	9
POL (200-level)	3	Component Area 4 (Cultural Studies)	3
Component Area 5 (prefer AGR 236)	3	MTH or Natural Science	3
	33		30

Technology as a Minor

For non-technology students, the following minors are available and designed to enhance other majors across the University:

1. **Computer Aided Design**
   IT 139, 161, 439, 467, 9 hrs from drafting
2. **Construction**
   IT 163, 263, 368, 370, 468 and 6 hours from IT 372, 470, 472, 484

3. **Electronics**
   IT 134, 232, 235, 373, 473, 6 hrs. Electronics
4. **General Technology**
   IT 134, 139,163, 166 or 267, and 9 hrs IT courses
5. **Interior Design**
   IT 139, 161, 263, 368, 372, 468, 470
6. **Industrial Management**
   IT 330, 374, 472, 480, 484, and 6 hrs from IT 468, 373, 470, 472
7. **Trades and Industry Certification**
   IE 430, 431, 463, 464, 479, 482, and 491

Industrial Education Course Descriptions

IE 430 **Aims and Objectives of Vocational Industrial Education.**
A study of the history and philosophy of Vocational Industrial Education. Credit 3.

IE 431 **Human Relations for Vocational Industrial Teachers.**
This course is designed to prepare the student to develop interpersonal skills and a better understanding of working relationships with people. Writing enhanced. Credit 3.

IE 463 **Preparation of Instructional Materials.**
This course is designed to prepare a student in the selection, development, organization, and effective use of instructional materials in Industrial Education classes. It involves the study of types, values, limitations and sources of instruction sheets and other teaching aids. Credit 3.

IE 464 **Methods of Teaching Industrial Subjects.**
A study of the objectives and the selection, organization and presentation of the subject matter of the various areas of Industrial Education including the organization of units of work, and demonstration teaching. Writing enhanced. Credit 3.

IE 479 **Occupational Analysis and Curriculum Development.**
This course is designed to enable a student to analyze trades, occupational pursuits and jobs for divisions, operations and information in order to develop a curriculum compatible to his/her teaching field. Writing enhanced. Credit 3.

IE 482 **Work-Based Learning.**
This course is to prepare the Work-Based Learning teacher to implement and teach a Work-Based Learning co-operative education class. The content will cover methods of student selection, work station qualifications, training plans, state and federal laws, and integration of the school and industrial work experience. Credit 3.

IE 491 **Laboratory Management, Organization and Control.**
This course is designed to prepare students to successfully manage laboratory activities, organize their labs in accordance with contemporary concepts, and to control materials/supplies within their laboratories. Prerequisite: Junior standing or consent of instructor. Credit 3.

Industrial Technology Course Descriptions

IT 134 **Electronics Technology I.**
This course is designed to provide fundamental understanding of electronics in DC circuits. Emphasis is on knowledge and application of electrical safety, power generation, metering instruments and circuit analysis. Laboratory experiences include “hands-on” circuit construction and basic troubleshooting. Credit 3.

IT 139 **Introduction to Computer-Aided Drafting.**
This course is intended to provide the student with an understanding of Computer-Aided Drafting principles. Students will utilize the software command structure of two popular CAD programs, namely AutoCAD and MicroStation, to complete a number of typical and practical drafting application exercises. Approximately one-half of the semester will be spent on each program. Credit 3.

IT 161 **Engineering Graphics.**
This is a recognized standard course in beginning drawing for engineering and industrial education. Prerequisite: IT 139. Credit 3.

IT 163 **Construction Technology I.**
This course is a study of materials and methods of wood frame construction found in residential and commercial construction focusing on aspects of load-bearing structural design elements. Instruction is given in the correct use of hand tools and machine tools, job safety, job-site controls, material handling, equipment, and application. Laboratory experiences include design and construction of a wood frame structure with elements typically found in residential construction. (2-2). Credit 3.

IT 166 **Machining Technology I.**
This course serves as an introduction to the problems, techniques, and processes of modern machining technology. Instruction is given in the use of hand and machine tools, introduction to computer numerical control, product planning and development, metric measurement, safety, and opportunities for employment in the machining industry. Credit 3.

IT 171 **Descriptive Geometry.**
This course emphasizes problems of space relations of points, lines, surfaces, intersections, and developed surfaces, and their application to the graphical solution of engineering problems. Prerequisites: IT 139,161. Credit 3.

IT 232 **Electronics Technology II.**
This course is an in-depth study of the electronic principles associated with AC circuits. Topics of study include network theorems, circuit analysis methods, resonance, filters and frequency responses of reactive circuits. Prerequisite: IT 134 or consent of instructor. Credit 3.

IT 235 **Solid State Electronics.**
This course is designed to provide in-depth knowledge and experience in the principles and applications of solid-state devices. Specific emphasis is placed on the construction, characteristics and applications of diodes, rectifiers, transistors, thyristors and integrated circuits. Laboratory experience is gained through circuit construction, testing and troubleshooting. Prerequisite: IT 232 or consent of instructor. Credit 3.

IT 263 **Home Planning.**
This course consists of the development of a set of plans and specifications for a small residence. Prerequisite: IT 161. Credit 3.

IT 267 **Elements of Metal Technology.**
This course is a study of materials and methods of construction found in metal building systems. Instruction is given in the correct use of hand and power tools, job safety, job-site controls, material handling, equipment and application. Aspects of load design calculations, fastener use, metal coatings, and erection equipment are studied. Laboratory instruction includes basic metal working processes (welding, sheet-metal, foundry, and wrought-iron work) used in metal frame construction. (2-2). Credit 3.

IT 274 **Problems in Industrial Design.**
This course utilizes a number of problem solving techniques and procedures related to industrial design. Students are encouraged to use innovative techniques, in individual and group settings; to achieve workable solutions to selected design problems. Prerequisites: IT 139,161 or consent of instructor. Credit 3.

IT 330 **Contemporary Technology Innovations, Issues and Perspectives.**
This course provides a study of societal technologies and their effects on the daily lives of consumers. The course presents the pervasive nature of technology innovations and increases the awareness of the promises of uncertainty associated with the use of technology as a human enterprise. Writing enhanced. Credit 3.

IT 360-361 **Related Science, Mathematics, and Technology in Occupations.**
This is the written portion of an 18-hour segment of proficiency examinations. Prerequisite: Consent of department chair. Credit 6.

IT 362-363 Manipulative Skills in Occupations.
This segment is for the manipulative portion of the proficiency examination. Prerequisite: Consent of department chair. Credit 6.

IT 364-365 Knowledge of Related Subjects in Occupations and Personal Qualifications.
This is the oral portion of the proficiency examination. Prerequisite: Consent of department chair. Credit 6.

IT 368 Construction Processes.
This course is a study of materials and methods of construction found in concrete and masonry structures. Concrete chemistry, mixing and placement equipment, testing, finishing techniques, reinforcing, formwork, specification, and job-site safety implementing these materials are studied. Laboratory experiences include batch sampling and testing and small group projects implementing concrete and masonry methods and materials. Prerequisite: IT 163. (2-2). Credit 3.

IT 370 Construction Technology II.
This course focuses on non-structural construction typically found in cabinetry, trim, and furniture construction. Included is the study of woods, synthetic materials, hardware, and wood joinery. Instruction is given in the correct use of hand and machine tools, job safety, job-site controls, and material specification. Lab experiences include designing, planning, construction, and finishing of a piece of cabinetwork or furniture. (2-2). Credit 3.

IT 371 Civil Drafting.
This course will consist of drafting techniques and requirements necessary for civil engineering offices. Topics include survey drafting, map drafting, topos, site plans, subdivision plats, profile drawings and other related topics. Prerequisites: IT 171. Credit 3.

IT 372 Construction Drafting.
This course will consist of techniques and requirements necessary to the commercial or heavy construction industry. Topics will include foundation design, commercial building design and other structural works. Emphasis will also be given to pre-manufactured metal constructed building design. Prerequisites: IT 263. Credit **3.**

IT 373 Industrial Electronics.
The principles and operation of electrical switching, timing and control devices are studied with emphasis on industrial solid state and digital controls. Topics of coverage include serveomechanisms, tranducers, motor control systems and closed-loop industrial systems. Prerequisite: IT 232 or consent of instructor. Credit 3.

IT 374 Time and Motion Study.
A study of the principles of motion economy, work measurement and improvement of production methods as they apply to modern industry. Attention is given to human relations, work simplification, and selected charting procedures. Prerequisite: Junior standing or consent of instructor. Credit 3.

IT 379 Industrial Systems Drafting.
This course includes the illustration and preparation of drawings and the related symbolism used in electrical and fluid fields. Related and required piping and fitting fundamentals are also covered. Prerequisites: IT 161. Credit 3.

IT 439 Computer-Aided Drafting Productivity.
This course is a continuation of IT 139. Using advanced problem-solving exercises; students will customize screen menus, utilize new AutoCAD commands, and develop better file management skills. Advance methods and procedures to increase CAD productivity will be emphasized. Additional CAD software will be utilized as it becomes available. Prerequisites: IT 139 and 161 or consent of instructor. Credit 3.

IT 467 Mechanical Modeling.
This course consists of the principles and techniques involved in designing and drawing machine parts and other items normally required in an industrial setting. Topics include sectioning, dimensioning, view rotation, symbols, legends, developments, and blueprint details. Prerequisites: IT 139 and 161. Credit 3.

IT 468 **Cost Estimating of Construction Materials.**
This course is devoted to the study of qualities, types, and sizes of materials such as lumber and other wood products, masonry, paint, hardware, ceramic and metal products. In addition cost estimates for materials and labor is studied by figuring the cost estimate of a small residence. Extensive use is made of actual samples and other visual aids. Prerequisite: 12 hrs. IT courses or consent of instructor. Credit 3.

IT 470 **Construction Plans and Documents.**
This course is designed to give a clear insight into the particular problems of construction and proper construction procedures. The site selection, availability of services, grading, subsurface explorations to determine foundation needs, construction organization, and other activities of construction are presented in logical units. Prerequisites: 12 hours of Industrial Technology or consent of instructor. Credit 3.

IT 472 **Industrial Safety.**
This course is a study of the problems involved in developing an integrated safety program for an industrial or commercial establishment. It involves safety education, safe worker practices, recognition and elimination of health hazards, machinery guards, in-plant traffic, material handling and emergency treatment for industrial accidents. Writing enhanced. Credit 3.

IT 473 **Digital Electronics.**
This course is a study of the principles and applications of digital logic circuits including logic gates, counters, shift registers, and combinational logic circuits. Laboratory experiences consist of experimental problems. Prerequisite: IT 235 or consent of instructor. Credit 3.

IT 477 **Computer Numerical Control Programming and Application**.
This course is designed to provide students with an in-depth study of numerical control programming practices as used in industry. Areas of study will include the development of numerical control, programming methods, tooling for numerical control and a study of CNC in manufacturing and production. Prerequisite: IT 166 or consent of instructor. Credit 3.

IT 480 **Material Handing and Plant Layout.**
This course is the study of the basic requirements needed to develop the most efficient layouts of equipment and of operating and service facilities whether in manufacturing plants, warehouses, or other industrial or business applications. Special emphasis is on the necessary coordination between plant layout, materials handling, work simplification and production planning, and operation control. Credit 3.

IT 484 **Supervisory Personnel Practices.**
This course introduces students to the principles of management as pertaining to personnel. Responsibilities of management, industrial economics, supervisory information, training, group dynamics, work simplification, labor and human relations, working conditions, morale, motivation, and mental health are covered. Writing enhanced. Credit 3.

IT 488 **Technical Illustration.**
A study and application of the tools, skills, standards and opportunities associated with the field of technical illustration. Prerequisites: IT 139, 161 plus 6 hrs. drafting. Credit 3.

IT 490 **Directed Studies.**
Designed to provide students with the opportunity to gain specialized experience in one or more of the following areas: internship, laboratory procedures, individualized study, innovative curricula, workshops, specialized training schools, and seminars. Internship is required of all teacher education majors. Writing enhanced. Prerequisite: Junior or senior standing. May be repeated or taken concurrently to a maximum of 9 hours. Variable credit.

DEPARTMENT OF ART

Chair: Sharon King (936)294-1314; sking@shsu.edu

Faculty: Martin Amorous, Jimmy Barker, Kate Borcherding, Chuck Drumm, Michael Henderson, Sharon King, Pat Lawler, Tony Shipp

Website: www.shsu.edu/~art_www/

Throughout human history, artists have found ways to express beauty, emotion, and vision using a variety of media. The Department of Art offers opportunities for creative students to explore and develop proficiencies in many traditional art forms, such as drawing, painting, sculpture, printmaking, ceramics, jewelry and photography. New and innovative art forms are also promoted in the Department of Art. Digital media courses are offered in Graphic Design, Computer Animation and Photography. Traditional and new media programs are support by the Art History program that provides concepts in aesthetics and art theory from diverse cultures and time periods.

Mission

The mission of the Sam Houston State University Department of Art is to build a diverse and contemporary program that will promote critical thinking, creative problem solving and aesthetic understanding in both the student body and faculty. The Department of Art promotes creative research endeavors through the use of scholarships community-student related activities and by exhibiting both faculty and student art work in our gallery. Additionally, we provide the University and the community with a variety of visiting artists and lecturers who help sustain a larger artistic vision.

Academic Programs

- BA in Art with a Major in Studio Art
- BFA in Art with a Major in Studio Art
- BFA in Art with a Major in Advertising and Graphic Design
- BFA in Art with a Major in Art - Photography
- BA in Photography (see Photography)
- BS in Photography (see Photography)

Highlights

The Department of Art has extensive studio space, modern facilities, and two galleries to support the academic programs. Students in Graphic Design and Computer Animation have access to updated Macintosh Computer laboratories with the industry's latest standard software.

Ceramics places an emphasis on contemporary issues surrounding both clay and the art world. The function of the studio is to provide a space in which students can use the material in all aspects of its process. An interdisciplinary approach is highly encouraged and supported.

Career Opportunities

Graduates with a degree in art will find the following employment opportunities:

- Many industry or business settings
- Commercial design firms
- Self-Employed Artists
- Teaching Careers

Suggested Minors

Minors for a Bachelor of Arts can be chosen based on the student's goals and career choices. The minors can be selected from several areas such as Criminal Justice, Secondary Education, General Business, and Interior Design. Students are encouraged to contact an advisor when selecting a minor. Bachelor of Fine Arts degrees do not require a minor.

Student Organizations

SIGGRAPH – SHSU SIGGRAPH is a student chapter of the national SIGGRAPH organization. The mission of SIGGRAPH is to promote interest in computer graphics and animation. The student members of SIGGRAPH sponsor an annual Animation Festival on campus and participate in the National Annual Conference.

Internships

Graphic Design students complete a professional internship. Students intern with design and advertising agencies, the print industry, in-house design departments, and publishers.

Scholarships

Scholarships are available from both the department and the University to support a student's study. All Scholarships are awarded to full-time Art students only.

Scholarship	Awarded	Eligibility	Media	Process
Art Endowment	Spring	3.0 GPA – Full-Time Student – SO, JR, SR	Professional Attitude	Nomination Only
Marion St. John Baker	Spring	3.0 GPA – Must have 1 full year left of study	Three-Dimensional	Entry in Juried Show
Marjorie Leverton Boehme	Spring	Full-time Student – JR or SR	All	Entry in Juried Show
Elkins Lake Kuntz-Nelson	Spring	2.5 GPA overall, 3.0 GPA ART, 1 full year left in study	Painting	Entry in Juried Show
Edward Geeslin	Spring	Financial need and character	All	Entry in Juried Show
Weldon Hall Jr.	Spring for Fall sem.	Entering Freshman majoring in Art	All	Submit application, portfolio by Feb 1.
Ruth Wynne Thomason Hollinshead	Spring	3.0 GPA, deminstrate financial need, and be in good standing	All	Entry in Juried Show
Stanley E. Lea	Spring	3.0 GPA Art-SO, JR, SR	Printmaking	Entry in Juried Show
Clem Otis	Spring	2.5 GPA overall, one full year left of study	Oil Painting	Entry in Juried Show
Charles Pebworth	Spring	3.0 GPA ART – SO, JR, SR, 1 full year left of study	Sculpture	Entry in Juried Show
Polley Art	Spring –	ALL Art Student	Painting – all based on	Entry in show Fall work
James B & Marilyn C Shepard	Spring	2.5 GPA overall	Sculpture	Entry in Juried Show

Program Specific Requirements

Lecture classes meet for three clock hours per week for one semester. Combination lecture and studio classes meet for six clock hours per week. Art students should plan to budget their time for at least three clock hours per week of involvement for each semester hour credit.

Art majors are encouraged to participate in student exhibitions and other exhibits, programs, and lectures sponsored by the Department. Students must supply the necessary materials for their art projects in all studio classes.

Curriculum

Required Courses for Art Majors

Required courses: ART 161, 163, 164, 260, 265, 271, 365, 370 — 24 hrs.

Students will select one of the following degrees and programs:

BFA, Program in Advertising Graphic Design:
ART 234, 269, 335, 336, 366, 432, 463, 431, 434,
Art History (Advanced), ART (15 hrs. Advanced) PHO 333 — 48 hrs.

BFA, Program in Art-Photography:
ART 269, 331, Art History (3 Advanced), ART (12 hrs. Advanced),
PHO 230, 231, 235, 337, 363, 430, 495 PHO (3 Advanced) — 45 hrs.

BFA, Program in Studio Art:
ART 269, 366, 371 or 372, 467, 482, Art History (6 hrs. Advanced),
Art Studio (27 hrs. Advanced) — 48 hrs.

BA, Program in Studio Art:
ART (6 hrs. Advanced) — 6 hrs.

Major in Advertising Graphic Design
Bachelor of Fine Arts

First Year	Credit	Second Year	Credit
ART 161, 163, 164, 234, 265	15	ART 260, 269, 271, 335, 336, 365, 370	21
ENG 164, 165	6	BIO, CHM, GEL, PHY, or GEO	8
HIS 163	3	POL 26	3
CS 133	3		32
KIN 215	1		
	28		

Third Year	Credit	Fourth Year	Credit
ART 366, 432,463	9	ART 431, 434, 466	9
Advanced Art History 471,474,or 478	3	Advanced ART Electives	9
ENG 265, 266,267, PHL 261, or 263	3	MUS 161, 264, 265, THR 160, 164, 166	
Advanced Electives	6	230, 231, or DNC 176	3
MTH 164 (or approved substitute)	3	PHO 230 or higher	3
HIS 164	3	ECO 230,233,234, GEO 161,PHL 262,	
POL 231,232,235,265,266,281, or 285	3	PSY 131, 289, SOC 261, or 264	3
PHO 333	3	GEO 265, 266, HIS 265, 266, or SOC 168	3
	33	Elective	6
			36

Major in Art – Photography
Bachelor of Fine Arts

First Year	Credit	Second Year	Credit
ART 161, 163, 164, 265	12	ART 260, 269, 271, 365, 370	15
PHO 230	3	PHO 231	3
ENG 164, 165	6	ENG 265.266, 267, PHL 261, or 263	3
HIS 163, 164	6	MUS,161, 264, 265, THR 160, 164, 166	
CS 133	3	230, 231, or DNC 176	3
MTH 164 (or approved substitute)	3	BIO, CHM, GEL, PHY, GEL, or GEO	8
	33	KIN 215	1
			33

Third Year	Credit
ART 366 and Advanced Art History	6
PHO 235, 337, 363	9
POL 261	3
POL 231, 232, 235, 265, 266, 281, or 285	3
Electives	3
ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, 264	9
	3
	33

Fourth Year	Credit
ART 300-400 level electives	12
PHO 430 and 495	6
PHO 300-400 level elective	3
GEO 265, 266, HIS 265, 266, or SOC 168	3
Advanced Electives	6
	30

Major in Studio Art

Bachelor of Fine Arts

First Year	Credit
ART 161, 163, 164, 265, 271	15
ENG 164, 165	6
HIS 163	3
CS 133	3
KIN 215	1
MTH 164 (or approved substitute)	3
	31

Second Year	Credit
ART 260, 269, 365, 366, 370, 371	18
ENG 265, 266,267, PHL 261, or 263	3
HIS 164	3
BIO, CHM, GEL, PHY, GEO	8
	32

Third Year	Credit
ART 467, 482	6
Advanced ART Studio electives[1]	15
Advanced Art History	3
POL 261	3
POL 231, 232, 235, 265, 266, 281, 285	3
Electives	3
	33

Fourth Year	Credit
Advanced Art History	3
Advanced ART Studio electives	18
MUS,161, 264, 265, THR 160, 164, 166 230, 231, or DNC 176	3
GEO 265, 266, HIS 265, 266, or SOC 168	3
ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, or 264	3
Electives	3
	33

Students must complete the Art courses indicated for the first two years with a minimum 3.0 grade point average in Art to remain candidates for the BFA degree. Students whose Art grade point average falls below 3.0 will become candidates for the BA degree. Candidates for the BFA degree must maintain a 3.0 grade point average in Art including all residence and transferred work. BFA students must participate in a senior exhibition the semester of graduation, and submit a Vita and slides or portfolio of their work. The student and advisor establish which electives will be taken for the Bachelor of Fine Arts in Studio Art degree.

Art electives in the BFA curriculum may be chosen from all 400 level studio art courses. All 400 level art courses may be repeated for credit except Art History courses, Graphic Design Courses and ART 494.

Not all art courses are offered each semester. Consult the Schedule of Classes and your advisor before registration.

A student considering graduate school after completing the Bachelor of Fine Arts in Studio Art degree should take 15 to 18 semester credit hours in the area of specialization: Painting, Drawing, Printmaking, Sculpture, Ceramics, or Jewelry. BFA Studio Art students are encouraged to minor in Art History by taking two additional Advanced Art History courses.

Major in Studio Art

Bachelor of Arts

First Year	Credit
ART 161, 163, 265	9
ENG 164, 165	6
HIS 163	3
CS 133	3
Foreign Language 141, 142	8
KIN 215	1
	30

Second Year	Credit
ART 164, 260	6
Minor**	6
PHL 261	3
Elective	3
BIO, CHM, GEL, PHY, GEO	8
Foreign Language 263, 264	6
	32

Third Year	Credit
ART 365, 370	6
Minor*	6
POL 261	3
POL 231, 232, 235, 265, 266, 281, or 285	3
MTH 164 (or approved substitute)	3
HIS 164	3
MUS,161, 264, 265, THR 160, 164, 166 230, 231, or DNC 176	3
Electives	6
	36

Fourth Year	Credit
ART (Advanced)	12
Minor* (Advanced)	6
ECO 230, 233, 234, GEO 161, PHL 262 PSY 131, 289, SOC 261, or 264	3
Electives	12
	30

* Students may complete a 48-hour major in Studio Art, in which case the 18-hour minor requirement does not apply. ART 271, 366, and (371 or 372) are required if the 48-hour major is chosen.

** Students are advised to use the elective/minor hours to meet the 42-advanced hour requirement for graduation.

Art Minors

Two-Dimensional Studio Art Minor
ART 161, 163, 265, ART (9 hrs.2-D . Advanced Art)

Three-Dimensional Studio Art Minor
ART, 161, 163, 271, ART (9 hrs. 3-D . Advanced Art)

Art History Minor (For Art Majors)
ART 260, 370, Art History (12 hrs. Advanced)

Animation Minor
ART 163, 271, 375, 331, 376 , (3 hrs Advanced Art)

Art History Minor (non-Art majors)
ART 260, 370, Art History (12 hrs. Advanced)

Interior Design Minor (IND Majors only)
ART 161, 163, 265, 271, 370, ART (3 hrs. Advanced)

Teacher Certification

Students interested in becoming an art teacher in a public school in the State of Texas will pursue an All-Level Certification in Art. Once all credentials are met for the All-Level Certification this allows employment in grades Kindergarten through 12th grade. To pursue the degree required for certification follow the degree plan for a Bachelor of Arts, Major in Art Studio and a Minor in Secondary Education (Please see Secondary Education for information regarding courses required for SED minor). To complete all requirements for certification the student will need to take and pass two (2) TeXes certification exams. Permission to take the All-Level Art content exam must be granted by the chair of the Department of Art. Please contact the department regarding this procedure.

Art Course Descriptions

ART 160 **Introduction to the Visual Arts.** (Non-Majors only) [ARTS 1301]
This course will introduce the visual elements of art, their nature, functions and relationships in Painting, Sculpture and Architecture to the non-major. Prerequisite: None. Credit 3.

ART 161 **Basic Design I.** [ARTS 1311]
The study and application of two-dimensional design elements and principles using diverse media. Prerequisite: None. Credit 3.

ART 163 **Drawing.** [ARTS 1316]
Freehand drawing using various media. The illusion of volume and space through the use of perspective, line, and value is stressed. Prerequisite: None. Credit 3.

ART 164 **Life Drawing I.**
Drawing from the model in various media. Gesture drawing and figure structure are studied. Prerequisite: ART 163. Credit 3.

ART 234 **Graphic Design I.**
This entry-level course is the first in building the foundation for graphic design. The emphasis is on creative thinking and problem solving and the development of the designer's process. Each project builds upon the previous in depth and complexity of that process. The student is introduced to computer application of two-dimensional concepts and output. Prerequisite: ART 161. Credit 3.

ART 260 **Pre-Renaissance Art History** [ARTS 1303]
This course provides a chronological survey of the major monuments of painting, sculpture, architecture, textiles, and metalwork from the ancient through the medieval periods. Prerequisite: None. Credit 3.

ART 265 **Basic Design II.** [ARTS 2311]
Continuation of Basic Design I with emphasis on various compositional approaches and color organization using a variety of materials and media. Prerequisite: ART 161. Credit 3.

ART 269 **Life Drawing II.**
A continuation of ART 164. Prerequisite: ART 164. Credit 3.

ART 271 **Three-Dimensional Design.** [ARTS 1312]
An introduction to elements of design and the principles of arrangement as applied to problems in the third dimension. Prerequisite: None. Credit 3.

ART 331 **2D Computer Animation.**
In this course, computer software is used to create 2D animations that incorporate traditional techniques and styles such as drawing and painting, cut paper, cel animation and stop action. Story development is emphasized and video editing techniques are practiced. Prerequisite: ART 234 and ART 265. Credit 3.

ART 335 **Graphic Design II.**
This foundation course introduces an overview of history, principles, processes and terminology of typography. Type sensitivity is developed through a variety of means: classifying and identifying typefaces, designing typographic logotypes, as well as designing with type. The majority of work is created on the computer. Prerequisite: ART 234. Credit 3.

ART 336 **Graphic Design III.**
The techniques and processes of print media are explored. The use of color is emphasized. Students will be exposed to historical and aesthetic issues. Prerequisite: ART 335. Credit 3.

ART 365 **Painting I.**
An introduction to the materials and techniques of oil painting. Emphasis is placed on the observation of actual phenomena using still life, the figure, and landscape. Prerequisites: ART 161, ART 163 and ART 265. Credit 3.

ART 366 **Printmaking.**
An introduction to the techniques and procedures of printmaking. The emphasis is on relief, monoprint, and intaglio methods. Prerequisites: ART 163 and ART 265. Credit 3.

ART 370 **Renaissance through Rococo Art History**
This course provides a chronological survey of the major monuments of painting, sculpture, architecture, textiles, and metalwork from the medieval period to the present. Prerequisite: None . Writing Enhanced. Credit 3.

ART 371 **Ceramics.**
An introduction to ceramics. Clay will be explored through a variety of basic hand building techniques. Ceramic surfaces including slips and glazes will be employed. Students will use various kiln firing techniques and clay bodies. Prerequisite: ART 271. Credit 3.

ART 373 **Collage.**
A class which follows the precepts of the twentieth century art form of using and exploring the juxtaposition and layering of a variety of materials and images. The dynamics of composition and a further investigation of the use of color and inherent capabilities of contrasting images and textures will be studied. Students will use a variety of materials including the found object, discarded papers, invented textures and painted surfaces to create their imagery. Prerequisite: ART 265. Credit 3.

ART 374 **Methods & Materials.**
An introduction to sculptural form through projects involving woodworking and welding. Lectures and demonstrations will be given on tools, materials and safety procedures. Prerequisite: ART 271. Credit 3.

ART 375 **Introduction to 3D Computer Animation.**
Basics of 3D Animation including 3D modeling techniques, key-framing and graph editing, shading, lighting and rendering. Prerequisite: ART 161, ART 163, ART 234, and ART 271. Credit 3.

ART 376 **Advanced 3D Computer Animation**
Further study in techniques used in 3D Computer Animation including 3D modeling, shading, lighting, and rendering. Advanced concepts including inverse and forward kinematics, deformers, and dynamics are introduced. Prerequisite: ART 375. Credit 3.

ART 431 **Illustration.**
This course promotes the inventive and individual solutions to illustrational problems, explores relationships of the image to the text and develops individual skill level using a variety of media, including the computer. Prerequisites: ART 265 and ART 269. Credit 3.

ART 432 **Graphic Design IV.**
Publication design problems are presented as they relate to a specific corporation/product. Typical projects include corporate identity systems and ad campaigns. Production methods are individually explored to produce presentation quality mockups. Prerequisite: ART 336. Credit 3.

ART 434 **Graphic Design V.**
An internship in an approved field and an intense portfolio review. Prerequisite: ART 432. Credit 3.

ART 463 **Advanced Drawing.**
Drawing problems with emphasis on the development of personal expressive techniques. Prerequisite: ART 269. Credit 3.

ART 465 **Advanced Painting.**
Exploration of traditional painting processes and concepts along with the introduction of non-traditional techniques and materials. Emphasis is placed on skill development and individual exploration of ideas. Prerequisite: ART 365. Credit 3.

ART 466 **Painting in Aquamedia.**
The focus is on transparent watercolor. Landscape, still life, and the figure are emphasized, along with experimentation. Prerequisites: ART 161, ART 163, ART 265 and ART 365. Credit 3.

ART 467 **Jewelry.**
A study of techniques and materials needed to design and create jewelry. Design and craftsmanship skills are emphasized. Prerequisite: ART 265. Credit 3.

ART 468 Casting.
The Casting course will cover the methods and procedures of centrifugal casting, vacuum casting, steam casting, gravity pour casting and sand casting. The difference in spruing the models (wax, wood, plastic or forms found in nature) for each of these methods will be studied. Prerequisite: ART 265 and ART 271. Credit 3.

ART 474 History of the Nineteenth and Twentieth Century Art.
A survey of major artistic movements and artists working in painting, sculpture and architecture. Prerequisite: ART 260 and ART 370. Writing Enhanced. Credit 3.

ART 478 Criticism and Theory in the Visual Arts.
The study of historical and contemporary aspects of major thinking and writing concerning the visual arts. Prerequisite: ART 260 and ART 370. Writing Enhanced. Credit 3.

ART 480 Advanced Ceramics.
A continued exploration of ceramics. Individual direction of each student will determine type of clay, ceramic surface and firing process to be used. Further research into clay and glaze chemistry and the history of ceramics. Prerequisite: ART 371 or ART 372. Credit 3.

ART 482 Sculpture.
The exploration of three-dimensional media through the proper use of tools, working processes, and a variety of materials. Emphasis placed on skill development and individual exploration of ideas. Prerequisite: ART 374. Credit 3.

ART 492 Advanced Printmaking.
Advanced problems in printmaking. Special procedures and problems involving further investigation of various printmaking media with an introduction to lithography. Prerequisite: ART 366. Credit 3.

ART 493 Undergraduate Seminar in Art.
An undergraduate seminar course concerning problems selected within an area of specialization. Prerequisites: 6 hours of credit in the area of investigation, with permission of the instructor and department chair. (This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog.) Variable credit.

ART 494 The Business of Art.
This class is designed to prepare the art studio major for a professional presentation of their portfolio to present to a gallery or for admittance into graduate school. Students will learn how to photograph their art-work, write a resume, artist statement and cover letter. Crate building, mat cutting and frame making will also be covered. Class discussions, guest lectures and readings on current art topics are also required. Students enrolling in this class must sign up for additional lab hours with the professor. Credit 3.

PHOTOGRAPHY PROGRAM

Coordinator: Thomas Seifert (936)294-1196; tseifert@shsu.edu

Faculty: Jack Barnosky, Rebecca Finley, Emmette Jackson, James Paster, Thomas Seifert

Website: www.shsu.edu/~pho_www

Photography, whether commercial or fine art, relies on technical and visual skills that serve one goal: communication. The student who is best prepared to solve the challenges that photography presents is the student with a command of the fundamental principles and practices involved. In a controlled environment under close observation with feedback, students are encouraged to explore, take risks, find their own path, and develop their skills.

Academic Programs

- BA in Photography
- BS in Photography
- BFA in Art with a program in Photography (see Art)

Three photography degree programs are offered to form a positive environment in which students can explore their creative potential. The Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) degrees emphasize photographic fundamentals, visual literacy, photo history and business practices that prepare students to begin a career in Professional Photography. The student who receives the B.A degree emphasizes the liberal arts while. The BS emphasizes the sciences. The Bachelor of Fine Arts degree, offered in conjunction with the Art Department, places photography as an area of specialization within an intensive study of the fine arts and prepares students to pursue a Master of Fine Arts degree.

Highlights

- A positive environment in which students can explore their creative potential
- Up-to-Date Facilities
- Five full-time faculty

Career Opportunities

Variety of opportunities for students in a broad area of photography careers depending on student's individual interest.

Suggested Minors

Minors can be chosen based on the students goals and career choices. The minors can be selected from several areas such as General Business, Art, Marketing, and Mass Communications. Students are encouraged to contact an advisor when selecting a minor. Bachelor of Fine Arts degrees do not require a minor.

Internships

Internship courses are designed to provide students with work experience in a career related professional atmosphere. This allows the student to gain valuable working knowledge in the field of photography.

Scholarships

Madison Wolff and Hal Fulgham Scholarships are endowment scholarships for students interested in photography.

Program Specific Requirements

Equipment and costs. Students enrolled in photography courses must furnish their own 35mm camera. As photography majors and minors progress through the program more expensive and complex professional equipment can be checked out for use or they may wish to purchase their own professional equipment. All students should be prepared to meet expenses for consumable supplies (film and paper).

Curriculum

Required Courses for Major

Bachelor of Arts and Bachelor of Science: PHO 230, 231, 232, 233, 234, 235, 332, 333, 361, 363, 430, and 495.

Bachelor of Arts majors must take PHO 337.

Major in Photography
Bachelor of Arts

First Year	Credit	Second Year	Credit
PHO 230, 231, 232	9	PHO 233, 234, 361	9
KIN 215	1	HIS 163, 164	6
ENG 164, 165	6	PHL 261 or 263	3
MTH 164 or 170	3	CS 133 or 143	3
POL 261	3	BIO, CHM, PHY, GEL, or GEO	8
Foreign Language 141 & 142	8	Minor	3
	30		32

Third Year	Credit	Fourth Year	Credit
PHO 235, 333, 337, 382, PHO(Advanced)	15	PHO 363, 430, 495, 3 hrs. Advanced	15
ART 161	3	Minor	9
Foreign Language 263, 264	6	ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, or 264	3
POL 231, 232, 235, 265, 266, 281, or 285	3	PHL 366 or 300 level ART, DNC MUS, or THR	3
Minor	9		30
	36		

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Major in Photography
Bachelor of Science

First Year	Credit	Second Year	Credit
PHO 230, 231, 232	9	PHO 233, 234, 361	9
ENG 164, 165	6	ENG 265, 266, 267, PHL 261, or 263	3
MTH 164	3	HIS 163, 164	6
BIO, CHM, PHY, GEL, or GEO	8	POL 261	3
CS 133 or 143	3	MTH 170	3
KIN 215	1	BIO, CHM, PHY, GEL, OR GEO	8
	30		32

Third Year	Credit	Fourth Year	Credit
PHO 235, 333,363, 382, PHO (Advanced)	15	PHO 430, 495, PHO (Advanced)	15
ART 161	3	Minor	9
GEO 265, 266, HIS 265, 266, or SOC 168	3	MTH, BIO, CHM, PHY, or GEL	3-4
POL 231 ,232, 235, 265, 266, 281 or 285	3	ECO 230, 233, 234, GEO 161, PHL 262 PSY 131, 289, SOC 261, or 264	3
Minor	9	Elective	3
	33		33

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Major in Art – Photography

First Year	Credit	Second Year	Credit
ART 161, 163, 164, 265	12	ART 260, 269, 271, 365, 370	15
PHO 230	3	PHO 231	3
ENG 164, 165	6	ENG 265.266, 267, PHL 261, or 263	3
HIS 163, 164	6	MUS,161, 264, 265, THR 160, 164, 166 230, 231, or DNC 176	3
CS 133	3	BIO, CHM, GEL, PHY, GEL, or GEO	8
MTH 164 (or approved substitute)	3	KIN 215	1
	33		33

Third Year	Credit
ART 366, Advanced Art History	6
PHO 235, 337, 363	9
POL 261	3
POL 231, 232, 235, 265, 266, 281 or 285	3
Electives	9
ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, or 264	3
	33

Fourth Year	Credit
ART 300-400 level elective	12
PHO 430 and 495	6
PHO 300-400 level elective	3
GEO 265, 266, HIS 265, 266, or SOC 168	3
Advanced Electives	6
	30

Minor in Photography

PHO MINOR: PHO 230, 231, 232, 6 hours from PHO 233, 234, 235 and 9 advanced hours of PHO electives. 24 hours

Photography Course Descriptions

PHO 181 Introduction to Photography. (Non-Majors only)
This is a beginning course intended for non-photography majors. Content of the course includes a study of cameras, photographic materials, and visual principles. Students must provide a 35mm camera. Credit 3.

PHO 230 Photographic Principles I.
Designed for photography majors and minors, this course introduces the student to the technical principles and creative potential of black and white photography. Credit 3.

PHO 231 Photographic Design.
Students are introduced to the basic principles of visual design as they apply specifically to photographic media and methods. Prerequisite: PHO 230. Credit 3.

PHO 232 Photographic Principles II.
This course is a continuation of PHO 230. Students will be introduced to advanced exposure techniques and the principles necessary to master use of the large format camera. Prerequisite: PHO 232. Credit 3.

PHO 233 Digital Photography I.
This course introduces the student to the tools and techniques used in the creation, manipulation, and presentation of digital images in the desktop computing environment. Credit 3.

PHO 234 Studio Practices I.
Students learn the fundamentals of working in the studio photographing people and objects. They are introduced to the use and control of continuous lighting as well as high-powered electronic flash in both the silver-based and digital photography modes. Prerequisites: PHO 230 and 233. Credit 3.

PHO 235 History of Photography.
A study is made of the history of photography from its earliest beginnings. Technical, visual, aesthetic and social aspects are considered. Writing Enhanced. Credit 3.

PHO 332 Digital Photography II.
This course will engage students in a study of the tools, techniques, and applications of electronic photography in the desktop computing environment. Preparation of images will include scanning and computer manipulation of film-based images as well as the importing and use of electronic images in 3D, page layout, and multimedia/authoring applications. Prerequisite: PHO 233. Credit: 3.

PHO 333 Web Site Development.
This course is designed to introduce students to the process of designing and creating web sites for the World Wide Web. Beginning with an understanding of the Internet, its history and development, students move on to actually creating web pages in rudimentary HTML 4. Students are also introduced to web authoring tools and learn about their strengths and weaknesses in creating and maintaining websites. The course concludes with an examination of scripting languages, browser differences, and the future of HTML as it morphs to meet the demands of users and programmers worldwide. Credit 3.

PHO 337 Alternative Photographic Processes.
In this course students are introduced to a variety of non-standard photographic processes. Prerequisite: PHO 232. Credit 3.

PHO 361 Studio Practices II.
This course is a continuation of PHO 234. Advanced commercial product and portrait photography and fundamental photographic business practices are examined in both silver-based and digital modes. Prerequisites: PHO 230, 232, 233 and 234 or consent of instructor. Credit 3.

PHO 363 Photography Seminar.
A different topic is presented each semester. Photo majors must take at least one seminar class in order to graduate. May be repeated for credit. Credit 3.

PHO 364 Film Appreciation.
A critical examination of the unique way in which movies tell their stories. Each semester a different film genre such as science fiction, documentary, Film Noir, or the films of one director or actor are examined. May be repeated for a total of 6 semester credit hours. Writing Enhanced. Credit 3.

PHO 381 Exhibition Photography.
The course deals with the fundamentals of gallery exhibition. Emphasis is placed on developing and promoting a personal photographic style. A study is also made of archival techniques. Prerequisite: 6 hours photography. Credit 3.

PHO 430 Photographic Computer Imaging Applications.
This course explores the creation, manipulation, and use of the digital image. It includes experience in three dimensional, animation, and virtual reality environments on the desktop computer workstation. Credit 3

PHO 462 Photographic Field Studies.
This course introduces the students to the specialized skills used by documentary photographers. Each student will produce a professional quality photographic project which documents a subject that is of interest to the students. These projects will be done in the field outside of the studio. Prerequisite: PHO 230 or consent of instructor. Credit 3.

PHO 487 Expressive Photography.
An exploration is made of the creative application of the photographic image as a means of personal expression. Course requirements include the completion of a portfolio of creative work. Prerequisites: 15 hours of photography or consent of instructor. Credit 3.

PHO 495 Portfolio.
This course is designed to assist students in preparing a final presentation portfolio and in addressing issues involved with entering the work force. Recommended for all graduating seniors. Writing Enhanced. Credit 3.

PHO 499 Directed Studies.
This course is provided to allow the student, under the supervision of a faculty member, to develop specialized skills, to conduct an investigation into an area of special interest or to set-up and complete an internship with an established professional photographer. Regular meetings will be held with the faculty sponsor. The course will culminate in a portfolio of photographs and/or a scholarly written report. Departmental approval is required before student may enroll in this course. May be repeated or taken concurrently to a maximum of 6 hours. Variable credit.

DEPARTMENT OF BIOLOGICAL SCIENCES

Chair: Mathew P. Rowe (936) 294-1540; MPR002@shsu.edu

Faculty: Karölis R. Bagdonas, Theodore J. Brummel, Jerry L. Cook, Tamara J. Cook, James R. DeShaw, Harold F. Foerster, Anne R. Gaillard, Joan E. N. Hudson, William I. Lutterschmidt, Diane L. H. Neudorf, Todd P. Primm, Monte L. Thies, Jack C. Turner, Justin K. Williams, Everett D. Wilson

Website: www.shsu.edu/~bio_www/

Mission

The Department of Biological Sciences is dedicated to the pursuit and dissemination of knowledge and scientific discovery in the life sciences through innovative teaching and research programs. The Department strives to instill in its students the philosophy of lifelong scholarship, producing scientifically literate members of society who have the knowledge to contribute and compete in a rapidly changing world.

Academic Programs

- BA in Biology
- BS in Biology
- BS in Environmental Science (see Environmental Science Sequence within this chapter)

Biology, the study of living things, is an exciting and dynamic field that offers many areas of focus. Students may choose to study how life forms function at the molecular, cellular, organismal or ecological levels. The biological sciences provide opportunities to study viruses, bacteria, fungi, plants, and animals and to investigate the biochemical, physiological, anatomical, behavioral, or ecological processes that make each organism unique.

Highlights

The Department of Biological Sciences is located in the Lee Drain Building, which houses facilities including teaching and research laboratories, the Warner Herbarium, Sam Houston State Vertebrate Museum and Texas Bird Sound Library, an animal rearing facility, greenhouse, outdoor aviary, and scanning electron microscopy, molecular, microbiology, and flow cytometry laboratories. The Department operates the Center for Biological Field Studies, a 250 acre field station within 5 miles of campus that is dedicated to biological and environmental research and teaching.

Student Organizations

- Beta Beta Beta (TriBeta) is an undergraduate national Biological Honor society. The organization was founded in 1922 and the Delta Tau chapter at SHSU was chartered in 1965. TriBeta is dedicated to advancing the understanding and appreciation of the biological sciences and encouraging/supporting undergraduate student scientific research. TriBeta membership requires: (1) a declared major in Biology, Environmental Science or related biological field, (2) completion of two biology courses (associate member) and one 300 or 400 course (regular member) with BIO GPA of 3.0, and (3) an overall SHSU GPA of 2.75. Membership invitations are sent to eligible students each fall and spring semester. Dr. Joan E.N. Hudson is the TriBeta faculty sponsor.
- Sam Houston Association of Medical Oriented Students (SHAMOS) membership is available to any student interested in pursuing a career in the medical or allied health field. Activities include fundraisers, community service projects, blood drives with the Gulf Coast Regional Blood Center, and canned food drives. SHAMOS sponsors an outside speaker program to inform students of the opportunities and benefits of the various disciplines of the medical arts (e.g., general and specialist dentistry, general and specialist medicine, occupational therapy, physician assistant, podiatry, forensic pathology, and EMS). Dr. Karölis R. Bagdonas serves as the faculty advisor.

Internships

The Department of Biological Sciences believes that "hands on" experiences, through either internships or faculty directed independent studies, are an important complement to a student's formal coursework. Moreover, undergraduate research experience is critical for students applying to graduate programs or professional schools. We therefore encourage all Biology students to consider participating in an internship or independent research project; such participation is required for the Environmental Science Program. Students seeking information regarding internships and/or independent research experiences should contact one of the following faculty: Dr. James DeShaw for Environmental Science students; and Dr. Matthew Rowe for all others.

Scholarships

Academic scholarships are available from both the Department of Biological Sciences and the University to support student studies. The Department of Biological Sciences scholarships include:

- Biology & Environmental Science Academic Scholarship
- Claude McLeod Academic Scholarship
- Emma Normand Academic Scholarship
- James D. Long Biology Endowment
- Patrick Neil O'Bryant Academic Scholarship
- James Patrick Weber Environmental Science Award
- S.R. Warner Academic Scholarship
- Wilson–Warner Endowed Scholarship in the Biological Sciences
- Roy Turner Scholarship Endowment

Departmental scholarship information may be obtained by writing to Scholarships, Department of Biological Sciences, Box 2116, SHSU, Huntsville, Texas 77341-2116 or by visiting our website at **www.shsu.edu/~bio_www/u-schol.html**. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672.

Program Specific Requirements

Candidates for the Bachelor of Science (BS) in Biology are required to complete a Major Field Achievement Test (MFAT) in Biology to be eligible for graduation. The Department of Biological Sciences administers the MFAT once during both the Fall and Spring semesters at no cost to the student. A student is eligible to take the MFAT upon completion of all required biology credits or during the semester immediately prior to graduation (August graduates must take the examination during the Spring semester immediately prior to graduation). The student, with written permission from the Chair of the Department of Biological Sciences, may substitute another national or state examination (MCAT, DAT, OAT, TExES) in place of the MFAT; however, the student is responsible for the examination costs. The exam score, although part of the student's record, has no effect on the student's GPA.

BIOLOGY PROGRAM

Major in Biology: All students majoring in Biology will develop competence in the fundamental principles of biology and will gain experience in botany, zoology, cellular biology, microbiology, genetics, and ecology. Students take an active role in creating a degree plan that best meets their interests and their career goals. Most students pursue careers in terrestrial ecology, animal physiology, animal behavior, medical professions, biotechnology, or teacher education. Students interested in forensic science combine an extensive background in biology with substantial coursework in chemistry and criminal justice to prepare them for work with state and federal agencies.

Required Courses for the Major

The biology major may choose from two degree programs, the Bachelor of Arts or Bachelor of Science. All majors must complete the following core courses:

BIO 161/111, 162/112, 234, 340, 345, 347, 410, and 411 (25 hrs.).

Students may choose their area of specialization contingent upon completion of the required core courses.

Note: Commencing with the 2000-2002 Catalog, SHSU no longer offers BIO 138/118 and BIO 139/119. However, the Department will permit students who successfully completed the BIO138/118 and BIO 139/119 sequence at another institution to substitute these courses for BIO 161/111 and BIO 162/112, respectively.

Major in Biology
Bachelor of Arts

First Year	Credit	Second Year	Credit
BIO 161/111, 162/112	8	BIO 234, BIO 345	7
ENG 164, 165	6	Component Area 4 (Literature)	3
Foreign Language 141, 142 (one field)	8	CS 143	4
KIN 215	1	PHL	3
CHM 138/118, 139/119	8	Foreign Language 263, 264 (one field)	6
	31	MTH 170 and MTH/STA 379 or BIO 474	6
		HIS 163, 164	6
			35

Third Year	Credit	Fourth Year	Credit
BIO 340, 347, BIO (Advanced)*	11-12	BIO (Advanced)*	9-12
Minor	9	BIO 410, 411	2
Component Area 4		Minor	9
(Visual and Performing Arts)	3	ENG (200 level or higher) or SCM	3
ART, DNC, MUS, THR or PHL 366	3	Component Area 5	3
POL 261, POL (200-level)	6	Advanced General Electives	3-6
	32-33		29-35

Major in Biology
Bachelor of Science

First Year	Credit	Second Year	Credit
BIO 161/111, 162/112	8	BIO 234, BIO 345	7
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	ENG 330	3
CHM 138/118, 139/119	8	MTH 142 and MTH 143 or	
KIN 215	1	MTH/STA 379	7-8
CS 143	4	Component Area 4 (Cultural Studies)	3
	33	CHM 238/218, 239/219	8
		Component Area 5	3
			35

Third Year	Credit	Fourth Year	Credit
BIO 340, 347, BIO (Advanced)*	14-16	BIO (Advanced)*	9-12
POL 261, POL (200 level)	6	BIO 410, 411	2
PHY 138/118, 139/119	8	Component Area 4	
Minor**	6	(Visual and Performing Arts)	3
	34-36	Minor**	12
		Advanced General Electives	3
			29-32

* Advanced Electives should be selected according to specific areas of study as determined by the student and their academic advisor.

** Recommended minor is CHM, ESC, GEL, MTH, or PHY.

Note: Students should use the elective and/or minor hours to meet the 42-advanced hour requirement for graduation with either the BA or BS degree.

Choice of Restricted Electives in Biology
A student working toward a BA degree must complete four upper division (300/400 level) courses in addition to the core courses. A student working toward a BS degree must complete the core curriculum courses and specialize their degree program by taking five upper division (300/400 level) courses from their area of focus. Students choosing to generalize their program, such as those working toward teacher education, may elect to take their courses from several focus groups. Students should consult with an academic advisor in the Biological Sciences early in their degree program regarding appropriate choices for their restricted electives.

Teacher Certification in Science and Life Sciences

Biology Majors
Students may receive teacher certification in either Science or Life Sciences for grades 8-12; however, degree requirements for Secondary Teacher Certification in Science and Life Sciences are under revision. Contact the department chair for information about courses leading to certification. The Bachelor of Arts (BA) Degree is not available for the Science certification program.

For teacher certification, no grade below C in the science composite coursework is accepted.

Bachelor of Science in Science with Life Science Emphasis
Students seeking certification in Physical Science and secondary certification in Biology, Chemistry, Geology, or Physics at the secondary level (grades 8-12) may choose to complete the Composite Science BS degree program. Students choose an area of specialization beyond the general science core of CHM 138/118, 139/119, 238/218; BIO 161/111, 162/112, 234, 340, 341, 345, 392; GEO 131/111; GEL 133/113, 134/114, 330; PHY 138/118, 139/119, 397/317; and MTH 142 and MTH170 or 379. The Life Science emphasis requires completion of BIO 340, 341, 345, 392, and 6 hrs. of advanced BIO electives. The required education courses are:

SED 383, 394, 464, 480, 496, 497, RDG 392, SCM 384, SED 374, or PSY 374.

For teacher certification, no grade below C in the science coursework is accepted.

Biology and Life Science Minors
Biology minors seeking certification in Life Sciences at the secondary level (grades 8-12) are required to complete CHM 138/118, 139/119, BIO 161/111, 162/112, 234, 340, 341, 345, 347, and 392. The composite science program is not available for the minor. Students not seeking certification must complete BIO 340, 345, 347, plus two advanced BIO courses that best fit their educational needs. They should use their electives to fill the University requirement for advanced hours. The required education courses are:

SED 383, 394, 464, 480, 496, 497, RDG 392, SCM 384, SED 374, or PSY 374.

For teacher certification, no grade below C in the science composite coursework is accepted.

Curriculum: Bachelor of Science

Major In Biology with Emphasis in Forensic Science
Students seeking a background that will prepare them for careers in Forensic Science can select advanced courses that lead to a **major in Biology** and **a minor in Chemistry and/or Criminal Justice**. Courses in the major should be selected from BIO 341, 342, 344, 345, 347, 349, 431, 432, 449, 474, 480, and 494. Courses for the Chemistry minor should be selected from CHM 339, 348, 440, 441, 458, and 495. The minor in Criminal Justice may include CJ 261, 267, 268, 273, 294, 366, 462, 465, and 488.

Minor in Biology with Emphasis in Forensic Science
Students seeking a background that will prepare them for careers in Forensic Science can select advanced courses that lead to a **major in Chemistry** (see Department of Chemistry) and a **minor in Biology**. The following courses are required for the Forensic Science minor: BIO 341 or 342, 345, 347, 480, 349 or 449, and 432, or 474.

Major In Biology with Emphasis in Biotechnology
To satisfy the Bachelor of Science degree requirements, Biology majors desiring to prepare for careers in biotechnology should take the following advanced courses: BIO 344, 345, 347, 349, 410, 411, 435, 449, 480, BIO Advanced Elective, and BIO 474 or MTH 379. These students also should take a minor in chemistry, including CHM 348 and 440. Internships (BIO 494) are available to qualified students. For further details about biotechnology, see the department chair.

Major In Biology with Emphasis in Preprofessional Studies
Biology majors following the preprofessional curricula of premedicine, predentistry, prephysical therapy, and preveterinary medicine should take the following Biology courses: BIO 342, 344, 347, and 349. General electives recommended for preprofessional students are BIO 348, 435, 446, 449, 474, and 480. For detailed course requirements in specialized fields, consult the Preprofessional Studies listings of this catalog.

Curriculum: Minor in Biology
Bachelor of Arts or Bachelor of Science

Students seeking a minor in biology are required to complete CHM 138/118, 139/119, BIO 161/111, 162/112, 234, 340, 345, 347, plus one elective course. Students seeking a secondary teaching certificate along with their biology minor should include BIO 341 or BIO 392 as their restricted elective for a minimum of 26 semester hours of biology.

Biology Course Descriptions

BIO 134 **Contemporary Biology.** [BIOL 1308]
Presentation for the non-science major of biological concepts and topical subjects related to science methods, embryological development, reproduction, genetics, evolution, human organ systems, disease, and environmental biology. Ethical considerations of reproduction and birth control, genetic engineering, environmental pollution and population control will be included. Credit in BIO 134 as a laboratory science is contingent upon completion of BIO 114. Credit in this course cannot be applied to either a major or minor in the sciences. Fall, Spring, Summer. Credit 3.

BIO 114 **Contemporary Biology Laboratory.** [BIOL 1108]
Fall, Spring, Summer. Credit 1.

BIO 137 **Environmental Science.** [BIO 2306]
A general course designed to cover all areas relating to contemporary ecological problems. Topics include air, water, and soil pollution; radiation, limnology, climate, pesticides, wastes, and land conservation. Fall, Spring. Credit 3.

BIO 117 **Environmental Science Laboratory.** [BIO 2106]
Fall, Spring. Credit 1.

BIO 161 **General Botany.** [BIO 1311].
General principles of botany are presented. Emphasis is placed on morphology, taxonomy, genetics, physiology, and ecology of plants in an evolutionary and ecological context. Students may begin sequence with either BIO 161 or 162. Credit for BIO 161 as a laboratory science is contingent on completion of BIO 111. Fall, Spring, Summer. Credit 3.

BIO 111 **General Botany Laboratory.** [BIO 1111]
Fall, Spring, Summer. Credit 1.

BIO 162 **General Zoology.** [BIO 1313].
General principles of zoology are presented in an evolutionary context. Emphasis is placed on the anatomy, behavior, and ecology of animals. Students are introduced to evolutionary and ecological principles of biology. Students may begin sequence with either BIO 161 or 162. Credit for BIO 162 as a laboratory science is contingent on completion of BIO 112. Fall, Spring, Summer. Credit 3.

BIO 112 **General Zoology Laboratory.** [BIO 1113]
Fall, Spring, Summer. Credit 1.

BIO 234 **Introductory Cell Biology.**
A general cellular approach to biological principles is presented, including scientific methods, origins of life, biochemistry, cell structure, metabolism, cellular evolution, and cell division. Prerequisite: Minimum grade of C in BIO 161/111 and BIO 162/112. Fall, Spring. Credit 3.

BIO 245 **Human Anatomy.** [BIOL 2401]
This course deals with structure and form of the human body. It includes studies of cells, tissues, and organ systems. Registration is primarily for students in prenursing or majors in kinesiology or health. Credit in this course cannot be applied to either a major or minor in Biology. Two-hour laboratory. Fall, Spring. Credit 4.

BIO 246 **Human Physiology.** [BIOL 2402]
This course will help students identify and understand the function of several important human organ systems and how these systems maintain homeostasis. Topics and the mechanisms involving circulation, digestion, metabolism, muscle action and respiration will receive the most emphasis. This course is designed to emphasize a clinical knowledge of physiology and techniques required by students studying nursing, physical therapy, and related health fields. Prerequisite: Minimum grade of C in BIO 245. Two-hour laboratory. Fall and Spring. Credit 4.

BIO 247 **Introductory Applied Microbiology.** [BIOL 2420]
An introduction to microorganisms, their morphology, growth requirements, methods of culture, and the manner in which they affect health. Reactions of the body toward pathogenic organisms and the principles of immunity and chemotherapy are considered. Credit in this course cannot be applied to a major or minor in Biology. Two-hour laboratory. Writing enhanced. Fall, Spring. Credit 4.

BIO 336 **Fish, Wildlife, Recreation Management.**
The history and basic principles, philosophy and concepts of wildlife management as they relate to habitats, people, and the problems associated with their interactions. Three-hour laboratory and field work. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, and 340. Fall. Credit 3.

BIO 340 **General Ecology.**
A study of physical and biotic components of the environment, responses of organisms to their environment, community ecology, natural ecosystems, and human's interaction with ecosystems. Field studies are an integral part of the laboratory. Three-hour laboratory and field work. Prerequisite: Minimum grade of C in BIO 161/111, 162/112. Fall, Spring. Credit 4**.**

BIO 341 **Human Biology.**
This course deals with the study of structure and function of the human body. The structure of various organ systems are discussed and their function as organs and systems described. ***This course is not recommended for preprofessional students.*** Minimum grade of C in BIO 161/111, 162/112, 234. Two-hour laboratory. Fall, Spring. Credit 4.

BIO 342 **Comparative Vertebrate Anatomy.**
A study of representative vertebrates, their anatomy, ontogeny, and phylogeny. The course is required of premedical students. Prerequisite: Minimum grade of C in BIO 161/111, 162/112 or consent of the instructor. Three-hour laboratory. Even year, Spring. Credit 4.

BIO 343 **Plant Physiology.**
General course dealing with principal life processes of plants. Topics include photosynthesis, respiration, nutrition, flowering, dormancy, hormones, growth, and development. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234; CHM 138/118, 139/119. Three-hour laboratory. Writing enhanced. Odd year, Fall. Credit 4.

BIO 344 General Physiology.
The study of the primary mechanisms by which autotrophic and heterotrophic organisms function. Important fundamental aspects of cellular, regulatory, and systemic physiology are presented emphasizing the functional aspect of living systems at the cellular and molecular levels. Students are expected to develop an integrated understanding of the areas presented and recognize the interdependence of these mechanisms in the maintenance of homeostasis. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234; CHM 138/118, 139/119, 238/218. Three-hour laboratory. Writing enhanced. Spring. Credit 4.

BIO 345 Introductory Genetics.
Study is made of the physical bases of inheritance and principles of heredity and variation. Topics include Mendelian genetics, cytogenetics, molecular basis of genetics, gene expression and regulation, and DNA technologies. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234; CHM 138/118, 139/119. Two-hour laboratory. Writing enhanced. Fall, Spring. Credit 4.

BIO 346 Pathophysiology.
A study of basic physiological systems and underlying system dysfunctions associated with human disease processes across the life span. Relationships between etiologic agents and their consequence to human form and function will be stressed. Critical thinking processes integrating symptoms, treatment and prognosis will be applied to physiological perspectives. Four hours lecture per week. Prerequisites: Minimum grade of C in CHM 135/115, BIO 245, 246 or consent of the instructor. Credit 4.

BIO 347 General Microbiology.
An introduction to microorganisms including bacteria, viruses and fungi. Major areas considered are morphology, physiology, genetics, and pathology. Microorganisms are studied in relation to soil, water, food, industrial processes, and disease. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234 and 8 hrs. of chemistry. Two-hour laboratory. Writing enhanced. Fall, Spring. Credit 4.

BIO 348 Vertebrate Embryology.
This is a study of the early development of representative vertebrates from fertilization until differentiation of organs has been completed. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234. Two-hour laboratory. Writing enhanced. Even year, Fall. Credit 4.

BIO 349 Histology.
A study of animal tissues with emphasis on human materials. Identification and preparatory techniques are stressed. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234; CHM 138/118, 139/119. Three-hour laboratory. Writing enhanced. Spring. Credit 4.

BIO 364 Plant Taxonomy.
A study of the characteristics and classification of plants emphasizing systematic techniques. Focus on identification of the more common plant families allows transfer of knowledge to other regions of the country and world. Prerequisite: Minimum grade of C in BIO 161/111, 162/112. Two-hour laboratory. Spring. Writing enhanced. Credit 3.

BIO 369 Economic Entomology.
A study of basic principles of entomology as related to modern principles of insect pest management. Included are discussions of the biology and control of economically important insects in Texas. Collections of insects are made. Not open to students with credit in BIO 431. Two hours lecture and two hours laboratory. Prerequisites: Minimum grade of C in BIO 161/111, 162/112, and 234. Even year, Fall. Credit 3.

BIO 371 Plant Pathology.
The study of the diseases common to field crops, orchards and gardens in Texas emphasizing the identification, cause and control of these diseases. Two hours lecture and two hours laboratory. Prerequisites: Minimum grade of C in BIO 161/111, 162/112, and 234. Odd year, Spring. Credit 3.

BIO 380 **Field Biology.**
This course provides students with an informative, stimulating, and hands-on introduction to field biology and field research. This course introduces undergraduate students to field methods and to the ecology and natural history of a particular geographic region. This course consists of two parts: a weekly seminar during the semester that introduces and discusses the geographic region and ecological system (i.e. the Florida Everglades), and an off-campus field trip to that location during a semester break. Minimum grade of C in BIO 161/111, 162/112, and 234. Spring, Summer. Credit 3.

BIO 392 **Plant Morphology.**
Survey of the plant kingdom with emphasis on morphogenesis, comparative structure and life cycles of representative plant forms. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, and 234. Three-hour laboratory. Fall, Summer. Credit 3.

BIO 410, BIO 411 **Undergraduate Seminar.**
Discussions of current literature in the biological sciences. Required of senior Biology majors. Prerequisite: Biology major, Senior standing. Fall, Spring. Credit 1 each.

BIO 430 **Vertebrate Natural History.**
This course deals with the taxonomy, natural history, and ecology of vertebrates. Laboratories emphasize the identification of Texas Vertebrates and field techniques used in their study. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, and Junior standing. Two-hour laboratory. Spring. Credit 3.

BIO 431 **General Entomology.**
A study is made of insect morphology, taxonomy, development, and life histories. Collection and identification by use of keys are stressed. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, and 234. Junior standing. Two-hour laboratory. Odd year, Spring. Credit 3.

BIO 432 **Environmental Toxicology.** (Also listed as ESC 432).
This course presents basic toxicology as a qualitative and quantitative science of the effects of poisons (toxins) upon the environment, individuals, and populations. The course will also provide a comparison of the toxicology of human and other species' exposure to common environmental contaminants. Writing enhanced. Prerequisite: BIO 161/111, 162/112, and 247 or 347; MTH 379 or BIO 474; 8 hrs. CHM, and Junior standing. Two one-hour lectures and one two-hour laboratory. Even year, Fall. Credit 3.

BIO 433 **Aquatic Biology.**
Physical, chemical, and biological features of inland waters; organisms of freshwater; factors in biological productivity; methods and equipment. Largely a field course dealing with various approved methods of studying freshwater systems. This course is designed to meet the needs of chemists, teachers of science, biologists, and environmental scientists. Prerequisites: 11 hrs. biology. Minimum grade of C in BIO 161/111, 162/112, 8 hrs. CHM, and Junior standing. Two-hour laboratory. Spring. Credit 3.

BIO 434 **Electron Microscopy**
This course is designed to teach students the methods of preparing specimens for electron microscope analysis and to use the electron microscope as a tool to conduct research. Students will become competent in using the electron microscope for visual analysis or chemical elemental analysis. Prerequisites: Minimum grade of C in BIO 161/111, 162/112, 234, and 12 hrs. advanced biology, and Junior standing. Writing enhanced. Spring. Credit 3.

BIO 435 **Immunology.**
Humoral and cell-mediated immunobiology, genetics, and chemistry are considered along with immunoanalyses and pathologies. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234, 345; CHM 348 and Junior standing.Spring. Credit 3.

BIO 437 **Microbial Ecology**.
This course introduces the student to basic ecological concepts through the study of microbial communities. Interactions at the microscopic and macroscopic levels will be discussed along with biogeochemical cycles. Bioremediation concepts will also be explored. Prerequisite: BIO 161/111, 162/112, 234, and 247 or 347; CHM 239/219, and Junior standing. Two one-hour lectures and one three-hour laboratory. Credit 3.

BIO 446 Parasitology.
Morphology, life cycles, physiological adaptations, evolution, and distribution of parasitic animals. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, and Junior standing. Three-hour laboratory. Odd year, Fall. Credit 4.

BIO 449 Cytology.
A physical and chemical study of cells, their ultrastructure and nuclei. Studies of metabolism, growth, differentiation, and reproduction are included with special emphasis on mitosis and meiosis. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234, 345; CHM 138/118, 139/119, and Junior standing. Three-hour laboratory. Writing enhanced. Fall. Credit 4.

BIO 460 Philosophy of Biology.
This course will help the student understand the philosophical issues associated with defining and applying theoretical terms and constructs within evolutionary biology. Minimum grade of C BIO 161/111, 162/112, 234, plus 8 hrs. advanced biology, and Junior standing. Writing enhanced. Even year, Spring. Credit 3.

BIO 461 Introductory Evolutionary Biology.
Evolution is the core theory of modern biology. Students will be introduced to the major principles of evolutionary biology, from the history of evolutionary thought through theory and current concepts of evolution. Emphasis will be placed on molecular and cellular evolution, mechanisms of evolution including natural selection, gene flow, founder effect, and speciation. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234, 8 hrs. advanced biology, and Junior standing. Writing enhanced. Spring. Credit 3.

BIO 470 Animal Behavior.
A study of the mechanisms and functional explanations of behavior. Experimental approaches to addressing questions of behavior will be emphasized. Topics will include behavioral genetics, neuroethology, migration, habitat selection, foraging, communication, social behavior, reproductive strategies, and human sociobiology. Field studies and independent projects will be integral components of this course. Prerequisite: Minimum grade of C BIO 161/111, 162/112, and Junior standing. Two-hour laboratory. Writing enhanced. Fall. Credit 3.

BIO 471 Invertebrate Zoology.
This course will explore the diversity of invertebrate types morphologically, embryologically and physiologically. The ecological role of invertebrates will be emphasized. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, and Junior standing. Two-hour laboratory. Even year, Fall. Credit 3.

BIO 474 Biostatistics.
This course includes an introduction to statistical methods and their application to real biological problems. Topics include descriptive statistics, probability distributions, estimation, hypothesis testing, correlation and regression, and analysis of variance. Use of the computer in statistical analyses will also be stressed. Prerequisites: MTH 170 or 142, 8 hrs. of biology. Fall. Credit 3.

BIO 480 Molecular Biology.
This course emphasizes the structural and functional characteristics of proteins, RNA and DNA, and their individual and collective contributions to life. The course provides the conceptual and experimental framework for genetic engineering and the new Biotechnology. Models from prokaryotic and eukaryotic organisms as well as viruses and plasmids are used. The laboratory will include methods of gene cloning and electrophoretic analyses of proteins, RNA and DNA. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234, 345, 347; CHM 239/219, and Junior standing. Three-hour laboratory. Writing enhanced. Spring. Credit 3.

BIO 493 Endocrinology.
This course is designed to familiarize the student with the structure, development, comparative anatomy, and physiology of the endocrine system. Particular emphasis will be given to the endocrine control of reproductive processes. Prerequisite: Minimum grade of C in BIO 161/111, 162/112, 234; CHM 138/118, 139/119, and Junior standing. Two-hour laboratory. Writing enhanced. Odd year, Fall. Credit 3.

BIO 494 Biological Sciences Internship.
A supervised, off-campus intern work experience in an approved area of the biological sciences with business, industry or government. This elective course provides the student with direct professional work experience in such areas as biotechnology, biomedical research, ecological assessment, wildlife biology, and science/nature education. Academic credit is based on a written technical report and an oral presentation. Prerequisites: Biology major, 6 hrs. of advanced biology, Junior standing, 3.0 GPA and approval of Department Chair. Writing enhanced. Credit 3.

BIO 495 Special Topics in Biology.
This course is designed to allow independent study by selected advanced students in specific areas of biology not covered by organized undergraduate courses. Instruction is on individual basis with the student being supervised in his studies by an appropriate faculty member. Prerequisite: Biology major, minimum Junior standing. This course may be taken for Academic Distinction credit. See Academic Distinction Program in this Catalog. Credit 1, 2, or 3.

ENVIRONMENTAL SCIENCE PROGRAM

Faculty: James R. DeShaw, Monte L. Thies

Academic Programs

BS in Environmental Science

The Environmental Science Program provides the student with concepts, methods, and practical laboratory and field experience in air quality, wetland assessment, endangered species management, industrial hygiene, environmental policy, environmental pollution assessment, and pollution control technology through a multidisciplinary approach. The program is designed to meet the demand for environmental scientists in government, industry, and consulting. The curriculum is interdisciplinary in nature with emphasis in the basic sciences. Core courses in the program stress technical and regulatory aspects of environmental quality. Opportunities are available for specialization in ecology, chemistry, geology, or geography.

Career Opportunities

- air quality
- water quality
- industrial hygiene
- pollution management
- wetland delineation
- endangered species management
- environmental laws and policies

Suggested Minors

An academic minor field is not required under this curriculum; however, a minor in chemistry is strongly recommended.

Internships

Students gain practical experience in the field through either an independent research project or the internship program. The internship involves real-world work experience in an area of Environmental Science with government, industry, or a consulting firm. Academic credit is based on a written technical report and an oral presentation.

Scholarships

Academic scholarships are available from both the Department of Biological Sciences and the University to support students' studies. Information on Departmental scholarships may be obtained by writing to Scholarships, Department of Biological Sciences, Box 2116, Huntsville, Texas

77341-2116 or by visiting our website at www.shsu.edu/~bio_www/u-schol.html. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672.

Curriculum

Required Courses for the Major

Environmental Science is currently offered only as Bachelor of Science degree program. As an interdisciplinary degree, the student must complete a required core group of classes in Environmental Science, Biology, Chemistry, Physics, and Mathematics.

All majors are required to take the following courses in Environmental Science: BIO 137/117: ESC 330, 343, 430, 461 or 495, 410 and 411.

Additional required foundation courses include BIO 161/111, 162/112; CHM 138/118, 139/119, 241, 238/218, 239/219, 440, 442; PHY 138/118, 139/119; GEL 133/113; BIO 433 or 340, and BIO 247 or 347; MTH 142, 143, and MTH/STA 379 or BIO 474 or MTH 274.

Students may choose their restricted electives to meet their ultimate career goals; however, a minor in chemistry is strongly recommended.

Major in Environmental Science

Bachelor of Science

First Year	Credit	Second Year	Credit
BIO 137/117	4	Component Area 4 (Literature)	3
ENG 164, 165	6	CS 143	4
CHM 138/118, 139/119	8	CHM 241	4
BIO 138/118, 139/119 or 161/111, 162/112	8	GEL 133/113	4
HIS 163, 164	6	BIO 247 or 347	4
KIN 215	1	PHY 138/118, 139/119 or 141, 242	8
	33	MTH 142, 143 or MTH/STA 379, or BIO 474	7-8
			34-35

Third Year	Credit	Fourth Year	Credit
ESC 330, 430	6	ESC 343 and 495 or 461	7
CHM 238/218, 239/219	8	ESC 410, 411	2
POL 261, POL (200-level)	6	BIO 433 or 340	3-4
Component Area 4 (Visual and Performing Arts)	3	CHM 440, 442	8
		Restricted Advanced Electives*	12
ECO 230, 233 or 234	3		32-33
ENG 330	3		
Component Area 4 (Cultural Studies)	3		
	32		

* A minimum of 42 advanced hours is required for the Environmental Science degree. A minor is not required but a minor in chemistry or biology is strongly recommended. Restricted Advanced Electives may be tailored to the specific career goals and needs of the student. ESC majors having a minor field and/or a second major field must choose their restricted electives courses from departments outside of these fields.

Recommended choices include AGR 344; BIO 364, 430, 431, 433 or 340 (does not apply to major core), 474; CHM 348, 448; GEO 433, 434, 435, 442; GEL 330, 360, 440, 446; ESC 331, 332, 333 or 432.

Minor in Environmental Science

A minor in Environmental Science is available. Students in the minor are required to take BIO 137/117*, 247 or 347, 330, 343, 430; CHM 138/118, 139/119, 241, and 442.

Environmental Science Course Descriptions

ESC 330 **Legal Aspects of Pollution Control.**
A study comparing various state and federal laws with particular emphasis on the State of Texas statutes will be conducted. Nature of evidence for prosecution under these laws will be considered. Prerequisites: BIO 137/117, and CHM 241. Fall. Credit 3.

ESC 331 **Environmental Sanitation.**
A study of topics relating to public health and sanitation. The causative agents of human diseases of public health importance are characterized, and present knowledge of prevention and control of these diseases is reviewed. Prerequisites: BIO 161/111, 162/112, 247 OR 347, and 8 hrs. of chemistry. Two-hour laboratory. Odd year, Fall. Credit 3.

ESC 332 **Solid Wastes and Recycling.**
A study of solid wastes and recycling pertaining to sources, storage, processing, economics, and legal issues involved. Physical and chemical components of wastes and waste processing and their environmental effects will be stressed. Prerequisites: BIO 161/111, 162/112, 247 or 347, ESC 330, GEL 133/113, and CHM 241 and Junior standing. Odd year, Spring. Credit 3.

ESC 333 **Industrial Hygiene.**
A study of industrial hygiene and occupational health and safety. This course will present the basics of industrial hygiene and work place monitoring. Emphasis will be on fundamentals of work place hazard recognition, techniques of evaluation, and methods of control. Prerequisites: BIO 161/111, 162/112, CHM 241, and PHY 138/118, 139/119. Even year, Spring. Credit 3.

ESC 343 **Water Supply and Waste Water Disposal.**
Water supply, development, treatment and distribution; waste water collection and treatment; water purification and reuse; and the chemistry and ecology of aquatic systems are studied. Prerequisites: BIO 137/117, CHM 241, and MTH 142. Two-hour laboratory. Fall. Credit 4.

ESC 410, ESC 411 **Undergraduate Seminar.**
Student discussions of current scientific literature in environmental science. Required of environmental science majors. Prerequisite: Senior standing. Fall, Spring. Credit 1 each.

ESC 430 **Hazardous Waste Management.**
This course deals with the technical and regulatory aspects of handling and disposing of toxic and hazardous wastes based on recently mandated legislation procedures. This course will educate current students in an area that is of major national concern and will update persons already working in the field of environmental science. Prerequisites: CHM 241, BIO 137/117, GEL 133/113, and Junior standing. Spring. Credit 3.

ESC 432 **Environmental Toxicology.** (Also listed as BIO 432).
This course presents basic toxicology as a qualitative and quantitative science of the effects of poisons (toxins) upon the environment, individuals, and populations. The course will also provide a comparison of the toxicology of human and other species' exposure to common environmental contaminants. Prerequisite: BIO 161/111, 162/112, and 247 or 347; MTH 379 or BIO 474; 8 hrs. CHM, and Junior standing. Two one-hour lectures and one two-hour laboratory. Even year, Fall. Credit 3.

ESC 461 **Environmental Science Field Experience.**
A supervised off-campus intern work experience in an approved area of Environmental Science with industry, business, or government. This course provides the student with direct professional work experience with industry or governmental entity. Academic credit is based on a written technical report and an oral presentation. Prerequisite: 6 hrs. of advanced Environmental Science and approval of instructor. Summer. Credit 3.

ESC 495 **Special Topics in Environmental Science.**
Individual study in specialized areas of Environment Science. To be directed and approved by the Environmental Science advisor. Credit 1, 2, or 3.

DEPARTMENT OF CHEMISTRY

approved by the American Chemical Society

Chair: Richard (Rick) E. Norman (936)294-1527; norman@shsu.edu

Faculty: Benny Arney, Tom Chasteen, Mary Lynn DeShazo, Paul Loeffler, Mary Plishker, Rick White, Darren Williams

Website: www.shsu.edu/~chemistry/

Mission

The Department of Chemistry is committed to providing an educational environment conducive to scholarship, intellectual development, and the acquisition of a foundation of knowledge and techniques required of professional chemists. This goal requires the effective representation of the fundamental areas of chemistry, a dedicated and creative faculty, and support for the many functions of the department.

Academic Programs

- BS in Chemistry for professional chemists
- BS in Chemistry for other technical careers
- BS in Chemistry with emphasis in Biochemistry-Biotechnology
- BS in Chemistry with emphasis in Forensic Science
- BS in Forensic Chemistry
- BS in Composite Science with emphasis in Chemistry
- BS in Chemistry/Chemical Engineering
- BS in Medical Technology (*program being phased out*)

The Department of Chemistry is approved by the American Chemical Society. Chemistry majors may pursue the Bachelor of Science for professional chemists that leads to American Chemical Society certification and prepares students for graduate studies in traditional chemical fields. Students interested in professional schools, chemistry associated industries, or secondary education may pursue the Bachelor of Science for other technical careers. The Bachelor of Science in Chemistry with emphasis in Biochemistry-Biotechnology prepares students for careers in hi-tech companies in the Houston area and across the state and nation. The growing interest in Forensic Science has prompted the Department of Chemistry to offer a Bachelor of Science in Forensic Chemistry that is designed to prepare students for careers combining a knowledge of chemistry and the legal system. Students completing this degree can pursue opportunities in various forensic labs across the country, or can continue their education either in the graduate program in Forensic Science, or in graduate programs that are more traditional.

Highlights

- The Department of Chemistry has a study abroad program in Germany in which students carry out summer undergraduate research in a German University and can experience the culture and approach to chemical education in Europe.
- The Department of Chemistry moved into an impressive new facility (the Chemistry/ Forensic Science Building) during the Fall semester of 2005 greatly expanding and improving the laboratory facilities.

Career Opportunities

Everything around you is composed of chemicals. We live in a world of chemicals and life would not be possible without them. An understanding of the fundamentals of chemistry is important for everyone in today's society. Professional chemists are working to enhance our quality of life by improvements in food, medicine, clothing, building supplies, products for recreation, and a whole range of consumer products.

Virtually every industry or business that makes or sells a product is involved in chemistry. It is no wonder that the various areas of chemical and biochemical technology offer the largest field of employment in the physical sciences. Chemists are employed in fields such as:

- environmental analysis
- agriculture
- biotechnology
- pharmaceutical research
- waste management
- energy production
- forensic science
- petrochemical industry

Chemistry graduates will find many applications for their training in the fields of education, business, industry, law, government and medicine.

Suggested Minors

A variety of minors can complement a major in chemistry. Some of the more popular minors in recent years have been biology, criminal justice and general business. Others have included education, mathematics and political science.

Student Organizations

Chemistry Club - The Chemistry Club is an active organization which encourages student interactions in a social atmosphere and which supports student travel to professional meetings.

Scholarships

Scholarships are available from the Department in Chemistry and from the University to support students' studies. For further information, contact the Chair, Department of Chemistry or visit the Department of Chemistry Home Page. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672.

Curriculum

Chemistry students learn how to critically examine and analyze observations, to use chemical understanding to propose solutions to problems of a quantitative or qualitative nature that may arise in industry, in academia or in various careers associated with chemistry. Students majoring in Chemistry have the opportunity for hands-on experience in working with atomic absorption, gas chromatography, high performance liquid chromatography, ultraviolet and visible spectroscopy, 60 MHz and 300 MHz nuclear magnetic resonance spectroscopy, mass spectrometry, ion chromatography, capillary electrophoresis and other standard instrumentation in chemistry.

Required Courses for Major

Required courses are CHM 138/119, 139/119, 238/218, 239/219, 241, 410, 440, 448, 467 — 32 hrs.

Students will select one of the following tracks:

BS for Professional Chemists: CHM 348, 426, 449, 495, CHM (3 hrs. Advanced) — 16 hrs.

BS for Other Technical Careers: CHM 426, 495, CHM (3 hrs. Advanced) — 8 hrs.

Major in Chemistry
For Professional Chemists
Bachelor of Science

First Year	Credit	Second Year	Credit
CHM 138/118, 139/119	8	CHM 238/218, 239/219, 241	12
ENG 164, 165	6	PHY 138/118, 139/119	8
HIS 163, 164	6	Component Area 4 (Literature or PHL)	3
MTH 142, 143	8	CS 143	4
Minor**	3	Minor**	3-6
KIN 215	1		30-33
	32		

Third Year	Credit	Fourth Year	Credit
CHM 448, 449, 348	12	CHM 410, 440, 467, 426,	10
POL 261, POL (200-level)	6	CHM 495, CHM (Advanced*)	6-9
Component Area 4 (Cultural Studies)	3	Component Area 4	
ENG 330	3	(Visual & Performing Arts)	3
Minor** (Advanced)	6	Component Area 5	3
Elective	6	Minor** or electives	8-10
	36		30-35

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Major in Chemistry
Other Technical Careers
Bachelor of Science

First Year	Credit	Second Year	Credit
CHM 138/118, 139/119	8	CHM 238/218, 239/219, 241	12
ENG 164, 165	6	PHY 138/118, 139/119	8
MTH (142 or higher level)	4	Component Area 4 (Literature or PHL)	3
HIS 163, 164	6	MTH (143 or higher level)	4
Minor**	6	CS 143 or 164	3
KIN 215	1	Minor**	3-6
Component Area 4 (Visual & Performing Arts	3		33-36
	34		

Third Year	Credit	Fourth Year	Credit
CHM 426, 448, 467	9	CHM (Advanced*)	3
POL 261, POL (200-level)	6	CHM 410, 440, 495	8
ENG 330	3	Component Area 5	3
Minor**	8-9	Component Area 4 (Cultural Studies)	3
Elective	3	Minor** or electives (Advanced)	15
	29-30		35

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

* CHM 368, 348, 339, 441, and 443 are recommended.

** A minor requires six semesters of coursework, a minimum of 18 credits (six advanced) in an approved field.

Emphasis in Biochemistry – Biotechnology

Students seeking a background that will prepare them for the emerging technologies in biochemistry and biotechnology can select advanced courses that will lead to a major in chemistry and a minor in biology.

Emphasis in Forensic Science

Students seeking a background that will prepare them for careers in Forensic Science can select advanced courses that lead to a major in chemistry and a minor in Criminal Justice and/or Biology.

Secondary Teacher Certification

Students seeking Secondary Teacher Certification in Science take courses leading to the Bachelor of Science in Composite Science with an emphasis in Chemistry.

First Year	Credit	Second Year	Credit
CHM 138/118, 139/119	8	CHM 238/218, 239/119, 241	12
MTH 142, 379	7	PHY 138/118, 139/119	8
GEL 133/113, 134/114	8	GEL 330	3
ENG 164, 165	6	HIS 164	3
HIS 163	3	Component Area 4	3
KIN 215	1	(Visual & Performing Arts)	
	33	CS 143	4
			33

Third Year	Credit	Fourth Year	Credit
CHM 410, 440, 426	7	CHM 348	4
PHY 397/317	4	BIO 234	3
BIO 161/111, 162/112	8	GEO 131/111	4
POL 261, POL (200-level)	6	SCM 384	3
Component Area 4	3	Component Area 4 (Literature or PHL)	3
(Cultural Studies)		Component Area 5	3
Electives*	6	Electives*	8
	34		28

* **Teacher Certification**
Students seeking certification at the secondary level should use their 14 elective hours and an additional 10 hours to satisfy the certification requirements (SED 383, 394, 464, 480, 496, and 497; RDG 392; SED 374 or PSY 374). Those students not seeking certification should use their elective hours to fulfill university requirements for advanced hours.

Major in Forensic Chemistry

Bachelor of Science

Students seeking background and training in the area of forensic science can get a Bachelor of Science in Forensic Chemistry with a Criminal Justice minor. This degree option educates students for careers in forensic chemistry in both private and government arenas and also prepares students to enter graduate schools in forensic science.

First Year	Credit	Second Year	Credit
CHM 138/118, 139/119	8	CHM 238/218, 239/219, 241	12
ENG 164,165	6	MTH 143 (or higher level)	4
MTH 142 (or higher level)	4	PHY 138/118, 139/119	8
HIS 163, 164	6	CS 143	4
BIO 161/111, 162/112	8	Component Area 4 (Literature or PHL)	3
KIN 215	1	CJ 261,262	6
	33		37

Third Year	Credit	Fourth Year	Credit
CHM 348, 448	8	CHM 410, 467, 440, 480	11
BIO 234, 345	7	POL (200-level)	3
CJ 264	3	CJ 436	3
CJ 465	3	ENG 330	3
Component Area 4 (Cultural Studies)	3	CJ 478	3
Elective (Advanced)	6	Component Area 5	3
POL 261	3	Elective (Advanced)	9
Component Area 4 (Visual & Performing Arts)	3		35
	36		

Chemistry/Chemical Engineering

A Dual Degree Plan for Concurrent Bachelor of Science Degrees from Sam Houston State University and Universities with Recognized Accredited Chemical Engineering Degree Programs

In this plan the student completes three years in Chemistry at Sam Houston State University and two years in Chemical Engineering at a university with a recognized accredited chemical engineering degree program. On successful completion of the curriculum shown below and the chemical engineering curriculum at a university with a recognized accredited degree program in chemical engineering, the student will receive two Bachelor of Science degrees, a Bachelor of Science with a major in Chemistry from Sam Houston State University and a Bachelor of Science in Chemical Engineering from the university with the recognized accredited chemical engineering degree program.

First Year	Credit	Second Year	Credit
CHM 138/118, 139/119	8	CHM 241, 238/218, 239/219	12
PHY 141	4	PHY 245, 142	8
MTH 142, 143	8	MTH 244	4
ENG 164, 165	6	POL 261	3
Component Area 4 (Cultural Studies)	3	Component Area 4 (Literature or PHL)	3
Component Area 5	3	ENG 330	3
KIN 215	1		33
	33		

Third Year	Credit	Fourth and Fifth Years
CHM 448, 410, 449, 426	11	University with Recognized
Advanced CHM	3	Accredited Chemical Engineering
CS 162 or 164	3	Degree Program
HIS 163, 164	6	
MTH 376	3	
IT 161	3	
POL (200-level)	3	
Component Area 4 (Visual & Performing Arts)	3	
	35	

Minor in Chemistry

A minor in Chemistry requires a minimum of six semesters of coursework and shall include CHM 138/118, 139/119, 238/218, 239/219, 241, and six semester hours of advanced chemistry including one advanced laboratory course. For students majoring in Food Science and Nutrition, the minor consists of CHM 138/118, 139/119, 238/218, 239/219, 348, and 339.

Chemistry Course Descriptions

NOTE: THEA requirements for mathematics courses listed as prerequisites for chemistry courses are published in the current schedule of classes. These requirements are in addition to any prerequisites listed below.

CHM 115 **Inorganic and Environmental Chemistry Laboratory.** [CHEM 1105]
Laboratory for CHM 135. Concurrent enrollment in CHM 135 is recommended. Credit 1.

CHM 116 **Organic and Biochemistry Laboratory.** [CHEM 1107]
Laboratory for CHM 136. Concurrent enrollment in CHM 136 is recommended. Credit 1.

CHM 118 **General Chemistry I: Laboratory.** [CHEM 1111]
Laboratory for CHM 138. Prerequisite: Prior credit for or concurrent enrollment in CHM 138. Credit 1.

CHM 119 **General Chemistry II: Laboratory.** [CHEM 1112]
Laboratory for CHM 139. Prerequisite: CHM 118 and prior credit for or concurrent enrollment in CHM 139. Credit 1.

CHM 135 **Inorganic and Environmental Chemistry Lecture.** [CHEM 1305]
The elements and their compounds are considered from a non-technical standpoint with emphasis placed on more familiar materials. This course is for non-science majors. Credit 3.

CHM 136 **Introductory Organic and Biochemistry Lecture.** [CHEM 1307]
An orientation in organic chemistry is given in the first part of the course to allow treatment of the chemistry of nutrition and other biochemical aspects given in the last part. This course is for non-science majors. Prerequisite: CHM 135,138 or completion of a high school chemistry course. Credit 3.

CHM 138 **General Chemistry I: Lecture.** [CHEM 1311]
The following topics are studied: chemical changes and laws governing them; the gas laws; reactions involving oxygen, hydrogen, acids, bases, and salts; ionization; metathesis; the periodic classification, and the atomic structure. This course is for chemistry and other science majors. Fall, Spring, Summer. Prerequisite: Minimum grade of C in MTH 163, MTH 170, MTH 199 or MTH 284 (or equivalent), or a minimum Math score of 250 on the THEA (or equivalent). Credit 3.

CHM 139 **General Chemistry II: Lecture.** [CHEM 1312]
Descriptive chemistry, equilibria, kinetics, thermodynamics, electrochemistry, and oxidation-reduction reactions are presented. Prerequisite: A minimum grade of C in CHM 138. Fall, Spring, Summer II. Credit 3.

CHM 238 **Organic Chemistry I: Lecture.** [CHEM 2323]
A study of chemical bonding and structure of organic molecules is made. Functional group reactions and syntheses are emphasized. Reaction mechanisms, nomenclature and isomerism are studied. Prerequisite: A minimum grade of C in CHM 138/118, 139/119. Fall, Summer I. Credit 3.

CHM 218 **Organic Chemistry I: Laboratory.** [CHEM 2123]
Laboratory for CHM 238. Prerequisite: CHM 119, and prior credit for or concurrent enrollment in CHM 238. Credit 1.

CHM 239 **Organic Chemistry II: Lecture.** [CHEM 2325]
The general plan of CHM 238 is continued. Spring, Summer II. Prerequisite: A minimum grade of C in CHM 238. Credit 3**.**

CHM 219 **Organic Chemistry II: Laboratory.** [CHEM 2125]
Laboratory for CHM 239. Prerequisite: CHM 218, and prior credit for or concurrent enrollment in CHM 239. Credit 1.

CHM 241 **Quantitative Analysis.**
The fundamental principles of quantitative analysis are emphasized. Acid-base, complexometric, precipitation, and redox titrations, solution equilibria and spectrophotometric analysis are discussed. Laboratory exercises involve all types of volumetric procedures and colorimetric analysis. Four-hour laboratory. Prerequisite: A minimum grade of C in CHM 139. Fall, Spring. Credit 4.

CHM 339 Metabolism.
This course is a study of the bioenergetics associated with the metabolic pathways and processes. The metabolism of carbohydrates, lipids, proteins, and nucleic acids; the interrelationship of the metabolic pathways; and the regulation of metabolism are emphasized. Prerequisites: A minimum grade of C in CHM 239, and 348. Spring odd years. Credit 3.

CHM 348 Introductory Biochemistry.
The chemistry and functions of carbohydrates, lipids, proteins, enzymes, nucleic acids and vitamins; enzyme kinetics; the processes of and mechanisms of digestion and absorption; and biological buffers are studied. Four-hour laboratory. Writing Enhanced. Prerequisites: A minimum grade of C in CHM 239. Fall. Credit 4.

CHM 367 Introductory Inorganic Chemistry.
General principles of inorganic chemistry are presented with a descriptive and practical rather than mathematical approach. Periodic relationships of elements and bonding, reactions and synthesis of inorganic compounds, acid-base chemistry are studied. Prerequisite: A minimum grade of C in CHM 238. Fall. Credit 3.

CHM 368 Environmental Chemistry.
The chemical principles underlying the effects of air, water, and soil pollution are covered. Specific attention is paid to gas phase radical reactions, light absorption characteristics of atmospheric components, solution chemistry of fresh and salt water systems, and the mobility and chemistry of metal components of soil systems. Writing Enhanced. Prerequisites: A minimum grade of C in CHM 241, 238 and 239 (or concurrent enrollment in CHM 239). Spring. Credit 3.

CHM 410 Chemical Literature Seminar.
Methods of searching the literature in chemistry are presented. Emphasis is placed on the use of Chemical Abstracts, Beilstein, chemical patent literature, journals, and reference collections in the several specialties of chemistry. Prerequisite: Junior standing in chemistry. Spring. Credit 1.

CHM 426 Advanced Integrated Laboratory.
This course will involve in-depth experiments that require the use of sophisticated synthetic and analytical procedures in the areas of organic, inorganic or analytical chemistry. Writing Enhanced. Prerequisites: A minimum grade of C in CHM 448. Spring. Credit 2.

CHM 440 Instrumental Analytical Chemistry.
Spectrophotometry, separation techniques and mass spectrometry are discussed. Specific topics include the computer's use in the modern laboratory, ultraviolet and visible absorption, atomic absorption, flame emission, and inductively coupled plasma spectroscopy, infrared absorption, and gas and liquid chromatography. Instruments for these techniques are used in the laboratory work. Writing Enhanced. Prerequisites: A minimum grade of C in CHM 238, and 239 and a minimum grade of C or concurrent enrollment in CHM 448. Four-hour laboratory. Fall. Credit 4.

CHM 441 Methods for Environmental and Industrial Analysis.
This course covers the philosophy of modern instrumental methods used for environmental and industrial analyses. The topics to be covered include quality control and quality assurance good laboratory practices, waste minimization and elimination, safe laboratory operation, ISO standards, EPA methodology, and statistical data analysis. Prerequisites: A minimum grade of C in CHM 241, 238 and 239, and CHM 368. Spring. Credit 4.

CHM 442 Air Quality. (Also listed as ESC 440.)
An in-depth study of the sources of air pollution is made. Sampling procedures and the chemical analyses required for identification of pollutants are studied. Control methods for the restriction of air pollution are outlined. Four-hour laboratory. Prerequisites: A minimum grade of C in CHM 241, 238 and 239. Spring odd years. Credit 4.

CHM 443* **Structural Spectroscopic Methods.**
A survey of the spectroscopic and spectrometric methods for elucidation of structural information for chemical compounds with emphasis on the structural identification of unknowns. The methods of ultraviolet-visible spectrophotometry, Fourier-transform infrared spectroscopy, mass spectrometry, and both one- and two-dimensional nuclear magnetic resonance spectroscopy will be covered. The relative strengths, complementary nature, and utility will be discussed. The focus will be the determination of chemical structures by spectroscopic/spectrometric methods. Writing Enhanced. Prerequisite: A minimum grade of C in CHM 239. Credit 4.

CHM 448 **Physical Chemistry I.**
A comprehensive first course in physical chemistry is given with emphasis on the mathematical approach. Thermochemistry, the laws of thermodynamics and phase equilibria are considered. Laboratory experiments are designed to illustrate principles and to enable students to master physico-chemical techniques. Four-hour laboratory. Writing Enhanced. Prerequisites: A minimum grade of C in CHM 239, MTH 143 and one year of physics. Fall. Credit 4.

CHM 449 **Physical Chemistry II.**
Electrochemistry, colloids, kinetic theory, reaction kinetics, and statistical mechanics are studied. Laboratory emphasis is on electrical measurements and kinetic studies. Four-hour laboratory. Prerequisite: A minimum grade of C in CHM 448. Spring odd years. Credit 4.

CHM 467 **Advanced Inorganic Chemistry.**
Properties of atoms and ions, bonding theory and structure, acid-base theory, reactions of inorganic compounds, nonaqueous solvents, and coordination chemistry are studied. Emphasis is on the underlying theoretical concepts involved. Prerequisite: CHM 448 or concurrent enrollment. Spring even years. Credit 3.

CHM 480 **Forensic Chemistry.**
This is a one semester course focused on surveying important aspects of chemistry to forensic inquiries. Focus will be on the validity of results. Techniques and methods for selecting proper techniques to answer various questions will be discussed. Writing Enhanced. Prerequisite: A minimum grade of C in CHM 239, 440 and 467; MTH 142, CS 143. Spring. Credit 3.

CHM 495 **Undergraduate Research in Chemistry.**
This course acquaints the senior student with techniques used in simple research problems. Prerequisites: student must have a minimum of 20 semester hours in chemistry and consent of the Department Chair. May be repeated for an additional three semester hours by those students having a definite project to complete. This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

DEPARTMENT OF COMPUTER SCIENCE

Chair: Peter A. Cooper (936) 294-1569; cooper@shsu.edu

Faculty: David Burris, Graciela Gonzalez, Ken Hartness, Jiahuang Ji, Timothy McGuire, Karon Murff, Gary Smith

Website: Computer Science: www.shsu.edu/~csc_www
Digital Forensics: www.df.shsu.edu

Mission

The Department of Computer Science is a community of faculty staff and students, centered in the computer science disciplines. The Department of Computer Science is dedicated to providing the highest quality education possible to its graduate and undergraduate students through excellence in teaching and excellence in research. The department is committed to furthering the pursuit of knowledge and meeting the needs of a diverse society.

The Department of Computer Science seeks to provide an environment that encourages innovative thinking, academic rigor and the pursuit of scholarship in an atmosphere that promotes high ethical and moral values and mutual respect, embracing diversity, and working towards a goal of instilling a life-long love of learning.

Academic Programs

BS in Computing Science

The Computer Science program offers major study plans for students wishing to pursue careers as a programmer/analyst/software engineer, as network and database administrators, as digital forensics and information security professionals, or to prepare for advanced studies at the graduate level. Minor study plans are offered which can be tailored to the needs of students majoring in almost any field. A plan leading to secondary teacher certification in Computer Science is also offered.

Highlights

Sam Houston State University provides a comprehensive computing environment for students. The Computer Services Department operates a large number of computing laboratories containing desktop computers, and workstations. A variety of operating systems, network protocols, programming languages and application packages are available. Students have full access to the Internet and E-mail facilities when on campus and through dial-up facilities from off-campus. In addition to the institutional facilities, the Department of Computer Science operates a range of lab facilities to support its mission and programs, including a network lab, data recovery and a network security lab. The department operates a 40-node symmetric multiprocessing system for use in parallel processing, digital forensics, cryptanalysis and steganographic research. The department also has access to state of the art visualization facilities. As part of its operations, the department of Computer Science houses the Sam Houston State University Center of Excellence in Digital Forensics, a center dedicated to the development of digital forensics training for law enforcement personnel and research opportunities into forensics and security issues.

Career Opportunities

Computing professionals support many scientific, governmental and commercial enterprises though network and communication systems management, application (computer program) development and maintenance, and hardware design. The management of computing resources within organizations is typically a mission critical activity and computing professionals occupy key organizational roles as network and database administrators, software engineers, systems analysts and programmers. Of key concern in today's modern environment is the protection, assurance and recovery of computing resources, providing opportunities for those wanting to work in the information assurance and digital forensics fields.

Suggested Minors

Because computer systems are a part of our everyday lives, they have application to many academic fields. Many of our computer science students select minors in a scientific field such as mathematics, physics, chemistry or GIS, or in business related fields such as accounting. However, other minors are equally valuable, including Art, English, Music, and particularly Criminal Justice, given the connected world in which we live and the need to protect our systems and ourselves from digital crime.

Student Organizations

Sam Houston Association of Computer Scientists - The club sponsors fieldtrips, campus visits by guest speakers and occasional student/faculty outings.

Internships

The Computer Science department does not operate internships as part of its degree program.

Scholarships

The Department of Computer Science offers the following scholarships:

- The Johnny Cook Kelly Memorial Scholarship: awarded to undergraduate computer science majors with a preference given to students from Walker County.
- The Mohamed Ahmed Noman Scholarship: awarded to full time graduate or undergraduate students working toward a degree in Computer Science.
- The Kailas and Becky Rao Scholarship in honor of Mr. Albert Kidd: awarded to full time graduate or undergraduate students in good standing and majoring in Computer Science.

Each of these scholarships require a minimum GPA of 3.0 and registration in courses leading to a degree in Computer Science. Other criteria are also pertinent to individual scholarships. More information can be obtained through the department.

Program Specific Requirements

The baccalaureate degree in Computer Science has the following program specific requirements:

Mathematics: 12 hours (6 upper division). The specific requirements are: MTH 199/299 or MTH 142/143, MTH /STA 379 and 3hrs Advanced MTH/STA. The math sequence MTH 142/143 is essential for students interested in aerospace and engineering disciplines.

Science: 16 hours (8 hours in each of two sciences)

Curriculum
Major in Computer Science
Bachelor of Science

The Computer Science major requires a total of 41 hours of Computer Science coursework. All general degree requirements including a minor in a non-Computer Science area must also be met. The 39 hours of coursework for the Computer Science major should be distributed as follows (NOTE: CS 133, CS 138, and CS 143 may not be used to meet this requirement):

REQUIRED COURSES: CS 146, 147, 272, 334, 362, 437	20 hrs.
Students are expected to select an emphasis from one of the following concentrations:	
Computer Science: CS 278, 333, 430, 431, CS (9 hrs.)	21 hrs.
Information Systems: CS 278 (COBOL), 234, 336, 463, CS (9 hrs.)	21 hrs.
Information Assurance: DF 138, DF 291, DF 391, DF 491, CS or DF (9 hrs.)	21 hrs.
The total must include a minimum of 21 advanced hours: Total	41 hrs.

CS 431 is recommended for students electing to complete the Information Systems concentration.

Suggested Courses of Study
Computer Science (CS)

First Year	Credit	Second Year	Credit
CS 146, 147, 272	11	CS 278, 333, 362	9
MTH 199 and 299 or		Component Area 4 (Visual &	
MTH 142 and 143	6-8	Performing Arts)	3
ENG 164, 165	6	Component Area 3 (Natural Science)	8
HIS 163, 164	6	Component Area 4 (Literature)	3
KIN 215	1	ENG	3
	30-32	POL 261, POL (200-level)	6
			32

Third Year	Credit	Fourth Year	Credit
CS 334, 430, 431	9	CS 437	3
Advanced CS Elective	3	Advanced CS Electives	6
Component Area 3 (Natural Science)	8	STA 379	3
Component Area 4 (Cultural Studies)	3	Minor/electives	15
Minor/electives	9	Component Area 5	3
	32	Advanced MTH/STA elective	3
			33

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Suggested Courses of Study
Computer Science (IS)

First Year	Credit	Second Year	Credit
CS 146, 147, 278 (COBOL)	9	CS 234, 272, 336	9
MTH 199, 299 or		Component Area 4 (Visual &	
MTH 142, 143	6-8	Performing Arts)	3
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	ENG elective	3
KIN 215	1	POL 261, POL (200-level)	6
Minor/General Elective	3	Minor/General Electives	9
	31-33		33

Third Year	Credit	Fourth Year	Credit
CS 334, 362, 463	9	CS 437	3
CS (Advanced)	6	CS (Advanced)	6
STA 379	3	MTH 396	3
Component Area 3 (Natural Science)	8	MGT 380	3
Component area 4 (Cultural Studies)	3	Minor/Advanced General Electives	9
Component Area 5	3	Component Area 3 (Natural Science)	8
	32		32

Suggested Courses of Study
Computer Science (IA)

First Year	Credit	Second Year	Credit
CS 146, 147, DF 138	11	CS 272, 362, DF 291	9
MTH 199 and 299 or		Component Area 4 (Visual and	
MTH 142 and 143	6-8	Performing Arts	3
ENG 164, 165	6	Component Area 3 (Natural Science)	8
HIS 163, 164	6	Component Area 4 (Literature)	3
KIN 215	1	ENG Elective	3
	30-32	POL 261, POL (200-level)	6
			32

Third Year	Credit	Fourth Year	Credit
CS 334, DF 391	6	CS 437, DF 491	6
DF or CS (Advanced)	6	STA 379	3
Component Area 3 (Natural Science)	8	DF or CS (Advanced)	3
Component Area 4 (Cultural Studies)	3	MTH/STA (Advanced)	3
Minor/Advanced General Elective	9	Component Area 5	3
	32	Minor/electives	15
			33

Students with extensive high school programming experience may elect to begin a major or minor program with CS 147 or CS 272. Students who have taken the advanced placement computer science examination may be eligible for credit for CS 146 and CS 147.

Minor in Computer Science

A Computer Science Minor consists of 21 hours of Computer Science coursework of which at least 9 hours must be advanced. Two recommended minor plans are shown here. Modifications may be made to meet individual student needs as approved by the Computer Science Department Chair. Individualized minor plans are available for students seeking a Computer Science minor for Certification.

Computer Science Minor:

Students will select an emphasis from one of the following tracks:

Information Systems: CS 160, CS 278(COBOL), CS 234, 334, 337, 336, 463… ..... 21 hrs.
Computer Sciences: CS 146,147, 272, 278, 333, 334, CS (Advanced) 3 hrs..... 23 hrs.
Information Assurance: CS 146, 234, DF 138, 291, 390, 491, DF(Advanced) 3 hrs.... 22 hrs.

Computer Science Course Descriptions

CS 133 **Introduction to Computers.** [COSC 1300]
This is a computer literacy course. Basic computing concepts are presented. Assignments provide a hands-on experience in using microcomputer applications. Multimedia and the Internet are introduced. May not be taken for credit toward a CS major or minor. This course may be taken as a classroom based course or as an Independent Study/Internet course. Credit 3.

DF 138* **Introduction to Digital Forensics and Information Assurance.**
This course introduces students to the fundamentals of digital forensics technology. Emphasis is placed on identifying threats to, and vulnerabilities of, computer systems and how to minimize them. Students will learn how hackers identify victims, how attacks are executed, and various methods used to access to computer systems. Credit 3.

CS 138 **Multimedia and Network Computing.**
This is an introduction to the computing technology underlying multimedia and network computing. The emphasis is on the use of this technology to improve communications. CD-ROMs, audio and video capture, electronic mail, groupware and other hardware and software resources are used to prepare documents and visual aids and to make interactive presentations. Students enrolled in this course should be seeking a teaching certificate. May not be taken for credit toward a CS major or minor. This course may be taken as a classroom based course or as an Independent Study/Internet course. Credit 3.

CS 143 **Introduction to Computing for the Social Sciences.** [COSC 1401]
This course develops the student's skills in the effective use of computing technology in the Social Sciences. Topics covered in depth include Windows, word processing, spreadsheets, database, integrated applications, local networking, the Internet and multimedia documents. May not be taken for credit toward a CS major. Credit 4.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

CS 146** **Introduction to Algorithms and Programming.**
This course is an introduction to programming. A software engineering approach to developing computer programs is stressed and object-oriented concepts are introduced. The development of procedures and the writing and testing of programs to implement them is emphasized. This course includes a 2-hour lab-based component. Prerequisites: eligibility for MTH 199, MTH 170, or MTH 142, basic keyboarding and PC skills. Credit 4.

CS 147** **Programming Algorithms and Data Structures.**
This course is a continuation of CS 146 and emphasizes the relationships between the data objects in computer programs. Re-usability is stressed through the use of generic data abstractions such as the C++ Standard Template Library. This course includes a 2-hour lab-based component. Prerequisites: CS 146, MTH 199 or 170 or 142. Credit 4.

CS 160 **Visual Programming.**
This course is an introduction to programming using the visual paradigm, aimed at students with little or no background in programming. The core notions of problem solving through programming are introduced, following an object-oriented approach to visual programming.

CS 234 **Networks I.**
Installation, usage, and management of computer hardware ad operating systems for business. Topics include scripting, macros, intelligent agents. Installation and management of networks, the Internet, and communications software is covered. Prerequisite: CS 146. Credit 3.

CS 272 **Computer Organization I.**
This course examines the functional components of computer systems. Topics discussed include processors, memory types and hierarchies, buses, I/O, interrupts, etc. with emphasis on how they affect program execution, parameter passing and inter-program communications between programs written in diverse languages. Prerequisite: CS 146, CS 147 (may be taken concurrently). Credit 3.

CS 278 **Special Topics/Programming.**
In-depth study of a programming language used to implement information systems. Real time components, visual techniques, and artificial intelligence will be utilized as appropriate. This course may be repeated for credit with the approval of the undergraduate advisor. A different language must be covered to receive approval for repeat credit. Prerequisite: CS 147. Credit 3.

DF 290* **Hardware Forensics.**
Techniques in the duplication, recovery and restoration of digital evidence. Includes hard disks, floppy drives, CD formats, DVD formats, zip drives, mobile phones, PDA's smart cards, memory technologies, and other devices capable of storing digital information. Prerequisite: DF 138. Credit 3.

DF 291* **Network Security.**
The rationale and necessity for securing computer systems and data networks, as well as methodologies for the design of security systems, establishing security protocols and the identification of best practices in the administration, testing and response protocols for secure communications systems. Prerequisite: DF 138. Credit 3.

CS 333 **Computer Organization II.**
This course is a continuation of Computer Science 272. It is a study of computer systems organization and systems programming. Uni- and multi-processor, SMP, parallel and distributed systems are studied. Prerequisite: CS 272. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

**Change in course number is subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

CS 334 **Data Base Management Systems.**
This course emphasizes the design of information systems using database software and query language/programming interfaces. Data warehouse concepts are introduced. Legacy systems, LAN and distributed systems based systems are used to give the student hands-on experience in systems development. Writing Enhanced. Prerequisite: CS 147. Credit 3.

CS 336 **Information Systems Design and Management.**
This is a course in the design and implementation of large-scale file and persistent object-based information systems. Client/server systems are covered. Prerequisite: CS 278(COBOL). Credit 3.

CS 362 **Data Structures.**
Introductory treatments of such topics as orthogonal lists, strings, arrays, linked lists, multilinked structures, indexed and direct files, and generalized data management and database management systems. Prerequisites: CS 147, MTH 299 or MTH 143. Credit 3.

CS 373 **Human-Computer Interaction.**
This course presents a comprehensive introduction to the principles and techniques of human-computer interaction. The course examines the event-driven model through the development of applications utilizing graphical design environments and the use of rapid application prototyping to explore a variety of techniques for HCI, particularly in relation to mobile and other non-traditional devices.

CS 394 **Numerical Methods.**
This course develops the concepts underlying the use of the computer for interpolation, approximations, solutions of equations and the solution of both linear and nonlinear systems equations. Mathematical software and/or user written programs are utilized. Also offered as Mathematics 394. Prerequisites: CS 147 and MTH 143 or consent of instructor. Credit 3.

DF 390* **Digital Forensics Tools.**
This course explores tools for the recovery of information on protected or damaged hardware for the purpose of providing evidence of misuse or abuse of systems. Topics also include the chain of evidence, protocols for data recovery, cryptographic analysis, password recovery, the bypassing of specific target operating systems and obtaining data from digital devices that have been damaged or destroyed. Prerequisite: DF 291. Credit 3.

DF 391* **Cryptography.**
This course will describe the basic principles of cryptography and how it is used in modern computer and communication systems. It will cover single ciphers, modern ciphers, public-key cryptography, key management, cryptanalysis and steganography. Students will learn how cryptography is used for message secrecy, integrity, authentication and digital signatures. Application areas to be discussed include email, files, network communication, and electronic payments. Prerequisite: DF 291 Credit 3.

CS 396 **Switching Theory.**
This course is an introduction to Boolean Algebra and graph theory with emphasis on their applications in the design of digital computer software and hardware. Logic systems are designed and analyzed. Prerequisite: CS 272 . Credit 3.

CS 430 **Language Translators.**
This course deals with the design and implementation of assemblers, interpreters and compilers. Topics include symbol tables, lexical scanning, syntactic analysis, object code generation and storage allocation. Programming assignments will involve implementation of functional components of a translator. Prerequisites: CS 272 and CS 362. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

CS 431 **Computer Operating Systems.**
This course is concerned with software organization of computer systems. It is intended to bring together the concepts and techniques of programming languages, data structures and computer organization by considering their role in the design of general computer systems. The problems which arise in multi-accessing, multiprogramming, and multiprocessing are emphasized. Prerequisites: CS 333 and CS 362. Credit 3.

CS 437 **Software Engineering.**
This course is an introduction to formal methods of specifying, designing, implementing and testing software for large programming projects. Methods of estimating and predicting reliability are discussed. Writing Enhanced. Prerequisite: 3 hours of advanced CS and CS 334. Credit 3.

CS 438 **Computer Graphics.**
This course introduces graphical API's used in developing graphical user interfaces and multimedia applications. Topics covered are selected from the PHIGS, Windows, Presentation Manager, X-Windows, digital video and other appropriate technologies. Prerequisite: 6 advanced hours of CS. Credit 3.

CS 463 **Networks II.**
This course covers the architecture and protocols of local and wide area networks. Peer to peer and client/server configurations based upon DOS, OS/2 and Unix servers and clients are covered. Assignments involve the set-up, configuration and monitoring of Novell and Lan Server networks. Writing Enhanced. Prerequisite: 6 advanced hours of CS. Credit 3.

CS 470 **Special Topics in Computer Science.**
Topics of general interest are offered on a timely basis. Previous topics include Cognitive Computing, Embedded Linux Systems, Visual Graphics/Component Systems. Prerequisites: For all CS 470 topics — 6 hrs. advanced CS. Credit 1-3.

CS 477 **Simulation.**
This is an introduction to simulation methodology applicable to all disciplines. It covers the design of simulation experiments, validation of models and their computer implementation. The use of a generalized simulation language is introduced and applied in class projects. Prerequisites: 6 advanced hours CS and MTH 379. Credit 3.

CS 482 **Programming Languages.**
This course emphasizes programming languages which support the Object-Oriented Programming (OOP) paradigm. Programming assignments are used to illustrate the features and weaknesses of the language and to develop the student's proficiency in the use of OOP technology. Prerequisite: CS 147. Credit 3.

DF 491* **Information Security.**
This course provides an introduction to basic security needs. The course will include, but not be limited to indivduals vs. government privacy issues, federal encryption standards, the different layers of security currently available, the practical application of user level and system level cryptography, and strategies for evaluation and selection of security methods. Prerequisite: DF 291 Credit 3.

DF 492* **Professionalism and Ethics in Digital Forensics.**
This course examines the nature, need and value of well-formed ethical constructs within the digital forensics profession. Included in this course is a discussion, through case studies, of the nature of professionalism, personal and professional codes of ethics and conduct, and the professional handling of ethical and moral conflict. The course also explores the role of the professional in public policy and the awareness of consequences of ethical dissent and whistle blowing. Writing Enhanced. Prerequisite: Senior classification with 6 hours advanced CS or DF courses. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

DEPARTMENT OF GEOGRAPHY AND GEOLOGY

Chair: Marcus Gillespie (936) 294-1233; marcusg@shsu.edu

Faculty: Don Albert, Chris Baldwin, Cody Barron, Brian Cooper, Marcus Gillespie, Gang Gong, Mark Leipnik, Dennis Netoff, Jim Tiller, Betsy Torrez, and C. Allen Williams

Website: www.shsu.edu/~gel_geo

The Department of Geography and Geology is an excellent blend of two disciplines that have a common thread. Both programs are concerned with the physical environment, its impact on and the ways that humans have modified the natural environment. Students may major or minor in either program.

Mission

The primary mission of the Department of Geography and Geology is to provide students of the two complimentary programs a comprehensive understanding of the range and depth of these scientific disciplines which encompass, respectively, the human and physical domains of geography, and the physical and historical domains of geology. This understanding is intended to enable our students to achieve their full potential as skilled professionals and well-qualified technical employees in a diverse range of companies and governmental organizations, and to become effective teachers and community leaders. Our programs enable students to become informed users of a range of technologies and prudent stewards of our natural resources. This understanding of the world will promote successful careers, active life-long learning, and an ability and desire to contribute positively to society.

GEOGRAPHY PROGRAM

Coordinator: Marcus Gillespie (936) 294-1233; marcusg@shsu.edu

Faculty: Don Albert, Cody Barron, Gang Gong, Marcus Gillespie, Mark Leipnik, Dennis Netoff, Jim Tiller and C. Allen Williams

Website: www.shsu.edu/~gel_geo/

Geography is the study of the earth and its people. Contrary to popular belief, it is NOT about memorizing place-names and coloring maps. On the contrary, it is about *understanding* the world, and this includes an understanding of both the natural environment and the cultural world of politics, economics, and religion. Because of the breadth of its subject matter, it integrates information from a wide variety of other disciplines and examines that information from a spatial perspective. For those individuals that are curious about the world, there are few disciplines that will satisfy that curiosity as much as Geography.

The relevance of geography is highlighted by the fact that the world's population recently passed the six billion mark and it continues to grow rapidly, thereby creating a wide variety of problems that we must try to solve. If an individual counted one person on earth each second, it would take about 200 years to count all of the people on earth! Because of the rapid rate of population growth, three billion more people will be added to the world's population by the year 2050. With nine billion people to be housed, fed and educated over the next few decades, while resources are becoming increasingly scarce and damage to the environment accelerates, many environmental and social issues are becoming more acute and difficult to solve. For this reason, geography has become increasingly focused on the nature of the relationship between humans and their environment. The resource limits that every society must deal with also affect such things as the social, political and economic characteristics of a society and the way in which that society interacts with others. Through a study of these things, our students develop an understanding and appreciation of the

fact that we live in an increasingly interdependent world in which the welfare of the environment and of other cultures affects all of us. In a world of global markets, global transportation systems, and global telecommunications, such knowledge is of fundamental importance for helping people to better understand one another and for helping them to deal with environmental, social, and economic issues.

Academic Programs

- BA in Geography
- BS in Geography
- Teacher Certification (BA or BS in Social Science Composite – Geography Emphasis)

Highlights

Located on the third floor of the Lee Drain Building, the department maintains both a Geographic Information System (GIS) lab and a combination GIS and remote sensing lab. These labs contain state-of-the-art computers, software and scanners. We also have a van for fieldtrips, a Zodiac watercraft used for field research, a coring device capable of taking 20-foot core samples, high-quality GPS receivers, and a large-scale flume to demonstrate sedimentation processes. . In order to enhance learning, all of our rooms are outfitted with video-projection systems, and our lecture rooms have sound systems and dedicated computers with Internet access that are used by the instructors for teaching purposes. Many of our students obtain internships and work with faculty members on research projects.

Career Opportunities

Because of the breadth of geography, there are a wide variety of career opportunities for geography graduates. These opportunities include careers in the following:

- military
- urban planning
- environmental companies and state environmental agencies
- state transportation departments
- city government
- education
- marketing agencies
- energy companies
- emergency management.

Geography's focus on spatial relationships, in conjunction with new advances in technology, have led to the development of new geographical tools—principally Geographic Information Systems (GIS) and Global Positioning Systems (GPS)—that are now used by many geographers in a wide variety of fields. Because GIS can be applied within virtually any field (government, business, military, etc.) it is one of the fastest growing job fields and the demand for people with GIS experience exceeds the supply. To prepare our students for this field, we established an Interdisciplinary Minor in GIS that consists of both Computer Science and Geography courses. The combination of geographic and computer science skills is highly marketable. With their broad background, geography graduates have an ability to see connections where others do not, and this enables geographers to work in many different fields. Geography literally offers a world of opportunities.

Suggested Minors

- GIS (Geographic Information Systems)
- Geology, Biology, Environmental Science
- History
- Sociology
- Political Science
- Military Science
- Economics
- International Business
- Marketing
- Computer Science

- Journalism
- Foreign Language
- Social Science Composite

Student Organizations

- Geographers of Sam Houston (GOSH) - GOSH is intended to enhance appreciation for geography through club-sponsored field trips, guest lectures, and other activities, and to promote camaraderie among geography students.
- Gamma Theta Upsilon (GTU) - GTU is the National Geography Honor Society and was established to promote geographic awareness and the pursuit of geographic knowledge. To be eligible for membership in this honor society, students must have at least 12 hours of geography coursework, a minimum GPA of 3.25 in their geography coursework, and an overall GPA of at least 3.0.

Internships

Educational and research opportunities using GIS are available through a variety of internship opportunities that will increase students' skills and employment opportunities.

Scholarships

- GERALD L. HOLDER SCHOLARSHIP FOR GEOGRAPHY STUDENTS: $500 -- $700 one semester. Geography majors or minors, senior status, 3.0 GPA Geography overall.
- JAMES ELLISON KIRKLEY SCHOLARSHIP: Two awards (amounts vary) to majors in history, political science, geography, or sociology. Recipients are selected on basis of high academic achievement.
- THE ELTON M. SCOTT SCHOLARSHIP FOR GEOGRAPHY STUDENTS: $500 -- $700 one semester. Geography majors or minors, senior status. 3.0 GPA Geography overall.
- JOHN H. BOUNDS SCHOLARSHIP FOR GEOGRAPHY STUDENTS: $500-$700 for one semester. Requirements: geography majors or minors, senior status. Contact department for GPA requirements.

Request information from: B. Marcus Gillespie, Chair, Department of Geography and Geology, Box 2148, Huntsville, TX 77341-2148. (936)294-1233

Program Specific Requirements

Students must meet the academic standards established by the university.

Curriculum

Required Courses for Major

All geography majors must take the following courses:

GEO 131/111, 265, 266, 330, 331, 369, and 2 technical/applied courses from GEO 362, , 363, 433, 444, or 448. (It is advisable to take GEO 362 before taking GEO 363, 25 hrs.444 or 448.). In addition to these requirements, students must take the courses shown below for the respective degree.

Bachelor of Arts: GEO 471, GEO (6 hrs. Advanced)	9 hrs.
Bachelor of Science: GEO 442, and GEO (9 hrs. Advanced)	13 hrs.
Bachelor of Arts, Social Sciences Composite (Geography Emphasis): GEO 161, 471, and 3 hours of GEO (Advanced).	9 hrs.
Bachelor of Science, Social Sciences Composite (Geography Emphasis): GEO 161, 442, 471, and 3 hours of GEO (Advanced)	13 hrs.

Major in Geography
Bachelor of Arts

First Year	Credit	Second Year	Credit
GEO 131/111, 265	7	GEO 266, 330	6
ENG 164, 165	6	Course in accepted minor	3
MTH 164 (or approved substitute)	3	Component Area 4 (Literature or PHL)	3
CS 133 or MIS 188	3	Foreign Language 141, 142	8
HIS 163, 164	6	POL 261, POL (200-level)	6
BIO, CHM, or PHY	4	PHL 261	3
KIN 215	1	General Elective	3
	30		32

Third Year	Credit	Fourth Year	Credit
GEO 331, 369	6	Advanced GEO Electives	6
GEO 362, 363, 433, 435, 444 or 448	6-8	GEO 471	3
Courses in accepted minor	6	Courses in accepted minor	9
Component Area 4		Advanced General Electives	12
(Visual & Performing Arts)	3	ART, DNC, THR, MUS or PHL 366	3
Foreign Language 263, 264	6		33
ENG (200 level or higher) or SCM	3		
General Elective	3		
	33		

Major in Geography
Bachelor of Science

First Year	Credit	Second Year	Credit
GEO 131/111, 265	7	GEO 266, 330	6
ENG 164, 165	6	GEL 134/114	4
HIS 163, 164	6	Component Area 4 (Literature)	3
MTH 164 (or approved substitute)	3	CS 133 or MIS 188	3
MTH or PHL 262 or PHL 362	3	POL 261, POL (200-level)	6
GEL 133/113	4	Courses in accepted minor	6
KIN 215	1	PHL 261	3
	30		31

Third Year	Credit	Fourth Year	Credit
GEO 331, 369	6	GEO 442	4
GEO 362, 363, 433, 435, 444 or 448	6-8	Advanced GEO Electives	9
ENG (200 level or higher) or SCM	3	Courses in accepted minor	9
General Electives	7	Component Area 4	
BIO, CHM, or PHY (one department)	8	(Visual & Performing Arts)	3
Course in accepted minor	3	Advanced General Electives	9
	33		34

Major in Social Sciences Composite (Geography Emphasis)
Bachelor of Arts

First Year	Credit	Second Year	Credit
GEO 131/111, 161	7	GEO 265, 266	6
ENG 164, 165	6	Component Area 4 (Literature)	3
MTH 164 (or approved substitute)	3	HIS 265, 266	6
CS 133 or MIS 188	3	POL 261 and POL (200-level)	6
BIO, CHM, or PHY	4	Foreign Language 141, 142	8
HIS 163, 164	6	SCM 384 (or 161 if transfer credit)	3
KIN 215	1		32
	30		

Third Year	Credit
GEO 330, 331, 369	9
HIS 369, 379	6
Foreign Language 263, 264	6
ECO 234	3
SOC 261	3
Component Area 4 (Visual & Performing Arts)	3
General Elective*	3
	33

Fourth Year	Credit
GEO 362, 363, 433, 435, 444 or 448	6
GEO 471, Advanced GEO Elective	6
HIS 398	3
POL 378	3
PHL 366	3
General Electives*	6
Advanced General Electives*	6
	33

Major in Social Sciences Composite (Geography Emphasis)

Bachelor of Science

First Year	Credit
GEO 131/111, 161	7
ENG 164, 165	6
HIS 163, 164	6
GEL 133/113	4
MTH 164 (or approved substitute)	3
MTH OR PHL 262 OR PHL 362	3
KIN 215	1
ECO 234	3
	33

Second Year	Credit
GEO 265, 266, 330	9
Component Area 4 (Literature)	3
GEL 134/114	4
CS 133 or MIS 188	3
POL 261 and POL (200-level)	6
HIS 265 and 266	6
	31

Third Year	Credit
GEO 331, 369, 471	9
HIS 369 and 379	6
BIO, CHM, or PHY (one department)	8
SCM 384 (or 161 if transfer credit)	6
Advanced GEO Elective	3
	32

Fourth Year	Credit
GEO 362, 363, 433, 435, 444 or 448	6
GEO 442	4
HIS 398	3
POL 378	3
SOC 261	3
Component Area 4 (Visual & Performing Arts)	3
Advanced General Electives*	10
	32

Teacher Certification

Students seeking a Bachelor of Arts (BA) Degree with a major in Social Sciences Composite (Geography Emphasis) and teacher certification at the secondary level (grades 8-12) should use their 15 elective hours and an additional 9 hours to satisfy the required certification requirements. Students seeking a Bachelor of Science (BS) Degree with a major in Social Sciences Composite (Geography Emphasis) and teacher certification at the secondary level (grades 8-12) should use their 13 elective hours and an additional 11 hours to satisfy the required certification requirements. The required education courses are listed below and with teacher certification, the BA degree total is 137 hours and the BS degree total is 139 hours. Those students not seeking certification should use their electives to fulfill the University requirement for advanced elective hours – preferably in their major or minor field of study.

SED 383, 394, 464, 480, 496, 497, RDG 392, SED 374 or PSY 374 (24 hours)

For teacher certification, no grade below C in social science courses is accepted.

Minor in Geography

GEO 265, 266, 330, 369, plus 6 hours advanced geography.

Minor In GIS
(Geographic Information Systems)

GEO 362, GEO 444, GEO 435, CS 160, CS 278, CS 334 or MIS 390, plus 3 hours of designated electives in either Geography (GEO 363, GEO 448, or GEO 475) or an appropriate course in Computer Science. Double dipping of courses from the major and minor fields is limited to two courses.

Geography Course Descriptions

GEO 131 **Weather and Climate.** [GEOG 1301]
A systematic introduction to weather and climate as it pertains to man. Topics discussed will include components of weather, weather processes and their measurement, severe weather, climatic elements and control factors, and climate as a factor of physical environments. Credit 3.

GEO 111 **Weather and Climate Laboratory.**
Concurrent enrollment in GEO 131 is strongly recommended. Credit 1.

GEO 161 **Introduction to Geography.** [GEOG 1300]
An introductory course designed to acquaint students with the breadth of Geography. This includes an examination of the physical environment, environmental issues, and the cultural, economic, and political factors that influence human activities and societies. Attention will be focused upon the spatial interrelationships that exist between man and his environment. In addition, selected geographic skills will be covered, including latitude and longitude determination, earth-sun relationships, time, map projections and map scale. Credit 3

GEO 265 **World Regional Geography: Europe, Asia, And Australia.** [GEOG 1303]
An introductory level course giving a general overview of the land and people. Topics discussed will include the physical environment, cultural characteristics and the various ways people live and make their living. Attention will be focused upon the relationships which exist between location, the physical environment and human activity. Examples of countries covered are Russia, Germany, France, China, Japan, and United Kingdom. Credit 3.

GEO 266 **World Regional Geography: Latin America, Africa, and South Asia.** [GEOG 1303]
An introductory level course giving a general overview of the land and people. Topics discussed will include the physical environment, cultural characteristics and the various ways people live and make their living. Attention will be focused upon the relationships which exist between location, the physical environment and human activity. Examples of countries covered are Mexico, Brazil, Argentina, Egypt, Republic of South Africa, Israel, Iran, and India. Writing Enhanced. Credit 3.

GEO 330 **Cultural Geography.**
An evolutionary examination of man as an agent of change within the environment. Innovation, development, and diffusion of agriculture, language, religion, music, sport, and other attainments and institutions will be examined for their expression on the landscape. Credit 3.

GEO 331 **Location and Human Activity**.
An examination of the importance of location to human activity. The locational characteristics of primary, secondary, and tertiary economic activities are examined, with an emphasis on land use and urban form, its theory, and descriptive analysis, as well as an explanation of market forces and their consequences. Credit 3.

GEO 362 **Map Use and Map Interpretation.**
This course teaches students how to use and interpret topographic maps and helps them to develop an appreciation of their use as tools by geographers. It familiarizes students with map projections and their limitations, various coordinate systems, map measurements, GPS, and the basics of air photo interpretation. Credit 3.

GEO 363 Computer Cartography.
Fundamentals of thematic mapping, including appropriate usage, projections, base-map compilation, data measurement and analysis, map design and construction, color principles, and other cartographic concepts will be emphasized. Prerequisite: GEO 362. Credit 3.

GEO 368 Historical Geography of the United States.
A survey of the changing geography of the United States including initial exploration, European perception of North America, geographical expansion of the United States to the Pacific, and geographical factors underlying the urbanization and industrialization of the nation. Writing Enhanced. Credit 3.

GEO 369 Anglo-America.
This course provides a general overview of the land and people of the United States and Canada. Topics covered include the physical environment (weather patterns, landforms and water resources), cultural differences, and the various ways people live and make their living. Attention is focused upon the relationships which exist between location, the physical environment and human activity. Writing Enhanced. Credit 3.

GEO 433 Field Studies.
Use of geospatial technologies such as Global Positioning Systems (GPS), laser surveying, digital aerial photography and computerized mapping (GIS) will be stressed. Applications of these technologies will include surveying, water resources, forestry, soil science, wetlands delineation, urban and transportation planning, automobile accident reconstruction and crime scene evidence recovery. Half of the class meetings will take place at a variety of outdoor locations. Credit 3.

GEO 435 Applied Geographic Information Systems.
Applied GIS is designed to meet the needs for a highly applied course with realistic practical training extending the fundamental principles learned in Introduction to Geographic Information Systems (GEO 444). The application of GIS technology to mapping, modeling and management of large data bases will be emphasized. Writing Enhanced. Prerequisite: GEO 444. Credit 3

GEO 442 Geomorphology.
This course focuses on surficial geological processes and the resulting landforms. Specific topics include landscape processes associated with streams, glaciers, wind, coasts, mass wasting, weathering and soil development, and geologic structure. Labs emphasize landform analysis through interpretation of topographic maps and aerial photos. Writing Enhanced. Prerequisite: GEL 133. Two-hour laboratory. Credit 4.

GEO 444 Introduction to Geographic Information Systems.
This course will introduce basics of geographic information systems (GIS) with an emphasis on environmental and resource management applications. Students will design and develop a digital spatial database, perform spatial analyses, create hard-copy maps, and generate reports. Students will be introduced to several GIS software packages. Writing Enhanced. Credit 3.

GEO 448* Remote Sensing.
This course introduces students to the methods used to analyze and interpret aerial photography and satellite imagery. Emphasis is placed on multispectral satellite imagery, digital image processing, and land use and land cover analysis using remotely sensed imagery. Credit 3.

GEO 461 Conservation of Natural Resources.
This course stresses the impact of human activities on the natural world, environmental protection, and the wise use of the earth's resources. Topics include: environmental history, economics, law and ethics, ecology, population issues, agriculture and grazing, soil conservation, forestry, endangered and exotic species, water availability and water pollution, hazardous and solid waste management, air pollution (including global warming), energy resources (fossil, nuclear, and renewable), and the impact of technology on the future health of the planet. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

GEO 471 Texas.
A survey of the regional geography of Texas. Consideration is given to the significance of primary and secondary activity within the state, urbanization, and potential for development. Writing enhanced. Credit 3.

GEO 472 Ethnic Texas: A Multicultural Geography.
A developmental study of the state stressing the perception, manipulation and change of its environment by its people. Ethnic/culture groups considered will include the following: Anglo, Black, French, German, Greek, Indian, Italian, Jewish, Mexican-American, Scandinavian-American (Danes, Norwegians, and Swedes), and Slavic-Americans (Czechs, Poles, Slovaks, and Wends). Credit 3.

GEO 475 Readings in Geography.
A course designed specifically for advanced students of geography who are capable of independent study. Registration is permitted only upon approval of the program coordinator. This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog. Writing Enhanced. Credit 1-3.

GEOLOGY PROGRAM

Coordinator: Brian J. Cooper (936) 294-1566; bio_bjc@shsu.edu

Faculty: Chris Baldwin, Mark Leipnik, Dennis Netoff, Betsy Torrez

Website: www.shsu.edu/~gel_geo/

Geology is the ultimate integrated science because all of the principles and methods of the other sciences, as well as geologic principles and methods, are applied to an understanding of the Earth. Geologists study rocks, of course, but they study them from the context of providing information that may eventually be used to forecast earthquakes, volcanic eruptions, and other geologic hazards. The information obtained may also be applied to help geologists locate various natural resources. Therefore, geology serves to enhance human existence by attempting to reduce risk and by providing the materials necessary for the expansion of civilization.

Academic Programs

- BS in Geology
- BS in Geology with a plan in Geoscience
- Teacher Certification (BS in Social Science Composite – Geology Emphasis)

The Program offers three Bachelor of Science plans. The Geology Plan is designed for the person seeking a position in industry or planning to attend graduate school. The Geoscience Plan is designed for the person with a general interest in geology. The Composite Science plan is for someone wanting certification to teach at the secondary level. Each plan is designed to provide an education in the fundamentals of geology. The required geology courses will give the student an understanding of the earth and will provide an opportunity to observe, investigate, analyze, and interpret geological materials, processes, and structures.

Highlights

Located on the third floor of the Lee Drain Building, the department maintains both a Geographic Information System (GIS) lab and a combination GIS and remote sensing lab. These labs contain state-of-the-art computers, software and scanners. We also have a van for fieldtrips, a Zodiac watercraft used for field research, a coring device capable of taking 20-foot core samples, high-quality GPS receivers, and a large-scale flume to demonstrate sedimentation processes. In order to enhance learning, all of our rooms are outfitted with video-projection systems, and our lecture rooms have sound systems and dedicated computers with Internet access that are used by the instructors for teaching purposes. Many of our students obtain internships and work with faculty members on research projects.

Career Opportunities

Geology majors generally pursue careers in three areas:

- the environmental industry
- the petroleum industry
- teaching

Geology students are provided with the knowledge and skills required to pursue an applied profession, a career in education, and/or continued education at the graduate level.

Suggested Minors

Geography, Geographic Information Systems, science minor, Mathematics, or Computer Sciences

Student Organizations

Sam Houston Association of Geology Students (SHAGS) – SHAGS is a very active student organization that sponsors field trips to sites in Texas, Oklahoma, and Arkansas. Alumni, professors, and other professional geologists are invited to speak at SHAGS meetings. Geology majors benefit greatly from the sense of camaraderie gained during the field trips, meetings, and other activities.

Internships

Educational and research opportunities using GIS are available through a variety of internship opportunities that will increase students' skills and employment opportunities.

Scholarships

- SHAGS SCHOLARSHIP: $500 per year, awarded to two students, junior or senior status, Geology majors,minimum GPA of 3.0, faculty recommendations required.
- CANNAN GEOLOGICAL SCHOLARSHIPS: $600 per year, junior or senior status, Geology majors, minimum GPA of 3.2 in Geology and overall 3.0, faculty recommendations required.

Scholarship recipients are determined by a faculty committee during the Spring semester.

Program Specific Requirements

Geology program specific requirements include ENG 330, 8 hours in each of BIO, CHM, and PHY; plus additional MTH requirements depending on the specific degree option.

Curriculum

Required Courses for Geology Major

Bachelor of Science, Geology: GEL 132/112 or 133/113, plus 134/114, 334, 344, 345, 440, 442, 460, 461, and three Advanced GEL Electives.

Bachelor of Science, Geoscience: GEL 132/112 or 133/113, plus 134/114, 334, 344, 345, 440, 442, and five Advanced GEL Electives.

Major in Geology

Bachelor of Science

First Year	Credit	Second Year	Credit
GEL 132/112 or 133/113	4	GEL 334, 344, 345	11
GEL 134/114	4	Component Area 4 (Literature)	3
ENG 164, 165	6	ENG 330	3
CHM 138/118, 139/119	8	BIO 162/112 plus 161/111 or 137/117	8
HIS 163, 164	6	MTH 142 plus 143 or 379	7-8
CS 133	3	Component Area 5	
KIN 215	1	(Social & Behavioral Sciences)	3
	32		35-36

Third Year	Credit	Fourth Year	Credit
GEL 440, 442, GEL (Adv)	11-12	GEL 460, 461	6
PHY 138/118, 139/119	8	Two Advanced GEL Electives	6-8
POL 261	3	Component Area 4 (Cultural Studies)	3
Component Area 4		POL (200-level)	3
(Visual & Performing Arts)	3	Courses in accepted minor	12
Courses in accepted minor	6		30-32
	31-32		

Major in Geology – Geoscience Plan
Bachelor of Science

First Year	Credit	Second Year	Credit
GEL 132/112 or 133/113	4	GEL 334, 344, 345	11
GEL 134/114	4	Component Area 4 (Literature)	3
ENG 164, 165	6	ENG 330	3
CHM 138/118, 139/119	8	BIO 162/112 plus 161/111 or 137/117	8
MTH 163, 170, 142 or more advanced	6	HIS 163,164	6
CS 133	3	Component Area 5	
KIN 215	1	(Social & Behavioral Sciences)	3
	32		33

Third Year	Credit	Fourth Year	Credit
GEL 440, 442, GEL (Adv)	11-12	Four Advanced GEL Electives	12-14
PHY 138/118, 139/119	8	Component Area 4	
Component Area 4		(Cultural Studies)	3
(Visual & Performing Arts)	3	POL (200-level)	3
POL 261	3	Courses in accepted minor	12
Courses in accepted minor	6		30-32
	31-32		

A minor in geography, science, or mathematics is strongly recommended.

Major in Composite Science (Geology Emphasis)
Bachelor of Science

First Year	Credit	Second Year	Credit
GEL 132/112 or 133/113	4	GEL 334, 344, 345	11
GEL 134/114	4	Component Area 4 (Literature)	3
ENG 164, 165	6	SCM 384	3
CHM 138/118, 139/119	8	BIO 161/111, 162/112	8
HIS 163, 164	6	MTH 170, 163	6
Component Area 4	3		31
(Visual & Performing Arts)			
KIN 215	1		
	32		

Third Year	Credit	Fourth Year	Credit
GEL 330, 360	6	GEL 335, 442	7
CHM 238/218	4	PHY 138/118, 139/119	8
GEO 131/111	4	PHY 397/317	4
Component Area 4 (Cultural Studies)	3	BIO 234	3
POL 261, POL (200-level)	6	Component Area 5	3
CS 133	3	(Social & Behavioral Sciences)	
Electives*	6	Electives*	8
	32		33

Teacher Certification

Students seeking teacher certification at the secondary level should use their 14 elective hours and an additional 10 hours to satisfy the certification requirements (SED 383, 394, 464, 480, 496 and 497; RDG 392; SED 374 or PSY 374). Those students not seeking certification should use their electives to fulfill the university requirements for advanced hours.

Minor in Geology

GEL 132/112 or 133/113, plus 134/114 and 12 hours advanced geology.

Geology Course Descriptions

GEL 132 **Geologic Hazards and Resources.** [GEOL 1305]
An introduction to the interrelationship between humans and the geologic environment. This includes the potential hazards posed by geologic processes, and the planning that needs to be done to lessen their impact. Earth materials and their uses by humans are also emphasized. No prerequisite. Fall, Spring, Summer. Credit 3.

GEL 112 **Geologic Hazards and Resources.** [GEOL 1105]
This course must be taken concurrently with GEL 132, Geologic Resources and Hazards. Laboratory experiences include map and air photo interpretation, analysis of remote sensing data, and study of economically important earth materials. Field trips and take-home computer exercises are also required. Credit 1.

GEL 133 **Physical Geology.** [GEOL 1303]
An introduction to the materials, processes, and structure of the earth. Topics include earthquakes, volcanoes, plate tectonics, mountain building, weathering and erosion, glaciation, oceans, and mineral resources. No prerequisite. Fall, Spring, Summer. Credit 3.

GEL 113 **Physical Geology Laboratory.** [GEOL 1103]
This course must be taken concurrently with GEL 133, Physical Geology. These laboratory experiences involve the study of rocks, minerals, and map interpretations. Credit 1.

GEL 134 **Historical Geology**. [GEOL 1304]
An introduction to the history of the earth and its past inhabitants, including a section on the dinosaurs and their extinction. This course gives a broad overview of the tectonic evolution of the planet, indicated by various major mountain-building events; ancient environments and changing sea levels recorded in sedimentary deposits; and the evolution of life represented by the fossil record. No prerequisite. Fall, Spring, Summer. Credit 3.

GEL 114 **Historical Geology Laboratory.** [GEOL 1104]
This course must be taken concurrently with GEL 134, Historical Geology. Laboratory experiences include the study of common animal and plant fossils and problems which illustrate practical applications of geological principles. No prerequisite. Credit 1.

GEL 330 **Oceanography.**
A survey of the general principles of oceanography is made. The geology of ocean basins, tide-water processes and the chemistry of sea water are studied. Biophysics of the sea and environmental problems are considered. Prerequisites: GEL 133/113. Spring, Summer I. Credit 3.

GEL 334 **Geochemistry.**
A general introduction to all types of geochemistry that includes a discussion of the underlying chemical concepts, with an emphasis on the applications to geological environments. The chemical concepts include isotopic chemistry, thermodynamics, crystal chemistry, and aqueous solutions. The geological metasomatism, geothermobarometry, and environmental geochemistry. Prerequisites: GEL 132/112 or GEL 133/113 plus CHM 138/118. Even year Fall. Credit 3.

GEL 335 Energy and Environmental Impact.
This course focuses on geologic energy resources, use, and their environmental impact. The case will be made for the link between population growth, industrialization, and the critical need for developing existing energy resources as well as developing strategies for new energy sources and energy conservation. The impact of energy development and exploitation on the health of the ecosphere will be stressed throughout. Alternative and renewable energy sources are evaluated. The course format will rely heavily on a case study approach. Specific topics will include such things as plate tectonics and energy resources, fossil fuels, nuclear energy, renewable energy resources, and our energy future. Writing Enhanced. Prerequisites: GEL 132/112 or 133/113. Credit 3.

GEL 344 Mineralogy.
This course covers crystallography, genesis of minerals, identification and classification of minerals, and optical mineralogy. Prerequisites: GEL 133/113 and CHM 138/118, 139/119, MTH 163. Includes lab work. Writing Enhanced. Odd year Fall. Credit 5.

GEL 345 Petrology.
The classification, origin, occurrence and associations of igneous, sedimentary, and metamorphic rocks. Includes optical petrology using thin sections. Writing Enhanced. Prerequisite: GEL 344. Even year Spring. Credit 5.

GEL 360 Environmental Geology.
This course offers an introduction to geological processes and materials, and how they affect people and the environment. Specific topics include earthquakes, volcanism, mass wasting, floods, coastal hazards, and climatic change. Optional topics may include such items as energy and water resources, subsidence, and waste disposal. Writing Enhanced. Prerequisites: GEL 133/113. Even year Fall. Credit 3.

GEL 431 Geology of North America.
A study of the geologic history of the continent of North America. Topics include paleogeography, major depositional areas and stratigraphic units, and paleotectonics. Writing Enhanced. Prerequisites: GEL 133/113, 134/114. Even year Spring. Credit 3.

GEL 432 Economic Geology.
This course is concerned with the origin and occurrence of economically important minerals. A portion of the course is devoted to petroleum. Writing Enhanced. Prerequisites: GEL 133/113. Odd year Spring. Credit 3.

GEL 437 Plate Tectonics.
An introduction to the movement of lithospheric plates. Topics to be covered include earthquakes, volcanism, seismic tomography, the evolution of continents and ocean basins, and the influence of the earth's interior on these processes. Lecture only. Writing Enhanced. Prerequisites: GEL 133/113, with GEL 134/114 highly recommended. Odd year Fall. Credit 3.

GEL 440 Stratigraphy and Sedimentation.
A study of the principles and methods used in describing, classifying and correlating strata. Includes studies of modern and ancient depositional environments. Lab/field work included. Writing Enhanced. Prerequisites: GEL 133/113 and GEL 134/114. Odd year Spring. Credit 4.

GEL 442 Structural Geology.
This course covers the principles of deformation of the Earth's lithosphere, with emphasis on mechanical principles, identification and interpretation of structures from the microscopic scale to the scale of mountain belts. Other topics include regional tectonics and application in petroleum exploration. Lab work will focus on graphical and quantitative techniques of analyzing geologic structures. Writing Enhanced. Prerequisites: GEL 133/113, PHY 138/119, MTH 163. Odd year Spring. Credit 4.

GEL 446 Hydrogeology.
An introduction to the study of groundwater and its role in the hydrologic cycle. Topics include properties and distribution of water on the surface, in the vadose zone and in aquifers; behavior, modeling, and geology of groundwater aquifers; human use and abuse of water resources, including groundwater contamination and extraction; and water law economics, and aquatic ecology. A lab with field trips will focus on measurement and modeling of groundwater. Writing Enhanced. Prerequisites: GEL 133/113, MTH 163. Credit 4.

GEL 460, GEL 461 Field Geology.
These courses will consist of on-site studies in structure, stratigraphy, petrology and paleontology. Field trips will be taken to appropriate areas in Texas and/or surrounding states. Writing Enhanced. Prerequisite: Senior standing. Credit 3 hours for each course.

GEL 495 Special Topics in Geology.
Individual study in special areas of geology. Topic content will usually be selected and agreed upon by the student and a member of the Geology faculty. Sometimes special topics courses will be offered by the Geology faculty. This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog. Prerequisites and credit will be determined by the faculty member. May be repeated for credit. Writing Enhanced. Fall, Spring, Summer. Credit 1, 2, or 3.

DEPARTMENT OF MATHEMATICS AND STATISTICS

Chair: Mark L. Klespis, (Interim) (936) 294-1577;klespis@shsu.edu

Coordinators: John Snow (Mathematics), Max Coleman (Mathematics Education), Cecil Hallum (Statistics)

Faculty: Ferry Butar, Max Coleman, Beth Cory, Tom Davis, Rebecca Garcia, Cecil Hallum, Jaimie Hebert, John Huber, William Jasper, Jackie Jensen, Julie Jones, Jodie Kirk, Mark Klespis, Harry Konen, Brian Loft, Dave Luning, Glen Mattingly, Joseph O'Brien, Wesley Sanders, Jon Short, John Snow, , Mary Swarthout, Jianzhong Wang

Website: www.shsu.edu/~ mth_www/

Mathematics is a powerful tool for solving practical problems, combining logic and precision with intuition and imagination. The basic goal of mathematics is to reveal and explain patterns – whether the pattern appears as electrical impulses in an animal's nervous system, as fluctuations in stock market prices, or as fine detail of an abstract geometric figure.

Mission

The Department of Mathematics and Statistics provides an environment that is conducive to and promotes the understanding of mathematics and statistics by all students, encourages community and institutional service, and encourages and supports continued faculty development and scholarship.

Academic Programs

- BA in Mathematics
- BS in Mathematics

Highlights

- Host for annual mathematics conference on teaching of mathematics
- Numerous grants with government and education agencies
- Home of Reeves Center for Mathematics Education
- Undergraduate student presentations at MAA meetings

Career Opportunities

- Accounting and Finance
- Computer Programming
- Sales and Marketing
- Management and Related Positions
- Actuarial
- Computer Systems Analysis
- Engineering
- Statistics
- Mathematics
- Operations Research
- Modeling
- Academic Positions – High School or College

Suggested Minors

Chemistry, Computer Science, Music, Physics, Pre-Med/Biology, Secondary Education, Statistics

Student Organizations

- Mathematical Association of America (MAA)
- Pi-Mu-Epsilon Mathematics Honor Society
- Ruth Lane Math Society

Internships

Possible internships exist with NASA, National Security Agency, Actuarial Firms, Oil Industry

Scholarships

The Department of Mathematics and Statistics offers several scholarships each year and Sam Houston State University offers additional, university-wide scholarships. For information on departmental scholarships, contact the Department of Mathematics and Statistics. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672.

Program Specific Requirements

Anyone considering a degree in Mathematics should consult an advisor in the Mathematics department prior to registering for any courses.

Curriculum

Curriculum outlines below are typical, but modifications may be made to meet individual student needs. Although study plans usually begin with MTH 142, other courses such as MTH 163 or 170 may sometimes be more appropriate. Students who have completed extensive high school mathematics may be eligible for advanced placement.

Major In Mathematics

Bachelor of Arts

First Year	Credit	Second Year	Credit
MTH 142, 143	8	MTH 244, 364	7
ENG 164, 165	6	Component Area 4 (Literature)	3
Component Area 3 (Natural Science, Not in Department of Physics)	4	ENG or SCM Elective	3
		POL 261, POL (200-level)	6
PHY 141 or 142	4	Foreign Language (one field)	8-10
HIS 163, 164	6	CS 164	3
KIN 215	1	Component Area 4 (Visual & Performing Arts)	3
General Electives	6		
	35		33-35

Third and Fourth Years	Credit
MTH 377, 461, 466, 471, 477, MTH (Advanced – see note below)	18
Approved Minor	18
ART, DNC, MUS, THR or PHL 366	3
Component Area 4 (Cultural Studies)	3
Component Area 5	3
Foreign Language (one field)	6
Advanced General Electives	9
	60

Notes: 1. The following courses can only be used as required advanced electives by students who are seeking elementary/middle school teacher certification: MTH 381, 382, 383, 384, 386, and 387. The following courses can only be used as required advanced electives by students who are seeking secondary teacher certification: 484 and 485.

2. Students should use the minor and advanced general electives to complete the 42-advanced hour requirement for graduation.

Major in Mathematics

Bachelor of Science

First Year	Credit	Second Year	Credit
MTH 142, 143	8	MTH 244 and 364	7
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	ENG or SCM Elective	3
KIN 215	1	PHY 141 and 142	8
BIO, CHM, or GEL (from one field)	8	POL 261, POL (200-level)	6
General Electives	6	CS 164	3
	35	Component Area 4 (Visual & Performing Arts)	3
			33

Third and Fourth Years	Credit
MTH 376, 377, 461, 466, 471, 477, MTH (Advanced – see note below)	24
Minor	18
Component Area 4 (Cultural Studies)	3
Component Area 5	3
Electives	12
	60

Notes: 1. The following courses can only be used as required advanced electives by students who are seeking elementary/middle school teacher certification: MTH 381, 382, 383, 384, 386, and 387. The following courses can only be used as required advanced electives by students who are seeking secondary teacher certification: 484 and 485.

2. Students should use the minor and electives to complete the 42-advanced hour requirement for graduation.

Major in Mathematics with Teacher Certification

For students selecting a Minor as a Second Teaching Field

The requirements include CS 164 or approved substitute, MTH 142, 143, 244, 363, 364, 377, 379, 477, 484, and 485.

For students who do not select a Minor

The requirements include those above, and one of the following options:

OPTION 1: (Analysis Emphasis) MTH 394, 461, and 467.

OPTION 2: (Statistics Emphasis) STA 380, STA 470, and MTH/STA 471.

Minor in Mathematics with Teacher Certification

Middle School Level Certification

Plans must include MTH 184, 185, 284, 285, 383, 384, 386 and 387 or approved substitutes.

Secondary Level Certification

Plans must include MTH 142, 143, 363, 364, 377, 379, 484, 485 and CS 164 or approved substitutes.

Teacher Certification

In addition to the listed degree requirements, the following courses must be completed for teacher certification. Several of these courses may be taken as electives or to partially complete existing degree requirements.

SED 374, 383, 394, 464, 480, 496, and 497

RDG 392

SCM 384

Minor in Mathematics without Teacher Certification

Minors in mathematics must include MTH 142, 143 and one of the following: MTH 244 and 6 semester hours of advanced mathematics (no more than 3 hours of courses cross listed with STA), or 10 semester hours of advanced mathematics (no more than 3 hours of courses cross listed with STA). Prerequisites should be carefully noted. The following courses can only be used as required advanced electives by students who are seeking elementary/middle school teacher certification: MTH 381, 382, 383, 384, 386, and 387. The following courses can only be used as required advanced electives by students who are seeking secondary teacher certification: 484 and 485.

A student's major program of study may also impose requirements on a minor in mathematics. Thus, the selection of courses for a mathematics minor should be made with the counsel of both the major advisor and a mathematics advisor.

Mathematics Course Descriptions

NOTE: TSI requirements for mathematics courses are located in the online Schedule of Classes. These requirements are in addition to any prerequisites listed below.

MTH 031D **Developmental Mathematics I.**
This course deals with fundamental operations involving whole numbers, fractions, decimals and percents, ratio and proportion, interpretation of graphs, geometry, and introductory algebra including axioms and properties of the real number system, fundamental operations involving algebraic expressions, first and second degree equations and inequalities in one unknown. Credit in this course may not be applied toward graduation or classification of students by hours completed.

MTH 032D **Developmental Mathematics II.**
This course covers products and factoring of polynomials, algebraic fractions, exponents and radicals, quadratic equations, functions and graphs, applications and systems of equations. Credit in this course may not be applied toward graduation or classification of students by hours completed.

MTH 142, 143, 244 **Calculus I, II, III.**
This sequence of courses is a unified introduction to the fundamental concepts, skills, and applications of calculus and analytic geometry.

MTH 142 **Calculus I.** [MATH 2413]
Topics include limits and continuity, the derivative, techniques for differentiation of algebraic, logarithmic, exponential and trigonometric functions, applications of the derivative and anti-differentiation, definite integral, Fundamental Theorem of Calculus. Prerequisite: MTH 163 or high school equivalent. Credit 4.

MTH 143 **Calculus II.** [MATH 2414]
Topics include the definite integral and its applications, techniques of integration, improper integrals, Taylor's formula and infinite series. Prerequisite: MTH 142 with a grade of C or better. Credit 4.

MTH 163 **Plane Trigonometry.** [MATH 1316]
Topics include coordinate systems, circular functions, solutions of triangles, identities, trigonometric equations, and inverse functions. Prerequisites: Two years of high school algebra and one year of high school geometry. Credit 3.

MTH 164 **College Mathematics.** [MATH 1332]
This course is designed to meet the objectives of Component area 2 of the core curriculum for non-business and non-science related majors. Topics may include sets, counting principles, probability, logic, linear algebra, linear programming, mathematics of finance, geometry, and calculus. Applications are emphasized. Prerequisites: Two years of high school algebra and high school geometry. Credit 3.

MTH 169 **Elementary Statistics.** [MATH 1342]
This is a survey course in elementary statistics designed to acquaint students with the role of statistics in society. Coverage includes graphical descriptive methods, measures of central tendency and variation, the basic concepts of statistical inference, the notion of estimators, confidence intervals, and tests of hypotheses. Also offered as STA 169. Prerequisite: Two years of high school algebra. Credit 3.

MTH 170 **Pre Calculus Algebra.** [MATH 2312]
Topics include a brief review of introductory algebra, variation, elementary theory of equations, functions (including exponential and logarithmic), inequalities, systems of equations, and other related topics. Prerequisites: Two years of high school algebra and one year of high school geometry. Credit 3.

MTH 184 **Introduction to the Foundations of Mathematics I.** [MATH 1350]
Topics include a study of sets, systems of numeration, natural numbers, integers, number theory and rational numbers. Credit in this course is applicable only toward elementary/middle school certification. Prerequisites: Two years of high school algebra and one year of high school geometry. Credit 3.

MTH 185 **Introduction to the Foundations of Mathematics II.** [MATH 1351]
Topics include basic notions of Euclidean Geometry in 2 and 3 dimensions, ratio, proportions, percents, decimals, concepts of congruence and similarity, transformational geometry and measurement. Credit in this course is applicable only toward elementary/middle school certification. Prerequisites: MTH 184 with a grade of C or better. Credit 3.

MTH 199 **Mathematics for Managerial Decision Making I.** [MATH 1324]
Topics include a review of introductory algebra, equations, relations, functions, graphs, linear programming, systems of equations and matrices, and mathematics of finance. Prerequisites: Two years of high school algebra and one year of high school geometry. Credit 3.

MTH 244 **Calculus III.** [MATH 2415]
This course includes the study of the calculus of functions of several variables and topics in vector calculus including line and surface integrals, Green's Theorem, Divergence Theorem, and Stoke's Theorem. Prerequisite: MTH 143 with a grade of C or better. Credit 4

MTH 284 **Functions and Graphs.**
The emphasis of this course is on functions and their multiple representations including linear, polynomial, logarithmic, exponential and logistic functions. Prerequisite: MTH 185 with grade of C or better. This course may be applied only toward middle school teacher certification. Normally offered in the Fall, Spring and Summer . Credit 3.

MTH 285 **Fundamentals of Calculus.**
This course provides an introduction to the concepts and applications of calculus. This course may be applied only toward middle school teacher certification. Prerequisite: MTH 284. Normally offered in the Fall, Spring and Summer. Credit 3.

MTH 299 **Mathematics for Managerial Decision Making II.** [MATH 1325]
Topics include differential and integral calculus with applications in areas such as business and economics. Prerequisite: MTH 199 or 170. Credit 3.

MTH 363 **Euclidean Geometry.**
This course consists of a modern development of Euclidean geometry and a limited introduction to non-Euclidean geometry. Writing Enhanced. Prerequisite: MTH 364 or consent of instructor. Normally offered in Fall and Summer II. Credit 3.

MTH 364 **Introduction to Mathematical Thought.**
This course includes an introduction to sets, logic, the axiomatic method and proof. Writing Enhanced. Prerequisite: MTH 143 or consent of instructor. Normally offered in the Spring and Summer I. Credit 3.

MTH 376 Differential Equations.
This course, in conjunction with MTH 476, is intended to develop a basic competence in areas of mathematics that are used in solving problems from the physical sciences. This first course emphasizes the general solution of ordinary differential equations, including the Laplace transform and infinite series methods. Prerequisite: MTH 244 or consent of the instructor. Normally offered in the Fall. Credit 3.

MTH 377 Introduction to Linear Algebra And Matrices.
Topics include: solving systems of linear equations, fundamental matrix theory (invertibility theorems, determinants), eigenvectors, and properties of linear transformations. Remaining topics are chosen from: Properties of general vector spaces, inner product spaces, and/or diagonalization of symmetric matrices. Prerequisite: MTH 143. Normally offered in the Spring and Summer II. Credit 3.

MTH 379 Statistical Methods in Practice.
Topics include organization and presentation of data, measures of central tendency, dispersion, and position, probability distributions for discrete and continuous random variables, sampling techniques, parameter estimation, and hypothesis testing. Emphasis will be given to the use of the MINITAB statistics package. Also offered as STA 379. Prerequisites: 3 semester hours of mathematics and consent of instructor. Normally offered in the Fall, Spring, Summer I. Credit 3.

MTH 381 Introduction to the Foundations of Mathematics III.
Topics include probability, data analysis, discrete mathematics, and problem solving. Credit in this course is applicable only toward elementary/middle school certification. Prerequisite: C or better in MTH 184. Normally offered in the Fall, Spring and Summer. Credit 3.

MTH 382 Foundations of Middle School Mathematics.
Topics include relations, functions, coordinate geometry, logic, and history of mathematics. Credit in this course is applicable only toward middle school certification. Prerequisite: C or better in MTH 184. Normally offered in the Fall and Spring. Credit 3.

MTH 383 Geometric Measure and Transformations.
Topics included in this course are measurement in one, two, and three dimensions, the metric system, transformational geometry, congruencies, similarities, geometric constructions, and coordinate systems. This course may be applied only toward middle school certification. Prerequisite: MTH 285. Normally offered in the Fall and Spring of each year and in the Summer of odd numbered years. Credit 3.

MTH 384 Foundations of Mathematics.
This course includes an introduction to logic, concepts of proof, proof techniques, induction, and sets. It may be applied only toward middle school certification. Writing Enhanced. Prerequisite: MTH 285 or equivalent. Normally offered in the Fall and Spring and in the Summer of even numbered years. Credit 3.

MTH 386 Fundamentals of Probability and Statistics.
This course provides an introduction to probability, descriptive statistics,and inferential statistics, including regression, confidence intervals, and the construction and interpretation of tables, graphs, and charts. Calculator techniques related to the above topics will be incorporated into the course. This course may be applied only toward middle school certification. Prerequisite: MTH 285. Normally offered in the Fall and Spring and in the Summer of even numbered years. Credit 3.

MTH 387 Problem Solving in Middle School Mathematics.
Topics included in this course are problem-solving strategies appropriate for middle school or junior high mathematics. The course may be applied only toward middle school certification. Writing Enhanced. Prerequisite:Math 285. Normally offered in the Fall and Spring of each year and in the Summer of odd numbered years. Credit 3.

MTH 394 Numerical Methods.
Topics include interpolation, approximations, solutions of equations, and the solution of both linear and nonlinear systems of equations. Also offered as CS 394. Prerequisites: CS 164 and MTH 143 or consent of the instructor. Normally offered in the Spring. Credit 3.

MTH 396 Operations Research I.
Techniques for the application of the scientific method to decision making in business and government are presented through the formulation and interpretation of mathematical models for various specific real life problems. Normally offered in the Fall. Prerequisite: MTH 299 or 143. Credit 3.

MTH 461 Introductory Analysis.
This course consists of a more thorough treatment of the material traditionally considered in elementary calculus. Topics include sets, functions, properties of the real number system and sequences. Writing Enhanced. Prerequisite: MTH 364 or consent of the instructor. Normally offered in the Fall. Credit 3.

MTH 466 Elementary Analysis.
Topics include limits, continuity, differentiation, Riemann integration, infinite series and sequences and series of functions. Writing Enhanced. Prerequisite: MTH 461 or consent of instructor. Normally offered in the Spring. Credit 3.

MTH 467 The Evolution of Mathematics.
An introduction to the historical development of fundamental mathematical ideas from antiquity to the present. Writing Enhanced. Prerequisite: consent of instructor. Normally offered in Spring. Credit 3.

MTH 470 Special Topics in Mathematics.
Normally, this course consists of readings and individual research appropriate for the undergraduate level with subject matter for study selected by mutual agreement of student and supervisor. However, special classes may be organized when there is sufficient student interest in a particular project. Writing Enhanced. Prerequisites: 6 semester hours of advanced Mathematics and consent of instructor. This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog. Credit 3.

MTH 471 Theory and Applications of Probability and Statistics I.
Topics include basic concepts and properties of probability, random variables, statistical distributions, measures of central tendency, variance, covariance, correlation, functions of random variables, sampling distributions, and the Central Limit Theorem. Also offered as STA 471. Prerequisite: MTH 143. Normally offered in the Fall. Credit 3.

MTH 472 Theory and Applications of Probability and Statistics II.
Topics include multivariate, conditional and marginal distributions, point and interval estimation, theory of estimation, maximum likelihood estimates, hypothesis testing, likelihood ratio tests, contingency analysis, and nonparametric statistics. Also offered as STA 472. Prerequisites: MTH 244 and STA 471. Normally offered in the Spring. Credit 3.

MTH 476 Topics in Applied Mathematics I.
This course, in conjunction with MTH 376, is intended to develop a basic competence in areas of mathematics that are used in solving problems from the physical sciences. Topics will be selected from partial differential equations, multivariable and vector calculus, and complex analysis. Prerequisite: MTH 376 or consent of the instructor. Normally offered in the Spring. Credit 3.

MTH 477 Algebraic Structures.
Topics include groups, rings, fields, finite groups and Abelian groups. Writing Enhanced. Prerequisite: MTH 364 or consent of the instructor. Normally offered in the Fall. Credit 3.

MTH 484 A Survey of Mathematical Ideas.
This course is designed to bring together and supplement the technical material of other mathematics courses in the mathematics teacher-education program and relate it to the mathematics curriculum of the secondary school. This course may be applied only toward teacher certification. Prerequisite: Consent of instructor. Normally offered in the Spring and Summer I. Credit 3.

MTH 485 Mathematical Problem Solving.
This course focuses on solving mathematical problems including the use of proof as well as graphical and numerical methods. It extends and connects concepts from algebra, geometry, and calculus, including functions, graphs, complex numbers and number systems. This course may be applied only toward teacher certification. Prerequisite: Advanced standing in mathematics. Normally offered in the Fall. Credit 3.

Minor in Statistics

Requirements are adjusted to accommodate program emphases.

Emphasis on Statistical Theory
STA 379, 380, 471, 472, and two courses elected from STA 381, 470, 473, and 474.

Emphasis on Statistical Method
STA 379, 380, 381, 474, 473, and one course elected from STA 470, CS 477, MTH 394, and MTH 396.

A concentration of twelve semester hours is appropriate for students who need an understanding of statistics to augment study in another field but who do not require a minor in statistics. A typical concentration might consist of STA 379 and 380 with two additional courses selected from STA 381, 470, 471, 472, 473 and 474.

Statistics Course Descriptions

STA 169 Elementary Statistics. [MATH 1342]
This is a survey course in elementary statistics designed to acquaint students with the role of statistics in society. Coverage includes graphical descriptive methods, measures of central tendency and variation, the basic concepts of statistical inference, the notion of estimators, confidence intervals, and tests of hypotheses. Also offered as MTH 169. Prerequisite: Two years of high school algebra. Credit 3.

STA 379 Statistical Methods in Practice.
Topics include organization and presentation of data; measures of central tendency, dispersion, and position; probability distributions for discrete and continuous random variables, sampling techniques, parameter estimation, and hypothesis testing. Emphasis will be given to the use of the MINITAB statistics package. Also offered as MTH 379. Prerequisites: Three semester hours of mathematics and consent of instructor. Normally offered in the Fall, Spring, and Summer I. Credit 3.

STA 380 Statistical Design and Analysis of Experiments.
Topics include sampling designs and hypothesis testing in analysis of variance, analysis of covariance, and regression analysis. Design characteristics, model diagnostics, and hypothesis testing will be emphasized and work will be required on real data. The MINITAB and SAS statistics packages will be applied. Prerequisite: STA 379 or equivalent. Normally offered in the Spring semester. Credit 3.

STA 381 Sample Survey Methods.
The course treats principles needed in planning and conducting sample surveys. Topics include random, stratified, systematic, and cluster sampling methods as well as sub sampling techniques. Prerequisite: STA 379 or equivalent. Credit 3.

STA 470 Special Topics in Statistics.
This course is designed to accommodate independent study and research with content determined by mutual agreement of student and supervisor. However, it may also be taught as a special organized class when there is sufficient student interest in a particular project. Such topics as statistical quality control, modeling and analysis, time series analysis, Monte-Carlo techniques and bootstrapping may be included. This course may be taken for Academic Distinction credit. (See Academic Distinction Program in this catalog.) May be repeated for credit. Prerequisites: Six semester hours of advanced statistics and consent of instructor. Credit 3.

STA 471 **Theory and Applications of Probability and Statistics I.**
Topics include basic concepts and properties of probability, random variables, statistical distributions, measures of central tendency, variance, covariance, correlation, functions of random variables, sampling distributions, and the Central Limit Theorem. Also offered as MTH 471. Prerequisite: MTH 143. Normally offered in the Fall semester. Credit 3.

STA 472 **Theory and Applications of Probability and Statistics II.**
Topics include multivariate, conditional and marginal distributions, point and interval estimation, theory of estimation, maximum likelihood estimates, hypothesis testing, likelihood ratio tests, contingency analysis, and nonparametric statistics. Also offered as MTH 472. Prerequisites: MTH 244 and STA 471. Normally offered in the Spring. Credit 3.

STA 473 **Nonparametric Statistics.**
Topics include chi-square goodness-of-fit testing and inferences concerning location and scale. Specific tests include the sign test, Wilcoxon signed-rank test, the Kruskal-Wallis test, tests for randomness and trends, and contingency analyses. Prerequisites: STA 379 and consent of instructor. Credit 3.

STA 474 **Regression Modeling and Analysis**.
Topics include model estimation and testing, model diagnostics, residual analysis, variables selection, and multicollinearity. Work will be required on real data with the use of the MINITAB and SAS statistics packages. Prerequisites: STA 379 and consent of instructor. Credit 3.

SCHOOL OF MUSIC

Accredited by National Association of Schools of Music

Chair: TBA (936) 294-1360

Faculty: Randy Adams, Wayne Barrett, Rodney Cannon, Patricia Card, David Clemmer, Barbara Corbin, Kathy Daniel, Peggy DeMers, Karen Epps-Miller, Trent Hanna, Allen Hightower, Kristin Hightower, Henry Howey, Kyle Kindred, Mary Kay Lake, Matthew McInturf, Christopher Michel, Sheryl Murphy-Manley, Sergio Ruiz, Scott Phillips, Scott Plugge, Carol Smith, Jay Whatley, Andrew Wilson

Website: www.shsu.edu/music/

Mission

The Sam Houston State University School of Music exists as a community of musician-educators whose mission is:

- To educate and train students for lives of service and contribution—as teachers, performers, composers, therapists and scholars;
- To provide and nurture a nucleus of musical life for the larger community;
- To educate the university student population regarding music's intrinsic value as a part of the human experience and its central role in human culture; and
- To mutually encourage one another in professional growth and attainment

Our mission encompasses a variety of programs and curricula, traditional and innovative which are regularly examined for effectiveness, quality and relevance. It includes our commitment to a combination of:

- Classroom studies in music and
- The live performance of music, individually and collectively, as central to music study, development and knowledge.

As an integral part of our mission, we commit ourselves to continuing steps toward realizing the full potential of community, both as teachers and as colleagues; further, we commit to interaction with our students that emphasizes personal attention and interest in their total musical/intellectual development.

Academic Programs

- Bachelor of Music: Performance Track
  Teacher Certification Track
  Theory/Composition Track
- Bachelor of Music: Music Therapy Track

The School of Music offers instruction in the following applied areas: Bassoon, Clarinet, Euphonium, Flute, Guitar, Horn, Oboe, Organ, Percussion, Piano, Trumpet, Trombone, Tuba, Saxophone, String Bass, Viola, Violin, Violoncello, and Voice.

Highlights

All music majors receive training in applied music, music theory, music history, and, where appropriate, professional training specific to a particular field. Each student receives private instruction in his or her principal applied area (such as piano, trumpet, or voice), participates in musical ensembles (such as wind ensemble, orchestra, choir, or jazz band), and is afforded a multitude of opportunities to grow and develop as a musician. Students develop keyboard skills in a state-of-the-art piano lab and have their musical training enhanced in a Computer Assisted Instruction lab.

Career Opportunities

Graduates of the School of Music are successfully employed around the state, the nation, and internationally as:

- music educators

- music therapists
- musical performers
- music scholars
- music composers

Student Organizations

Numerous student organizations actively promote enrichment across a wide array of musical interests.

- **American Choral Directors Association**
- **American String Teachers Association/Symphony Association**—The group's membership consists of string students at Sam Houston State University and was organized to support string pedagogy on the SHSU campus.
- **Kappa Kappa Psi**—National band fraternity. Provides valuable service to the school and serves to promote excellence in band music.
- **Music Educators National Conference**—National organization for music education. Membership in this student chapter is open to music education majors.
- **Mu Tau Omega**—National organization for music therapy. Membership open to interested students committed to the study and/or advancement of music therapy in community, educational, and clinical settings.
- **Phi Mu Alpha**—International music fraternity for men. Provides valuable service to the school and community.
- **Pi Kappa Lambda**—National music honor society. Invitation to membership is limited to the top students from the junior, senior, and graduate classes by vote of the faculty members of Pi Kappa Lambda.
- **Sigma Alpha Iota**—International music fraternity for women. Provides valuable service to the school and community.
- **Tau Beta Sigma**—National band sorority. Supports band studies and provides valuable support service to instrumental ensembles and to the school.

Internships

Following the completion of all coursework, the music therapy student must fulfill a 900-1040 hour (five-six month) clinical internship at an AMTA national roster internship site or an SHSU university-affiliated internship site. The intern must be supervised on-site by a qualified and approved MT-BC supervisor. The internship is the final requirement for graduating with the bachelor's degree in music therapy. Once it has been completed, the individual is eligible to sit for the board certification examination. A passing grade on the exam will result in board certification and the credentials MT-BC.

Scholarships

Scholarships are available both from the School of Music and from the University to support student study. For more information regarding scholarships, prospective or current students should contact the Chair of the School of Music. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672. Interested persons may also gather more information from the School of Music website.

Program Specific Requirements

General Requirements for Music Majors

- Students desiring to major in music must have previous musical experience. All students entering the School of Music as music majors must audition in their major performance area and be accepted for a specific degree plan (e.g Bachelor of Music: Performance, Teacher Certification, Theory/Composition; Bachelor of Music: Music Therapy).
- All applied music students must take jury examinations at the end of each semester.
- Before students majoring in music are allowed to enroll for 300 level courses in applied music, they must pass a proficiency examination, normally administered at the end of their fourth semester of study.

- As a component of all music degrees, students must pass a proficiency examination in piano. Students who do not have the requisite skills may enroll in piano classes, which are designed to prepare students for the proficiency exam.
- Concert attendance (12 per semester) is required of all undergraduate music majors for at least six semesters of their college study. Transfer students may receive a credit or waiver for up to three semesters. Details of this requirement are printed in the School of Music Student Handbook.
- Enrollment in a major ensemble is expected of full-time students each long semester. The minimum requirement is seven semesters for B.M. with teacher certification or eight semesters for other majors. For piano principals (non-performance majors), accompanying (ENS 110) will satisfy a portion of this requirement. For piano performance majors, accompanying (ENS 110) satisfies the major ensemble requirement. Further details are printed in the School of Music Student Handbook.

Curriculum

Required Courses for Majors

Bachelor of Music: Performance Track, 75 hours
Teacher Certification Track, 70 hours
Theory/Composition Track, 82-86 hours
Bachelor of Music: Music Therapy Track, 86 hours

Teacher Certification Track

Bachelor of Music

A curriculum for the Bachelor of Music degree with teacher certification, when successfully completed, qualifies a candidate for All-Level State Certification to teach music in early childhood through twelfth grade.

Programs with Choral or Instrumental Emphasis
Choral Emphasis
(for students preparing to teach vocal music)

First Year	Credit
MUS 122, 123, 124, 125	8
MUS 117, 118	2
MUS 113 or 116	1
MUS 213 or 216	1
Applied lessons (100 level)	4
Ensemble (100 or 200 level)	2
ENG 164, 165	6
HIS 163, 164	6
MTH 164 or 170	3
Component Area 6 (Computer Literacy)	3
KIN 215	1
	37

Second Year	Credit
MUS 222, 223, 224	6
MUS 119	1
MUS 226	2
MUS 138, 376	6
Applied lessons (100 level)	4
Ensemble (100 or 200 level)	2
Component Area 4 (Literature)	6
Component Area 5 (Social Science)	3
Component Area 3 (Natural Science)	4
Component Area 4 (Cultural Studies)	3
	37

Third Year	Credit
MUS 377, 378	6
MUS 424	2
MUS 362, 363	6
MUS 313 or 316	1
MUS 310	1
MUS 462	3
MUS 367	3
Applied lessons (300 level)	4
Ensemble	2
SCM 384	3
POL 261	3
SED 374	3
	37

Fourth Year	Credit
Applied lessons with Jr. recital	2
Ensemble	1
POL 285	3
RDG 392	3
SED 394	3
SED 464	3
Component Area 3 (Natural Science)	4
SED 480, SED 496, EED 491	9
	28

Instrumental Emphasis
(for students preparing to teach instrumental music)

First Year	Credit	Second Year	Credit
MUS 122, 123, 124, 125	8	MUS 222, 223, 224	6
MUS 113*, 116	2	MUS 226	2
Applied lessons** (100 level)	4	MUS 213, 216	2
Ensemble** (100 or 200 level)	2	MUS 138, 376	6
ENG 164, 165	6	Applied lessons (100 level)	4
HIS 163, 164	6	Ensemble (100 or 200 level)	2
MTH 164 or 170	3	Component Area 4 (Literature)	6
Component Area 6		Component Area 5 (Social Science)	3
(Computer Literacy)	3	Component Area 3 (Natural Science)	4
KIN 215 (or approved substitute)	1	Component Area 4 (Cultural Studies)	3
	35		38

Third Year	Credit	Fourth Year	Credit
MUS 377, 378	6	Applied lessons with Jr. recital	2
MUS 424	2	Ensemble (300 or 400 level)	1
MUS 362, 363	6	RDG 392	3
MUS 313, 316	2	SED 394	3
MUS 310, 311	2	SED 464	3
MUS 367	3	POL (200-level)	3
MUS 461	3	Component Area 3 (Natural Science)	4
Applied lessons (300 level)	4	SED 480, SED 496, EED 491	9
Ensemble (300 or 400 level)	2		28
POL 261	3		
SED 374	3		
SCM 384	3		
	39		

* class instrument requirement will be reduced by one semester in the student's applied area

COAS

Performance Track
Bachelor of Music

The curriculum in music performance is designed to challenge and develop students with exceptional performance ability and potential. Among other goals, students who pursue this degree may be seeking careers as professional performers and/or planning to further their studies with graduate work.

Instrumental (Non-Keyboard) Principal

First Year	Credit	Second Year	Credit
MUS 122, 123, 124, 125	8	MUS 222, 223, 224	6
Applied lessons (100 level)	4	MUS 226	2
Ensemble	2	MUS 138, 376	6
ENG 164, 165	6	Applied lessons (100 level)	4
HIS 163, 164	6	Ensemble	2
MTH 164 or 170	3	Component Area 4 (Literature)	3
Component Area 6 (Computer Literacy)	3	Component Area 5	3
	32	Component Area 3 (Natural Science)	4
		KIN 215	1
			31

Third Year	Credit	Fourth Year	Credit
MUS 377, 378	6	MUS 362	3
MUS 363	3	Advanced music theory elective	3
MUS 461	3	MUS 424	2
Applied lessons (300 level)	4	Applied lessons (300 level)	8
Applied lessons with Jr. recital	4	MUS 417	1
Ensemble	2	Ensemble	2
Component Area 4 (Cultural Studies)	3	POL (200-level)	3
POL 261	3	Component Area 3 (Natural Science)	4
Electives	5	Electives	6
	33		32

Piano or Organ Principal

First Year	Credit	Second Year	Credit
MUS 122, 123, 124, 125	8	MUS 222, 223, 224	6
Applied lessons (100 level)	4	MUS 226	2
Ensemble	2	MUS 138, 376	6
ENG 164, 165	6	Applied lessons (100 level)	4
HIS 163, 164	6	Ensemble	2
MTH 164 or 170	3	Component Area 4 (Literature)	3
Component Area 6		Component Area 5	3
(Computer Literacy)	3	Component Area 3 (Natural Science)	4
	32	KIN 215	1
			31

Third Year	Credit	Fourth Year	Credit
MUS 377, 378	6	MUS 465	3
MUS 363	3	Advanced music theory elective	3
MUS 492	3	MUS 424	2
Applied lessons (300 level)	4	Applied lessons (300 level)	8
Applied lessons with Jr. recital	4	MUS 417	1
Ensemble	2	Ensemble	2
Component Area 4 (Cultural Studies)	3	POL (200-level)	3
POL 261	3	Component Area 3 (Natural Science)	4
Electives	5	Electives	6
	33		32

Vocal Principal

First Year	Credit	Second Year	Credit
MUS 122, 123, 124, 125	8	MUS 222, 223, 224	6
MUS 117, 118	2	MUS 119	1
Applied lessons (100 level)	4	MUS 226	2
Ensemble	2	MUS 138, 376	6
ENG 164, 165	6	Applied lessons (100 level)	4
HIS 163, 164	6	Ensemble	2
MTH 164 or 170	3	Component Area 4 (Literature)	3
Component Area 6		Component Area 5	3
(Computer Literacy)	3	Component Area 3 (Natural Science)	4
	34	KIN 215	1
			32

Third Year	Credit
MUS 377, 378	6
MUS 363	3
MUS 462	3
Applied lessons (300 level)	4
Jr. recital	4
Ensemble	2
POL 261	3
GER 141	4
GER 142	4
	33

Fourth Year	Credit
MUS 424	2
Applied lessons (300 level)	8
MUS 417	1
Advanced music theoryApplied lessons with elective (2 courses)	6
Ensemble	2
GER 263	3
GER 264	3
POL (200-level)	3
Component Area 3 (Natural Science)	4
	32

Literature Track

Bachelor of Music

The major in music literature curriculum, strongly concentrated on the study of music history and literature, is designed principally to prepare the student for entry into graduate study in musicology.

First Year	Credit
MUS 122, 123, 124, 125	8
Applied lessons (100 level)	4
Ensemble	2
ENG 164, 165	6
HIS 163, 164	6
MTH 164 or 170	3
Component Area 6 (Computer Literacy)	3
	32

Second Year	Credit
MUS 222, 223, 224	6
MUS 226	2
MUS 138, 376	6
Applied lessons (100 level)	4
Ensemble	2
Component Area 4 (Literature)	3
Component Area 5	3
Component Area 3 (Natural Science)	4
KIN 215	1
	31

Third Year	Credit
MUS 377, 378	6
Advanced music theory electives	3
Applied lessons (300 level)	4
Ensemble	2
GER 141	4
GER 142	4
Advanced music literature electives	6
Component Area 4 (Cultural Studies)	3
	32

Fourth Year	Credit
Advanced music theory electives	9
MUS 424	2
Applied lessons (300 level)	4
Ensemble	2
POL 261, POL (200-level)	6
Component Area 3 (Natural Science)	4
Advanced music literature electives	6
	33

Theory/Composition Track

Bachelor of Music

The major in music theory/composition is designed to prepare the student for graduate study in the field. Students who normally pursue this degree are those who have career interests as composers or as teachers of theory/composition.

First Year	Credit	Second Year	Credit
MUS 122, 123, 124, 125	8	MUS 222, 223, 224	6
Instrumental techniques	1	MUS 226	2
Applied lessons (100 level)	4	MUS 138, 376	6
Ensemble	2	Instrumental techniques (2 courses)	2
ENG 164, 165	6	Applied lessons (100 level)	4
HIS 163, 164	6	Ensemble	2
MTH 164 or 170	3	Component Area 4 (Literature)	3
Component Area 6		Component Area 5	3
(Computer Literacy)	3	Component Area 3 (Natural Science)	4
KIN 215	1	Component Area 4 (Cultural Studies)	3
	34		35

Third Year	Credit	Fourth Year	Credit
MUS 377, 378	6	MUS 465	3
MUS 362	3	Advanced music theory electives	6
MUS 424	2	Applied lessons (300 level)	4
Advanced music theory electives	6	PNO 301X*	4
MUS 371, 372	6	MUS 417	1
Applied lessons (300 level)	4	Ensemble	2
Ensemble	2	GER or FRN 142	4
GER or FRN 141	4	POL 261, POL (200-level)	6
	33	Component Area 3 (Natural Science)	4
			34

* For piano principals, this requirement is satisfied by applied lessons

Music Therapy Track

Bachelor of Music

The music therapy curriculum prepares the student for a career as a music therapist and includes the requisite professional certification. A one-semester internship concludes this course of study.

First Year	Credit	Second Year	Credit
MUS 122, 123, 124, 125	8	MUS 222, 223, 224	6
MUS 113	1	MUS 226	2
Applied lessons (100 level)	4	MUS 138	3
Ensemble	2	MUS 238, 239	6
ENG 164, 165	6	MUS 162	3
HIS 163, 164	6	Applied lessons (100 level)	4
MTH 164 or 170	3	Ensemble	2
KIN 215 or accepted substitute	1	PSY 131	3
	31	Component Area 4 (Literature)	3
			32

Third Year	Credit
MUS 210	2
MUS 213	1
MUS 310	1
MUS 365, 366	6
MUS 336	3
MUS 368	3
Applied lessons (300 level)	4
Ensemble	2
Component Area 6 (Computer Literacy)	3
PSY 331	3
SOC 168	3
SPD 231	3
	34

Fourth Year	Credit
MUS 210	2
MUS 165 or 166	3
MUS 313	1
MUS 495, 496	6
MUS 376, 377 or 378	3
Ensemble	2
BIO 245	4
PHL 471	3
POL 261, POL (200-level)	6
Component Area 3 (Natural Science)	4
	34

Fifth Year	Credit
MUS 497, 498 (One-semester internship)	6

Minor in Music

Students who elect music as a minor must complete a minimum of eighteen hours in theory, applied music, or music literature, six of which must be advanced (300 level and above). Up to twelve hours of applied music may be used in the minor. Students who desire to enroll in private instruction must audition for the school in their respective applied areas.

Students who choose music as a teaching minor must complete the following courses.

MUS 122, 123, 124, 125MUS 138MUS 367, 368Applied Music (4 hours)Music Electives (6 hours)Piano Proficiency ExaminationEnsemble Enrollment for five semesters

All-level certification to teach music is not available to students who minor in music.

Music Course Descriptions

ENSEMBLES

The following performance groups are open to all students of the University who qualify by audition:

Jazz Band	ENS 115	Band	ENS 116, 316
Orchestra	ENS 117, 317	Opera Workshop	ENS 119
Chamber Music	ENS 118	Production Workshop	ENS 219
Accompanying	ENS 110	Wind Ensemble	ENS 216, 416
Mixed Chorus	ENS 111, 311		

Not more than eight hours earned in ensembles may be counted toward a degree unless specified.

ENS 110	Major ensemble for keyboard students (performance major only).
ENS 111, 311	Major ensemble for vocal students.
ENS 116, 216, 316, 416	Major ensemble for wind and percussion students.
ENS 117, 317	Major ensemble for string students.

For information regarding Common Course numbers for Ensemble courses, please refer to the Common Course listing in this catalog.

Applied Music

MUS 110X Class Piano for Non-Music Majors. [MUSI 1101]
Basic techniques of piano playing. Development of musical literacy with respect to the keyboard. Designed for the non-music major. Two hours lecture and practice. Credit 1**.**

MUS 111X Class Piano, Level 1. [MUSI 1181]
Basic techniques of piano playing. Development of musical skills with respect to the keyboard. Designed for the music major who has little familiarity with the keyboard. Two hours lecture and practice. Credit 1.

MUS 112X **Class Piano, Level 2.** [MUSI 1182]
Basic techniques of piano playing. Development of musical skills with respect to the keyboard. Prerequisite: MUS 111X. Credit 1.

MUS 113X **Class Piano, Level 3.** [MUSI 2181]
Basic techniques of piano playing. Further development of musical skills with respect to the keyboard. Prerequisite: MUS 112X. Credit 1**.**

MUS 114X **Class Piano, Level 4.** [MUSI 2182]
Basic techniques of piano playing. Enhancement of musical skills to provide minimum competencies on keyboard necessary for completion of the music degree. Prerequisite: MUS 113X. Credit 1.

MUS 113: **Study of Woodwinds.** [MUSI 1166]: [MUSI 1167]
MUS 116 Basic techniques of teaching and playing clarinet, saxophone, oboe, bassoon, flute, and piccolo. Three hours lecture and practice. Credit 1 each.

MUS 117: **Singers Diction. 117: English and Italian. 118: French. 119: German.**
MUS 119 These courses are designed to familiarize singers with the pronunciation of each language as sung in choral music, recital literature, and opera. Prerequisites: MUS 117, none; MUS 118 and 119, MUS 117. Credit 1 each.

MUS 162 **Fundamentals of Guitar.** [MUSI 1303]
Basic guitar technique for the beginning student is combined with a study of the fundamentals of music notation. Not open to music majors. No prerequisite. Credit 3.

MUS 165: **Fundamentals of Singing.**
MUS 166 A study of the physiology of vocal music production and the development of the singing voice. Emphasis on correct breathing, tone placement, vowel formations, stage presence and musical interpretation. Not open to students majoring in Music. Credit 3 each.

MUS 213: **Study of Brasses.** [MUSI 1168]:[MUSI 2168]
MUS 216 Basic techniques of teaching and playing trumpet, trombone, French horn, baritone, and tuba. Three hours lecture and practice. Credit 1 each.

MUS 226 **Conducting I.**
An introduction to the basic techniques of conducting choral and instrumental music. Prerequisite: Sophomore standing. Credit 2.

MUS 262 **Advanced Guitar.**
Continuation of fundamentals of guitar with guitar techniques for advanced students combined with study of fundamentals of music notation. Credit 3.

MUS 310 **Study of Percussion.**
Basic techniques of teaching and playing all percussion instruments. Three hours lecture and practice. Credit 1.

MUS 313: **Study of Strings.**
MUS 316 Basic techniques of teaching and playing violin, viola, violoncello, and string brass. Three hours lecture and practice. Credit 1 each.

MUS 417 **Recital.**
A public solo performance reflecting the work of one full semester of preparation at the upper division level under supervision of the applied music faculty. The student must be concurrently enrolled for applied music instruction and must have his/her program approved by his/her professor. A Recital Hearing must be passed at least two weeks prior to the scheduled performance. Credit 1.

MUS 424 **Conducting II.**
The study and application of advanced conducting technique as applied to instrumental and choral ensembles with emphasis on the development of analytical and interpretative skills. Prerequisite: MUS 226 or consent of instructor. Three hours lecture. Credit 2.

MUS 461 **Techniques for Wind and String Instruments.**
A study of the literature, methods, and teaching techniques of wind and string instruments. May be taken by conference. Prerequisites: Senior standing in music performance and consent of instructor. Credit 3.

MUS 462 Vocal Pedagogy and Techniques.
Introduction to the teaching of voice, in both the private and group settings. Students will survey different schools of approach and study of the physiology of singing. Credit 3.

Applied Music Instruction

BSN 101X, 301X, 302X	Bassoon	PER 101X, 301X, 302X	Percussion
HRN 101X, 301X, 302X	Horn	TRP 101X, 301X, 302X	Trumpet
STB 101X, 301X, 302X	String Bass	FLU 101X, 301X, 302X	Flute
CEL 101X, 301X, 302X	Cello	PNO 101X, 301X, 302X	Piano
OBO 101X, 301X, 302X	Oboe	VLA 101X, 301X, 302X	Viola
TBA 101X, 301X, 302X	Tuba	GUI 101X, 301X, 302X	Guitar
CLR 101X, 301X, 302X	Clarinet	SAX 101X, 301X, 302X	Saxophone
ORG 101X, 301X, 302X	Organ	VLN 101X, 301X, 302X	Violin
TRB 101X, 301X, 302X	Trombone	VOI 101X, 301X, 302X	Voice
EUP 101X, 301X, 302X	Euphonium		

Applied Music Fees. Students enrolled in Applied Music Instruction are required to pay a fee at the time of registration on a per-course basis as follows:

1-hour course	$30.00	3-hour course	$75.00
2-hour course	$60.00	4-hour course	$75.00

There is no additional charge for use of practice rooms.

Music Theory and Composition

MUS 122 Theory of Music I. [MUSI 1211]
An introduction to the fundamental materials and structures of music. All diatonic scales and intervals, notation and structure of basic rhythmic organizations, and simple vertical sonorities are explored, using the keyboard as an adjunct tool. A study of tonality, key systems, and simple phrase and period forms are applied to creative work in order to integrate all concepts with the student's work in applied and historical studies. The semester ends with an introduction to the study of tertian harmony as exemplified in tonal music and including diatonic triads. Credit 2.

MUS 123 Theory of Music II. [MUSI 1212]
Continuation of THEORY OF MUSIC I, expanding the tertian harmonic vocabulary to include the dominant seventh chord, and an introduction to secondary sevenths, secondary dominants and leading tone chords, and modulation. The study of ternary, binary, and through-composed forms and their application to creative work. Prerequisite: MUS 122. Credit 2.

MUS 124 Musicianship I. [MUSI 1216]
Intensive drill in the development of sight-singing and aural skills. The material used is coordinated with that of THEORY I. Credit 2.

MUS 125 Musicianship II. [MUSI 1217]
Continuation of MUSICIANSHIP I. Material is coordinated with that of THEORY II. Prerequisites: MUS 122 and 124. Credit 2.

MUS 161 Introduction to The Study of Music. [MUSI 1301]
The study of the fundamentals of music, including major and minor scales, rhythm, chords, sight-reading, and ear-training. Not open to music majors or minors. Credit 3.

MUS 222 Theory of Music III. [MUSI 2211]
A continuation of the study of harmonic and melodic materials of tonal music expanded to include all characteristic diatonic and chromatic resources and their application in keyboard work and creative projects. Formal procedures studied include the larger traditional structures such as the rondo, sonata, and contrapuntal forms. Prerequisites: MUS 123 and 124. Credit 2.

MUS 223 Theory of Music IV. [MUSI 2212]
A study of musical materials and structures that evolved in the late nineteenth and twentieth centuries. Emphasis is placed on the investigation of the entire panorama of twentieth century music including folk, ethnic, and jazz idioms in addition to the developments in the classical tradition. Prerequisite: MUS 222. Credit 2.

MUS 224 **Musicianship III.** [MUSI 2216]
Continuation of MUSICIANSHIP II. Material is coordinated with that of THEORY III. Prerequisites: MUS 123 and 125. Credit 2.

MUS 362 **Orchestration And Analysis.**
A study of basic techniques of instrumentation, including ranges, transpositions, and characteristics of band and orchestral instruments. Practical application in the form of projects for various instrumental combinations. Prerequisite: MUS 222. Credit 3.

MUS 363 **Structure and Analysis.**
A study of musical structure and design from all historical periods. Introduces diverse methods of musical analysis to gain an ability to distinguish various stylistic idioms. Emphasis is placed on analytical findings as it relates to application in teaching, performance, music therapy, conducting, and/or composition. Prerequisite: MUS 223. Credit 3.

MUS 370 **Class Composition.**
An introduction to the craft of composition. Projects involve the application of basic creative techniques which generate complete pieces, diverse stylistic idioms, and aesthetic considerations. May be repeated for credit. Prerequisites: MUS 222 and 224 or permission of instructor. Credit 3.

MUS 371, 372 **Junior Composition.**
The study and practice of strict composition. Reference is made to the practices of the eighteenth and nineteenth centuries, but with emphasis on the stylistic idioms of the twentieth century. May be taken by conference. Prerequisite: MUS 223. Credit 3 each.

MUS 464 **Seminar in Composition.**
Creative activity in the composition of larger forms under individual faculty supervision. Prerequisite: MUS 372. Credit 3.

MUS 465 **Counterpoint and Analysis.**
A survey of polyphony of the eighteenth through the twentieth centuries with emphasis on creative projects. Prerequisite: MUS 223. Credit 3.

MUS 474 **Twentieth-Century Musical Styles.**
Trends, techniques, and the various styles of musical composition in the twentieth century, beginning with Impressionism, studied conceptually and aurally. Concepts are applied to exercises in composition. Prerequisite: MUS 223. Credit 3.

Music Education, Literature and History

MUS 138 **Survey Of Music Literature.** [MUSI 1308]
The fundamentals of music terminology, standard instrumental and vocal forms, and representative composers and compositions from secular and sacred music of most eras. Writing Enhanced. Prerequisites: MUS 122, 124 or school consent. Credit 3.

MUS 264 **History of Rock, Jazz, and Popular Music.** [MUSI 1310]
A survey of the history of jazz, rock, and popular music beginning with their common origins in African, European, and late 19th-century southern folk music. Continues through the latest trends and includes individual musicians as well as stylistic details. No prerequisite; for non-music majors. Credit 3.

MUS 265 **Music Appreciation.** [MUSI 1306]
A general survey of music literature designed for the non-music major. Representative composers and their works are studied through recordings, lectures, reports, and live performances. Credit 3.

MUS 339 **Introduction to Music Education.**
A survey of the responsibilities, competencies, and contemporary issues that pertain to the professional music educator. Credit 3.

MUS 367, 368 **Studies in Music for Children.**
Introduction to Kodály philosophy and materials, Orff techniques and instruments, folk song analysis, solfege, Dalcorze concepts and methods of other pedagogues in the field of elementary music. Several types of curricula for grades K-6 are presented. Prerequisite: MUS 123. Credit 3 each.

MUS 376, 377,378 **History of Music.**
A study of musical styles, forms, and textures in history from antiquity to the present. The first course (MUS 376) includes music from antiquity through the Renaissance. The second course (MUS 377) covers the period from Monteverdi to Beethoven. The third course (MUS 378) begins with the later works of Beethoven and extends to the present era. MUS 377 and 378 are Writing Enhanced. Prerequisites: MUS 138; junior standing or consent of instructor. Credit 3 each.

MUS 468 **Seminar in Research and Creative Activities.**
A course in which the undergraduate student may pursue advanced specialized study under faculty supervision in the areas of composition, music literature, analysis, and research. May be repeated for credit. (This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog.) Credit 3.

Music Therapy

MUS 210 **Practicum in Music.**
Supervised pre-clinical experience in community settings; each semester of study is correlated with the population being considered in the corresponding core music therapy course. Credit 1 (4 semesters).

MUS 238 **Introduction to Music Therapy**.
A survey of the role of music as therapy in educational, psychiatric, hospital, nursing home, and prison settings. No prerequisite. Credit 3.

MUS 239 **Psychology of Music.**
A study of the effect of music on the mind. Topics include musical acoustics, music perception, and experimental research in music. No prerequisite. Credit 3.

MUS 336 **Instrumental Skills for the Music Therapy Setting.**
Study of instrumental skills as applied in the music therapy setting utilizing guitar, dulcimer, keyboard percussion, and Latin American instruments. Research findings in the music therapy literature will be used in structuring improvisational opportunities for specific music therapy populations. Prerequisite: Music or music therapy major. Credit 3.

MUS 365 **Observation and Measurement in Music Therapy.**
A study of current assessment and evaluation procedures used in music therapy and the application of observational recording techniques in educational, social, and therapeutic settings. Prerequisite: Admission to music therapy program. MUS 210 must be taken concurrently. Credit 3.

MUS 366 **Music Therapy Techniques I.**
An examination of music therapy techniques used in the special education setting and current legislation related to education of students with disabilities and music/music therapy to be provided. Prerequisite: MUS 365. MUS 210 must be taken concurrently. Credit 3.

MUS 495 **Music Therapy Techniques II.**
A study of music therapy procedures used with adults in aging adult settings and an examination of issues concerning the use of music therapy within this population. Prerequisites: MUS 365. MUS 210 must be taken concurrently. Credit 3.

MUS 496 **Music Therapy Techniques III.**
A seminar presentation of contemporary issues in the field of music therapy. Prerequisite: MUS 365. MUS 210 must be taken concurrently. Credit 3.

MUS 497 **Internship in Music Therapy.**
First three-month period of supervised clinical experience at site approved by the American Music Therapy Association (AMTA). Prerequisite: Completion of all coursework. Credit 3.

MUS 498 **Internship in Music Therapy.**
Second three-month period of supervised clinical experience. Prerequisite: MUS 497. Credit 3.

DEPARTMENT OF PHYSICS

Chair: Rex Isham (936) 294-1607; isham@shsu.edu

Faculty: Barry Friedman, Hugh Hall, Renee James, Gan Liang, Charles Meitzler, Brian Oetiker

Website: www.shsu.edu/~phy_www/

Physics is the study of how nature behaves. It is concerned with the basic principles of the universe and is one of the foundations on which other physical sciences are based. The beauty of physics is exhibited by the simplicity of its fundamental theories and in the way a small number of basic concepts, equations and assumptions can expand the students' understanding of the world.

Mission

The mission of the Department of Physics is to promulgate the ability to critically think about nature through teaching and to develop the inquisitiveness to seek additional knowledge by research. In conducting this mission, the Department of Physics will provide capable scientists that can make positive contributions to our society. In order to accomplish this mission, the Department of Physics will take the following steps:

- Improve success in learning and research among all students in the department.
- Develop additional methods to plan and assess the program in the department.
- Recruit and retain qualified, motivated students.
- Promote diversity in the faculty and students.
- Collaborate with other institutions and departments to enhance education opportunities.
- Develop and implement additional educational services to off-campus audiences.
- Provide assistance to teachers in the schools preparing the future students for the institution.

Academic Programs

- BS in Physics
- BS in Physics/Engineering Dual Degree
- Pre-engineering Program
- Teacher Certification – Physical Science

Physics students may pursue a Bachelor of Science Degree in Physics or a dual degree consisting of a Bachelor of Science in Physics from Sam Houston State University and a Bachelor's degree in a engineering field at a university with an accredited degree program in the chosen engineering field. Students also may enroll in a two-year pre-engineering program. The Bachelor of Science Degree in Physical Science with Secondary Certification is available to students seeking careers in secondary education.

Career Opportunities

Graduates with a Bachelor of Science Degree either pursue further education at the graduate level or enter the workforce. Approximately one-half of the graduates pursue graduate study seeking either the Master of Science or Ph.D. degree. The remainder primarily enter the engineering profession but may also enter the fields of computer science and education.

Suggested Minors

All Physics majors meet the requirements for a minor in mathematics.

Student Organizations

Society of Physics – The Society of Physics is a nationally recognized organization. The society sponsors field trips, campus visits by potential students and attendance at professional meetings.

Scholarships

The Physics Department awards scholarships on a competitive basis. Other general scholarships are available from the University. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672. Prospective students should contact the chair of the Physics Department, Box 2267, Huntsville, Texas 77341 or the website.

Program Specific Requirements

Physics students will learn the simplicity of nature and the unifying aspects of the laws of physics. This is accomplished by recognizing physical problems, developing a hypothesis and predicting the consequences of it, performing experiments to test the predictions, and formulating the results into a theory. The skills of inquiry, observation, and experimentation are used in all scientific careers including engineering, business, teaching, and administration.The Physics Department has basic research laboratories in selected fields and provides opportunities for advanced students to be involved in research projects. The University operates computer laboratories containing desktop computers, and work stations at several locations on campus.

Curriculum

Required Courses For Major

The Bachelor of Science degree requires 37 hours in Physics as follows:

Required Courses: PHY 141, 142, 245, 391/311, 466, 468, 470, 471, 495	31 hrs.
Advanced Physics Laboratory Electives: PHY 393/313, 395/315, or 433/413	6 hrs.
Advanced Physics Electives: PHY 467, 496	

All Physics majors meet the requirements for a minor in mathematics.

Major in Physics

Bachelor of Science

First Year	Credit	Second Year	Credit
PHY 138*, 141	4-7	PHY 142, 245	8
ENG 164, 165	6	MTH 244	4
MTH 142, 143	8	Component Area 4 (Literature)	3
CHM 138/118, 139/119	8	ENG (200 level or higher)	3
KIN 215	1	POL 261, POL (200-level)	6
KIN activity elective	1	HIS 163, 164	6
	28-31	CS 162 or 164	3
			33

Third Year	Credit	Fourth Year	Credit
PHY 391/311, 471	7	PHY 466, 468, 470, 495	12
MTH 376, 476	6	Advanced PHY elective	6
BIO 161/111, 162/112 or GEL 133/113, 134/114	8	Advanced General elective	8-11
Component Area 4 (Cultural Studies)	3	MTH (Advanced) or Science (Advanced)	6-8
Component Area 5	3		32-37
Component Area 4 (Visual & Performing Arts)	3		
	30		

Physical Science with Secondary Certification

Bachelor of Science

First Year	Credit	Second Year	Credit
PHY 138*, 141	4-7	PHY 142, 245	8
CHM 138/118, 139/119	8	CHM 238/218, 239/219	8
MTH 142, 143	8	MTH 244	4
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	Component Area 4 (Cultural Studies)	3
KIN 215	1	POL 261, POL (200-level)	6
KIN activity elective	1	CS 133, 162 or 164	3
	34-37		35

Third Year	Credit	Fourth Year	Credit
PHY 391/311, 395/315, 397/317	12	PHY (Advanced)	14
SCM 161 or 384	3	SED 394, 464, 480, 496, 497	15
Component Area 4 (Visual & Performing Arts)	3	CHM (Advanced)	4
SED 374, 383, RDG 392	9		33
Component Area 5	3		
CHM 241, 440	8		
	38		

* A student may need preparatory work in mathematics or might be eligible for advanced placement, either of which necessitates adjustment of the schedule. Such a student should consult a member of the physics or mathematics faculty concerning his/her schedule. PHY 138 is considered a preparatory course in physics and as such cannot be used to meet major hour requirements for the B.S. degree.

Minor in Physics

A minor in Physics requires a minimum of 24 hours of coursework and shall include PHY 141 and 142, 245, 391/311, and eight semester hours of advanced electives in physics.

Physics/Engineering Dual Degree

First Year	Credit	Second Year	Credit
PHY 141	4	PHY 142, 245	8
MTH 142, 143	8	MTH 244	4
CHM 138/118, 139/119	8	POL 261, POL (200-level)	6
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	ENG 330	3
KIN 215	1	IT 161	3
	33	KIN elective	1
		Component Area 6 (Computer Literacy)	3
		CS 162 or 164	3
			34

Third Year	Credit	Fourth Year
PHY 395/315, 360, 361, 391/311	14	University with Recognized Accredited
Engineering		Degree Program
Component Area 4 (Visual & Performing Arts)	3	
MTH 376, 476	6	
PHY (Advanced)**	3-4	
Component Area 5	3	
Advanced Elective	3	
	32-33	

** Advanced PHY electives include PHY 393/313, 431, 433/413, 466, 468, 471, and 488.

Pre-Engineering

Students wishing to major in any of the many fields of engineering may take their first two years in pre-engineering at Sam Houston State University and transfer to a college of engineering to complete their degree requirements.

Pre-Engineering

First Year	Credit	Second Year	Credit
PHY 141	4	PHY 142, 245	8
MTH 142, 143	8	MTH 244	4
CHM 138/118, 139/119	8	POL 261, POL (200-level)	6
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	ENG 330	3
KIN 215	1	IT 161	3
	33	KIN elective	1
		Component Area 6 (Computer Literacy)	3
			34

For the Dual Degree Plan the student completes three years in Physics at Sam Houston State University and the curriculum in an engineering field at a university with a recognized accredited degree program in the chosen engineering field. After successfully completing this program, the student receives two Bachelor of Science degrees, one in Physics from Sam Houston State University and one in an engineering specialty from the university with the recognized accredited engineering degree program. The applicable engineering specialties are aerospace, agriculture, chemical, civil, electrical, industrial, mechanical, nuclear, petroleum, and radiation protection engineering. For the chemical engineering option, a Bachelor of Science in Chemistry would be received from Sam Houston State University.

For more information on this program contact:

Dual Degree Plan Coordinator
Department of Physics
Sam Houston State University
Huntsville, Texas 77341-2267

Students in either of these programs should consult with the Physics/Engineering advisor to adjust the recommended programs to meet the requirements of the particular field of engineering at the terminal university. To contact the Department of Physics call (936) 294-1601; FAX: (936) 294-1585 or visit our website at shsu.edu/~phy_www/.

Physics Course Descriptions

PHY 133 **Introductory Astronomy.** [PHYS 1311]
The development of astronomy, the solar system, stars, galaxies, and cosmology are studied. Emphasis is placed on discovering astronomical phenomena through individual observational activities. The Sam Houston planetarium and observatory are also used in laboratory activities. No mathematics or physics prerequisites. Credit 3.

PHY 113 **Introductory Astronomy Laboratory.** [PHYS 1111] Credit 1

PHY 134 **Stars and Galaxies.**
The study of the universe beyond the solar system. Topics include the nature of stars, stellar evolution, galaxies, quasars, cosmology, the universe as a whole, and theories about the origin and fate of the universe. Along the way, students will be introduced to tools astronomers use to determine such properties as temperatures, compositions, motions, masses, and evolution of astronomical objects. Credit 3.

PHY 114 **Laboratory – Stars and Galaxies.**
This laboratory will introduce students to the tools and techniques used by ancient and modern astronomers to determine the nature of stars, galaxies, the interstellar medium, and the universe as a whole. This is a companion course to PHY 134. Credit 1.

PHY 135, 136 **General Physics for Non-Science Majors.**
These courses are for liberal arts students. They are NOT open to students majoring in programs offered by Chemistry, Physics, Biological Sciences, Geology, or Mathematics. Concepts and principles are stressed. No Mathematics or Physics prerequisites.

PHY 135 **Fundamentals Of Physics I.** [PHYS 1305]
This is an elementary course covering the fundamentals of motion, forces and heat. Credit 3.

PHY 115 **Fundamentals of Physics I Laboratory.** [PHYS 1105] Credit 1.

PHY 136 **Fundamentals of Physics II.** [PHYS 1307]
The course is a continuation of PHY 135. Fundamentals of electricity and magnetism, sound, light, and modern physics are included. Credit 3.

PHY 116 **Fundamentals of Physics II Laboratory.** [PHYS 1107] Credit 1.

PHY 138, 139 **General Physics.**
These courses are designed for students majoring in biological sciences and their related pre-professional programs.

PHY 138 **General Physics — Mechanics and Heat.** [PHYS 1301]
A modern treatment is made of the laws and principles of mechanics and heat. Derivations are carefully done using a non-calculus approach and considerable problem work is required. The laboratory work consists of quantitative experiments. Prerequisite: Credit or registration for MTH 163 or equivalent. Credit 3.

PHY 118 **General Physics Laboratory I.** [PHYS 1101] Credit 1.

PHY 139 **General Physics — Sound, Light, Electricity and Magnetism.** [PHYS 1302]
The course is a continuation of PHY 138, covering the subjects of sound, light, electricity and magnetism. The same emphasis is placed on derivations and problem solving as in PHY 138. The laboratory work consists of quantitative experiments. Prerequisites: PHY 138, MTH 163. Credit 3.

PHY 119 **General Physics Laboratory II.** [PHYS 1102] Credit 1.

PHY 141, 142, 245 **Introduction to Physics.**
These are comprehensive courses for students majoring or minoring in physics, pre-engineering, mathematics, and programs requiring calculus level mathematics.

PHY 141 **Introduction to Physics I.** [PHYS 2425]
A thorough introduction to the more general topics in mechanics. Considerable attention is given to the solution of problems with the emphasis placed on fundamental concepts. A laboratory/problem session is an integral part of the course. Writing Enhanced. Prerequisites MTH 142. If high school physics or calculus has been taken, then MTH 142 may be taken concurrently. Credit 4.

PHY 142 **Introduction to Physics III.** [PHYS 2427]
An introduction to the general topics of electricity and magnetism, and basic electrical circuits. The emphasis continues to be on problem solving with the laboratory/problem session an integral part of the course. Writing Enhanced. Prerequisites: PHY 141 and MTH 143.

PHY 245 **Introduction to Physics II.** [PHYS 2426]
An introduction to topics in heat and wave motion including sound and light. The quantitative description of phenomena is emphasized. The laboratory continues as an integral part of the course. Writing Enhanced. Prerequisites: PHY 141 and MTH 142. Credit 4. Credit 4.

PHY 360 **Statics.**
Study of equilibrium of particles and rigid bodies, forces, friction, center of gravity, and moments of inertia. Vector algebra and calculus are used. Prerequisites: PHY 141 and MTH 244. Credit 3.

PHY 361 **Dynamics.**
The study of kinematics and dynamics of particles and rigid bodies using the concepts of force, mass and acceleration, energy, and impulse and momentum. Vectors, calculus and differential equations are used. Prerequisites: PHY 141 and MTH 244. Credit 3.

PHY 391 **Modern Physics I.**
Relativity is introduced, quantum theory of light, Compton effect, photoelectric effect, Bohr atom, particles as waves, quantum mechanics in one dimension, tunneling, and atomic structure are covered. Prerequisites: PHY 243 and MTH 244. PHY 311 must be taken concurrently. Credit 3.

PHY 311 **Modern Physics Laboratory I.** Writing Enhanced. Credit 1.

PHY 393 **Modern Physics II.**
Statistical physics, lasers, molecular structure, solid state, superconductivity, low energy nuclear physics, nuclear physics applications, and elementary particles are covered. Prerequisite: PHY 391. PHY 313 must be taken concurrently. Credit 3.

PHY 313 **Modern Physics Laboratory II.** Writing Enhanced. Credit 1.

PHY 395 **Electronics and Circuit Analysis**.
Active circuit analysis, analog and digital integrated circuits, selected discrete components, and application to certain digital and analog systems are studied. PHY 315 must be taken concurrently. Credit 3.

PHY 315 **Electronics and Circuit Analysis Laboratory.** Writing Enhanced. Credit 1.

PHY 397 **Astronomy.**
A study is made of the solar system, sun, stars, and stellar systems, their motions, structure, energy sources and evolution, star clusters, interstellar matter, galaxies, and cosmology. PHY 317 must be taken concurrently. Credit 3.

PHY 317 **Astronomy Laboratory.** Writing Enhanced. Credit 1.

PHY 410 **Advanced Undergraduate Laboratory I.**
This laboratory course provides additional, in-depth laboratory experience for physics majors and minors and transfer students. It will emphasize measurement and data handling. Writing Enhanced. Credit 1.

PHY 431 **Physics for the Forensic Sciences**.
Forensic science makes use of a number of physical techniques. This course is designed to provide a student with an understanding of the physics used in forensic science that enhances the standard introductory physics course. Topics covered include interior and exterior ballistics, optics, stress and strain, elementary fluid mechanics. Credit 3.

PHY 433 **Light and Optics.**
The wave theory of light is emphasized. The phenomena of interference, diffraction and polarization are treated both theoretically and in selected laboratory experiments. The theory and applications of lasers are discussed and investigated in the laboratory. PHY 413 must be taken concurrently. Credit 3.

PHY 413 **Light and Optics Laboratory.** Writing Enhanced. Credit 1.

PHY 466 **Introductory Quantum Mechanics.**
This course includes introductory quantum mechanics, application of quantum theory to the harmonic oscillator, potential barriers, the hydrogen atom, theory of atomic spectra, the free electron, and elementary band theory of solids. Prerequisite: PHY 391. Credit 3.

PHY 467 **Introduction to Solid State Physics.**
This course introduces the concepts of crystal structure, crystal diffraction, reciprocal lattices, crystal binding, phonons, free electron Fermi gas, semi-conductors, energy bands, Fermi surfaces, point defects, and optical properties of crystals. Credit 3.

PHY 468 **Electricity and Magnetism.**
Properties of dielectrics and magnetic materials, electromagnetic fields, and Maxwell's equations are studied. Prerequisite: MTH 376. Credit 3.

PHY 470 Introduction to Theoretical Physics.
The dynamics of rigid bodies, vibrating systems and normal coordinates, and other selected topics of advanced mechanics are stressed. Lagrangian and Hamiltonian concepts are introduced. Prerequisite: MTH 376. Credit 3.

PHY 471 Thermodynamics and Statistical Mechanics.
Basic concepts of classical thermodynamics, including the first and second laws, properties of gases, entropy, thermodynamic functions, and introductory statistical mechanics are studied. Prerequisites: PHY 391 and MTH 376. Credit 3.

PHY 495 Undergraduate Research.
This course consists of special projects or topics in experimental or theoretical physics for individual physics students. Each student pursues an approved project of interest to him, or he may participate in one of the organized research programs conducted by the physics faculty. The projects are supervised by the physics faculty, but each student is expected to demonstrate individual initiative in planning and conducting the research program or topic. Writing Enhanced. Prerequisite: consent of Department Chair. The course may be repeated for an additional three semester hours credit with consent of Department Chair. This course should be taken in addition to hours required for physics major or minor and may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog. Credit 3.

PHY 496 Selected Topics in Physics.
Prerequisite: Consent of the instructor. May be repeated for additional credit. Credit 3.

PHY 498 Senior Thesis.
This is a directed elective for senior students majoring in physics seeking additional experience in a sophisticated research project. This research will be conducted under the supervision of a member of the physics faculty and the results will be presented in the form of a thesis. Writing Enhanced.

DEPARTMENT OF THEATRE AND DANCE

Chair: Penelope A. Hasekoester (936) 294-1330; theatre@shsu.edu

The performing arts require the collaborative efforts of many talented individuals. Every dramatic, musical, or dance performance by an artist on stage or screen requires years of training and practice. Just as important to each performance are the individuals who work behind the scenes to make it happen. The playwrights, choreographers, stage make-up artists, costume designers, sound technicians, scene and lighting designers, stage managers, and directors all play vital roles in any theatrical effort. The Department of Theatre and Dance gives opportunities for all individuals who are interested in the performing arts to develop their talents and discover new skills.

Mission

The Department of Theatre and Dance at SHSU is committed to providing high quality performance, choreographic design, technical curricula of artistic and scholarly pursuits. Individual programs are sufficiently balanced and integrated to allow students to choose from a wide variety of theatre and dance related careers and prepare them to compete successfully in the chosen area of artistic, commercial or educational specialization.

DANCE PROGRAM

Coordinator: Jennifer Pontius (936) 294-1300; pontius@shsu.edu

Faculty: Cindy Gratz, Dana Nicolay, Kista Tucker, Melissa Wynn

Website: www.shsu.edu/~dnc_www/

'The Dance is the mother of the arts.' — Curt Sachs

Dance is the most ephemeral and immediate of the arts. It exists in the moment of its performance and is then gone. To be successful, a dancer must learn to be totally focused in the moment of the dance. This requires extraordinary awareness, sensitivity, imagination, and discipline. A dancer must approach both his/herself and his/her field with curiosity, diligence, excitement, and honesty. In the process, the dancer finds a vibrant, energizing life of experiences, while developing skills, interests, and personal qualities that can lead to a variety of satisfying careers.

The Dance Program provides a supportive environment and a performance-oriented curriculum of sufficient scope and depth to allow graduates to discover this life. Through the exploration of movement as an expressive language, and the training of the body as the instrument of that language, the dance curriculum balances rational and intuitive qualities in the developing dance professional.

Courses such as ballet and modern dance technique, choreography, pedagogy, World Dance, and Dance History, give dance majors an awareness of the world that is both aesthetically sophisticated and academically sound.

Academic Programs

- BA in Dance
- BFA in Dance
- Teacher Certification

Admission to both the BA and the BFA is by audition only. One audition is held each semester. Teaching certification is available with either the BA or BFA in Dance through the College of Education. Certification with either the BA or BFA requires a designated 18-24 hour minor in preparation for a second teaching field.

The BFA curriculum is designed to lead to a performing career. BFA candidates must complete a minimum of 77 hours in Dance. The BA is more academically based and typically leads to a career in teaching. BA candidates must complete a minimum of 59 hours in Dance and must satisfy requirements for an official minor.

Highlights

The Dance Program is housed in spacious facilities that provide five large studios, a semiformal Dance Theater, costume construction and storage facilities, audio and video editing capabilities, a body conditioning studio and a dance library.

Career Opportunities

- dance performance
- dance education
- arts administration
- health-related professions

Suggested Minors

- Secondary teaching
- Business
- Theatre

Student Organizations

Chi Tau Epsilon, the prestigious national dance honor society, recognizes, supports, and promotes superior achievement in dance and in the performing arts. Membership in the society is recorded on the student's transcript. Each year, Chi Tau Epsilon is an active student organization, sponsoring the student choreography showcase, Dances @ 8, conducting recruitment workshops for the dance program, and sponsoring community support activities including Adopt a Highway, food drives, and participation in the Special Olympics. Chi Tau Epsilon also awards annual scholarships for outstanding choreographic and academic achievement.

Scholarships

The Dance Program awards scholarships ranging from $500 to $1,500 per academic year. In addition the Mary Ella Montague Endowed Scholarship is awarded to the outstanding returning Dance major each year and the Kelley Barber Award is given annually to a Dance major for outstanding performance. Applications are available in the dance office.

Program Specific Requirements

BIO 245 & PHY 135/115 are required for all dance majors.

Curriculum

Required Courses for Major

All dance majors must repeat DNC 110 for four semesters. Bachelor of Arts Candidates must complete one semester each of DNC 333, 334, 430, and be registered in either ballet or modern technique every semester. Candidates for the Bachelor of Fine Arts degree must be registered in both ballet and modern dance technique each semester after the freshman year. They must also complete at least two semesters each of DNC 430, 433, and 434. DNC 233, 234, 333, 334, 430, 433, and 434 are open only by audition or permission of the instructor. Candidates for the BA must complete requirements for a minor field of study to graduate. The BFA does not require a minor.

Major in Dance
Bachelor of Arts

First Year	Credit	Second Year	Credit
DNC 110, 110 127, 172, 176	10	DNC 110, 110, 276, 272	8
DNC 233, 234, 232 or 273	9	DNC 233, 234	6
THR 161 or 162	3	BIO 245	4
ENG 164, 165	6	POL 261	3
HIS 163, 164	6	CS 133	3
PHY 135/115	4	MTH 164 or 170	3
	37-38	PHL 261	3
		Minor	6
			36

Third Year	Credit	Fourth Year	Credit
DNC 376, 373 or 374	6	DNC 430, 472 or 474	6
DNC 333, 334	6	DNC 433, 434	6
Foreign Language (one field)	8	Foreign Language 263, 264	6
POL (200-level)	3	Minor	12
Minor	6	Component Area 4	3
Component Area 5	3	ENG or SCM	3
KIN 215	1		36
	37		

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Major in Dance
Bachelor of Fine Arts

First Year	Credit	Second Year	Credit
DNC 110, 110, 127, 172, 176	10	DNC 110, 110, 273 or 232	5
DNC 233, 234	6	DNC 272, 276	6
THR 16 or,162	3	DNC 233, 233, 234, 234	12
ENG 164, 165	6	BIO 245	4
HIS 163, 164	6	MTH 164 or 170	3
	31	PHY 135/115	4
			34

Third Year	Credit	Fourth Year	Credit
DNC 333, 333, 334, 334	12	DNC 430, 430, 472, or 474, 476	12
DNC 373 or 374, 376	6	DNC 433, 433, 434, 434	12
CS 133, 138 or 143	3	POL (200-level)	3
Component Area 4 (Cultural Studies)	3	KIN 215	1
Component Area 5	3	Component Area 4	3
POL 261	3	ENG or SCM	3
THR 164	3		34
	33		

Dance Course Descriptions

DNC 110 **Dance Workshop.**
This is a practical workshop in support of Dance Program concerts and activities. Duties include costume construction, backstage and front of house support, and audio/video recording and dubbing. Special seminars in areas such as diet and health, auditioning and career opportunities and options are also addressed. Credit 1.

DNC 124 **Folk Dance Forms.** [DANC 1222]
Dances indigenous to Europe, Mexico and the United States are studied in relation to their cultural derivations. Special consideration is given to dance as a cultural and recreational activity. Credit 2.

DNC 126 **Theatre Dance Forms.**
Specific theatrical dance forms such as ballet, jazz, modern dance, and Hip Hop are studied in specially dedicated sections. Credit 2.

DNC 127 **Improvisational Technique.**
This course explores concepts designed to employ movement and vocal skills that will enhance performance and creativity. Emphasis is on solo and group work that will help the student discover the diversity and range of the human instrument. Credit 2

DNC 172 **Dance as Art.** [DANC 2303]
This course is a video survey of the vast range of theatrical dance that has taken place in the twentieth century. Forms and styles covered include ballet, modern/post-modern, jazz, musical theater, tap, contemporary dance, and dance for music video. Writing Enhanced. Credit 3.

DNC 176 **Rhythmic Structure of Movement.** [DANC 1301]
A study is made of musical forms, rhythm and meter in relation to the needs of a dancer-choreographer. Credit 3.

DNC 232 **Social and Folk Dance Forms.**
Social and folk dance forms of ethnic and social significance are studied and performed in relation to their cultural derivations and historical perspectives and their use in period theatrical/concert production. Special emphasis is placed upon the importance of ethnic art forms to contemporary society. Credit 3.

DNC 233 **Beginning Ballet Technique.**
This is a ballet technique class designed for incoming dance majors. It presumes no former ballet training but requires well-developed movement skills. Students who are not dance-majors must have permission of instructor or program coordinator to register. Credit 3.

DNC 234 **Beginning Modern Dance Technique.**
This is a modern dance technique class designed for incoming dance majors. It presumes no former modern dance training but requires well developed movement skills. Students who are not dance-majors must have permission of instructor or program coordinator to register. Credit 3.

DNC 272 **History and Philosophy of Dance: 1700 to the Present.**
A chronological survey is made of the history of dance from the 1700's to the modern period. Special emphasis is placed on the philosophic relationship of dance to the various cultural epochs. Writing Enhanced. Credit 3.

DNC 273 **World Dance: Exploring Cultures Through the Dance Experience**.
In this course, students re immersed in the dances of one world region for half a semester, and of another world region for the other half semester. Although comparisons between two cultures will become evident, the primary objective of the course is to expose the student to two different dance styles and to use dance analysis to identify and study cultural characteristics. Guest artists lead classes and demonstrations, which include live music, costumes, and terminology. Each time the course is offered, a different set of cultures is examined. Prerequisites: Junior level standing or permission of the instructor. Credit 3.

DNC 276 **Choreography I.**
The student learns to analyze the various components of design and to create basic dance studies which demonstrate understanding of dance as a craft and as an art. Prerequisites: DNC 176. A minimum of intermediate standing in ballet or modern dance, or permission of the instructor is required to register for this course. Credit 3.

DNC 333 **Intermediate Ballet Technique.**
This is an intermediate level ballet technique class which presumes substantial exposure to ballet dance training. Open by audition only. Prerequisite: DNC 233 or permission of the instructor. Credit 3.

DNC 334 **Intermediate Modern Dance Technique.**
This is an intermediate level modern dance technique class which presumes substantial exposure to modern dance training. Open by audition only. Prerequisite: DNC 234 or permission of the instructor. Credit 3.

DNC 373 Laban Movement Analysis.
This course provides an overview of Laban Movement Analysis emphasizing the areas of Body, Effort, Shape, Space, and components necessary to understand and support non verbal communication. Theory, supported by experiential activities, provides the student the opportunity to better understand human movement as well as a means of acquiring efficient, expressive movement. A brief history/application of LMA is included in the curriculum. Prerequisites PHY 135 and BIO 245. Credit 3.

DNC 374 Principles of Dance Technique.
This course provides the student with an overview of the movement system emphasizing the subjective control experience in dance. Methods of tuning the system including body therapies, conditioning regimes, body awareness techniques, and dance training will be reviewed and compared. Prerequisites: PHY 135/115, BIO 245. Credit 3.

DNC 376 Choreography II.
The student develops extended dance works which demonstrate advanced understanding of dance as a craft and as an art. Prerequisite: DNC 176, 276 and/or permission of the instructor. Credit 3.

DNC 430 Repertory.
The student is involved in rehearsals in which dance works by faculty and guest artists, as well as the great masters of choreography, are staged or reconstructed in preparation for major dance program performances Credit 3.

DNC 433 Advanced Ballet Technique.
This is a pre-professional level of ballet technique in which dancers will develop a high degree of technical ability and expressive range. Open by audition only. Prerequisite: DNC 333 or permission of the instructor. Credit 3.

DNC 434 Advanced Modern Dance Technique.
This is a pre-professional level of modern dance technique in which dancers will develop a high degree of technical ability and expressive range in the modern dance idiom. Open by audition only. Prerequisite: DNC 334 or permission of the instructor. Credit 3.

DNC 472 Dance Criticism and Analysis.
Students will view outstanding examples of choreography, read the works of major dance critics, and further develop the tools needed to critically analyze choreography. Emphasis is on writing informed, insightful, analyses of the form, content, and effectiveness of choreographic works. Writing Enhanced. Credit 3.

DNC 474 Dance Pedagogy.
This course acquaints students in dance with methods for teaching ballet and modern dance technique, and examines the curriculum for dance established by the National Standards for Arts Education for Grades K-12. Students gain theoretical and practical experience, focusing on the use of anatomically correct and systematic approaches to developing dance skills. Class structure, design of exercises, effective communication with students, and selection of appropriate musical accompaniment are examined. Writing Enhanced. Credit 3.

DNC 476 Choreography III.
The student develops extended solo, duet, and ensemble works for performance in formal and informal concerts presented by the Dance Program. Prerequisite: DNC 176, 276, 376 and/or permission of the instructor. Credit 3.

DNC 492 Seminar in Dance.
Opportunities are offered for thorough study of a variety of topics which students may choose in dance. Such topics as Historical Period Dance, Ethno-cultural Studies, Choreographic Projects, et cetera, are illustrative. Credit 3.

DNC 493 Independent Study.
Opportunities are offered for individual study of an approved problem in dance. Credit 3.

THEATRE PROGRAM

Chair: Penelope Hasekoester (936) 294-1330; Hasekoester@shsu.edu

Faculty: Gregg Buck, Donald Childs, Ron Destro Kristina Hanssen, Maureen McIntyre, Thomas Prior Thomas Soare

Website: www.shsu.edu/~drm_www/

Theatre reflects the human condition in the study of a wide range of behavior, relationships, periods of history, social configurations and aesthetic styles. Involvement in this collaborative art form finds students growing in theatre skills and techniques, better understanding themselves, solving problems, working within a group and meeting production deadlines.

A theatre major first studies each area of the theatre to gain substantial knowledge of acting, technical theatre, costuming, lighting and scenic design, stage makeup, history, criticism, and directing. From that background, a person can specialize in one of these areas with additional coursework in theatre, and in such fields as music, dance, art, industrial education, radio and television, or teacher education. Bachelor of Fine Arts degree programs are available in musical theatre, acting and directing, design and technical theatre, and secondary education.

Students have the opportunity to act in shows every semester. As they develop expertise in areas of their primary interests, advanced students are chosen to stage manage, to design lights, sets, costumes, sound, makeup, and to direct for major productions. Productions are staged in either the large, 396-seat proscenium theatre or the 90-seat thrust theatre. The theatres themselves, as well as the scene and costume shops are equipped with excellent technical equipment. Guest directors and professional workshops provide students additional contacts with other people in professional theatre. The proximity to Houston also allows students exposure to many venues of professional theatre, opera, dance, film and other forms of entertainment.

Academic Programs

- BFA in Theatre
- BFA in Musical Theatre

Highlights

The Theatre and Musical Theatre programs at Sam Houston State University:

- are active in the Kennedy Center American College Theater Festival.
- have been invited to participate at the Regional Kennedy Center American College Theater Festival five times in the last four years.
- were invited to perform The Laramie Project at the National Festival in Washington, D.C. in 2003.
- have an apprenticeship program with the Theatre Under the Stars in Houston. Two musical theatre students are selected to participate each semester.
- have private auditions on the Sam Houston State University campus for SHSU theatre and musical theatre students by the Broadway Theatre Project.
- have guest artists in the areas of acting, directing, playwriting, and design. These have included Edward Albee, Mark Ramont, Kevin Cooney, Luc LaFortune, Rod Caspers, Andrew Campbell, James McLure, Penny Arcade, James Black, and Judy Dolan.

The program also holds memberships and participates in:

- Texas Educational Theatre Association (TETA)
- United States Institute of Theatre Technology (USITT)
- Texas Nonprofit Theatres (TNT)
- Southwest Theatre Association (SWTA)

Career Opportunities

Graduates of the theatre program are well prepared for rewarding careers in professional or educational theatre or for graduate school.

Suggested Minors

There is no minor required for a BFA in Theatre.

Student Organizations

- Alpha Psi Omega - honorary drama fraternity
- United States Institute of Technology

Internships/Apprenticeships

The Sam Houston State University Department of Theatre and Dance has a professional apprenticeship program with Theatre Under The Stars, Houston. This apprenticeship allows Sam Houston State University students to work with the Humphrey's School of Musical Theatre and to work with Theatre Under The Stars in a performance as well as an arts administration capacity.

Scholarships

Scholarships are available through the theatre program for theatre and musical theatre majors. Performance, technical and design auditions are held each spring for freshman and transfer students entering in the fall. Continuing scholarships are available for application toward the end of each semester. Contact the Department or visit the website for further information.

Student assistantships are available for advanced theatre students who work in scenery, properties, costuming, lighting and management.

Curriculum

Required Courses for Major

All theatre majors are required to register for THR 114 or 314, theatre workshop, for 6 semesters. Musical theatre majors with a theatre emphasis are required to register for 4 semester hours of production crew. Musical theatre majors with a dance or music emphasis are required to register for 2 hours of production crew. These semester hours do not reduce the requirements for 3-hour courses necessary for the major.

A Bachelor of Fine Arts degree with an emphasis in Acting and Directing consists of the following requirements: 66 hours of theatre, 114 for two semesters, 314 for four semesters, 160, 161, 162, 164, 230, 231, 232, 265, 268, 337, 360, 369, 370, 372, and 433, one design course from 334, 430 or 461; 460 or 471, 463, 466, 467, 3 hours of advanced theatre electives, 6 hours of art, 3 hours of music and 6 hours of dance, plus a 42 hour core and 9 additional hours of English. A minor is not required in this degree program.

Major in Theatre, Acting and Directing Emphasis

Bachelor of Fine Arts

First Year	Credit	Second Year	Credit
THR 114 (2 semesters)	2	THR 314 (2 semesters)	2
THR 160, 161, 162, 164, 230	15	THR 231, 232, 265, 268	12
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	MTH 164 or 170	3
DNC 126	2	ENG (Literature, Adv.)	3
KIN 215	1	CS 133	3
	32	POL 261, POL (200-level)	6
			32

Third Year	Credit
THR 314 (2 semesters)	2
THR 337, 360, 369, 372	12
THR 334, 430, 461 (any two)	6
Component Area 5	3
Component Area 3 (Natural Science,	8
Music 165, 166 or 265	3
	34

Fourth Year	Credit
THR 433, 460, 463, 466, 467	15
THR electives from 431, 432, 462, 468, 469, 487, 489, 492	3
ART 6 hrs. from 163, 164, 260, or 370	6
ENG (Literature, Adv.)	6
	30

Major in Theatre – Design and Technology

Bachelor of Fine Arts

A Bachelor of Fine Arts degree with an emphasis in Design and Technology consists of 66 hours of theatre. 114 for two semesters, 314 for four semesters, 160, 161, 162, 164, 230, 231 or 268, 260, 261, 331, 334, 337, 360, 362, 460 or 471, 463, 465, and 466, 9 hours of advanced theatre electives, 9 hours of art, an additional 9 hours of english, 2 hours of dance, plus 42 hours of core. No music is required.

First Year	Credit
THR 114 (2 semesters)	2
THR 160, 161, 162, 164, 230	15
ENG 164, 165	6
HIS 163, 164	6
DNC 126	2
KIN 215	1
	32

Second Year	Credit
THR 314	2
THR 231 or 268	3
THR 260, 261	6
ART 163	3
Component Level 4	6
MTH 164 or 170	3
CS 133	3
POL 261, POL 200 Level	6
	32

Third Year	Credit
THR 314	2
THR 331, 334, 337	9
THR 360, 460, or 471	6
Component Area 5	3
Component Area 3	8
ART 260	3
ENG(Literature, Advanced)	3
	34

Fourth Year	Credit
THR 463	3
THR 362,465	6
THR 466	3
THR Electives from 330, 335 365, 461, 475, 430, 492,	12
ART 370	3
ENG(Literature, Advanced)	3
	30

Major in Musical Theatre, Theatre Emphasis

Bachelor of Fine Arts

A Bachelor of Fine Arts degree in musical theatre is available with an emphasis in theatre, music, or dance. The theatre emphasis requires 48 hours of theatre, 16 to 27 hours of dance and 24 hours of music. The dance emphasis requires 30 to 48 hours of dance, 31 hours of theatre, and 24 hours of music. The music emphasis requires 40 hours of music, 31 hours of theatre, and 19 to 27 hours of dance.

Entry into the musical theatre program is by audition only, and those auditions are scheduled toward the end of every semester. Contact the Theatre Program for information.

First Year	Credit
THR 114 (2 semesters)	2
THR 161, 162, 164	9
THR 317* Musical Theatre Workshop (2 semesters)	2
DNC 126 or 233 (2 semesters)	4-6
MUS 161, 265, 111X, 112X	8
VOI 101X (2 semesters)	4
HIS 163	3
ENG 164,165	6
	38-40

Second Year	Credit
THR 314 (2 semesters)	2
THR 230, 231, 268	9
THR 317* Musical Theatre Workshop (2 semesters)	2
DNC 126, 233 or 234 (2 semesters)	4-6
MUS 122, 123, 124, 125	8
VOI 101X (2 semesters)	4
Component Area 4 (Literature)	3
HIS 164	3
	35-37

Third Year	Credit
THR 317* Musical Theatre Workshop (2 semesters)	2
THR 369, 370	6
DNC 232	3
DNC 333 (2 semesters)	6
VOI 301X (1 hour each semester)	2
MTH 164 or 170	3
POL 261, POL (200-level)	6
CS 133 or equivalent	3
	31

Fourth Year	Credit
THR 317* Musical Theatre Workshop (2 semesters)	2
THR 432, 466, 467, 471	12
DNC 333 or 433 (2 semesters)	6
VOI 301X (1 hour each semester)	2
Component Area 3 (Natural Science)	8
Component Area 4 (Cultural Studies)	3
Component Area 5	3
	36

* Repeated for credit every semester.

Major in Theatre
Secondary Teaching Certificate
Bachelor of Fine Arts

A Bachelor of Fine Arts degree with secondary teaching certification requires a minor in another academic area (18-24 hrs.) beyond the courses listed below.

First Year	Credit
THR 114 (2 semesters)	2
THR160, 161, 162, 164, 230	15
ENG 164, 165	6
HIS 163, 164	6
MTH 164 or 170	3
DNC 126	2
KIN 215	1
	35

Second Year	Credit
THR 314 (2 semesters)	2
THR 231, 232, 265, 268, 369	15
Component Area 4 (Literature)	3
CS 133 or 138	3
POL 261, POL (200-level)	6
Component Area 3 (Natural Science)	8
	37

Third Year	Credit
THR 314 (2 semesters)	2
THR 337, 360, 466, 467	12
THR 334, 430, 461 (any two)	6
Component Area 4 (Cultural Studies)	3
SED 374	3
SED 383, RDG 392	6
	32

Fourth Year	Credit
THR 463, 460 or 471, 6 hrs. electives at 400 level	12
SED 394, 464, 480, 496, 497	15
SCM 384	3
Component Area 5	3
	33

Theatre Minor. A minor in theatre usually consists of the following courses: 2 courses from 160, 161 or 162; 164, 230, 231, 268, 460 and 466, plus 3 hours of THR 114 or 314.

University Theatre: Auditions for productions are open to all students. The Theatre operates in conjunction with theatre workshop for which one hour of credit per semester may be received.

Theatre Course Descriptions

THR 114 **Theatre Workshop.**
One semester hour of credit may be received per semester for work done in this practical workshop consisting of actual work on productions. Required of theatre and musical theatre majors. May be repeated for credit. Credit 1.

THR 160 **Introduction to Production.**
Introduction to theatrical production. An overview of the elements of production to include an introduction to the basic components of theatre technology, stage scenery, stage lighting, theatrical costuming, stage management, theatre management, and script analysis. This course is designed to introduce the student to all areas of theatrical production. Credit 3.

THR 161 **Scenography I. Technical Production.**
Introduction to theatre technology. A focus on the techniques and methods in set construction, lighting and sound technology, property construction, and theatrical production techniques. Credit 3.

THR 162 **Technical Theatre: Stage Costuming.** [DRAM 1342]
A study of the basic techniques of costuming, sewing, dyeing, and distressing fabrics. Credit 3.

THR 164 **Acting I.** [DRAM 1351]
A study of basic techniques in body, voice, characterization, and play analysis as they are applied to the performance of stage tasks by the actor. Credit 3.

THR 166 **Theatre Appreciation.** [DRAM 1310]
An analysis of the theatrical experience for the audience. Examination of theatre's relation to the broad contemporary scene and its relation to past eras. Examination of the production elements necessary to provide the theatrical experience. Credit 3.

THR 230 **Stage Make-Up.** [DRAM 1341]
A survey of the reasons for stage make-up and the types of make-up available. Principles of designing make-up for characters in a play. Intensive practical application. Credit 3.

THR 231 **Theatre Speech I.** [DRAM 2336]
Beginning training in the release of the voice for effective communication. Work on breathing, projection, placement, articulation, resonance, and quality. Credit 3.

THR 232 **Theatre Speech II.**
Advanced training in application of appropriate vocal techniques to produce optimum control of quality, projection, and precision in diction. Ultimately the application is in fusing technique with the actor's interpretation of roles. Prerequisites: SCM 162 or THR 231, 164, or consent of the instructor. Credit 3.

THR 260 **Scenography II: Beginning Design.**
Introduction to the methods, concepts and materials of designing for theatre, including the basic element s of set design, properties design, lighting design, and sound design for the stage. Students will be introduced to the methods of developing a design from script analysis to presentation of the completed design. Prerequisites: THR 161 or permission of instructor. Credit 3.

THR 261 **Scenography III: Computer Drafting for Theatre**.
Introduction to computer aided drafting and design for theatrical applications. Practical approach to computer drafting of floor plans, elevations, sections, light plots, and organizational diagrams using popular CAD software developed specifically for theatrical applications as well as programs like AutoCAD and Project Manager. Prerequisites: THR 161 or permission of instructor. Credit 3.

THR 268 **Acting II.**
A concentration on the techniques of freeing the body, body language, and movement in the development of characterization and actor technique. Prerequisite: THR 164 or consent of instructor. Credit 3.

THR 314.A Theatre Workshop.
One semester hour of credit may be received per semester for work done in this practical workshop consisting of actual work on productions. Prerequisite: Sophomore standing. May be repeated for credit. Credit 1.

THR 314.B Theatre Workshop.
Rehearsal and performance in minor roles. May be repeated for credit. Credit 1.

THR 314.C Theatre Workshop.
Scene work in directing class. May be repeated for credit. Credit 1.

THR 317A Musical Theatre Workshop.
Junior and Senior levels to synthesize musical theatre majors' work in music, theatre and dance. May be repeated for credit. Credit 1.

THR 317B Musical Theatre Workshop.
Freshmen and sophomore levels, to synthesize musical theatre majors' work in music, theatre, and dance. May be repeated for credit. Credit 1.

THR 330 Advanced Stage Makeup.
Investigation of and experimentation with three-dimensional makeup constructions to provide drastic alteration of the actor's face for stage, film, and television. Prerequisite: THR 230 or consent of the instructor. Credit 3.

THR 331 Scenography IV: Intermediate Scenery and Property Design.
Investigation and experimentation with three dimensional spatial concepts and the interaction of the performer with the performance space. Designing for the performer and the action of the play with the practical development of spaces, furniture, and props for the stage. Prerequisites: THR 260 and 261. Credit 3.

THR 334 Stage Costume Design.
A survey of historical costume; contrast of general clothing with stage costume; and consideration of all elements involved in designing costumes for an entire production. Prerequisite: sophomore standing. Credit 3.

THR 335 Costume Construction.
Pattern drafting and construction techniques for period costumes. Projects may include bodices, skirts, corsets, panniers, bustles, crinolines, and 18th and 19th century men's coats. Prerequisites: THR 334 or 337 or consent of the instructor. Credit 3.

THR 337 History of Costume.
A survey of historical costumes and accessories by periods from ancient Egypt to the present day; contrast of general clothing with stage costumes. Writing Enhanced. Prerequisite: sophomore standing or consent of instructor. Credit 3.

THR 360 History of the Theatre I.
A survey of the origins of the theatre, with major concentration centered upon the development of the western theatre from the Greeks to the Neoclassic. Writing Enhanced. Credit 3.

THR 362 Scenography V: Intermediate Lighting, Sound, and Effects Design.
Investigation and experimentation with lighting the performer in space. Designing for the performer and the action of the play, with the practical development of lighting effects, sound effects and special effects. Prerequisites: THR 260 and 261. Credit 3.

THR 365 Stage and Theatre Management.
Advanced study of theatre management with an emphasis on the organizational, technical and management responsibilities of a stage manager as well as the public relations and marketing skills needed to run a house and box office. Included will be a focus on the establishment of a collaborative atmosphere within a production team or within a theatre company.

THR 369 Acting III.
Detailed study of action and characterization through scene study, research, and self-use, utilizing interior and exterior methods to develop a working method for each actor. Prerequisite: THR 164, 268 or consent of instructor. Credit 3.

THR 370 **Acting IV.**
Advanced scene study with concentration on textual analysis, structure, diction, and rhythm of the script. Prerequisite: 9 hours of acting courses or consent of instructor. Credit 3.

THR 372 **Improvisational Techniques**.
This course is designed to develop students' use of improvisations, games, and ritual to enhance creative thinking, problem solving skills, characterization, and trust within the rehearsal process. Prerequisite: THR 164. Credit 3.

THR 395 **Acting in Major Roles.**
This course allows credit for performing a major role in Theatre Program productions, involving research, rehearsal and performance during the nine-month academic year. May be repeated for credit. Credit 3.

THR 430 **Sceneography VI: Advanced Scenery, Lighting and Sound Design.**
Advanced design. Students will be involved in creating scenic, lighting, and sound design projects. The course will include extensive sketching, rendering, computer drafting, and model building. Prerequisites: THR 160, junior standing or consent of the instructor. Credit 3.

THR 431 **Acting for the Camera.**
An intensive and practical study of the special techniques of acting for film and television with the goal of work in those industries; extensive scene work in front of the camera. Prerequisite: consent of the instructor. Credit 3.

THR 432 **Auditioning for the Commercial Theatre.**
The preparation of audition materials which suit the variety of demands in the commercial world of theatre, musical theatre, cinema, and television. Prerequisite: consent of the instructor. Writing Enhanced. Credit 3.

THR 433 **Period Acting Styles.**
Acting styles, manners, customs, and movement characteristics of Greek, Elizabethan, Jacobean and Restoration periods as well as twentieth century non-realistic play styles will be studied through acting scenes from plays of those times. Prerequisite: THR 164. Credit 3.

THR 460 **History of the Theatre II.**
A Survey of changing styles in theatre, from the Romantic revolution through the Realistic movement to the innovations of the twentieth century theatre. Writing Enhanced. Credit 3.

THR 461 **Stage Lighting.**
The study of lighting design as an art; the history of stage lighting and a study of contemporary stage lighting techniques, practices, and equipment. Students will design lighting for a show of their own choosing. Prerequisite: THR 161 and basic computer literacy or consent of instructor. Credit 3.

THR 462 **Playwriting.**
A study of the elements of playwriting through writing exercises designed to enhance the understanding of structure, style, character and dialogue. Writing Enhanced. Prerequisite: junior standing or consent of instructor. Credit 3.

THR 463 **Dramatic Theory and Criticism.**
A study of the principles of various styles and periods of dramaturgy, involving a history of criticism from Aristotle to the present. Representative plays will be analyzed for theme, structure, characterization and dialogue with a view to their influences on contemporary theatre. Emphasis is placed on written student criticism and evaluation of plays. Writing Enhanced. Credit 3.

THR 465 **Scenography VII: Portfolio Development.**
Students will develop individualized projects in scenery, costume, lighting, sound, or technical production. Prerequisite: two of the following design courses: THR 334, 430, or 461; consent of instructor. Credit 3.

THR 466, 467 **Play Directing.**
Basic director preparation in script analysis, communication skills, creating ground plans and scene study through a wide variety of theatrical styles and direction of scenes. Writing Enhanced. Prerequisite: junior standing. Credit 3 each.

THR 468 **Experimental Theatre Production.**
Analysis of plays that depart from the realistic genre and examination of new production possibilities arising out of developments in theatre technology that will complement the experiments of the playwrights. Application of theory in laboratory productions. Writing Enhanced. Credit 3.

THR 469 **Dialects and Accents for the Theatre.**
Emphasis is placed upon the regional dialects of Great Britain and upon the accents which characterize English as spoken by the natives of the various European countries. Intensive practical application in rehearsing appropriate scenes from plays. Prerequisite: THR 164 or consent of the instructor. Credit 3.

THR 471 **The American Musical Theatre.**
The history of the development of musical theatre (excluding opera) in America. Emphasis is placed on written student criticism and evaluation of musical theatre. Writing Enhanced. Credit 3.

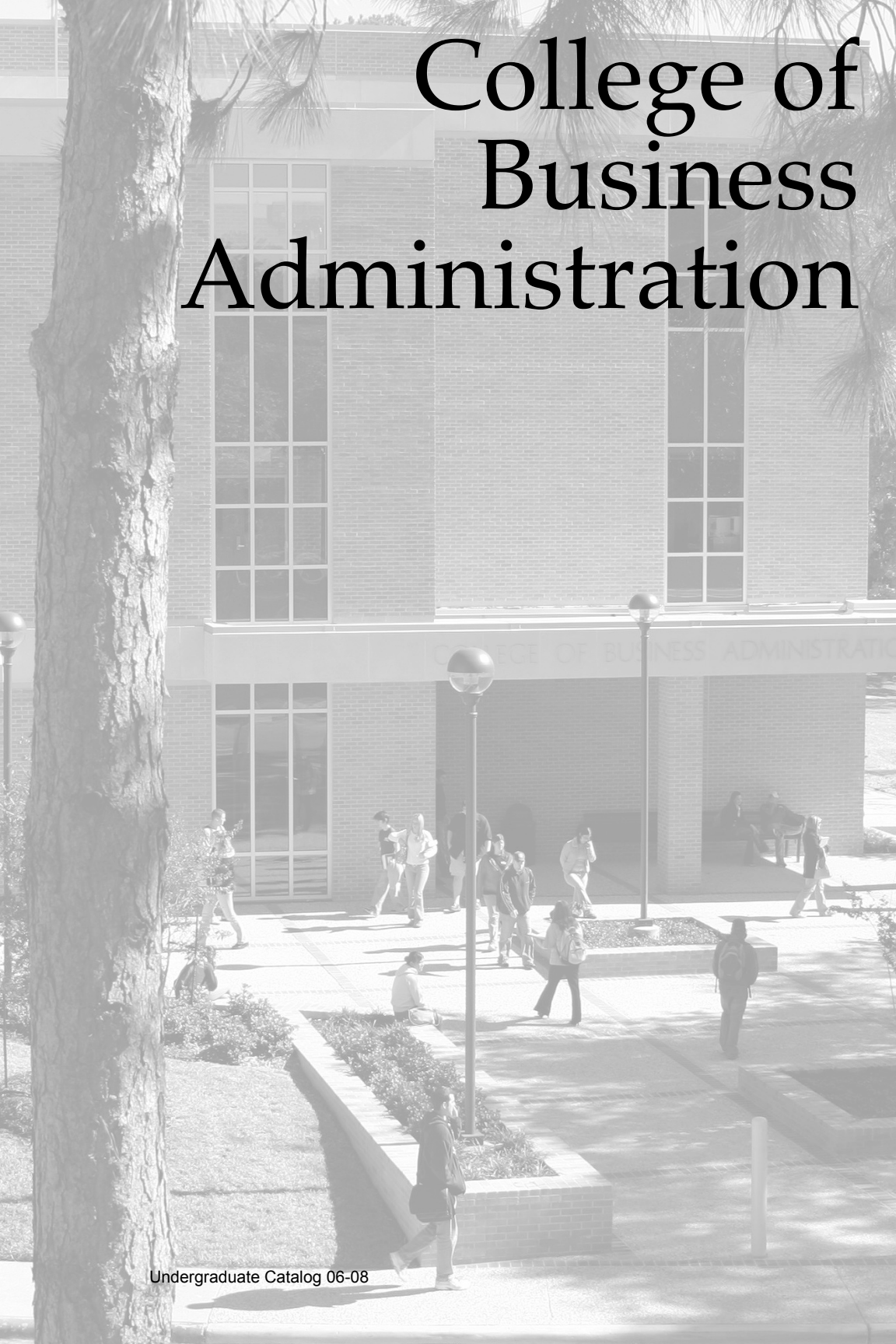
THR 475 **Scenography VIII: Scene Painting.**
Hands-on projects develop technical information in creating illusionistic environments for theatrical productions. Credit 3.

THR 487 **Workshop in Creative Dramatics.**
Fundamental theories and elements of creative drama, with emphasis in developing and guiding creative drama activities such as storytelling, improvisation, rhythmic and interpretative movement, puppetry, theatre in education techniques and pantomime. The course is designed for prospective teachers grades K-12. Writing Enhanced. Credit 3.

THR 489 **Repertory Theatre.**
A unified approach to theatre, contrasted with the compartmentalized division of labor used more frequently, allowing the self-contained group to do all of the production work as well as the acting. May be repeated for credit. Offered in summer terms. Credit 3.

THR 492 **Undergraduate Seminar in Drama.**
A course for the undergraduate student which will allow a student to pursue particular areas beyond the limits of current course offerings. The particular study, however, will be within the student's areas of specialization. Prerequisite: permission of the Program Coordinator. May be repeated for credit. Credit 3.

College of Business Administration



Undergraduate Catalog 06-08

COLLEGE OF BUSINESS ADMINISTRATION

Accredited by AACSB International,
The Association to Advance Collegiate Schools of Business

Administrative Officers

Dean	R. Dean Lewis, Ph.D. (936) 294-1254; deanlewis@shsu.edu
Associate Dean	Leroy W. Ashorn, Ph.D. (936) 294-1239; lashorn@shsu.edu
Department of Accounting	Ross Quarles, Ph.D., CPA, Chair (936) 294-1258; rquarles@shsu.edu
Department of Economics and International Business	William B. Green, Ph.D., Chair (936) 294-1265; green@shsu.edu
Department of General Business and Finance	Joe F. James, Ph.D., Chair (936) 294-1278; joejames@shsu.edu
Department of Management and Marketing	Roger D. Abshire, D.B.A., Chair (936) 294-1256; rabshire@shsu.edu

Vision

Sam Houston State University's College of Business Administration aspires to be recognized among the best regional colleges of business administration in the nation. It is committed to developing capable, confident, and ethical graduates equipped for a lifetime of productive contribution to business and society.

Mission

The mission of the College of Business Administration is to provide an excellent education to a diverse student body through traditional and unique business programs primarily at the undergraduate level. The College provides students with the opportunity to develop the skill necessary to achieve successful business careers in a global environment, to become productive and ethically committed citizens, to be prepared for advanced studies, and to pursue life-long learning. Through a continuously improving curriculum, excellent teaching, utilization of technology, and scholarly productivity, the college responds to changing student needs and provides service to its constituencies. This mission is accomplished with talented, diverse, and dedicated faculty, staff, and administrators working together with business, educational, government and community leaders.

Academic Programs

Major	Degree	Page
Accounting	B.B.A.	236
Banking and Financial Institutions	B.B.A.	248
Economics	B.B.A.	241
Finance	B.B.A.	248
General Business Administration	B.B.A.	249
Human Resource Management	B.B.A.	256
International Business	B.B.A.	242
Management	B.B.A.	256
Management Information Systems	B.B.A.	258
Marketing	B.B.A.	260

Note: This listing of undergraduate degree programs is correct as of December, 2005 and does not include those degree programs being phased out.

Highlights

The College of Business Administration is accredited by the Association to Advance Collegiate Schools of Business International (AACSB International). Currently there are only 430 schools of business in the United States and 506 worldwide that are accredited members of AACSB International.

Sam Houston State University was accredited in March of 2005 as the 17th Professional Golf Association of America/Professional Golf Management (PGA/PGM) university in the country and the first in the state of Texas. The PGA/PGM program at Sam Houston State University is designed to produce members of the PGA of America. Successful completion of the 5 year program will reward the student with a Bachelor of Business Administration (BBA) degree in General Business Administration with a minor in Professional Golf Management, resulting in Class "A" membership within the PGA of America.

In Fall 2005 the College of Business Administration occupied a 47,000 square foot addition to the Smith-Hutson Building providing much needed classroom, computer lab, and office space for the academic programs in the College.

The College of Business Administration, as part of a six university consortium, offers the MBA and BBA degrees in accounting, general business administration, and management at The University Center in The Woodlands, Texas.

The College offers the only Executive Master of Business Administration in Banking and Financial Institutions in the state of Texas. This is a two-year cohort program involving both online and residence coursework.

Each year the College of Business Administration conducts a career fair that offers students the opportunity to interact with approximately 50 employers from all types of business and not-for-profit organizations.

Each Fall Beta Alpha Psi (the national accounting honor organization) hosts a "Meet the Firms" night to allow students to visit with accounting and other financial services firms that may be recruiting college graduates.

Student Organizations and Activities

- Alpha Kappa Psi
- Beta Gamma Sigma
- COBA Ambassadors
- MBA Student Association
- Phi Chi Theta
- Omicron Delta Epsilon
- International Business Society
- Beta Alpha Psi
- National Association of Black Accountants
- Association of Information Technology
- Society for Human Resource Management

Additional student organizations exists within specific majors and/or departments. Please see the appropriate major/department for more details.

Internships and Study Abroad

A student may earn a maximum of six hours in approved, supervised educational work experience in internships. Internship applications are available from the sponsoring academic department. In order to receive academic credit, a student must meet the eligibility conditions, obtain prior

approval from the Department Chair of his/her major, and meet the guidelines established by the College of Business Administration for monitoring the quality of the learning experience.

Sam Houston State University offers the unique opportunity for students to earn college credit in Puebla, Mexico each year during Summer I Session. Founded in 1531, Puebla now ranks as the fourth largest city in Mexico. The rich culture of Puebla is a blend of colonial architecture and traditional art forms with a modern business and industrial center. Classes will be taught by COBA and other SHSU faculty members on the beautiful campus at the Universidad Iberoamericaca. Students will have many opportunities to interact with the local community. Field trips to major businesses, museums, and archeological sites are planned For lodging and meals, students have gwo choices: to stay at a hotel in downtown Puebla or to live with a family. Hotel accommodations are at the elegant Holiday Inn, once a 19th-century home. A limited number of scholarships are available to help cover the cost of the semester. Interested students may contact the Department of Economics and International Business for additional information.

Scholarships

Sam Houston State University offers academic scholarship opportunities for **beginning freshmen** who excel in areas of academic achievement and leadership and competitive scholarship opportunities for **current SHSU and transfer undergraduate students**. Information for these scholarships may be obtained from the Academic Scholarship Office, SHSU, Huntsville, TX 77341-2120; Telephone 936-294-1672; E-mail scholarships@shsu.edu.

Scholarships that are available from year to year may include:

- Jean D. Neal Scholarship
- Dr. Elliot T. Bowers Assistance Scholarships
- James Gilmore COBA Excellence Scholarship
- Johnson-Brown-Perkins Scholarship
- Wesley L. Oates Scholarship
- Edward James Crawford Scholarship
- J. N. and Vennie Crawford Business Administration Scholarship
- Douglas C. Fletcher, Sr. Scholarship
- James B. and Elsie Bexley Scholarship
- Frank & Mary McAdams Payne Banking Scholarship
- Joe M. “Butch” MacKenzie Scholarship
- Ed. And Genevieve Sandhop Endowed Scholarship
- Ed G. Sandhop Scholarship
- Neva and Wesley West Scholarship
- Wood-Yager Scholarship
- Kailas and Becky Rao Scholarship in Honor of Dr. Bobby K. Marks
- Kailas and Becky Rao Scholarship in Honor of Dr. Jean Neal
- Ray Gordon Dollar Sr. Scholarship
- Beta Gamma Sigma Scholarship

Numerous scholarships are available on a competitive basis for currently enrolled students in the College of Business Administration. Applications from **upper-classmen** for various scholarships, available through the Dean’s office, are accepted between January 2 and February 15. Scholarship recipients are announced in April for the following academic year. In addition, the College of Business Administration offers a limited number of scholarships for incoming freshmen. Applications, which are available from the Dean’s Office, must be returned by April 20.

College-Specific Requirements

General Requirements

General requirements for all majors pursuing the Bachelor of Business Administration degree are as follows:

English 164, 165	6 hours
Mathematics 199	3 hours
Laboratory Science	8 hours
Visual and Performing Arts Elective	3 hours
SCM 282 and 3 hours from ENG 265, 266, 267, PHL 261, 263	6 hours

Cultural Studies Elective	3 hours
History 163, 164	6 hours
Political Science 261, and 200-level Political Science course	6 hours
Computer Literacy Elective	3 hours
Kinesiology 215	1 hour

Foundation Knowledge for Business
Each program of study pursuant to the Bachelor of Business Administration degree includes the following Core Courses for the Foundation Knowledge for Business. Additional course requirements are outlined by specific departments.
Core Courses (45 semester hours)

Accounting, ACC 231, 232	6 hours
Economics, ECO 233, 234, and one advanced course in Economics	9 hours
Business Legal Environment, GBA 281	3 hours
Business Statistics, BAN 232, 363	6 hours
Business Finance, FIN 367	3 hours
Marketing, MKT 371	3 hours
Management, MGT 380, 475, 476	9 hours
Business Communications, GBA 389	3 hours
Management Information Systems, MIS 388	3 hours

Business Minors
With the exception of students seeking a BBA in International Business, no BBA degree **requires** a minor. Students are welcome to use electives in their degree program to seek a minor. Please visit The appropriate department chair to obtain specific details about adding a minor to a BBA degree program. The College of Business Administration offers eleven business minors that serve as excellent compliments to business and non-business degree programs. Specifically, the following minors are offered.

- Accounting
- Banking (available to only BBA students or Agricultural Business majors)
- Business Education
- Economics
- Entrepreneurship
- Finance
- General Business Administration (not available to other business majors)
- International Business
- Management
- Management Information Systems
- Marketing

With two exceptions the minors are open to all students majoring in areas that allow minors. Students majoring in programs within the College of Business Administration may not minor in General Business Administration. The minor in Banking is open to students seeking a B.B.A. degree as well as those seeking an Agricultural Business degree. See the appropriate departmental section for the specific course requirements for that program's minor(s).

Fifty Percent Requirement
At least 50 percent of the required business curriculum for the B.B.A. degree must be taken in residence at Sam Houston State University.

Entry to Upper Division Courses
Admission to undergraduate upper division courses, i.e., 300- and 400-level, in the College of Business Administration, is limited to students who have completed at least 50 semester hours with a GPA of at least 2.0. Students seeking a BBA must complete ACC 231, ACC 232, BAN 232, ECO 233, ECO 234, and MTH 199 with a minimum GPA of 2.0 prior to taking 300- or 400-level business courses.

Teaching Certification
A business major may have the requirements for a teaching certificate added when a degree plan is prepared. See secondary teaching certification requirements in this catalog.

Graduate Studies
The College of Business Administration is authorized to offer the Master of Business Administration and Master of Science in Finance degrees. The Graduate Catalog provides additional information regarding graduate studies in the College of Business Administration.

Web Address
www.shsu.edu/~coba/

DEPARTMENT OF ACCOUNTING

Chair: Ross Quarles (936) 294-1258; accounting@shsu.edu

Faculty: Elsie Ameen, Bill Carl Brewer, Linda Duvall, Diane Green, Jeff Harwell, Ennis Hawkins, Alice Ketchand, Taylor Klett, Philip Morris, Martha Sale, Jeff Strawser

Vision

To be a leading professional accounting department among Texas universities providing a relevant curriculum delivered by professional faculty dedicated to teaching, research, and service.

Mission

The mission of the Department of Accounting is to provide for our students an environment that facilitates both acquisition of relevant skills and assimilation into the accounting profession. Our faculty will engage in research, develop quality-teaching skills, maintain high professional and ethical standards, and actively support the college, university, and community.

Academic Program(s)

BBA in Accounting

Highlights

The Department of Accounting works closely with outside stakeholders in CPA firms, industry, and government in order to ensure that the accounting curriculum provides students with the necessary skill sets and knowledge to successfully function as professional accountants upon graduation. Evidence of the success of this process is provided in part by the continued recruitment of SHSU accounting graduates by numerous, diverse employers. Accounting majors participate in the annual Meet the Firms career fair held in the Fall semester. This function, directly sponsored by the SHSU Chapter of Beta Alpha Psi, the national accounting honor organization, is attended by employers that are specifically and many times solely interested in accounting majors and, in some cases, finance majors. This activity began in 1997 and has grown each year since. Accounting majors, minors, MIS majors, and finance majors from all levels attend this event to begin or to continue their participation in recruitment and hiring process.

Generally each week during the Fall and Spring semesters, representatives from large and small CPA firms, representatives from local and global public companies from diverse industries, and representatives from governmental agencies ranging from law enforcement to space exploration come to the SHSU campus to make presentations to and meet accounting majors. These presentations, sponsored by the campus chapter of Beta Alpha Psi, provide real world perspectives and information to the students that attend. All accounting and other majors are welcome at these presentations. In the social activities that usually follow these presentations, students have the opportunity to meet face to face with the representatives from these off campus organizations, most of which recruit students from the Accounting program at SHSU.

Representatives from a wide variety of business and governmental entities make presentations on a weekly basis during the Fall and Spring semesters at the National Association of Black Accountants chapter meetings on campus. Because the membership of this organization is not limited to accounting, finance, or MIS majors, these presentations address a broad range of business and professional topics. Social events held after many of these presentations present the opportunity for students to interact one on one with the representatives from a wide range of business and professional entities.

Career Opportunities

- Public accountant
- Tax accountant
- Cost accountant
- Government accountant

- Budget accountant
- Auditor
- Actuary
- Appraiser
- Budget analyst
- Credit analyst
- Financial examiner
- Tax examiner
- Revenue agent
- Educator

Suggested Minors

To allow accounting majors the ability to sit for the CPA exam, this program has few electives, and a minor is not required. Students are welcome to select a minor following consultation with the Department Chair, but should be aware that a minor will add hours to the length of the degree program.

Student Organizations and Activities

- Beta Alpha Psi
- National Association of Black Accountants
- Student membership in the American Institute of Certified Public Accountants (AICPA)
- Student membership Institute of Management Accountants (IMA)

Internships

Internships are available through the accounting program for students selected by both the hiring firm or business and also by the Department of Accounting. These internships must meet guidelines as established by the Texas State Board of Public Accountancy and involve specific, direct accounting training and activity beyond routine clerical and office activities. Students generally participate in internships in the Spring semester of their senior year. The selection process for these internship positions occurs generally during the early Spring semester of the Junior year. In some cases internships are available during Summer terms. Interested students should contact the Accounting Internship Program Director through the Department of Accounting office for departmental selection criteria and application requirements.

Scholarships

Scholarships are available on a competitive basis for accounting majors. Applications from upper-classmen for various scholarships, available through the Department of Accounting office and also through the Dean's office, are accepted between January 2 and February 15. Scholarship recipients are announced in April for the following academic year. The specific scholarships that are available through the Department of Accounting vary from year to year. Accounting majors need only to complete the application for scholarships available through the Department or the Dean's office in order to be considered for all scholarships available in any given year.

Scholarships that are available from year to year may include:

- Dr. Clinton Althaus Endowed Accounting Scholarship
- Dr. Rota Huff Accounting Scholarship
- Elwood Parkhill Memorial Accounting Scholarship
- Hildreth Hosea Smith Memorial Scholarship
- J. Roy Wells Business Scholarship
- Leonard and Marlene Keeling Endowed Scholarship
- W.O. "Bud" Whitlock Endowed Scholarship
- Carol Lee Sangster Accounting Scholarship
- Edwin G. Sandhop Jr. Endowed Scholarship
- H.O. and Laquita Crawford Endowed Scholarship
- Dow Chemical SHSU Alumni Scholarship(s)
- Ernst and Young SHSU Alumni Scholarship

Please see the College of Business Administration section for information on college and university-level scholarships.

Program-Specific Requirements

Minimum GPA Requirement for a BBA in Accounting
An overall minimum GPA of 2.5 is required for students to graduate with a BBA in Accounting.

Minimum GRADES in Accounting Courses
A minimum grade of "C" in accounting courses taken (prefix ACC) is required for a student to graduate with a BBA in Accounting.

Uniform CPA Examination Information
The Department of Accounting offers five-year programs whereby a student may satisfy the educational requirements to sit for the Uniform CPA Examination in the state of Texas and at the same time earn either a Master of Business Administration (MBA) degree or a Master of Science in Finance (MS), each with accounting concentrations. Interested students may contact the Chair of the Department of Accounting for information about these programs. Students who wish to qualify to sit for the Uniform CPA Examination through programs other than one of the five-year master's programs should check the Texas State Board of Public Accountancy homepage at http://www.tsbpa.state.tx.us/.

Curriculum
Major In Accounting[1]
Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265, 266, or 267;PHL 261, 263	3
HIS 163, 164	6	SCM 282	3
MTH 199	3	ECO 233, 234	6
Laboratory Science[2]	8	POL 261, 200-level Political Science	6
CS 133, 143, or GBA 180	3	ACC 231, 232	6
Visual and Performing Arts Elective[3]	3	BAN 232, GBA 281	6
KIN 215	1	Cultural Studies Elective[4]	3
	30		33

Third Year	Credit	Fourth Year[7]	Credit
ACC 365, 366, 369, 381, 383	15	ACC 435, 481	6
FIN 367	3	Advanced ACC Elective[5]	9
MGT 380	3	GBA 362	3
BAN 363, MKT 371	6	MGT 475, 476	6
GBA 389	3	ECO 467 or BAN 364	3
MIS 388	3	Electives[6]	5
	33		32

1 Transfer students must take at least 50% of the required business curriculum for the B.B.A. degree in residence at Sam Houston State University.

2 Two four-hour laboratory science courses from: Biology (including ESC 147), Chemistry, Geography/Geology (the only geography course that satisfies a laboratory science requirement is GEO 131/111), or Physics.

3 Select from AGR 299*, ART 160, 161, 163, 260, DNC 131, 176, MUS 161, 264, 265, or THR 160, 164, 166, 230, 231. Satisfies the Visual and Performing Arts requirement of Component Area 4 of the Core Curriculum (see the Core Curriculum section of this catalog).

4 Select from BSL 236, Foreign Languages 263, 264, GEO 265, 266, HIS 265, 266, or SOC 168. Satisfies the Cultural Studies requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

5 Students must select this elective from the 300- and 400- level accounting courses. Students planning to sit for the CPA exam in Texas are encouraged to take ACC 436 and ACC 484 in

preparation for that examination as well as meet entry requirements for the five-year programs in accounting (MBA or MS Finance).

[6] Students are encouraged to include electives from 300- or 400-level accounting courses so as to broaden their accounting knowledge base in the areas of governmental and not –for-profit accounting, financial statement analysis, ethics, fraud detection, and/or tax accounting in preparation for entry into those areas of the accounting profession.

[7] Students planning to enter either of the five-year accounting programs (MBA or MS in Finance) should consider concurrent enrollment in undergraduate and graduate courses during their final undergraduate semester when possible. See Department Chair or COBA Associate Dean for concurrent enrollment requirements.

Minor In Accounting

A minor in Accounting (18 hours) is available to all bachelor degree programs that permit a minor. The minor in Accounting requires ACC 231, 232, 365, and 9 additional advanced hours (300-level or above) hours in Accounting excluding ACC 331 with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in accounting must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the accounting minor or not.

Accounting Course Descriptions

ACC 231 **Principles of Financial Accounting.** [ACCT 2301]
A study of the basic accounting concepts and procedures underlying the organization and reporting of financial information. Topics include the accounting cycle, the preparation of financial statements, the measurement and reporting of business income, and the valuation and presentation of assets and current liabilities. Emphasis is placed on the relevance of the business and economic information generated by the accounting process and how it is used in personal and business decision making. Prerequisite: 18 semester credit hours of college credit. Credit 3. (Note: students who plan to take ACC 365 must earn a minimum grade of C in ACC 231)

ACC 232 **Principles of Managerial Accounting.** [ACCT 2302]
A continuation of financial accounting topics followed by an introduction to managerial accounting. Topics include corporate accounting issues, bonds, statement of cash flows, financial statement analysis, job costing, cost behavior, cost-volume-profit analysis, budgeting, performance evaluation, product pricing and capital budgeting. Emphasis is placed on the usage of accounting information in managerial decision making. Prerequisite: ACC 231. Credit 3. (Note: students who plan to take ACC 365 must earn a minimum grade of C in ACC 232)

ACC 233 **Basic Tax Concepts and Procedures.**
This survey course is designed to introduce non-accounting students to the basic concepts and procedures of taxation of individuals and businesses. Students will learn to prepare individual income tax returns as well as necessary forms for starting and operating a small business. Tax planning actions to minimize tax costs will be covered. Prerequisites: None. Not open to Accounting majors. Credit 3.

ACC 331 **Managerial Accounting.**
Further development of financial accounting concepts, interpretation, and the study of management uses of accounting data. This course includes a study of basic accounting concepts, interpretation of accounting reports, cost control and analysis, and methods of measuring performance. Not open to Accounting majors. Prerequisite: ACC 232. Credit 3.

ACC 335 **International Accounting.**
An introduction to the accounting aspects of international business. Topics covered from an international perspective include the interaction between accounting and its environment, differing national accounting practices, international harmonization of accounting and reporting, foreign currency translation and exchange rate issues, problems of inflation, transfer pricing and taxation, managerial accounting and analysis of foreign financial statements. Prerequisite: ACC 232. Credit 3.

ACC 365 Intermediate Accounting I.
A thorough study of the accounting principles underlying the preparation of financial statements. This course is concerned primarily with the recording process, formats of the financial statements, and the measurement and reporting of current and non-current assets and related revenues and expenses. The environment of accounting, basic accounting theory, and time value of money concepts are emphasized. Prerequisite: ACC 231 and 232 with a minimum grade of C in each. Credit 3.

ACC 366 Intermediate Accounting II.
A continuation of ACC 365, this course extends the study of the preparation of financial statements to the measurement and reporting of current and long term liabilities, stockholders' equity and investments. Additional topics include cash flow statements, accounting for pensions, leases, and income taxes. Prerequisite: ACC 365 with a minimum grade of C. Credit 3.

ACC 369 Cost Accounting.
A study of cost accounting principles and techniques of assembling data for product costing and for managerial use in planning and control and decision making. Cost terminology, cost behavior, job order and process costing, budgeting, cost-volume-profit analysis, standard costs, and activity based costing are topics covered. Prerequisite: ACC 232. Credit 3.

ACC 381 Principles of Accounting Systems Designs.
A study of principles of accounting systems design integrated into both manual and computerized systems. Also includes emphasis on the accounting cycle, internal control structures, computerized transaction processing systems, relational databases, and integrated enterprise resource planning systems in accounting. Prerequisites: ACC 232. Credit 3.

ACC 383 Income Tax Accounting.
A study of basic tax concepts and income taxation of individuals. Emphasis is placed on the determination of income and statutory deductions in order to arrive at the net taxable income. Consideration is given to tax planning as well as decision-making and tax return problems. Prerequisite: ACC 231 and 232 with a minimum grade of C in each. Credit 3.

ACC 430 Studies In Accounting.
Individual study as arranged with members of the faculty. These courses may be repeated and ACC 430 may be taken for Academic Distinction Program Credit. Prerequisite: Consent of Department Chair. Credit 1, 2, or 3.

ACC 432 Financial Statement Analysis.
A study of theoretical issues and various applications relevant to the analysis of financial statements using finance and accounting principles. Readings and case studies are utilized to provide a contemporary perspective. Prerequisite: ACC 232, FIN 367. Credit 3.

ACC 435 Advanced Accounting I.
A study of various special reporting topics in financial accounting, this course surveys financial statement presentation and disclosure requirements for special areas of income recognition and accounting changes, dilutive securities, earnings per share calculations, reporting for business segments and interim periods, and accounting and reporting standards for partnerships and governmental and not-for-profit entities. Prerequisite: ACC 366. Credit 3.

ACC 436 Advanced Accounting II.
A study of the financial accounting standards and procedures used in accounting and reporting for business combinations and intercorporate investments, consolidated financial statements, and multinational enterprises, including foreign currency transactions and financial instruments and translation of foreign entity statements. Prerequisite: ACC 366. Credit 3.

ACC 461 Fraud Examination.
An examination of fraud within organizations with an emphasis on its detection and prevention. This course examines the nature and causes of financial and occupational fraud, ways to prevent and deter fraudulent conduct, and procedures for uncovering and investigating fraud. Prerequisite: Senior standing and permission of the instructor. Credit 3.

ACC 462 Oil and Gas Accounting.
An introduction to oil and gas accounting. Emphasizes accounting for costs incurred in the acquisition, exploration, development, and production of oil and natural gas using successful efforts, full cost, and tax accounting methods. Also introduces students to joint interest accounting, gas pipeline accounting, the required disclosures for oil and gas activities, and analysis of oil and gas companies' financial statements. Prerequisite: ACC 365. Credit 3**.**

ACC 468 Governmental and Not-for-Profit Accounting.
A study of accounting and financial reporting for governments and not-for-profit entities. Topics include the government and not-for-profit environment, fund accounting, issues of budgeting and control, recognizing revenues and expenditures in governmental funds, accounting for capital projects and debt service, long-lived assets, long-term obligations, business-type activities, fiduciary and permanent funds, not-for-profit organizations (including health-care providers and colleges and universities), and auditing government and not-for-profit organizations. Prerequisite: ACC 365. Credit 3.

ACC 481 Auditing Principles.
An introduction to auditing concepts and procedures. Emphasizes generally accepted auditing standards; professional responsibilities; the nature, acquisition, evaluation, and documentation of audit evidence; internal control; and the auditor's reports. Prerequisite: ACC 381 and ACC 366. Credit 3.

ACC 484 Advanced Income Tax.
The Internal Revenue Code and the various income tax acts are studied. Students learn how to form, operate, and liquidate C Corporations, S Corporations, and Partnerships, including LLPs and LLCs. Federal Tax returns are prepared for C Corporations, S Corporations, and Partnerships. Tax research is emphasized and integrated into each area studied, using various tax services. Prerequisite: ACC 383. Credit 3.

ACC 486 Professional Ethics and Responsibilities.
This course provides prospective accounting professionals with the ability to apply philosophic moral theory to particular issues pertaining to the accounting profession. The course includes the examination of ethical standards, ethical reasoning, integrity, objectivity, independence, and other core values. Emphasis is placed on dealing with controversial issues and examining the legal and professional responsibilities of public accountants. Topics also included are examination of the state and AICPA Code of Professional Conduct and reporting matters, such as SEC, IRS, and similar bodies. Prerequisite: Senior standing and 24 hours of accounting. Credit 3.

ACC 499 Internship in Accounting.
This course provides students with an internship experience allowing the application of accounting and auditing skills in an actual work setting. Students will work full-time in public or industry accounting paid positions for a minimum of 150 hours. Students generally will work full-time for one-half of the semester and attend accelerated accounting courses during the remaining half. Prerequisites: Junior standing, ACC 366, ACC 381, Permission of the Department Chair of Accounting and selection by an employing firm. For Spring semester internships, should be taken concurrently with ACC 436 and ACC 481. Credit 3 hours.

DEPARTMENT OF ECONOMICS AND INTERNATIONAL BUSINESS

Chair: William B. Green (936)294-1265; green@shsu.edu

Faculty: Ulyses Balderas, Doug Berg, Edward Blackburne, Donald Bumpass, Marilyn Butler, Viera Chmelarova, Mark Frank, Donald Freeman, Fidel Gonzalez, Natalie Hegwood, John Miller, Mitchell Muehsam, Valerie Muehsam, Hiranya Nath, George Samuels

Vision

To develop outstanding Economics, International Business, and Business Analysis programs with faculty that is recognized for excellence in instruction, research, and service.

Mission

To provide curricula that promote critical thinking skills and enhance decision making abilities, which help students become productive and informed citizens. Faculty will engage in research to create and disseminate new knowledge, develop quality-teaching skills, maintain high professional standards, and actively serve the University Community.

Academic Programs

- BBA in Economics
- BBA in International Business

The Economics program is intended for students seeking a logical, ordered way of looking at business problems. The principles, approaches, and conclusions derived from the study of economics form the basis for developing sound policies in business, government, and personal life decisions.

The International Business program is designed for students preparing for positions with business, government, or international agencies dealing with international trade and foreign investments. As a result of the growing importance of international trade in the world economy, domestic and multinational corporations face a growing need for employees with specialized training in matters relating to international trade.

Career Opportunities

The study of economics is an effective way to prepare for several types of careers, including:

- Management training programs in corporations and financial institutions
- Federal, state, and local government employment in administrative and staff positions dealing with analysis, planning, and control functions
- Analyst positions on corporate staffs
- Graduate education in law, business, public administration, urban studies, and economics.

The study of international business is an effective way to prepare for several types of careers, including:

- Management training programs in domestic and multinational corporations
- Federal, state, and international agency employment in administrative and staff positions dealing with analysis, planning, and control functions
- Graduate education in law, business, public administration, and economics.

Suggested Minors

- A Foreign Language
- Finance
- Economics (for International Business majors
- Banking
- Accounting
- Management

- Marketing
- Political Science
- Math

Student Organizations

- Omicron Delta Epsilon
- International Business Society

Internships

A student may earn a maximum of six hours in approved, supervised educational work experience in internships. Internship applications are available in the Departmental office. It is the responsibility of the student to identify the internship opportunity. In order to receive academic credit, a student must meet the eligibility conditions, obtain prior approval from the Department Chair, and meet the guidelines established by the College of Business Administration for monitoring the quality of the learning experience.

Scholarships

Scholarships are available on a competitive basis for economics and international business majors. Applications from upper-classmen for various scholarships, available through the Department of Economics and International Business office and also through the Dean's office, are accepted between January 2 and February 15. Scholarship recipients are announced in April for the following academic year. The specific scholarships that are available through the Department of Economics and International Business vary from year to year. Economics and International Business majors need only to complete the application for scholarships available through the Department or the Dean's office in order to be considered for all scholarships available in any given year.

Scholarships that are available from year to year may include:

- Armstrong Foundation Endowed Scholarship in Economics
- Armstrong Foundation Endowed Scholarship in International Business
- Faculty Scholarship in Economics
- Faculty Scholarship in International Business

Curriculum
Major In Economics[1]
Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265, 266, or 267; PHL 261, 263	3
HIS 163, 164	6	SCM 282	3
MTH 199	3	ECO 233, 234	6
Laboratory Science[2]	8	POL 261, 200-level Political Science	6
CS 133, 143, or GBA 180	3	ACC 231, 232	6
Visual and Performing Arts Elective[3]	3	BAN 232, GBA 281	6
KIN 215	1	Cultural Studies Electives[4]	3
	30		33

Third Year	Credit	Fourth Year	Credit
MGT 380	3	MGT 475, 476	6
GBA 389, BAN 363	6	ECO 361, 363, or 467	3
FIN 367, MKT 371	6	ECO electives (300- or 400-level)	3
ECO 362, 367	6	Electives	20
ACC 331	3		32
MIS 388	3		
ECO electives (300- or 400-level)	6		
	33		

Minor in Economics

A minor in Economics (18 hours) is available to all bachelor degree programs that permit a minor. The minor in Economics requires ECO 233, 234, 362 or 367, and 9 advanced hours in ECO with a minimum grade point average of 2.0 in these courses. Degree candidates for a minor in economics must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the economics minor or not.

Major in International Business[1]

Bachelor of Business Administration

Students majoring in International Business must have a minor. The requirement for the minor will be waived for International Business students who are pursuing either a double major (two majors from the College of Business Administration) or a double degree (a B.B.A. and a degree offered by one of the other colleges within Sam Houston State University). There are enough electives in the International Business program to earn a minor without adding additional hours to the program.

The first and second years are the same as for a major in Economics.

Third Year	**Credit**	**Fourth Year**	**Credit**
MGT 380	3	ECO 463[5], 480[5]	6
GBA 389, BAN 363	6	FIN 471[5]	3
FIN 367, MKT 371	6	MGT 475, 476	6
ACC 331	3	MGT 471[5,6] or MKT 471[5,6]	3
ECO 335[5], 374[5], 468[5], GBA 465[5]	6	Minor Electives[7]	14
MIS 388	3		32
Minor Electives[7]	6		
	33		

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

Minor in International Business

A minor in International Business (30 or 33 hours) is available to all bachelor degree programs that permit a minor. The minor in International Business requires ACC 231, 232; ECO 230 (or 233 and 234), 480; FIN 367; MGT 380; MKT 371; 6 hours from FIN 471, GBA 465, MGT 4716 or MKT 4716, and 3 hours from ECO 335, 374, 463, or 468 with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in international business must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the international business minor or not.

1 Transfer students must take at least 50% of the required business curriculum for the B.B.A. degree in residence at Sam Houston State University.

2 Two four-hour laboratory science courses from: Biology (including ESC 147), Chemistry, Geography/Geology (the only geography course that satisfies a laboratory science requirement is GEO 131/111), or Physics.

3 Select from AGR 299*, ART 160, 161, 163, 260, DNC 131, 176, MUS 161, 264, 265, THR 160, 164, 166, 230, 231. Satisfies the Visual and Performing Arts requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

4 Select from BSL 236, Foreign Languages 263, 264, GEO 265, 266, HIS 265, 266, or SOC 168. Satisfies the Cultural Studies requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

5 ECO 463, FIN 471, GBA 465, and MGT 471 are typically offered ONLY in the fall semester. ECO 480, and MKT 471 (previously MKT 470) are typically offered ONLY in the spring semester. ECO 335, 374, or 468 are typically offered every third semester on a rotating basis (one each semester) each fall or spring semester. See an advisor for a schedule of course offerings.

6 MKT 471 (previously MKT 470) and MGT 471 (International Management and Marketing) are dual listed courses. A student cannot receive academic credit for both MKT 471 and MGT 471.

[7] A minor in a supporting business field or a foreign language is strongly recommended. Employment opportunities in International Business are likely to be enhanced with foreign language skills. Students who have high school credits in a foreign language or who have otherwise developed a foreign language proficiency are encouraged to participate in the College Level Examination Program (CLEP). Acceptable scores on the CLEP examinations will allow students to earn up to 14 hours of foreign language credits in French, German, or Spanish.

Business Analysis Course Descriptions

BAN 232 **Business Analysis.**
An introduction to the use of quantitative business techniques. Topics include: organizing and presenting data, descriptive statistics, probability, discrete and continuous distributions, systems of equations, modeling, optimization procedures, and statistical inference. Prerequisite: MTH 199. Credit 3. (Taught each semester.)

BAN 363 **Intermediate Business Analysis.**
A continuation of BAN 232 and is designed to introduce the use of statistics as a business tool in the face of incomplete knowledge. Topics include: estimation, hypothesis testing, analysis of variance, goodness-of-fit measures, correlation, simple and multiple regression. Prerequisite: BAN 232. Credit 3. (Taught each semester.)

BAN 364 **Operations Research.**
Quantitative methods used in the analysis of business problems. Topics include decision theory, linear programming, transportation and inventory models, Bayesian probability, and queuing theory. Prerequisite: BAN 232. Credit 3.

BAN 465* **Introduction to Business Forecasting and Econometrics.**
The application of statistical methods for business and economic forecasting and for hypothesis testing, estimation, and analyzing economic data Prerequisite: ECO 233 and 234, BAN 363. Credit 3

Economics Course Descriptions

ECO 230 **Introduction to Economics.** [ECON 1301]
A combination of micro-economic and macro-economic principles. Designed for those who are neither majors nor minors in economics, but who would benefit from a one semester introduction to economic principles. Credit 3. (Taught each semester.)

ECO 233 **Principles of Microeconomics.** [ECON 2302]
Basic economic principles including individual decision making, price theory, analysis of the firm, competition and monopoly, and the distribution of income. Credit 3. (Taught each semester.)

ECO 234 **Principles of Macroeconomics.** [ECON 2301]
The economic role of government, public finance and taxation, unemployment and inflation, national income theory, money and banking, economic fluctuations and growth, and international trade and finance. Credit 3. (Taught each semester.)

ECO 335 **Comparative Economics Systems.**
Market oriented, free enterprise capitalism, and its development, compared with alternative economic systems. Prerequisite: ECO 230 or 233. Credit 3. (Taught every third long semester.)

ECO 361 **Labor Economics.**
Problems of unemployment, wage theory, collective bargaining, labor legislation, and proposals for the solution of labor problems. The recent problems of labor are given special consideration. Prerequisite: ECO 230 or 233. Credit 3. (Taught only in the spring.)

ECO 362 **Intermediate Macroeconomics.**
National income concepts and measurements; analysis of the factors influencing the level of national income, employment, price, and production; and application to current problems. Prerequisite: ECO 230 or 234. Credit 3. (Taught in fall, spring, and SI.)

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

ECO 364 Public Finance.
The function of government in the marketplace with emphasis on public goods, externalities, taxation, fiscal federalism, and cost-benefit analysis. Prerequisites: ECO 230 or 233 and 234. Credit 3

ECO 367 Intermediate Microeconomics.
Pricing and output policies of firms, resource pricing, and distribution under condition of perfect competition, monopoly, oligopoly, and monopolistic competition Prerequisite: ECO 230 or 233. Credit 3. (Taught in fall, spring, and SI.)

ECO 370 Economics of Business and Government.
A study of the complex relationship between the business sector and the public sector in the United States and in the global marketplace. Topics will include the regulation of business in its various formats and the promotion of business nationally and internationally. Prerequisite: ECO 230, 233, or 234. Credit 3. (Taught only in the spring semester).

ECO 374 Contemporary International Issues in Economics.
Examination of current literature dealing with international trade and financial issues. Preparation, presentation and discussion of descriptive and analytical papers. Prerequisite: ECO 230, 233, or 234. Credit 3. (Taught every third long semester.)

ECO 430 Readings in Economics.
Individual study arranged with a member of the Economics and Business Analysis faculty. Conferences and written reports are typically required. A carefully prepared research paper concludes the course. This course may be taken for Academic Distinction Program Credit and can be used for Internship credit. This course may be repeated. Prerequisite: Consent of the Chair of the Department of Economics and International Business. Credit 1, 2, or 3.

ECO 463 Monetary Economics.
The role of money in a market economy with special attention given to national and international monetary and banking systems, and to their influence on the levels of income, employment, and , and international capital movements. Prerequisite: ECO 230 or 234. Credit 3. (Taught only in the fall.)

ECO 464 Urban and Regional Economics.
Economic problems of metropolitan and rural areas, location theory, regional resources, transportation problems, crime, and poverty. Prerequisite: ECO 230 or 233. Credit 3. (Taught only in the fall.)

ECO 465* Introduction to Business Forecasting and Econometrics.
The application of statistical methods for business and economic forecasting and for hypothesis testing, estimation, and analyzing economic data Prerequisites: ECO 233 and 234, BAN 363. Credit 3

ECO 467 Managerial Economics.
An integration of economic tools of analysis with optimization techniques such as calculus, LaGrangian multipliers and linear programming. Additional topics include risk analysis and decision-making under uncertainty, inventory control, profitability analysis, and capital budgeting. Prerequisites: ECO 230 or 233, BAN 232, FIN 367. Credit 3. (Taught in fall, spring, and SII.)

ECO 468 Economic Development.
Theoretical explanations and historical factors of economic development and underdevelopment. Policies for accelerating development in third world countries are analyzed. Prerequisite: ECO 230 or 233. Credit 3. (Taught every third long semester.)

ECO 473* Economics of Sports.
Application of economic principles to sport. Economic aspects of sports include: demand and supply, advertising, team output decisions, league/conference organization role of government. Prerequisite ECO 230 or 233. Credit 3

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

ECO 480 International Economics.
Economic concepts and analytical tools relating to international economics; examine foreign exchange markets and the theory of balance-of-payments adjustment; examine commercial policy as it relates to international trade; examine the role of international financial institutions. Prerequisite: ECO 230 or 233. Credit 3. (Taught only in the spring).

ECO 490 Environmental Economics.
An examination of how human values, activities, and institutions affect the environment and how the tools of economics can be used to evaluate public policy alternatives designed to improve the quality of the environment. Prerequisite: ECO 230 or 233 or 234. Credit 3. (Taught only in the fall semester).

ECO 499 Internship.
This course is designed to provide the student an opportunity to apply academic skills in a practical work environment under the supervision and guidance of a working professional. Prerequisites: ECO 233 and 234, ACC 231 and 232, junior standing, overall GPA of 2.5 or greater, and permission of the Departmental Chair.

DEPARTMENT OF GENERAL BUSINESS AND FINANCE

Chair: Joe F. James (936) 294-1278; fin_jfj@shsu.edu

Faculty: Leroy Ashorn, Jim Bexley, Donald Brown, Harry Griffin, Martin Griffin, Steve Henry, Kathy Hill, Harold Hurry, Geraldine Hynes, Kurt Jesswein, Keith Jenkins, Hadley Leavell, Bala Maniam, Charles Stowe, Robert Stretcher, Laura Sullivan, Shirley Tucker-Findley

Mission

The mission of the Department of General Business and Finance is to assist in fulfilling the mission of the University and the College of Business Administration by providing students at the undergraduate and master's levels with an academic foundation to become productive citizens, to develop successful careers, and to provide interested students with the background to pursue graduate or professional studies. The academic foundation leading to a Bachelor of Business Administration degree in Banking and Financial Institutions, Finance, or General Business Administration is designed to arouse intellectual curiosity, develop analytical reason, and provide historical and current information relative to the global environment.

Academic Programs

- BBA in Banking and Financial Institutions
- BBA in Finance
- BBA in General Business Administration

The Banking and Financial Institutions (BFI) degree program is designed to prepare students for officer-level positions in banks and other financial institutions. The Finance (FIN) degree program is designed to provide students with the knowledge of the problems and opportunities that confront entities in the specific field of finance. The General Business Administration (GBA) degree program provides an opportunity to customize student-selected electives for a broad base in business, to specialize within an industry, or to develop a minor either inside or outside the College of Business Administration.

Highlights

An Executive MBA in Banking was added during the previous catalog (2004-2006) period. In addition, the College of Business Administration was certified to participate in the Professional Golf Association of America's PGA/PGM program with participating students receiving the BBA degree in General Business Administration.

Suggested Minors

Both the Banking and the Finance degree majors have limited electives available; therefore no minor is required. Students in these two areas may elect to declare a minor; however, the additional courses will add to the length of their programs.

An entrepreneurship minor would be very beneficial to students anticipating starting or running their own businesses.

General Business Administration majors should consider a minor in one of the approved business minors to provide depth of knowledge in at least one business field.

- Accounting
- Banking
- Business Education
- Economics

- Entrepreneurship
- Finance
- International Business
- Management
- Management Information Systems
- Marketing

Career Opportunities

Both the Finance and General Business Administration degree programs are designed to prepare students for careers in business, government, or not-for-profit entities; to include the core business courses required for admission to master's or other professional programs; or to be combined with a sequence of professional education courses and other requirements by the College of Education to earn a certificate to teach in secondary schools.

Student Organizations

Beta Alpha Psi

Internships

The department has historically been very successful in offering internships primarily in the financial institutions area. Subject to approval, this catalog expands this area to include internship opportunities specifically designed to meet the PGA/PGM's program requirements as well as internships for students interested in other business environments.

Scholarships

Scholarships are available on a competitive basis for Banking, Finance, and General Business Administration majors. Applications from upper-classmen for various scholarships, available through the department office and through the Dean's office, are accepted between January 2 and February 15. Scholarship recipients are announced in April for the following academic year. The specific scholarships available vary from year to year and may include:

- International Association of Administrative Professional-Houston Chapter/ Dr. Rita B. Huff and Dr. Ronald D. Johnson Endowed Scholarship
- Laurence L. Corley Scholarship
- American Bank Scholarship
- Citizens Bank of Texas Scholarship
- Citizens Bank of Texas Sam Houston Alumni Scholarship
- Juanita Eikner Scholarship
- John Klein/Amegy Bank Scholarships
- Klein Trust Fund Banking Scholarships
- Walter E. Johnson Scholarships

Program Specific Requirements

Minimum Grades in Finance Courses

A minimum grade of "C" in finance courses taken (prefix FIN) is required for students to graduate with a BBA in Finance.

Curriculum
Major In Banking and Financial Institutions[1]
Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265, 266, 267; PHL 261, 263	3
HIS 163, 164	6	SCM 282	3
MTH 199	3	ECO 233, 234	6
Laboratory Science[2]	8	POL 261, 200-level Political Science	6
CS 133, 143, or GBA 180	3	ACC 231, 232	6
Visual and Performing Arts Elective[3]	3	BAN 232, GBA 281	6
KIN 215	1	Cultural Studies Electives[4]	3
	30		33

Third Year	Credit	Fourth Year	Credit
FIN 334, 367	6	MGT 475, 476	6
GBA 389, 362	6	FIN 432, 468, 472, 486	12
BAN 363, MKT 371	6	FIN Electives (300- or 400-level[5])	3
ACC 365, MGT 380	6	ECO Elective (300- or 400-level)	3
Business Electives (300- or 400-level)	3	Electives	8
FIN Electives (300- or 400-level)	3		32
MIS 388	3		
	33		

Minor in Banking
Minor in Banking: A minor in Banking (18 hours) is available to all bachelor degree programs in the College of Business Administration. The minor in Banking requires FIN 334, 468, 432, 472; 6 additional semester hours selected from FIN 499 - Bank Internship (no more than 3 semester hours per semester with a maximum of 6 hours), FIN 465, FIN 471, or FIN 486 with a minimum grade point average of 2.0 in these courses. The minor in Banking is also available to Ag Business majors. In addition to the courses listed here for COBA majors, the following additional courses will be required for Ag Business majors to obtain the banking minor: ACC 231, ACC 232, and FIN 367. Furthermore, degree candidates for a minor in banking must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the banking minor or not.

Major In Finance[1]
Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265, 266, or 267; PHL 261, 263	3
HIS 163, 164	6	SCM 282	3
MTH 199	3	ECO 233, 234	6
Laboratory Science[2]	8	POL 261, 200-level Political Science	6
CS 133, 143, or GBA 180	3	ACC 231, 232	6
Visual and Performing Arts Elective[3]	3	BAN 232, GBA 281	6
KIN 215	1	Cultural Studies Electives[4]	3
	30		33

Third Year	Credit	Fourth Year	Credit
FIN 334, 367, 432	9	MGT 475, 476	6
GBA 389, 362	6	FIN 468, 469, 486	9
BAN 363, MKT 371	6	FIN Electives (300- or 400-level[5])	6
ACC 365, 366	6	ECO Elective (300 or 400 level)	3
MGT 380	3	Electives	8
MIS 388	3		32
	33		

Minor in Finance

Minor in Finance: A minor in Finance (24 hours) is available to all bachelor degree programs that permit a minor. The minor in Finance requires ACC 231, 232; FIN 334, 367, 486; 6 additional advanced hours in FIN courses; and 3 additional hours of FIN courses at any level with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in finance must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the finance minor or not.

Major in General Business Administration[1]

Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265, 266, or 267; PHL 261, 263	3
HIS 163, 164	6	SCM 282	3
MTH 199	3	ECO 233, 234	6
Laboratory Science[2]	8	POL 261, 200-level Political Science	6
CS 133, 143, or GBA 180	3	ACC 231, 232	6
Visual and Performing Arts Elective[3]	3	BAN 232	3
KIN 215	1	GBA 281	3
		Cultural Studies Electives[4]	3
	30		33

Third Year	Credit	Fourth Year	Credit
FIN 334, 367	6	MGT 475	3
GBA 362, 389	6	MGT 476	3
BAN 363, MKT 371	6	ECO elective (300- or 400-level)	3
MGT 380	3	Business Elective (300- or 400-level)[6]	6
MIS 388	3	Electives (3 hrs. 300- or 400-level)	17
Business Electives	9		32
	33		

Major in General Business Administration with PGM Emphasis

Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265, 266, or 267; PHL 261, 263	3
HIS 163, 164	6	SCM 282	3
MTH 199	3	ECO 233, 234	6
Laboratory Science[2]	4	POL 261	3
CS 133, 143, or GBA 180	3	ACC 231, 232	6
Visual and Performing Arts Elective[3]	3	BAN 232	3
KIN 215	1	Cultural Studies Electives[4]	3
GBA 111[7]	2	GBA 111[7]	2
	28		29
Summer First Year		**Summer Second Year**	
GBA 219[8]	1	GBA 219[8]	1

Third Year	Credit	Fourth Year	Credit
Laboratory Science [2]	4	MGT 475	3
AGR 375	3	MIS 388	3
GBA 281	3	FIN 367	3
GBA 366	3	GBA 362	3
GBA 389	3	MKT 376	3
MKT 371	3	BAN 363	3
MGT 380	3	FCS 241	4
200-level Political Science	3	KIN 362	3
GBA 311[9]	2	GBA 311[9]	2
	27		27

Summer Third Year		**Summer Fourth and Fall Fifth Year**	
GBA 319	1	GBA 429	2

Fifth Year (Spring)	
MGT 476	3
ECO Elective (300- or 400-level)	3
FIN 334	3
Elective	3
	12

Minor in General Business Administration

A minor in General Business Administration (21 hours) is available to all non-business bachelor degree programs that permit a minor. The minor in General Business Administration requires ACC 231, 232; ECO 230 or 233 or 234; MKT 371; MGT 380; FIN 334 or 367; and 3 additional hours of business electives at any level with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in General Business Administration must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the general business administration minor or not.

Minor in Entrepreneurship

Minor in Entrepreneurship: A minor in Entrepreneurship (18 hours) is available to all bachelor degree programs that permit a minor. The minor in Entrepreneurship requires: FIN 334; GBA 362, 366, and 464; and two courses from FIN 465, MGT 334, or MKT 371 with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in Entrepreneurship must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the entrepreneurship minor or not.

Minor in Business Education

The required minor for someone wishing to use business as a second teaching field in Texas high schools requires ACC 231, 232; ECO 233, 234; GBA 260, 362, and 389; FIN 171; and MGT 380 with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in Business Education must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the business education minor or not.

[1] Transfer students must take at least 50% of the required business curriculum for the B.B.A. degree in residence at Sam Houston State University.

[2] Two four-hour laboratory science courses must be taken from: Biology (including ESC 147), Chemistry, Geography/Geology (the only geography course that satisfies a laboratory science requirement is GEO 131/111), or Physics.

[3] Select from AGR 299*, ART 160, 161, 163, 260, DNC 131, 176, MUS 161, 264, 265, THR 160, 164, 166, 230, 231. Satisfies the Visual and Performing Arts requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

[4] Select from BSL 236, Foreign Languages 263, 264, GEO 265, 266, HIS 265, 266, or SOC 168. Satisfies the Cultural Studies requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

[5] FIN 439 and 471 are typically offered only in the fall semester and FIN 377, 465, and 487 are typically offered only in the spring semester.

[6] GBA 363 is typically offered only in the fall semester and GBA 466 is typically offered only in the spring semester.

[7] GBA 111 is repeated each Fall and Spring of the first and second year of the program

[8] GBA 219 is repeat during the Summer Sessions following the first and second year of the program

[9] GBA 311 is repeated each Fall and Spring of the second and third year of the program

Finance Course Descriptions

FIN 171 **Personal Finance.** [BUSI 1307]
A study of the problems of personal financial management. Topics include savings, risks, investment considerations, insurance, taxation, governmental programs in financial planning, etc. Also recommended for non-business majors. Not open to students who have credit for FIN 367. Credit 3.

FIN 334 **Financial Institutions and Markets.**
This course will explore the structure of the financial system with emphasis on the role, operations, and regulations of financial institutions and markets, including international. The nature, participants, instruments, and relationships of the money and capital markets will be examined. Credit 3.

FIN 367 **Business Finance.**
A study is made of financial principles as applied to management of funds, capital budgeting, sources of funds, techniques of financial analysis, cost of capital, financial leverage, capital structure, forecasting financial needs, management of working capital, financial policies, analysis and regulation of security issues, and international finance. Prerequisites: ACC 232 and MTH 199 or equivalent. Credit 3.

FIN 430 **Problems in Finance.**
The student may pursue special studies for which a special course is not organized. Prerequisites: 30 hours of Business Administration and consent of department chair. Credit 1, 2, or 3.

FIN 432 **Financial Statement and Credit Analysis**.
A study of theoretical issues and various applications relevant to the analysis of financial statements using finance and accounting principles Readings and case studies are utilized to provide a contemporary perspective. Prerequisite: FIN 367. Credit 3.

FIN 439 **Seminar in Financial Derivatives**.
A study of options, futures, and other financial derivative Contracts. The course includes the markets, valuation, and specification of these derivative contracts, and their use in corporate financial risk management. Prerequisite: FIN 367. Credit 3**.** Typically offered only during the fall semester.

FIN 465 **Entrepreneurial and Small Firm Finance**.
A study of the development, implementation, and control of financial plans, strategies, and policies by owner-managers of small firms. Financing alternatives for small firms are explored. Prerequisite: Junior Standing. Credit 3. Typically offered only during the spring semester.

FIN 468 **Commercial Banking.**
This course includes operation of commercial banks, trust companies, Federal Reserve Banks, and other credit institutions. Federal Reserve Board and its function, rediscounting, open market operations, types of notes issued, and their relation to the Federal Reserve System are stressed. Special attention is given to recent bank legislation. Prerequisites: FIN 334 and FIN 367. Credit 3.

FIN 469 **Managerial Finance.**
This course includes an in depth study of some of the tools used in financial management. Problems in the valuation of securities, capital costs, capital budgeting, risk analysis, capital structure, financial statement analysis, and dividend policy are stressed. Prerequisite: FIN 367 with a minimum grade of C. Credit 3.

FIN 471 **International Finance.**
This course provides the student with a background in international finance by examining financial circumstances/problems unique to the multi-national firm. Some areas of study are international market forces that affect interest rates and currency values, hedging currency positions, and financing capital budgeting for the multi-national firms. Prerequisite: FIN 367. Credit 3. Typically offered only during the fall semester.

FIN 472 **Commercial Bank Lending**.
A study of theoretical issues and various applications relevant to the commercial lending activities of a bank using finance principles. Readings and case studies are utilized to provide a contemporary perspective. Prerequisite: Junior standing. Credit 3.

FIN 486 Investments.
A careful study is made of principles, types and forms of investments; modern investments; supply and demand for funds; characteristics of securities; federal, state, and municipal bonds; analysis of securities; and the movement of security prices. Prerequisite: FIN 367. Credit 3.

FIN 487 Security Analysis and Portfolio Management.
This course is an advanced analysis and study of the techniques for selecting and combining securities into a portfolio. Content includes setting investment goals, diversification and risk reduction, capital market theory, and portfolio selection models. Prerequisite: FIN 486. Credit 3. Typically offered only during spring semesters.

FIN 499 Undergraduate Internship in Finance.
A course designed to provide the student with an opportunity to apply academic skills in a practical work environment. (See Finance Internship Coordinator prior to enrolling. A minimum of 150 work hours in a pre approved finance organization. May be repeated for a maximum of 6 hours credit granted for internship.)

General Business Administration Course Descriptions

GBA 111* PGA/PGM Professional Development Lab.
This course is designed to guide students through the completion of the Level 1 materials of the PGA of America's Professional Golf Management Program. Only available to students enrolled in the PGA/PGM program. May be repeated for a maximum of 4 academic credit hours. The course is only available to PGA/PGM students. Credit 1.

GBA 180 Electronic Communications Techniques.
A course designed to provide the student with a background in electronic communications skills. These skills include producing properly formatted business documents concentrating on developing computer literacy and communication of business information in text and numerical formats both in print and online. Credit 3.

GBA 181 Business Principles in an International Environment. [BUSI 1301]
A survey course of all the major business disciplines with an emphasis on helping define career objectives and supporting academic interest areas. An overview of what is involved in accounting, marketing, management, legal aspects of business, economics and finance. An ideal choice for non-business majors wanting to learn of opportunities in business and how to pursue them. Credit 3.

GBA 219* PGA/PGM Internship.
A course designed to provide the student with an initial opportunity to apply academic skills in a practical work environment as required to complete the PGA/PGM Program. (See Internship Coordinator prior to enrolling.) All internships must be approved in advance in order to receive credit. The course may be repeated for a maximum of 2 hours of academic credit and is only available to PGA/PGM students. Credit 1.

GBA 260 Word Processing.
A study of the design and implementation of word processing as a management support system. The course includes theory and practical exercises to develop proficiency-level skills through hands-on application. Prerequisite: GBA 164 or equivalent. Credit 3.

GBA 281 Business Legal Environment. [BUSI 2301]
This course covers legal environment from a "preventive law", practical perspective. Specific subjects include: Litigation, Alternative Dispute Resolution, Torts, Business Organizations, Real and Personal Property Law including Asset Protection-Estate Planning, and Administrative Law. The course provides an introduction to Environmental Law, Consumer Law, Securities Law, Human Resources Management Law (Labor Law), and Marketing Law (Anti-Trust). Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

GBA 311* **Advanced PGA/PGM Professional Development Lab**
This course is designed to guide students through the completion of Levels 2 and 3 materials of the PGA of America's Professional Golf Management Program. Only available to students enrolled in the PGA/PGM program. May be repeated for a maximum of 4 academic credit hours. Credit 1.

GBA 319* **PGA/PGM Internship III.**
A course designed to provide the student with additional opportunity to apply academic skills in a practical work environment as required to complete the PGA/PGM Program. (See Internship Coordinator prior to enrolling.) All internships must be approved in advance in order to receive credit. The course
is only available to PGA/PGM students. Credit 1.

GBA 361 **Office Application System.**
A study of the design and implementation of desktop publishing as a part of the management information system, with an emphasis on hands-on applications at the computer to develop proficiency level skills. Prerequisite: GBA 260 or equivalent. Credit 3.

GBA 362 **Business Law.**
The focus of this course is on areas of modern commercial law as needed by business professionals in conducting business transactions in buying and selling goods and services. Common Law Contracts and negotiation strategies are presented. An examination of the Uniform Commercial Code includes Sales Law, Leasing, Commercial Paper - Negotiable Instruments, Commercial Storage and Distribution of Goods, and Transfer of Securities. Creditor's rights and U.S. Federal Bankruptcy Code are also covered. Credit 3.

GBA 363 **Human Resources Management Law.**
Designed for those seeking management positions and human resource management specialists, this course covers employment law with particular emphasis on Federal Laws on discrimination, compensation and promotion issues, worker safety, and employment benefits. Taught from a "preventive law" perspective, students acquire skills needed to keep abreast of the changing legal environment for employers and employees. Sexual harassment, affirmative action, workers compensation, worker safety and practical overview of employment manuals and procedures provide valuable information for future employees, managers or business owners. Credit 3. Typically offered only during fall semesters.

GBA 366 **Global Entrepreneurship and Innovation.**
Provides an overview of theories of entrepreneurship, the process of creating wealth an public policies that encourage new venture formation and economic growth. Credit 3.

GBA 385 **Real Estate Law.**
This course covers the legal aspects of real estate including the legal principles and legal instruments used in real estate transactions. Credit 3.

GBA 389 **Business Communications.**
Communication as a management tool in business and a personal skill with emphasis on the logical and psychological development of routine messages and reports. Prerequisite: Ability to use a word processing package. Credit 3.

GBA 411 **Professional Development.**
A course to prepare students for the professional job search and for professional conduct on the job so individuals can advance in their chosen careers. Credit 1.

GBA 429* **PGA/PGM Internship IV.**
A course designed to provide the student with an opportunity to apply advanced academic skills in a practical work environment as required to complete the PGA/PGM Program. (See Internship Coordinator prior to enrolling.) The course is only available to PGA/PGM students. Credit 1

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

GBA 430 Problems in Business.
An opportunity for the student to design a course, perhaps on a topic not offered or to more deeply investigate a subject of personal interest. A faculty member will be teamed up on a one-to-one basis to customize a project. Prerequisites: 30 hours in Business Administration and the consent of the department chair. May be taken for the Academic Distinction Program. Credit 1, 2, or 3.

GBA 461 Design and Presentation of Business Projects.
The focus of this course is on designing and delivering effective business presentations. Topics include planning, developing, organizing, and delivering business presentations. Students will design/develop effective visual aids which will be used in their business presentations using computer-assisted programs. Credit 3.

GBA 464 Entrepreneurship.
Designed for the aspiring entrepreneur or for those who are curious as to how wealth is created in a free market economy, this course provides a practical experience of how to evaluate business opportunities, how ventures are started with little or no capital, how wealth is realized, and how to develop innovative entrepreneurial skills and planning techniques to minimize the cost of experience. By the end of the course, students develop their own Personal Entrepreneurs Plan useful in focusing the direction of their personal careers. Credit 3.

GBA 465 International Business Law.
An overview of the international legal environment from a commercial and entrepreneurial perspective. This course examines the implications of international laws on foreign investment, intellectual property, sales contracts, money and banking, financing of enterprises, labor regulation and hiring, taxation, and dispute settlement. Credit 3.

GBA 470 Legal Topics.
An in-depth look at various areas in the law that are of special interest to students of different majors. May be repeated as topics change. Credit 3.

GBA 471 Intercultural Business Communication.
A course to prepare students for the complex leadership roles and communication tasks they will encounter in an increasingly multicultural, global work environment. The course familiarizes students with the cultural impacts on global business; managing cross-cultural effectiveness, transitions, relocations, diversity and performance; and cultural specifics of specific countries. Credit 3.

GBA 499* Internship.
A course designed to provide the student with an opportunity to apply academic skills in a practical work environment. (See Internship Coordinator prior to enrolling.) All internships must be approved in advance in order to receive credit. The course may be repeated one time for a maximum of 6 hours. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

DEPARTMENT OF MANAGEMENT AND MARKETING

Chair: Roger D. Abshire (936) 294-1256; rabshire@shsu.edu

Faculty: Irfan Ahmed, Gary Baker, Charles Capps, Jo Ann Duffy, Ronald Earl, Joseph Kavanaugh, Gerald Kohers, Dean Lewis, Juliana Lilly, Sanjay Mehta, John Newbold, Victor Sower, David Taylor, David Van Over, Victor Wayhan, Pamela Zelbst

Mission

The mission of the Department of Management and Marketing is to advance the mission of the College of Business Administration. The Department's mission is to furnish students the requisite knowledge and skills to be successful in management, human resource management, management information systems, and marketing, or related careers and to pursue graduate studies. The department is committed to excellence in teaching, intellectual contributions, and service.

Academic Programs

- BBA in Human Resource Management
- BBA in Management
- BBA in Management Information Systems
- BBA in Marketing

Career Opportunities

The Management program is designed to prepare students for positions and careers requiring leadership and managerial skills. The Marketing program is designed to prepare students to make marketing decisions that facilitate the organization in achieving its objectives. The Human Resource Management program is intended to prepare students to manage an organization's human resources in an effective and efficient manner. The Management Information Systems curriculum is designed to provide students with the skills necessary to function in entry level information systems positions with a basis for continued career growth. All programs will prepare students for graduate studies.

Student Organizations

- Association of Information Technology
- Beta Alpha Psi
- Society for Human Resource Management

Scholarships

Scholarships are available on a competitive basis for upper-classmen. Applications are accepted between January 2 and February 15. The specific scholarships available vary from year to year and may include:

- James and Ludie Earl Scholarship
- Helen Cochran Gilliland Scholarship
- K.K Lovell, Jr. Scholarships
- J.E. "Bo" Crews Scholarship
- Ed and Daphne Sower Memorial Scholarship *

Please see the College of Business Administration section for information on college and university- level scholarships.

* Available to freshmen majoring in Management with a concentration in Operations Management.

Curriculum
Major in Management[1]
Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ECO 233, 234	6
HIS 163, 164	6	POL 261, 200-level Political Science	6
MTH 199	3	ACC 231, 232	6
Laboratory Science[2]	8	ENG 265, 266, or 267; PHL 261, 263	3
CS 133, 143, GBA 180	3	SCM 282	3
Visual and Performing Arts Elective[3]	3	BAN 232	3
KIN 215	1	GBA 281	3
PSY 131 or SOC 261	3	Cultural Studies Electives[4]	3
	33		33

Third Year	Credit	Fourth Year	Credit
MGT 380, 381, 374	9	MGT 476, 471, 480	9
FIN 367, MKT 371	6	MGT 434, 466, 472, 477, 478,	
GBA 389, BAN 363	6	479, or 481	6
ACC 331	3	ECO 367, 467	6
MIS 388	3	MGT 475	3
Electives	3	Electives	8
	30		32

Emphasis in Operations Management: Students interested in the field of Operations Management are advised to select this area of study. Additional course requirements are: MGT 477, MGT 481, and BAN 364. This emphasis reduces the hours of electives available in the fourth year from eight to five.

Minor in Management

A minor in Management (21 hours) is available to all bachelor degree programs that permit a minor. The minor in Management requires MGT 380, 381; and 15 additional advanced hours in MGT courses; or MIS 388 and 12 additional advanced hours of MGT courses with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in management must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the management minor or not.

Major in Human Resource Management[1]
Bachelor of Business Administration

The first and second years are the same as stated above for a major in Management.

Third Year	Credit	Fourth Year	Credit
MGT 380, 381, 374, 480	12	MGT 472, 478, 479	9
FIN 367, MKT 371	6	MGT 475, 476	6
BAN 363	3	ECO 361, 367	6
MIS 388	3	ACC 331	3
GBA 363, 389	6	Electives	8
	30		32

[1] Transfer students must take at least 50% of the required business curriculum for the B.B.A. degree in residence at Sam Houston State University.

[2] Two four-hour laboratory science courses must be taken: Biology (including ESC 147), Chemistry, Geography/Geology (the only geography course that satisfies a laboratory science requirement is GEO 131/111), or Physics.

[3] Select from AGR 299**, ART 160, 161, 163, 260, DNC 131, 176, MUS 161, 264, 265, THR 160, 164, 166, 230, 231. Satisfies the Visual and Performing Arts requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

[4] Select from BSL 236, Foreign Languages 263, 264, GEO 265, 266, HIS 265, 266, or SOC 168. Satisfies the Cultural Studies requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

Management Course Descriptions

MGT 374 Human Resource Management.
Personnel policies and administration, job classification and analysis, wage plans and employment procedure, employment interviewing and testing, employee training and evaluation, labor turnover, and legislation affecting labor problems are studied. Prerequisites: MGT 380. Credit 3.

MGT 380 Principles Of Management.
This course is concerned with the principles and methods used in managing and operating organizations, both domestically and abroad. Course coverage includes analysis of the organization's environment and the managerial functions of planning, organizing, leading, motivating, and controlling. Credit 3.

MGT 381 Organizational Behavior.
Advanced study of individual and group behavior in organizations and how it affects the achievement of organizational objectives. Prerequisite: MGT 380. Credit 3.

MGT 430 Problems In Management.
The credit in this course varies according to the work performed. The student may pursue special studies for which a special course is not organized. Prerequisites: 30 hours in Business and Economics and consent of the instructor. This course may be taken for the Academic Distinction Program. Credit 1, 2, or 3.

MGT 434 Small Business Development.
A comprehensive study of all areas of operations and management of the small business enterprise. Topics covered include: ownership form, site analysis, planning, organizing, staffing, financial control, inventory control, and marketing tactics. Prerequisite: MGT 380. Credit 3.

MGT 466 Services Marketing Management.
This course examines the characteristics of the service domain. The planning, organization, production, and marketing of quality services will be the focus of the course. Prerequisites: MGT 380 and MKT 371. Credit 3.

MGT 471 International Management And Marketing.
A study of the decisions that managers must make in the planning, organizing, and operating of companies in cross-cultural environments. Prerequisite: MGT 380, MKT 371. Credit 3.

MGT 472 Compensation.
A study of the design and functioning of the entire compensation system with emphasis on wage and salary determination, individual and group incentives, employee benefits, and non-economic rewards. Prerequisite: MGT 380. Credit 3.

MGT 475 Operations Management.
This course addresses issues pertaining to the operations function within manufacturing and service firms competing in a global environment. The relationship of operations to other organizational functions will be investigated. Topics include decision making, project management, forecasting, capacity planning, facilities design and location, process and product design, inventory management, and quality assurance. Prerequisites: MGT 380, BAN 363. Credit 3.

MGT 476 Strategic Management And Policy.
The evaluation of external environmental factors and internal organizational strengths and weaknesses for the purpose of formulating organization strategies. Prerequisites: MGT 380, MKT 371, FIN 367, and senior standing. Credit 3.

MGT 477 Supply Chain Management.
A study of the marketing channels of distribution and the management of the integrated supply chain for products and services. The course addresses both upstream (suppliers) and downstream (channels of distribution) organizational members. Topics include purchasing, supplier selection/development, inter-organizational information systems, risk management, physical distribution, logistics, warehousing, channel relationships, and inventory management. Prerequisites: MGT 380, MKT 371. Credit 3.

MGT 478 Management And Labor Relations.
A study of the legal perimeter of management labor relations, the collective bargaining process, and problems of union contract compliance. Prerequisites: MGT 380. Credit 3.

MGT 479 Human Resource Development.
Provides an overview of the training discipline, identifies current issues for researchers and practitioners, and highlights coming changes in the work place and their impact on training and development in organizations. Prerequisite: MGT 380. Credit 3.

MGT 480 Social Responsibility Of Management.
A study of the role business plays in our society and the obligations and responsibility it has to society. The course examines the ethical, environmental, and cultural implications of industrial/technological societies and their history. Prerequisites: MGT 380. Credit 3.

MGT 481 Quality Management.
A study of current topics in quality assurance management to include total quality control, statistical quality control, statistical process control, quality circles, and Deming's methods. Emphasis will be placed on the systems approach to quality assurance. Prerequisites: MGT 475 (or IT 478), and BAN 363. Credit 3.

Major in Management Information Systems[1]

Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ECO 233, 234	6
HIS 163, 164	6	POL 261, 200-level Political Science	6
MTH 199	3	ACC 231, 232	6
Laboratory Science[2]	8	ENG 265, 266, 267; or PHL 261, 263	3
CS 133, CS 143, GBA 180	3	SCM 282	3
Visual and Performing Arts Elective[3]	3	BAN 232	3
KIN 215	1	GBA 281	3
PSY 131 or SOC 261	3	MIS 291	3
	33		33

Third Year	Credit	Fourth Year	Credit
MIS 388, 390, 379	9	MIS 431, 485	6
FIN 367	3	ECO 467	3
MKT 371	3	MGT 476	3
GBA 389	3	Restricted Electives[5]	12
MGT 380, 475	6	Electives	8
BAN 363	3		32
Cultural Studies Electives[4]	3		
	30		

Minor in Management Information Systems

A minor in Management Information Systems (21 hours) is available to all bachelor degree programs that permit a minor. The minor in Management Information Systems requires MIS 388, 390, 291, 431, 479, 485, and 3 advanced hours of MIS with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in Management Information Systems must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the management information systems minor or not.

[1] Transfer students must take at least 50% of the required business curriculum for the B.B.A. degree in residence at Sam Houston State University.
[2] Two four-hour laboratory science courses must be taken: Biology (including ESC 147), Chemistry, Geography/Geology (the only geography course that satisfies a laboratory science requirement is GEO 131/111), or Physics.
[3] Select from ART 160, 161, 163, 260, DNC 131, 176, MUS 161, 264, 265, or THR 160, 164, 166, 230, 231. Satisfies the Visual and Performing Arts requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).
[4] Select from BSL 236, Foreign Languages 263, 264, GEO 265, 266, HIS 265, 266, or SOC 168. Satisfies the Cultural Studies requirement of Component Area 4 of the Core Curriculum.
[5] Select from ACC 381, GEO 434, CS 164, 165, 234, or 278, MIS 438, 480, or 490 or a substitute approved by the Chair of the Dept. of Management and Marketing.

Management Information Systems Course Descriptions

MIS 291 **Business Systems Implementation.**
An introduction to the implementation of common business applications using current visual application development platforms. Basic structured and object-oriented analysis and construction techniques are taught in the context of the creation of business-oriented systems. Prerequisites: CS 133, CS 143, or GBA 180, and MTH 199. Credit 3.

MIS 379 **Systems Analysis and Design.**
A first course describing the methods for analyzing information needs and designing, evaluating, and implementing computer-based information systems. Special attention is given to both structured and adaptive techniques for analysis and design. Basic structured and object-oriented analysis and construction techniques are taught in the context of the creation of business-oriented systems. Prerequisite: MIS 390. Credit 3.

MIS 388 **Management Information Systems.**
This course is designed to be an introduction to the management and use of information systems in organizations. Material presented is selected to increase the student's literacy in this rapidly changing field, including commonly used acronyms and emerging technologies. Organizational applications of information systems will be discussed for all functional areas of the firm. Prerequisites: GBA 180, CS 133 or CS 143. Credit 3.

MIS 390 **Business Database Management.**
Introduction to databases. Entity-relationship modeling and normalization are studied and applied in order to create an organizational database. Students will become better computer users, who are more knowledgeable about the uses of databases in solving business problems, and learning a new way to think about business and its information needs. Prerequisite: Junior standing

MIS 430 **Problems in Management Information Systems.**
The credit in this course varies according to the work performed. The student may pursue studies for which a special course is not organized. Credit 1, 2, or 3.

MIS 431 **Electronic Commerce Implementation.**
An introduction to the implementation of common business applications for electronic commerce using Internet related technologies. The basics of Hypertext Markup Language (HTML), Common Gateway Interfaces (CGI), Java, and other current technologies will be covered in the context of electronic commerce applications on the Internet. Prerequisites: MIS 390 and MIS 291. Credit 3.

MIS 438 **Advances in Information Systems.**
A study of emerging information technologies. Class participants will learn about the technical fundamentals and business applications associated with information technologies. Prerequisite: MIS 390. Credit 3

MIS 480 Design and Implementation – ERP Systems.
This course builds on knowledge acquired in the Systems Analysis and Design class (MIS 379). This class studies the types of issues that managers will need to consider in implementing cross-functional integrated systems. We will examine the general nature of enterprise computing, re-engineering principles and the technical foundations of client/server systems and enterprise information architectures. We will also look at the different types of enterprise information systems, primarily SAP R/3. Topics include the tools and methodology, modules, processes, and industry initiatives. Prerequisite: MIS 379. Credit 3.

MIS 485 Business Network Management.
Presentation of current and emerging telecommunications services and networking technologies with emphasis on their strengths, limitations, and business applications. Practical aspects of installing and managing networks within business organizations. Commonly used network media, operating systems, LAN and WAN technologies, inter-networking approaches and media will be presented. Prerequisites: MIS 390 and MIS 291. Credit 3.

MIS 490 Business Database Management II.
This course provides strategies and techniques that give students knowledge and skills for database development, design, and implementation in a multi-user business environment using Oracle DBMS software. The course covers relational database technology and focuses on design of database applications. Case studies will be used to illustrate the use of database systems for strategic and operational decision making. Emerging technologies and their applications will be covered. Students will get hands-on experience with state-of-the-art commercial relational and object-oriented database technology and learn to use SQL. Prerequisite: MIS 390. Credit: 3.

Major in Marketing[1]

Bachelor of Business Administration

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ECO 233, 234	6
HIS 163, 164	6	POL 261, 200-level Political Science	6
MTH 199	3	ACC 231, 232	6
Laboratory Science[2]	8	ENG 265, 266, or 267; PHL 261, 263	3
CS 133, 143, GBA 180	3	SCM 282	3
Visual and Performing Arts Elective[3]	3	BAN 232	3
KIN 215	1	GBA 281	3
PSY 131 or SOC 261	3	Cultural Studies Electives[4]	3
	33		33

Third Year	Credit	Fourth Year	Credit
MKT 371, 378, 472	9	MKT 471, 473	6
MGT 380, GBA 389	6	MKT 372, 374, 376, 466, 477 or 478	6
FIN 367, BAN 363	6	MGT 475, 476	6
ACC 331, MIS 388	6	ECO 367, 467	6
Electives	3	Electives	8
	30		32

Minor in Marketing

A minor in Marketing (21 hours) is available to all bachelor degree programs that permit a minor. The minor in Marketing requires MKT 371, 378, 473; and 12 additional advanced hours in MKT with a minimum grade point average of 2.0 in these courses. Furthermore, degree candidates for a minor in marketing must achieve a minimum 2.0 grade point average for all hours attempted in business courses, including residence and transfer hours whether required for the marketing minor or not.

[1] Transfer students must take at least 50% of the required business curriculum for the B.B.A. degree in residence at Sam Houston State University.

[2] Two four-hour laboratory science courses must be taken: Biology (including ESC 147), Chemistry, Geography/Geology (the only geography course that satisfies a laboratory science requirement is GEO 131/111), or Physics.

[3] Select from ART 160, 161, 163, 260, DNC 131, 176, MUS 161, 264, 265, or THR 160, 164, 166, 230, 231. Satisfies the Visual and Performing Arts requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

[4] Select from BSL 236, Foreign Languages 263, 264, GEO 265, 266, HIS 265, 266, or SOC 168. Satisfies the Cultural Studies requirement of Component Area 4 of the Core Curriculum (see pages 52-53 of this catalog).

Marketing Course Descriptions

MKT 371 **Principles of Marketing.**
This course includes marketing functions, transportation, assembling, storage, trade channels, cost, co-operative marketing, trade association, market analysis, marketing structures and agencies, types of middlemen, international marketing, and current marketing practices. Prerequisite: Junior Standing. Credit 3.

MKT 372 **Advertising Principles.**
Advertising fundamentals in relation to modern business activity, fields of advertising, campaigns, appropriations, media and survey of activities of those engaged in advertising work studied. Credit 3.

MKT 374 **Sales Management.**
A study of the Selling process and the principles involved in the managing of the selling function. Provides an overview of the field of sales management and the role of the sales manager. Prerequisites: MKT 371. Credit 3.

MKT 376 **Retailing.**
This course includes the evolution of retailing, the scope of retailing, store location, store layout, organization, the customer, buying markets, receiving and marketing merchandise, mark-up, stock control, merchandise plan, fashions, retail credit, accounting, insurance, and sales promotion. Prerequisite: MKT 371. Credit 3.

MKT 378 **Consumer Behavior.**
A study of consumer decision-making processes in marketing and the factors that influence these processes. Prerequisite: MKT 371. Credit 3.

MKT 430 **Problems in Marketing.**
The credit in this course varies according to the work performed. The student may pursue special studies for which a special course is not organized. Prerequisites: 30 hours in Business and Economics and consent of the instructor. This course may be taken for the Academic Distinction Program. Credit 1, 2, or 3.

MKT 464 **Internet Marketing**.
This course will explore issues companies need to consider when using the internet as a medium for marketing goods and services. Besides the World Wide Web, several other e-marketing issues will be discussed (e.g., GIS, GPS, Database marketing, EDI, Data mining, etc.). The class will not delve too deeply into technical details, but rather discusses Internet marketing issues in the context of marketing strategy, consumer behavior, marketing communication, retailing, distribution, pricing, etc. Prerequisites: MIS 388 and MKT 371. Credit 3.

MKT 466 **Services Marketing Management.**
This course examines the characteristics of the service domain. The planning, organization, production, and marketing of quality services will be the focus of the course. Prerequisites: MGT 380 and MKT 371. Credit 3.

MKT 471 **International Management and Marketing.**
Surveys the economic, cultural and political foundations of international marketing systems, the foreign consumer, product policies, and distributional structures as well as the promotional and marketing research phases of foreign operations. Prerequisite: MKT 371, MGT 380. Credit 3.

MKT 472 Marketing Research.
The study of methods of collecting and analyzing information to be used in determining marketing strategy and making marketing decisions. Prerequisites: MKT 371, BAN 363. Credit 3.

MKT 473 Strategic Marketing Management.
Application of managerial principles in the development and execution of marketing strategy. Prerequisite: MGT 380 and MKT 371 plus six additional hours of marketing. Credit 3.

MKT 477 Supply Chain Management.
A study of the marketing channels of distribution and the management of the integrated supply chain for products and services. The course addresses both upstream (suppliers) and downstream (channels of distribution) organizational members. Topics include purchasing, supplier selection/development, inter-organizational information systems, risk management, physical distribution, logistics, warehousing, channel relationships, and inventory management. Prerequisite: MGT 380, MKT 371. Credit 3.

MKT 478 Marketing Communication and Promotional Strategy.
A study of contemporary issues in marketing communications. An examination of how the elements of the promotional mix, with emphasis on advertising, are used to develop effective marketing strategies. Prerequisite: MKT 371. Credit 3.

College of Criminal Justice

Undergraduate Catalog 06-08

COLLEGE OF CRIMINAL JUSTICE

Administrative Officers

Dean — Richard H. Ward, D.Crim.
(936)294-1632; rward@shsu.edu

Associate Dean — W. Wesley Johnson, Ph.D.
(936)294-1640; Johnson@shsu.edu

Associate Dean — Janet Mullings, Ph.D.
(936)294-1646; icc_jlm@shsu.edu

Faculty: James Barrum, Carrie Butler, Steven Cuvelier, Rolando del Carmen, Jerry Dowling, R.L. Garner, Jurg Gerber, Rodney Henningsen, Larry Hoover, Wes Johnson, Hee-Jong Joo, Robert Keppel, Glen Kercher, Sarah Kerrigan, Brian Lawton, Dennis Longmire, Phillip Lyons, Holly Miller, Doug Moore, Janet Mullings, Will Oliver, Joseph PetersonMitchell Roth, Jennifer Schulenberg, Robert Shearer, Sam Souryal, Raymond Teske, Victoria Titterington, Sparks Veasey, Richard Ward

Mission

PREAMBLE: The College of Criminal Justice is committed to providing students with a quality liberal arts education. Furthermore, students will gain an appreciation of their role as criminal justice professionals and as contributing members of society. As a part of a public university, the College also is committed to public service.

The University baccalaureate core curriculum will provide the foundation for talents necessary to succeed in the criminal justice profession and in society. These talents include:

- an ability to communicate effectively, both orally and in writing.
- an ability to use numbers and symbols in the representation of reality and to engage in logical thinking.
- an appreciation of the scientific method and the contribution of the sciences.
- an appreciation of culture through the visual and performing arts.
- an appreciation of human diversity and the imperative of human values in the preservation of a free society.
- an understanding of the political nature of society and its role in the Union of the United States.
- an understanding of the role of the individual as part of the family, groups, organization, and society.
- an appreciation of moral and ethical judgment.
- an appreciation of self through physical, social, and psychological development.

Criminal Justice: Criminal justice is a discipline that encompasses the preservation and protection of social order in a free society. It includes such principles as democracy, rule of law, constitutionalism, civil liberties, and the safeguarding of citizens against intimidation and oppression. The Criminal Justice curriculum which is based on the University's liberal arts core is designed to prepare students for higher education or entering careers in criminal justice. Graduates are expected to continue their personal and professional development in a variety of practical settings. To achieve this mission, four dimensions of development serve as a basis for the curriculum.

Knowledge, Reasoning, Judgment: The Criminal Justice curriculum provides students with the opportunity and assistance to acquire knowledge of the roles of policing, courts, laws, and corrections as they contribute to social order. Students will gain knowledge of the history, concepts, and critical issues in these areas through criminal justice required courses. The curriculum further provides a theoretical foundation of the discipline, combined with a thorough understanding of the scientific method as it applies to criminal justice. This combination is expected to sharpen the students' talents of reasoning and judgment — qualities imperative to rational functioning in the discipline.

Ability, Skills, Integration: The Criminal Justice curriculum provides students with the ability to achieve the professional goals of criminal justice. Students will learn how to prudently integrate knowledge and practice in criminal justice. Furthermore, the curriculum provides students with an opportunity to develop the individual and group skills necessary to meet various role expectations.

Conduct, Professionalism, Ethics: The Criminal Justice curriculum will provide graduates with an appreciation for the complexity and dilemmas associated with the criminal justice profession. Criminal Justice students will be exposed to the moral and ethical dimensions of the various careers within the discipline and will be charged with the essential aptitudes necessary for their professional conduct.

Vision, Change, Adaptation: The Criminal Justice curriculum will provide students with an understanding of the discipline as it currently exists and as it is envisioned to be in the future. The Criminal Justice student will be able to apply vision in the face of change and to respond to the evolving nature of criminal justice and society. Furthermore, students will be equipped with the tools of adaptation for making these changes.

The Criminal Justice program at Sam Houston State University was established by the Texas Legislature in 1965 under House Resolution 469, which directed the University to establish a program of excellence in criminal justice with four objectives:

- Provide training for undergraduate and graduate students preparing for careers in criminal justice;
- Provide a program of continuing education for professionals already employed in the field;
- Provide technical assistance and consultation services to criminal justice agencies;
- Promote research on problems in crime and the administration of criminal justice.

The College of Criminal Justice has developed a regional and national reputation for excellence. The academic programs include a major in criminal justice at the bachelor's level and graduate degrees at the masters and doctoral levels. The program leading to the Doctor of Philosophy in Criminal Justice is available only to students already holding an advanced degree.

Academic Programs

Major	Degree(s)	Page
Criminal Justice	B.A., B.S.	268
Victim Studies	B.A.	270

Note: This listing of undergraduate degree programs is correct as of December, 2005 and does not include those degree programs being phased out.

Highlights

- The Criminal Justice Center is a 130,000 square foot facility which houses a courtroom, auditorium and café.
- The Criminal Justice Center encompasses the Bill Blackwood Law Enforcement Institute of Texas, the Correctional Management Institute of Texas , and the Crime Victims' Institute
- The CJ program boast one of the largest faculties in the United States with experts in the field of law, law enforcement, police administration, criminology, corrections, history, psychology, terrorism, and forensic science
- Recruiters from various agencies around the world visit the center on a regular basis.
- Students receive real world experience by participating in prison tours, internships, and regional/national conferences.

Suggested Minors

- Psychology
- Sociology
- Foreign Language
- Computer Science

- General Business
- Accounting
- Biology
- Chemistry

Career Opportunities

- Police Officer
- Airline Security
- Customs Patrol Officer
- Security Consultant
- Loss Prevention
- Crime Lab Analysis
- Border Patrol
- Narcotics Investigator
- Private Investigation
- Probation/Parole Officer
- Family/Child Services
- Correctional Officer
- Game Warden
- Military Intelligence
- Victim Services Specialist
- Substance Abuse Counselor

Student Organizations and Activities

- Alpha Phi Sigma National Criminal Justice Honor Society
- Lambda Alpha Epsilon Criminal Justice Association
- Society of Forensic Science
- National Association of Blacks in Criminal Justice
- Phi Alpha Delta Pre-Law Society

The College of Criminal Justice hosts a variety of events for students including special guest lecturers, victimology fairs, mock courtroom trials, and an annual student/faculty picnic each Spring semester.

Internships/Study Abroad

Through the Internship Program, many criminal justice agencies in the United States have had an opportunity to recruit dedicated and well-educated men and women for careers in law enforcement, corrections, penology, and a variety of social service agencies that work with the offender. Students interested in serving as interns must have maintained a cumulative grade point average of at least 2.50 in all coursework and be classified as seniors. Field placements range from local to international agencies with emphases on law enforcement, corrections, courts/legal services, and support/social services. The following is a list of some of the agencies used as field placements:

- Bureau of Alcohol, Tobacco, and Firearms
- Drug Enforcement Administration
- Federal Bureau of Investigations
- Federal Law Enforcement Training Center
- INTERPOL
- Pinkerton Investigative Services
- Texas Attorney General
- Texas Department of Public Safety
- Texas Parks and Wildlife
- United Nations
- United States Custom Service
- United States Department of State
- United States Marshall Service
- United States Secret Service
- White House Security, Washington D.C.

The College of Criminal Justice offers a variety of fascinating tours to such exotic locales as, Turkey, Poland, Italy, Korea, Spain, and China. Traveling with SHSU turns an ordinary trip into an unforgettable experience. Students may receive 3 hours of academic credit for study abroad trips. Classes include the following areas: victimology, human rights issues, police training, crime in the country, correctional systems and criminal and procedural law. For more information, visit the criminal justice study abroad website at http://www.cjcenter.org/college/trips/.

Scholarships

Scholarships are available to criminal justice majors and awarded in the spring of each year at the College of Criminal Justice Honors Convocation for the following academic year. To qualify for a scholarship, a student must have completed at least one long semester at Sam Houston State University, unless otherwise indicated. Please review the CJ scholarship website at www.shsu.edu/~sfa_www/scholarship.html#cj.

Program Specific Requirements

Please see the individual degree plans below for degree specific requirements.

Curriculum

Sam Houston State University is authorized by the Texas Higher Education Coordinating Board to offer a Bachelor of Arts degree and a Bachelor of Science degree with a major in Criminal Justice, and a Bachelor of Arts in Victim Studies. Coursework for these degrees is offered by the College of Criminal Justice. The prefix designation for registration purposes is "CJ."

Criminal Justice Core

CJ 261 Introduction to the Criminal Justice System	3
CJ 262 Criminology	3
CJ 264 Fundamentals of Criminal Law	3
CJ 436 Understanding Human Behavior or PSY 289 Psychology of Adjustment	3
CJ 465 Professionalism and Ethics in Criminal Justice	3
CJ 478 Introduction to Methods of Research	3
	18

Major (No Minor)

Core Courses	18
Criminal Justice Electives*	30

* **Note:** At least 18 of the 30 hours must be in 300 or 400 level courses. Internship can be counted as CJ electives.

Major (With Approved Minor in Another Field)

Core Courses	18
Criminal Justice Electives*	12 or 18
Minor	18

* **Note:** BA: 12 advanced hours; BS: 18 hours — at least 12 must be advanced hours. Internship may be counted as CJ electives for 36 hour majors.

Major in Criminal Justice

Bachelor of Arts

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265, 266, 267; PHL 261, 263	3
HIS 163, 164	6	ENG Lit or SCM 161/282	3
MTH 164 or 170	3	Laboratory Science **	8
Cultural Studies elective***	3	POL 261, 3 hours POL	6
Visual and Performing Arts	6	CJ 264, 436 or PSY 289	6
CJ 261, CJ 262	6	FL 141, 142	8
KIN 215, KIN Activity	2		34
	32		

Third Year	Credit
CJ 465, 478	6
Visual and Performing Arts	3
PHL 261 or higher	3
FL 263, 264	6
CS 133, 143; LS 130, or MIS 188*	3
CJ Electives (300/400 level)	12
	33

Fourth Year	Credit
ECO 230, 233, 234, GEO 161, PHL 262, SOC 261, 264 or PSY 131	3
CJ Electives (300/400 level)	18
General Electives	8
	29

* This requirement may be satisfied by the successful completion of three hours of Management Information Systems 188, Computing Science 138, Library Science 130 or three hours or more of advanced computer literacy courses.

** This requirement is met by the successful completion of two four-hour laboratory science courses. The courses must be taken from two different departments: BIO, CHM, GEL/GEO 131/111 or PHY.

*** This criterion may be satisfied with the successful completion of three semester hours selected from Component Area 4 of this catalog.

Additional requirements: Forty-two semester hours of advanced coursework (300 or 400 level) are the absolute minimum. Minimum number of semester hours in residence: 32 semester hours of which 24 must be advanced.

Major in Criminal Justice

Bachelor of Science

First Year	Credit
ENG 164, 165	6
MTH 164	3
Laboratory Science **	8
HIS 163, 164	6
CJ 261, CJ 262	6
KIN 215, KIN Activity	2
	31

Second Year	Credit
ENG 265, 266, 267; PHL 261, 263	3
ENG Lit or SCM 161/282	3
MTH 170 or higher	3
Laboratory Science **	8
POL 261,3 hours POL	6
CJ 264, 436 or PSY 289	6
CS 133, 143; LS 130, MIS 188*	3
	32

Third Year	Credit
MTH, CS, or Laboratory Science***	6-8
Cultural Studies elective****	3
CJ 465, 478	6
CJ Electives (300/400 level)	12
ECO 230, 233, 234, GEO 161, PHL 262, SOC 261, 264, PSY 131, 289	3
General Electives	3
	33-35

Fourth Year	Credit
CJ Electives (300/400 level)	18
Visual and Performing Arts	3
General Electives	11
	32

COCJ

* This requirement may be satisfied by the successful completion of three hours of Management Information Systems 188, Computing Science 138, Library Science 130 or three hours or more of advanced computer literacy courses.

** This requirement is met by the successful completion of two four-hour laboratory science courses. The courses must be taken from two different departments: BIO, CHM, GEL/GEO 131/111 or PHY.

*** This criterion may be satisfied with the successful completion of 6-8 hours in mathematics or laboratory science courses. These courses must be taken from BIO, CHM, GEL/GEO 131/111 or PHY and excluding the two departments in which eight hours of laboratory science have been completed.

**** This criterion may be satisfied with the successful completion of three semester hours selected from Component Area 4 of this catalog.

Additional requirements: Forty-two semester hours of advanced coursework (300 or 400 level) are the absolute minimum. Minimum number of semester hours in residence: 32 semester hours of which 24 must be advanced.

Major in Victim Studies

Bachelor of Arts

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265, 266, 267; PHL 261, 263	3
MTH 164 or 170	3	POL 261, 3 hours POL	6
Laboratory Science **	8	CJ 483	3
Visual and Performing Arts	3	CS 133, 143*	3
HIS 163, 164	6	KIN 215, KIN Activity	2
CJ 261, CJ 267 or CJ 274	6	Cultural Studies elective*****	3
	32	PSY 131	3
		FL 141, 142	8
			31

Third Year	Credit	Fourth Year	Credit
ENG Lit or SCM 161/282	3	CJ 465, PSY 365 or PHL 471	6
Visual and Performing Arts	6	HED 493, PSY 331	6
MGT 380, MGT 466	6	CJ 294, 470, 477, 496, 497****	12
CJ 478 or SOC 386 or HED 460	3	CJ 489	3
CJ 480	3	Electives	5
FL 263, 264	6		32
PHL 261 or higher	3		
ECO 230, 233, 234; GEO 161***	3		
	33		

The Victim Studies Major is an interdisciplinary degree. Please be aware that there may be pre-requisites or stem courses that you need to complete before taking some of the classes listed.

* This requirement may be satisfied by the successful completion of three hours of Management Information Systems 188, Computing Science 138, Library Science 130 or three hours or more of advanced computer literacy courses.

** This requirement is met by the successful completion of two four-hour laboratory science courses. The courses must be taken from two different departments: BIO, CHM, GEL/GEO 131/111 or PHY.

*** This criterion may be satisfied with the successful completion of three semester hours selected from Component Area 5 (ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, 264) of this catalog.

**** MGT 474, POL 334, POL 433, PSY 331, PSY 381, SOC 333, SOC 335, SOC 364, CJ 473 (9 hours), POL 495 (9 hours), or any department approved substitution.

***** This criterion may be satisfied with the successful completion of three semester hours selected from Component Area 4 of this catalog.

Additional requirements: Forty-two semester hours of advanced coursework (300 or 400 level) are the absolute minimum. Minimum number of semester hours in residence: 32 semester hours of which 24 must be advanced.

Minor in Criminal Justice

CJ 261 Introduction to the Criminal Justice System	3
CJ 262 Criminology	3
CJ 264 Fundamentals of Criminal Law	3
CJ 436 Understanding Human Behavior or	
PSY 289 Psychology of Adjustment	3
CJ 465 Professionalism and Ethics in Criminal Justice	3
CJ 478 Introduction to Methods of Research	3
	18

The College of Criminal Justice has developed several Emphasis Areas for students who desire to focus their academic coursework in a particular field. These may include areas such as *Forensic Science (listed below), Comparative Criminal Justice, Policing, Security Studies, Terrorism, Victim Studies, and Probation, Parole & Corrections*. Each Emphasis Area will require completion of a prescribed series of courses. Those interested in completing an Emphasis Area should contact the Undergraduate Advisement Office in the College of Criminal Justice, (936) 294-3710.

Emphasis in Forensic Science
Bachelor of Science

Students seeking a background that will prepare them for careers in Forensic Science can select advanced courses that can lead to a major in Chemistry and a minor in Criminal Justice and/or Biology.

CHM 438	Introductory Biochemistry
CHM 439	Metabolism
CHM 440	Instrumental Analytical Chemistry
CHM 441	Methods for Environmental and Industrial analyses
CHM 458	Physical Chemistry I
CHM 495	Undergraduate Research in Chemistry

CJ 261	Introduction to the Criminal Justice System
CJ 267	Police Systems and Practices
CJ 268	Criminal Investigation
CJ 273	Legal Aspects of Law Enforcement
CJ 294	The Courts and Criminal Procedure
CJ 366	Forensic Science
CJ 363	Violent Offenders
CJ 462	Drug Use and Abuse
CJ 473	Undergraduate Internship In Criminal Justice (nine hours)
CJ 477	Serial Murder

Other recommended courses include:

BIO 345	Introductory Genetics
BIO 347	General Microbiology
BIO 349	Histology
BIO 474	Biostatistics
BIO 480	Introduction to Molecular Biology

Information on Programs and Grants

For additional information regarding admission requirements, degree programs, description of courses, and scholarships available to students, please refer to appropriate sections of the Undergraduate Catalog or the Graduate Catalog of Sam Houston State University. Brochures and information regarding the College of Criminal Justice baccalaureate, master's, and doctoral programs may be obtained by writing:

Dean and Director
College of Criminal Justice
Sam Houston State University
Huntsville, Texas 77341-2296

Requests for information concerning loans, grants, and other financial aid to undergraduate students should be addressed to the Student Financial Aid Office, Sam Houston State University, Huntsville, Texas 77341-2328.

Criminal Justice Course Descriptions

CJ 261 **Introduction to the Criminal Justice System**. [CRIJ 1301]
An introductory course designed to familiarize students with the facets of the criminal justice system, the sub-systems and how they interrelate, processing of offenders, punishment and its alternatives, and the future of the criminal justice system. Credit 3.

CJ 262 **Criminology**. [CRIJ 1307]
Crime as a form of deviant behavior; nature and extent of crime; past and present theories; evaluation of prevention, control, and treatment programs. Credit 3.

CJ 264 **Fundamentals of Criminal Law**. [CRIJ 1310]
A course in substantive criminal law which includes definition of law, definition of crime, general principles of criminal responsibility, elements of the major crimes, punishments, conditions or circumstances which may excuse from criminal responsibility or mitigate punishment, the court system of Texas and the United States, basic concepts of criminal law with emphasis on the penal law of the State of Texas. Credit 3.

CJ 265 **Correctional Systems and Practices**. [CRIJ 2313]
Analysis and evaluation of contemporary correctional systems; discussion of recent research concerning the correctional institution and the various field services. Credit 3.

CJ 267 **Police Systems and Practices**. [CRIJ 2328]
Philosophy and history of law enforcement; limitations imposed on law enforcement in a democratic society in accordance with the Constitution; agencies of law enforcement; role and place of law enforcement in the total justice process. Credit 3.

CJ 268 **Criminal Investigation**. [CRIJ 2314]
This course provides a brief overview of scientific crime detection and more detailed discussion of techniques for case management and documentation, the concept of proof, the impact of emergent technology on the investigative process, interacting with victims and witnesses, and interviewing suspects. Particular emphasis may be placed on the investigation of particular types of crimes, for example, homicides, sex offenses, child abuse, hate crimes, and so forth. Prerequisite: CJ 267 or consent of instructor. Credit 3.

CJ 273 **Legal Aspects of Law Enforcement**. [CRIJ 2323]
Investigation, arrest, search and seizure; study of constitutional and statutory law and the decisions of the United States Supreme Court and the Texas Court of Criminal Appeals. Credit 3.

CJ 274 **Community Resources in Corrections**.
A survey and analysis of probation, parole, and other community-reintegration procedures, halfway houses, community treatment centers, volunteer programs, and graduated release with special emphasis upon the functions, possibilities, and problem of community-based programs. Credit 3.

CJ 294 **The Courts and Criminal Procedure**. [CRIJ 1306]
Examines procedural requirements for judicial processing of criminal offenders. Examines concepts of evidence sufficiency, standards of proof, due process, and constitutional safeguards. Credit 3.

CJ 339 **History of the Criminal Justice System**.
A study of the major social, economic, legal and political events which have contributed to the formation of the American Criminal Justice System. Emphasis is on the common roots of the different components of the present system. Prerequisite: CJ 261. Credit 3.

CJ 361 **Comparative Criminal Justice Systems**.
The study of criminal justice in societies other than the United States including, but not limited to, the European region, the Asian region, and the African region. Emphasis is on the uncommon roots of criminal justice in these regions and the effectiveness of such systems in responding to criminal behavior. Prerequisites: CJ 261 and CJ 262. Credit 3.

CJ 362 **White Collar Crime.**
The study of the ideas and perspectives that are dominant in the field of white-collar crime. Topics such as organizational crime, occupational crime, legislation aimed at white collar crime, law enforcement, causes of white collar crime, and possible forms of intervention will be discussed. Prerequisites: CJ 261 and CJ 262. Credit 3.

CJ 363 **Violent Offenders.**
This course provides an introduction to psychological issues relating to understanding, assessing, managing criminal and other abnormal behavior. An overview of mental disorders and their relationship to criminality and violence is provided. Topics include sanity, psychopathy, criminal profiling, serial killers, stalking, women who kill, and threat assessment. Prerequisite: CJ 261 or CJ 262. Credit 3.

CJ 364 **Special Offenders and Special Needs.**
The identification and study of special or unusual offenders with special or unusual needs . Special offenders include those which rarely are covered in standard criminology classes, such as wildlife poachers, serial killers, computer hackers, substance abusers, and business and professional scam artists. Prerequisites: CJ 261 and CJ 262.

CJ 366 **Forensic Science**.
This course introduces students to the process of analysis of forensic evidence and developments in crime scene techniques. Students will gain basic knowledge of and some practical experience in techniques concerning various types of evidence including fingerprint, impression, hair, fiber, trace, firearms, took marks, biological, accelerant, explosive, and drug. Credit 3.

CJ 368 **Understanding Sexual Offending.**
This course provides an overview of the sexual offender. The origins and various motivations for sexual offending are explored as are treatment strategies and their relative effectiveness with different offender groups. Various approaches to community supervision are examined as are controversial issues such as castration of sex offenders. Prerequisite: CJ 261 or CJ 262. Credit 3.

CJ 394 **Terrorism**.
This course provides an overview of the field of terrorism. Using a multi-dimensional approach that draws from international relations, law, and police strategies, the course emphasizes research and analysis. Students also gain the ability to examine and scrutinize international strategies aimed at reducing terrorist incidents. Prerequisite: CJ 261 or CJ 262. Credit 3.

CJ 396 **Juvenile Delinquency and Juvenile Justice.**
Nature and extent of delinquency, explanatory models and theories: the juvenile justice system; history, philosophy, and evaluation of the juvenile court, juvenile court practices and procedures; the role of the police officer and the correctional officer. Credit 3.

CJ 397 **Introduction to Security.**
This course will focus on examining the security function and security's role and services provided. The origins and developments of security will be explored as well as the evolution of security education, training, certification and regulation. Problem identification and risk assessment in internal and external environments will be discussed. Security and the law, workplace violence, specific security threats, and the challenges for security in the future will also be addressed. Prerequisite: CJ 261 or CJ 262. Credit 3.

CJ 430 **Law and Society**.
The nature, functions, limitations and objectives of law; civil procedure; civil law and selected social problems, for example abortion, euthanasia; the civil courts; the grand jury and petit jury; torts; civil liability for police and correctional officers; family law. Credit 3.

CJ 432 **Legal Aspects of Corrections**.
Legal problems from conviction to release; pre-sentence investigations, sentencing, probation and parole; incarceration; loss and restoration of civil rights. Emphasis on practical legal problems confronting the probation and parole office and the correctional administrator. Credit 3.

CJ 436 **Understanding Human Behavior**.
The dynamics of human behavior; analysis of the biological, cultural, sociological and psychological factors. Credit 3.

CJ 438* **Child Abuse and Neglect.**
Students will develop knowledge concerning key concepts and terminology related to child abuse and neglect, related laws and court procedures, ways to address and investigate cases, and programs available to assist in the prevention of child abuse and neglect, as well as programs designed to protect children. This course will also provide a foundation for students who may enter professional careers that place them in a position to address and/or investigate suspected cases of child abuse and neglect.

CJ 462 **Drug Use and Abuse**.
The description, classification, and analysis of the extent of the drug problem. Credit 3.

CJ 464 **Alcohol: A Social Dilemma**.
Overview of the most serious drug abuse problem confronting today's society. Alcohol education — philosophy and background; physiological, and social aspects of alcohol use and abuse; social control measures; alcohol and public safety. Credit 3.

CJ 465 **Professionalism and Ethics in Criminal Justice**.
The study of theories and practices in areas of legality, morality, values and ethics as they pertain to criminal justice. Included will be such topics as police corruption, brutality, and methods of dealing with such practices, as well as the concept of profession and professional conduct. Credit 3.

CJ 468 **Organized Crime**.
Historical survey of organized crime in America, areas of influence, remedial practices and control. Credit 3.

CJ 470 **Correctional Counseling**.
Counseling psychology with emphasis on principals and procedures; the theoretical foundations of therapeutic psychology; therapeutic techniques and therapeutic process. Credit 3.

CJ 473 **Undergraduate Internship in Criminal Justice**.
A minimum of three months in an approved criminal justice or social agency setting taken preferably between junior and senior years. Designed to provide the student with an opportunity to apply academic learning in practical situations. See the College's Internship Coordinator for details about this program. Credit 9.

CJ 476 **Readings and Independent Studies in Criminal Justice**.
Designed for advanced students in the behavioral sciences who are capable of independent study. Registration upon approval of the appropriate Assistant Dean of the College of Criminal Justice and the instructor directing the course. Credit to be arranged.

CJ 477 **Special Topics in Criminal Justice**.
Designed to give the advanced undergraduate student academic flexibility. May be repeated for credit. Credit 3.

CJ 478 **Introduction to Methods of Research**.
Methods and techniques of research in the behavioral sciences; historical development of psychological and social research; techniques and problems. Credit 3.

CJ 480 **Victimology**.
Survey of the literature, research and current trends concerning the victim in the criminal justice system; particular attention is given to the victim rights and compensation, fear of crime measuring victimization, and the impact of victimization on the individual. Credit 3.

CJ 481 **Administrative Concepts in Law Enforcement**.
Basic principles and practices of administration and their applications to law enforcement. Relationship of theoretical administrative concepts and practical police problems. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

CJ 482 **Social Deviance**.
The psychological and sociological aspects of socially deviant behavior; theoretical overviews and implications for social control and social policy. Credit 3.

CJ 483 **Family Violence**.
The course will address the theoretical issues, both past and present, regarding family violence in order to provide the student with an understanding of the salient issues. In addition, attention will be given to the impact family violence has on the victim and society, legal aspects of family violence, key factors associated with recognition of family violence (especially child abuse), and pertinent research focusing on the subject. Credit 3.

CJ 484 **Current Police Policies**.
Analysis of police policies with particular attention to the current major problem areas from the point of view of both the administrator and the line operations officer. Integration of established scientific knowledge with practical police experience in the various areas of police functioning. Prerequisite: CJ 267. Credit 3.

CJ 489 **Fundamentals of Interviewing**.
The interaction involved in the face to face interview, knowledge of behavior reactions; development of an awareness of likely responses to the behavior of the interviewer. Credit 3.

CJ 493 **Police-Community Relations**.
A basic introductory course treating the broad field of Police and Community Relations, focusing particularly on police and community response. Prerequisite: CJ 261 or CJ 267. Credit 3.

CJ 495 **Psychology for Criminal Justice Personnel**.
The course deals with the psychological screening and selection, career influences and extra-career influences on criminal justice personnel and the public. Credit 3.

CJ 496 **Assessment and Treatment Planning**.
Virtually all community and institutional programs for juvenile and adult offenders either voluntarily or by mandate utilize an individual written treatment plan (IWTP). In addition, drug and alcohol programs for offender and non-offender populations use individual written treatment plans. Also, correctional personnel increasingly are supervising more offenders with special conditions who were previously diverted to other agencies. This course provides instruction in reading, writing and utilizing treatment planning documents. Prerequisite: Core Courses. Credit 3.

CJ 497 **Group Counseling**.
The goal of a helping professional in the corrections component of the criminal justice system is developing or changing attitudes and behaviors of clients in some socially accepted direction. Social skill development, increasing self-confidence, and planning for the future are other focuses. Group-based methods of intervention are effective and efficient for confronting a variety of personal and social problems and planning for and creating change. Prerequisite: Core courses. Credit 3.t

College of Education

COLLEGE OF EDUCATION

Administrative Officers

Dean	Genevieve Brown, Ed.D. (brown@shsu.edu)
Associate Dean	Karen S. Smith, Ed.D. (edu_kss@shsu.edu)
Department of Curriculum and Instruction	Charlene S. Crocker, Ed.D., Chair (csc001@shsu.edu)
Department of Educational Leadership and Counseling	Beverly J. Irby, Ed.D., Chair (edu_bid@shsu.edu)
Department of Health and Kinesiology	Alice Fisher, Ph.D., Chair (edu_axf@shsu.edu)
Department of Language, Literacy, and Special Populations	Mary E. Robbins, Ed.D., Chair (edu_mer@shsu.edu)
Department of Library Science	Mary A. Berry, Ph.D., Chair (lis_mab@shsu.edu)

Website: www.shsu.edu/~edu_www/

The College of Education is comprised of five academic units: Curriculum and Instruction; Educational Leadership and Counseling; Health and Kinesiology; Language, Literacy, and Special Populations; and Library Science. Teacher Certification is also under the administrative purview of the College of Education.

Mission

Through excellent instruction, research and public service, the College of Education provides students with opportunities to develop knowledge, skills, strategies, and experiences which allow them to serve in diverse roles and function productively in society.

Academic Programs

Major	Degree(s)	Page
Academic Studies	B.A., B.S.	283
Health	B.S.	297
Kinesiology	B.A., B.S.	303

Note 1: This listing of undergraduate degree programs is correct as of December, 2005 and does not include those degree programs being phased out.

Note 2: There is not an undergraduate major in Secondary Education. The primary teaching field will be listed as the major for students seeking certification in Grades 8-12.

Teacher Preparation Programs at Sam Houston State University

Levels of Certification:	EC-4	Early Childhood to 4th Grade
	EC-8	Early Childhood to 8th Grade
	4th-8th	Middle Grades (4th-8th)
	6th-12th	Grades 6th-12th
	8th-12th	Secondary (8th-12th)
	EC-12	All-level: Early Childhood – 12th

College/Department Housing Major:	COAS	College of Arts and Sciences
	COBA	College of Business Administration
	COE	College of Education
	CHSS	College of Humanities and Social Sciences
	C&I	Department of Curriculum and Instruction
	LLSP	Department of Language, Literacy and Special Populations

Content Area	Level of Certification	Major College/Department
Agriculture	8th-12th	COAS: Agriculture
Art	8th-12th	COAS: Art
Basic Business	8th-12th	COBA: General Business
Generalist-Bilingual	EC-4	COE: LLSP
Generalist-Early Childhood	EC-4	COE: LLSP
Generalist-English, Language Arts and Reading	EC-4	COE: LLSP
Generalist-ESL	EC-4	COE: LLSP
Business Education	6th-12th	COBA: General Business
Computer Science	8th-12th	COAS: Computer Science
Dance	8th-12th	COAS: Theatre & Dance
English, Language Arts and Reading	4th-8th	COE: LLSP
Family & Consumer Sciences	6th-12th	CHSS: Family & Consumer Sciences
French	8th-12th	CHSS: English & Foreign Languages
German	8th-12th	CHSS: English & Foreign Languages
Health	EC-12	COE: Health and Kinesiology
Hospitality, Nutrition and Food Science	8th-12th	CHSS: Family & Consumer Sciences
Human Development and Family Science	8th-12th	CHSS: Family & Consumer Sciences
Journalism	8th-12th	CHSS: Mass Communication
Languages (other than English)	EC-12	CHSS: English & Foreign Languages
Life Science	8th-12th	COAS: Biology
Mathematics	4th-8th	COE: C&I
	8th-12th	COAS: Math & Statistics
	EC-8	COE: C&I
Music	EC-12	COAS: Music
Physical Education	EC-12	COE: Health & Kinesiology
Physical Sciences	8th-12th	COAS: Physics
Science	4th-8th	COE: C&I
	8th-12th	COAS: Biology, Chemistry or Physics
Social Studies	4th-8th	COE: C&I
	8th-12th	CHSS: Political Science, History
Spanish	8th-12th	CHSS: English & Foreign Languages
Special Education	EC-12	COE: LLSP
Special Education Generalist	EC-4	COE: LLSP
Speech	8th-12th	CHSS: Mass Communication
Technology Applications	EC-12	COAS: Computer Science
Technology Education	6th-12th	COAS: Agriculture
Theatre or Theatre Arts	8th-12th	COAS: Theatre & Dance
Trades and Industry	8th-12th	COAS: Agriculture

Highlights

- Preparing high quality teachers for high performing schools through collaborative partnerships with 37 area school districts.
- Accredited by the National Council for Accreditation of Teacher Education for more than 50 years.
- Exceptional candidate performance on the Texas Examination of Educator Standards

Internships

Internships in public schools are permitted only for candidates who already have a baccalaureate degree. The Student Teaching experience provides intensive, extended activity in the field for undergraduate teaching candidates.

Scholarships

Several academic scholarships are available for undergraduate teaching candidates through the academic departments in the College of Education; other scholarships are also available through the University. Information about departmental scholarships and application forms may be obtained on the College of Education website at http://www.shsu.edu/~edu_www/scholarships.html/. Information on University scholarships may be obtained from the Office of Academic Scholarships website http://www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672.

College Specific Requirements

Required Field Experiences

Undergraduate and post-baccalaureate candidates are required to participate in field experiences in the public schools. Requirements for these activities vary by course and are coordinated by the Field Experience office. The criminal history background of each candidate is checked through the Office of Field Experience to assure the safety of the public school children who interact with SHSU teaching candidates.

Admission to the Educator Preparation Program Admission Standards, Revised Spring 2005

In the first education class, students seeking initial Teacher Certification apply for admission to the program. A one-time fee is charged upon application. Regular admission to the Educator Preparation program requires meeting each of the criteria listed below. Admission standing will be pending until each requirement is satisfied. Regular admission to the Educator Preparation program is required prior to placement in the Reading Block and Methods Block coursework. The requirements are:

1. Demonstration of successful college performance:
   - 2.5 overall GPA (includes transfer hours and SHSU hours)
   - 2.5 GPA in program area or teaching field
   - "C" or above in all courses required for teaching field/certification

2. Demonstration of college level skills
   - In computer science: C or above in CS 133 or CS 138
   - In reading: Scores at or above THEA/TASP >250 in Reading, or ACT > 21 in English, or SAT > 550 Verbal
   - In mathematics: Scores at or above THEA/TASP > 250 in Math, or ACT > 21 in Math, or SAT > 550 in Math, or

     Grade of B or better in Math 184 and 185 with > 240 THEA/TASP score (EC-4, 4-8), or

Grade of B or better in Math 164 or higher with
> 240 THEA/TASP score (SED), or

Grade of B or higher in Math 199 with
240 THEA/TASP score (Secondary Business majors)

- In writing: Scores at or above THEA/TASP > 240 in Writing, or B or higher in English 164 and English 165
- In oral communication: Grade of C or better in Speech course

3. Clear Criminal History Background Check

Teacher Certification

The preparation of teachers for the public schools in Texas is the responsibility of the entire Sam Houston State University community and the public school districts who are our partners in Sam Houston's Innovative Partnerships with Schools. Students seeking certification to work with young children in Early Childhood through 4th grade or in grades 4-8 will follow the Academic Studies degree plan. Students who wish to teach a content subject in grades 8-12 will major in a teaching field area (i.e. Mathematics, English, History) with a minor in Education. Some specialized areas of teaching require certification for a wider range of grades, usually EC-8 or EC-12. Academic advisors will provide certification and grade level assignment information upon request.

All teaching certificates are issued by the State Board for Educator Certification (SBEC) under the supervision of the Texas Education Agency, upon recommendation of the University and are subject to change. This recommendation includes verified completion of an approved program in educator preparation and a statement affirming the academic, moral, and physical fitness of the individual for service as a teacher. Sam Houston State University regards this recommendation process as a serious responsibility and has high standards for admission to candidacy in the SHSU Educator Preparation program, checkpoints throughout the program, and exit requirements.

Initial certification requires completion of a state approved undergraduate program (programs are described below).

Individuals who already hold a bachelor's degree in a state approved certification area may apply for admission to the post-baccalaureate alternate route to certification which includes admission to candidacy on the SHSU Educator Preparation Program. Information on this program may be obtained through the SHSU certification office (936) 294-1105.

State Certification Tests

Candidates must successfully complete state mandated certification tests in order to be recommended for certification by Sam Houston State University. Candidates take certification tests in the teaching field/s and in professional and pedagogical knowledge. Guidelines and procedures for taking state mandated certification tests are available on the official TExES/ ExCET website at http://www.texes.nesinc.com or in the TeXEs/ ExCet office in the Teacher Education Center. It is the responsibility of the student to be familiar with these guidelines and procedures, to be aware of test registration deadlines, and to complete registration forms correctly.

Application for State Teaching Certification

After the undergraduate has successfully completed the program requirements for graduation and certification and passed the appropriate certification exams, application should be made online to the State Board of Educator Certification for the teaching certificate. The University makes a recommendation for certification after the online application process has been completed and the degree has been posted on the student's transcript.

After the post-baccalaureate candidate has successfully completed the program requirements for certification and passed the appropriate certification exams, the candidate applies online to the State Board of Educator Certification for his/her certification using the same process.

For further information contact the certification analyst at (936) 294-1105.

Certification Analyst:	Undergraduate: Pat Sprott	(936) 294-1045
	Post Baccalaureate: Molly Doughtie	(936) 294-1105

Academic Studies (ACS) Leading to certification in Early Childhood – 4th Grade or 4th Grade – 8th Grade

The primary purpose of the Academic Studies (ACS) program is to prepare candidates to become exemplary teachers in Early Childhood through 4th Grade (EC-4) classrooms and 4th Grade through 8th Grade (4-8) classrooms. The ACS program consists of 60-68 hours of Academic Foundation courses, a 48-hour (minimum) Academic Studies major, and 21 hours of Professional Education courses, including student teaching. Candidates registered for nine hours during the student teaching semester are considered to be full-time students.

Candidates majoring in Academic Studies (ACS) have the following choices of major/minor combinations. If candidates wish to teach in grades EC-4, the major is Academic Studies (ACS) with five choices for minors:

- Bilingual Education (EC-4 Bilingual),
- Early Childhood (EC-4 Early Childhood),
- English as a Second Language (EC-4 English as a Second Language),
- Reading/Language Arts (EC-4 Reading Language Arts), or
- Special Education (EC-4 Special Education).

Each of these minors are offered by the Department of Language, Literacy and Special Populations.

If candidates wish to teach students in grades 4-8, then the major is ACS with four choices of a minor:

- English Language Arts and Reading (4-8 English Language Arts),
- Mathematics (4-8 Mathematics),
- Science (4-8 Science), or
- Social Studies (4-8 Social Studies).

Candidates may also choose a major and minor that allow them to teach in grades EC-8. There are two choices that provide an EC-8 certification. Those are English Language Arts and Reading (EC-8 English Language Arts and Reading) and Mathematics (EC-8 Mathematics). A major in ACS with a minor in Special Education provides for certification in EC-12.

The Texas Teaching Certificates awarded upon completion of all program requirements and successful performance on the related certification examinations are:

- EC-4 Generalist
- 4-8 English Language Arts
- 4-8 Mathematics
- 4-8 Science
- 4-8 Social Studies
- EC-8 English Language Arts and Reading
- EC-8 Mathematics
- EC-12 Special Education

All of the above programs have a 62-hour common core of Foundation Courses and a 21-hour common set of Professional Education Courses. Each major has a unique set of Academic Studies Courses which vary in the number of hours depending on the choice of major. The Academic Studies major component has a minimum of 48 hours. Students choosing one of these majors/minors should contact the Department of Curriculum and Instruction or the Department of Language,

Literacy and Special Populations as soon as possible to learn the exact courses required for the selected minor and for advising to assist in a smooth progress through the program.

All ACS Majors (with minors in Language, Literacy and Special Populations) are assessed at multiple benchmarks throughout their program and must be recommended at each checkpoint to progress through the program. Thus. they are:

1. required to apply for admission to Educator Preparation (see Standards for Admission to Candidacy in the Educator Preparation Program, above)),
2. required to apply placement in Literacy Block,
3. required to apply for placement in Methods Block, and
4. required to apply for Student Teaching.

Curriculum
Academic Studies Major
Academic Studies, Early Childhood Certificate: EC-4 Generalist
Bachelor of Science

Year 1	Credits	Year 2	Credits
ENG 164, ENG 165	6	ENG 200 Any	3
MTH 184, MTH 185	6	MTH 381	3
HIS 163, HIS 164	6	POL 261, POL 285	6
BIO, CHM or GEL 134/114	8	PHY 135/115	4
MUS 161	3	GEL 133/113 or GEO 131/111	4
CS 138	3	HED 282 or FCS 167	3
GEO 161	3	SPD 231	3
PSY 131	3	BSL 236	3
KIN 215	1	ECE 273	3
		ECE 275	3
		ART 160	3

Year 3	Credits	Year 4	Credits
ECE 329/319	3	Methods Block (EED 434, 435, 436 & EED 367)	12
ECE 363	3	Student Teaching Block (EED 484, 491 & ECE 486)	9
ECE 433	3		
EED 374	3		
EED 485	3		
RDG 385	3		
RDG 393	3		
SCM 384 or SCM 161	3		
LS 361	3		
RDG Block (RDG 370, 390 & 431)	9		
SPD 490	3	**Total Hours**	137

Academic Studies, Reading & Language Arts Certificate: EC-4 Generalist
Bachelor of Science

Year 1	Credits	Year 2	Credits
ENG 164, ENG 165	6	ENG 200 Any	3
MTH 184, MTH 185	6	MTH 381	3
HIS 163, HIS 164	6	POL 261, POL 285	6
BIO, CHM or GEL 134/114	8	PHY 135/115	4
MUS 161 or ART 160	3	GEL 133/113 or GEO 131/111	4
CS 138	3	HED 282 or FCS 167	3
GEO 161	3	SPD 231	3
PSY 131	3	BSL 236	3
KIN 215	1	ECE 273	3
		RDG 235 or RDG 275	3

Year 3	Credits	Year 4	Credits
EED 374	3	Methods Block (EED 434, 435, 436 & 367)	12
EED 485	3	Student Teaching Block (EED 484, 491 & 492)	9
ECE 363	3		
ECE 433	3		
ENG 372 or ENG 373	3		
LS 361	3		
ENG 300 or 400, Any course	3		
RDG 385	3		
RDG 393	3		
SCM 384 or SCM 161	3		
SPD 490	3		
RDG Block (RDG 370, 390 & 431)	9	**Total Hours**	137

Academic Studies, English as a Second Language
Certificates: EC-4 Generalist and ESL Supplement

Bachelor of Science

Year 1	Credits	Year 2	Credits
ENG 164, ENG 165	6	ENG 200 Any	3
MTH 184, MTH 185	6	MTH 381	3
HIS 163, HIS 164	6	POL 261, POL 285	6
BIO, CHM or GEL 134/114	8	PHY 135/115	4
MUS 161 or ART 160	3	GEL 133/113 or GEO 131/111	4
CS 138	3	SPD 231	3
GEO 161	3	BSL 236	3
PSY 131	3	ECE 273	3
KIN 215	1	HED 282 or FCS 167	3

Year 3	Credits	Year 4	Credits
LS 361	3	Methods Block (EED 434, 435, 436 & 367)	12
BSL 333 and BSL 478	6	Student Teaching Block (EED 484, 491 & BSL 488)	9
BSL 430 and BSL 477	6		
EED 374	3		
EED 485	3		
ENG 372 or ENG 373	3		
ENG 380 or ENG 431 or RDG 275	3		
RDG 235 or ECE 363	3		
RDG 385	3		
SCM 384 or SCM 161	3		
RDG Block (RDG 370, 390 & 431)	9	**Total Hours**	137

Academic Studies, Bilingual
Certificates: EC-4 Generalist and Bilingual Supplement

Bachelor of Science

Year 1	Credits	Year 2	Credits
ENG 164, ENG 165	6	ENG 200 Any	3
MTH 184, MTH 185	6	MTH 381	3
HIS 163, HIS 164	6	POL 261, POL 285	6
MUS 161	3	PHY 135/115	4
CS 138	3	GEL 133/113 OR GEO 131/111	4
GEO 161	3	SPD 231	3
PHL 262	3	BSL 236	3
KIN 215	1	ECE 273	3
ART 160	3	SPN 264	3

Year 3	Credits
LS 361	3
BSL 333 and BSL 478	6
BSL 430 and BSL 477	6
ECE 363	3
SPN 361	3
EED 374	3
EED 485	3
RDG 385	3
SCM 384 or SCM 161	3
SPN 367	3
SPN 368 or SPN 369	3
SPN 385	3
RDG Block (RDG 370, 390 & 431)	9

Year 4	Credits
Methods Block (EED 434, 435, 436 & 367)	12
Student Teaching Block (EED 484, 491 & BSL 488)	9
Total Hours	138

Academic Studies, Special Education
Certificates: EC-4 Generalist and EC-12 Special Education

Bachelor of Science

Year 1	Credits
ENG 164, ENG 165	6
MTH 184, MTH 185	6
HIS 163, HIS 164	6
BIO, CHM or GEL 134/114	8
MUS 161 or ART 160	3
CS 138	3
GEO 161	3
PSY 131	3
KIN 215	1

Year 2	Credits
ENG 200 Any	3
MTH 381	3
POL 261, POL 285	6
PHY 135/115	4
GEL 133/113 or GEO 131/111	4
SPD 231	3
BSL 236 or HIS 265, or GEO 265	3
ECE 273	3
SPD 331	3
SPD 377	3

Year 3	Credits
ECE 363	3
EED 374	3
LS 361	3
RDG 393	3
SCM 384 or SCM 161	3
SPD 367	3
SPD 438	3
SPD 478	3
RDG Block (RDG 370, 390 & 431)	9
SPD Block (SPD 460, SPD 480)	6

Year 4	Credits
Methods Block (EED 434, 435, 436 & 367)	12
Student Teaching Block (EED 484 or SED 480, EED 491 or EED 496 & SPD 474)	9
Total Hours	134

Academic Studies, Social Studies 4-8
Certificate: 4-8 Social Studies

Bachelor of Science

Year 1	Credits
ENG 164, ENG 165	6
MTH 184, MTH 185	6
HIS 163, HIS 164	6
BIO, CHM or GEL 134/114	8
MUS 161 or ART 160	3
CS 138	3
GEO 161	3
PSY 131	3
KIN 215	1

Year 2	Credits
ENG 200 Any	3
HIS 265	3
POL 261, POL 285	6
PHY 135/115	4
GEL 133/113 or GEO 131/111	4
SPD 231	3
GEO 265, GEO 266	6
RDG 275	3
MTH 381	3
ECO 234	3

Year 3	Credits	Year 4	Credits
GEO 369	3	Methods Block (EED 434, 435, 436 & 367)	12
GEO 471	3	Student Teaching Block (EED 484, EED 491 & EED 492)	9
LS 362	3		
HIS 369	3		
HIS 379	3		
HIS 398	3		
POL 378	3		
EED 374	3		
EED 485	3		
SCM 384 or SCM 161	3		
RDG Block (RDG 370, 390 & 431)	9	**Total Hours**	137

Academic Studies, Science 4-8
Certificate: 4-8 Science
Bachelor of Science

Year 1	Credits	Year 2	Credits
ENG 164, ENG 165	6	ENG 200 Any	3
MTH 184, MTH 185	6	POL 261, POL 285	6
HIS 163, HIS 164	6	MTH 284	3
BIO 161/111	4	PHY 135/115	4
BIO 162/112	4	GEL 133/113	4
MUS 161 or ART 160	3	GEL 134/114	4
CS 138	3	MTH 381	3
GEO 161	3	GEO 131/111	4
PSY 131	3	SPD 231	3
KIN 215	1	BSL 236 or HIS 265 or GEO 265	3

Year 3	Credits	Year 4	Credits
CHM 138/118	4	Methods Block (EED 434, 435, 436 & 367)	12
LS 362	3	Student Teaching Block (EED 484, EED 491& EED 492)	9
GEL 330	3		
BIO 341	4		
GEL 360 or 432 or 437	3		
PHY 397/317	4		
EED 374	3		
EED 485	3		
SCM 384 or SCM 161	3		
RDG Block (RDG 370, 390 & 431)	9	**Total Hours**	136

Academic Studies, English, Reading and Language Arts, 4-8
Certificate: 4-8 English, Reading and Language Arts
Bachelor of Science

Year 1	Credits	Year 2	Credits
ENG 164, ENG 165	6	ENG 200 Any	3
MTH 184, MTH 185	6	MTH 381	3
HIS 163, HIS 164	6	POL 261, POL 285	6
BIO, CHM or GEL 134/114	8	PHY 135/115	4
MUS 161 or ART 160	3	GEL 133/113 or GEO 131/111	4
CS 138	3	SPD 231	3
GEO 161	3	RDG 275	3
PSY 131	3	BSL 236 or HIS 265 or GEO 265	3
KIN 215	1	HED 282 or FCS 167	3
		RDG 285 or RDG 471	3

Year 3	Credits
EED 374	3
EED 485	3
ENG 372	3
ENG 300 or 400, Any three courses	9
LS 362	3
SPD 377	3
RDG 385	3
RDG 393	3
SCM 384 OR SCM 161	3
RDG Block (RDG 370, 390 & 431)	9

Year 4	Credits
Methods Block (EED 434, 435, 436 & 367)	12
Student Teaching Block (EED 484, EED 491& EED 492)	9
Total Hours	137

Academic Studies, English, Language Arts and Reading, EC-8
Certificate: EC-4 Generalist and 4-8 English, Language Arts and Reading

Bachelor of Science

Year 1	Credits
ENG 164, ENG 165	6
MTH 184, MTH 185	6
HIS 163, HIS 164	6
BIO, CHM or GEL 134/114	8
MUS 161 or ART 160	3
CS 138	3
GEO 161	3
PSY 131	3
KIN 215	1

Year 2	Credits
ENG 200 Any	3
MTH 381	3
POL 261, POL 285	6
PHY 135/115	4
GEL 133/113 or GEO 131/111	4
SPD 231	3
ECE 273	3
RDG 275	3
BSL 236 or HIS 265 or GEO 265	3

Year 3	Credits
ENG 300 or ENG 400, Any two courses	6
LS 363	3
ENG 372	3
ECE 363	3
EED 374	3
EED 485	3
RDG 285 or RDG 471	3
RDG 385	3
RDG 393	3
SPD 377	3
SCM 384 or SCM 161	3
RDG Block (RDG 370, 390 & 431)	9

Year 4	Credits
Methods Block (EED 434, 435, 436 & 367)	12
Student Teaching Block (EED 484, EED 491 & EED 492)	9
Total Hours	137

Academic Studies, Mathematics 4-8
Certificate: 4-8 Mathematics

Bachelor of Science

Year 1	Credits
ENG 164, ENG 165	6
MTH 184, MTH 185	6
HIS 163, HIS 164	6
BIO, CHM or GEL 134/114	8
MUS 161 or ART 160	3
CS 138	3
GEO 161	3
PSY 131	3
KIN 215	1

Year 2	Credits
ENG 200 Any	3
MTH 284, MTH 285	6
POL 261, POL 285	6
PHY 135/115	4
GEL 133/113 or GEO 131/111	4
SPD 231	3
BSL 236 or HIS 265 or GEO 265	3
HED 282 or FCS 167	3
MTH Electives	6

Year 3	Credits	Year 4	Credits
EED 374	3	Methods Block (EED 434, 435, 436 & 367)	12
EED 485	3	Student Teaching Block (EED 484, EED 491 & EED 492)	9
LS 362	3		
MTH 383	3		
MTH 384	3		
MTH 386	3		
MTH 387	3		
SCM 384 or SCM 161	3		
RDG Block (RDG 370, 390 & 431)	9	**Total Hours**	131

Academic Studies, Mathematics EC-8
Certificates: EC-4 Generalist and 4-8 Mathematics

Bachelor of Science

Year 1	Credits	Year 2	Credits
ENG 164, ENG 165	6	ENG 200 Any	3
MTH 184, MTH 185	6	MTH 284, MTH 285	6
HIS 163, HIS 164	6	POL 261, POL 285	6
BIO, CHM or GEL 134/114	8	PHY 135/115	4
MUS 161 OR ART 160	3	GEL 133/113 OR GEO 131/111	4
CS 138	3	SPD 231	3
PSY 131	3	ECE 273	3
KIN 215	1	HED 282 or FCS 167	3
GEO 161	3	BSL 236 or HIS 265 or GEO 265	3

Year 3	Credits	Year 4	Credits
EED 374	3	Methods Block (EED 434, 435, 436 & 367)	12
LS 363	3	Student Teaching Block (EED 484, EED 491 & EED 492)	9
MTH 383	3		
MTH 384	3		
MTH 386	3		
MTH 387	3		
ECE 363	3		
EED 485	3		
RDG 285 or RDG 471	3		
RDG 385	3		
SCM 384 OR SCM 161	3		
RDG Block (RDG 370, 390 & 431)	9	**Total Hours**	137

Teaching Field Major/ Education Minor
Leading to Certification in Grades 8-12

Candidates for teaching certificates in grades 8-12 will major in the teaching field of their choice. The certification advisor in the major department will provide guidance regarding the degree plan and other requirements. Within the College of Education, the secondary education advisor, in the Department of Curriculum and Instruction will provide guidance regarding securing certification and professional education coursework. Students may contact the Department of Curriculum and Instruction at 936-294-1146. Courses and requirements for secondary certification are shown below:

Professional Education Courses

SED 374, 383, 394, 464, 480, 496, 497, RDG 392 — 24

Additional Degree Requirements

- English (ENG 164, 165 and ENG Literature [200 level or higher]) and Speech Communication 384 preferred or 161 [transfer only] (3 hrs.) (Core Curriculum Component Areas 1 and 4)
- Math and Computer Science (Core Curriculum Component Areas 2 and 6)
- Science (Core Curriculum Component Area 3)

- Fine Arts (Core Curriculum Component Area 4)
- History and Political Science (Core Curriculum Component Area 5)
- Kinesiology or accepted substitutes (Core Curriculum Component Area 6)

All secondary certification minors are
1. required to apply for admission to educator preparation (see Standards for Admission to Candidacy in the Educator Preparation Program).
2. required to apply for the secondary methods block (SED 394, 464, and RDG 392).
3. required to apply for student teaching (contact edu_ofe@shsu.edu for student teaching information).

Note: The above represents a sequence of checkpoints and candidates must be recommended at each checkpoint to progress through the program.

Graduate Study
Graduate degrees offered through the College of Education are the Master of Arts, Master of Education, Master of Library Science, Master of Science, Doctor of Education, and Doctor of Philosophy. The Graduate Catalog provides detailed information.

DEPARTMENT OF CURRICULUM AND INSTRUCTION

Chair: Charlene Crocker (936) 2941136; csc001@shsu.edu

Faculty: William Edgington, Margaret Hammer, David Henderson, Daphne Johnson, Eren Johnson, Sam Sullivan, Sylvia Taube, Patricia Williams, Andrea Foster, Marilyn Rice, Bobby Ezell, Jan Zuehlke

Academic Programs

- Academic Studies B.A., B.S.

Highlights

- Prepare elementary and secondary teachers
- Field based teacher preparation
- Research based curriculum

Suggested Minors

- EC-4
  Reading Language Arts
  Special Education
  Bi-lingual
  ESL
  Early Childhood
- 4-8
  Math
  Science
  Social Studies
  English, Reading, Language Arts

Career Opportunities

- Classroom Teachers

Internships

Internships in public schools are permitted only for candidates who already have a baccalaureate degree. Undergraduate teaching candidates participate in the student teaching block as the capstone of their professional program sequence.

Program Specific Requirements

Required Field Experiences

Candidates for any teaching certificate participate in field experiences in the public schools. Requirements for these activities vary by course and are coordinated by the Field Experience office.

Admission to the Educator Preparation Program

Students seeking initial Teacher Certification will apply for admission to the Educator Preparation Program in their first Education class. Subsequent program specific requirements are explained below.

Admission to the Methods Block

Candidates for certification at all levels including, EC-4, 4-8, EC-8, EC-12 and 8-12 must participate in a one-semester methods block which occurs prior to the student teaching semester. Students must apply to be accepted into the methods block specific to their major. The Department of Curriculum and Instruction determines the eligibility based on criteria, which includes admission to the Educator Preparation Program, course work completed, and dispositions. Students should consult their education advisor to determine the process for application and admission.

Admission to Student Teaching
Student teaching is intended to be the culminating experiences in a candidate's preparation to become a teacher. The candidate should enroll in student teaching the final semester of their preparation program (see edu_ofe@shsu.edu for student teaching information).

Academic Studies (ACS) Course Descriptions

Academic Studies program coordinator: Dr. Bill Edgington (billedgington@shsu.edu)

EED 367 Technology Applications in the Classroom.
This course will apply technology and computers to support instruction in various content areas in elementary and middle schools. The course will explore, evaluate, and utilize computer/technology resources to design and deliver instruction as well as to assess student learning. Prerequisite: C S 138. Admission to Educator Preparation Program required and departmental approval. Field Experience in PK-8 public schools included in this course. This course is taken in block with EED 434, EED 435 and EED 436.

EED 374 Human Growth and Learning.
This course examines growth and learning in elementary environments. Major theories of the teaching-learning process are studied. Human development related to education is emphasized. Special attention is paid to the cultural milieu. Field experiences in public schools at appropriate levels included in this course (10 hours). Prerequisite: Junior status. Credit 3.

EED 434 Mathematics in the Elementary School.
This course emphasizes making mathematics meaningful to children. Students are to make lesson plans of acceptable quality, to produce practical teaching aids, and to be able to integrate mathematics with other areas of learning. Experience is provided in the selection and evaluation of teaching methods unit and lesson planning, use of curriculum and audio visual materials and the preparation of instructional materials appropriate for social studies content and skills at different elementary and middle school grade levels. Students observe and teach math lessons in an elementary or middle school classroom during the 10 days of field experience. Prerequisites: Admission to Educator Preparation Program required and Departmental Approval. Field experiences in PK-8 public schools included in this course. This course is taken in block with EED 435, EED 436 and EED 367. Credit 3.

EED 435 Science in the Elementary School.
This course is concerned with the scope and sequence of the science curriculum for elementary and middle school children. In this course, experience is provided in the selection and evaluation of teaching methods unit and lesson planning, use of curriculum and audio visual materials and the preparation of instructional materials appropriate for science content and skills at different elementary and middle school grade levels. Students are given experience in lesson planning, in organizing units of instruction, in the use of instructional materials, and in laboratory methods appropriate to elementary or middle school classrooms. Students observe and teach science lessons in an elementary or middle school classroom during the 10 days of field experience. Prerequisites: Admission to Educator Preparation Program required and Departmental approval. Field experiences in PK-8 public schools included in this course. This course is taken in block with EED 434, EED 436,and EED 367. Credit 3.

EED 436 Social Studies in the Elementary School.
In this course experience is provided in the selection and evaluation of teaching methods, unit and lesson planning, use of curriculum and audio-visual materials, and the preparation of instructional materials appropriate for social studies content and skills at different elementary and middle school grade levels. Students are expected to pass a social studies proficiency test to receive credit for this course. Emphasis is placed on the unit approach to teaching social studies. Students observe and teach social studies lessons in an elementary or middle school classroom during the 10 days of field experience. Prerequisites: Admission to Educator Preparation Program required and Departmental approval. Field experiences in PK-8 public schools included in this course. This course is taken in block with EED 434, EED 435, and EED 367. Credit 3.

EED 475 Problems.
Designed to permit individual students to study specific areas of interest and need. Prerequisite: Departmental Approval. Credit 3.

EED 476 Developing a Professional Teacher Portfolio.
The purpose of this course is to provide the prospective elementary or middle school teacher the opportunity to organize artifacts on the development, exploration, integration, application, and teaching of content knowledge, pedagogical knowledge and skill development in the development of a professional teacher portfolio. Prerequisite: Concurrent enrollment in student teaching and Departmental Approval. Credit: 3.

EED 484 Assessment, Evaluation, and Legal Issues in the Elementary Classroom.
The purpose of this course is to provide the prospective elementary or middle school teacher practical experience in the areas of assessment, evaluation, and legal issues in the elementary or middle school. The course will include a study of teacher-made tests, standardized tests, interpretation of test scores, performance assessment techniques, grading and reporting student progress, and legal issues relevant to education. This course is taken during the student teaching semester. Prerequisite: Admission to the Educator Preparation Program and Departmental Approval. Credit 3.

EED 485 Elementary Classroom Management in a Diverse Population.
The purpose of this course is to provide the prospective elementary or middle school teacher with the experiences in classroom management and discipline theories appropriate for the diverse population of students in the elementary or middle school. Field experiences in public schools at appropriate levels included in this course (15 hours) Prerequisite: Junior status. Credit: 3.

EED 491 Student Teaching in the Elementary School.
The student is assigned to student teach in an elementary or middle school classroom for six weeks. Must be taken with EED 492, ECE 486, BSL 488, SPD 484, or SED 497 for a total of six semester hours credit for the provisional elementary or provisional all-level certificate. Prerequisite: Admission to Student Teaching Program. Credit 3.

EED 492 Student Teaching in the Elementary School.
The student is assigned to student teach in an elementary or middle school classroom for six weeks. Must be taken with EED 491. Prerequisite: Admission to Student Teaching Program. Credit 3.

SECONDARY EDUCATION PROGRAM

Secondary Education program coordinator: Dr. Charlene Crocker (ccs001@shsu.edu)

The primary purpose of the Secondary Education Program is to prepare candidates to become exemplary teachers in secondary schools as well as both the elementary and secondary schools for those seeking all-level certification. The Secondary Education Program provides the course work necessary for candidates to receive certification for teaching grades 8 – 12 as well as those seeking all-level certification for teaching grades EC – 12.

Candidates for secondary level certification (8-12) and all level certification (EC12) programs except Special Education must have an academic content major. Secondary education is a minor, or a second minor, for students seeking certification for secondary teaching.

Candidates are encouraged to file their official degree plans as soon as they determine their major field of study. Each candidate seeking secondary or all level certification is expected to consult with an academic content advisor to file a Declaration of Major with SED or ESD for all level as the minor. Certification candidates should also meet with an advisor in secondary education at the time the degree plan is formalized.

Secondary Teaching Certification

Professional Education Course Sequence
SED 374
SED 383
Methods Block
SED 394
SED 464
RDG 392
Student Teaching Block
SED 480
SED 496
SED 497
Total 24 hours for certification

Secondary Education Course Descriptions

SED 374 Human Growth and Learning.
This course examines growth and learning in elementary and secondary environments. Major theories of teaching-learning processes are studied. Human development related to education is emphasized. Special attention is paid to the cultural milieu. Field experiences (10 hours) in 8-12 public schools included in this course.. Prerequisite: Junior status. Credit 3

SED 383 Media and Technology in Secondary Schools.
This course is designed to provide teachers who seek certification at the secondary level with an introductory overview of the teacher education program, with an introduction into instructional issues and teaching models, and with an introduction into how technology impacts education both in terms of increasing teacher productivity and in terms of integrating technology into instruction. Prerequisite: Junior status . Credit 3

SED 394 Classroom Management for Secondary Schools.
This course provides a survey of classroom management and discipline approaches appropriate in a public school setting. A range of management approaches and models will be critiqued. Study will include the philosophical foundations and integration of these models. Students will observe or assist teachers in a secondary classroom for a minimum of fifteen hours. Prerequisites: Admission to Educator Preparation Program required and Departmental Approval. Field experiences in 8-12 public schools included in this course. This course is taken in block with RDG 392 and SED 464. Credit 3.

SED 464 Methods of Teaching in Secondary Schools.
This course provides a study of the objectives and the selection, organization, and presentation of the subject matter of the various secondary school subjects, instruction in the organization of units of work, and demonstration teaching. A minimum of fifteen hours will be spent in field experiences in a public school classroom. To be taken the semester prior to student teaching. Prerequisites: Admission to educator preparation program required and Departmental Approval. Field experiences in 8-12 public schools included in this course. This course is taken in block with RDG 392 and SED 394. Credit 3.

SED 475 Problems.
This course is designed to permit individual students to study specific areas of interest and need. Prerequisite: Approval of Coordinator of Secondary Education. Credit 3.

SED 476 Developing a Professional Teacher Portfolio.
The purpose of this course is to provide the prospective secondary teacher the opportunity to organize artifacts on the development, exploration, integration, application, and teaching of content knowledge, pedagogical knowledge and skill development in the development of a professional teacher portfolio. Prerequisite: Concurrent enrollment in student teaching and Departmental Approval. Credit: 3.

SED 480 Responsibilities of the Professional Educator.
This course is designed to assist future teachers in understanding the structure, organization, and management of public schools at the national, state, and local levels. Course content will include a study of the needs of the special learner and students from various cultures. Prerequisite: Admission to Student Teaching Program. This course is taken during the student teaching semester. Credit 3.

SED 496 Student Teaching in the Secondary Classroom.
The student is assigned full-time student teaching responsibilities at the secondary level (Grades 8-12) for a period of six weeks. This course must be taken with SED 497. This time is divided among observation, participation, teaching and conference activities. Time will be spent in each of the student's teaching fields. Prerequisite: Admission to Student Teaching Program. Credit 3.

SED 497 Student Teaching in the Secondary Classroom.
The student is assigned full-time student teaching responsibilities at the secondary level (Grades 8-12) for a period of six weeks. This course must be taken with SED 496 or EED 491. This time is divided among observation, participation, teaching and conference activities. Time will be spent in each of the student's teaching fields. Prerequisite: Admission to Student Teaching Program. Credit 3.

DEPARTMENT OF HEALTH AND KINESIOLOGY

Chair: Alice Fisher (936) 294-1165; edu_axf@shsu.edu

HEALTH PROGRAM

Faculty: Martha Bass, Bob Case, Bill Hyman, Rosanne Keathley, Roy Moss

Mission

The mission of the Health Program at Sam Houston State University is to enhance the health and improve the quality of life for individuals, families, and communities through the provision of teaching, service, and research in the areas of health education and health promotion.

Academic Programs

- BS in Health
- Teacher Certification

Students may choose between a Bachelor of Science with teacher certification, a Bachelor of Science with no teacher certification, or, for students with an Associate Degree from an accredited college in Allied Health, a Bachelor of Applied Arts and Sciences Degree.

Highlights

- Nationally-recognized
- Honorary affiliation (Eta Sigma Gamma)
- Student-focused
- Value student diversity (various ethnic and cultural backgrounds)
- Seeking to create a diverse pool of graduates for successful entry into the workforce
- Outstanding faculty and staff

Suggested Minors

- Psychology
- Kinesiology
- Criminal Justice
- Sociology
- Business
- Education
- Communication

Career Opportunities

- Hospitals
- Geriatric facilities
- Corporate health promotion programs
- Federal, state and local health agencies
- Fitness settings
- School settings
- Voluntary agencies
- Clinical settings

Student Organizations

- Eta Sigma Gamma – National Health Science Honorary Society – requires a 3.0 GPA in Health and an overall 2.5 GPA; focus is research, service and education; volunteer hours required.
- S.H.A.W. – Sam Houston Alliance for Wellness – promotes healthy lifestyles; open to all SHSU students.

Internships

The undergraduate Health program provides for majors a 400-hour professional internship and minors a 200-hour internship sanctioned by the Society of Public Health Educators. Your internship will be conducted in either the school, community, medical or corporate health setting under the instruction and supervision of a qualified and experienced health-care professional.

Scholarships

Roy G. Moss, Jr., Health Education Scholarship – Majors in Health or Kinesiology who demonstrate financial need, have an exemplary GPA, display leadership potential and are actively involved in community health issues.

Department of Health & Kinesiology Scholarship – Health or Kinesiology major demonstrating financial need with a satisfactory GPA.

Health & Kinesiology Wellness Scholarship – Health or Kinesiology major displaying leadership potential with at least a 3.0 GPA and reflecting a high level of fitness.

Program Specific Requirements

Required Field Experiences

Candidates for any teaching certificate participate in field experiences in the public schools. Requirements for these activities vary by course and are coordinated by the Field Experience office.

Admission to the Educator Preparation Program

Students seeking initial Teacher Certification will apply for admission to the Educator Preparation Program in their first Education class. Subsequent program specific requirements are explained below.

Curriculum

Key Competency Areas:

- Assessing individual and community needs
- Planning effective health education programs
- Implementing health education programs
- Evaluating the effectiveness of health education programs
- Coordinating the provision of health education services
- Acting as a resource person
- Communication of health and health education needs

Major in Health

Bachelor of Science

First Year	Credit	Second Year	Credit
HED 160, 166	6	HED 230, 280	6
ENG 164, 165	6	ENG 265, 266 or 267	3
HIS 163, 164	6	POL 261, any 200 level POL	6
BIO 134, 114	4	BIO 245, 246	8
CHM	8	CS 133, 138 or 143	3
KIN 215	1	MTH 164 or 170	3
	31	KIN 1 hr. activity	1
		Social and Behavioral Sciences*	3
			33

Third Year	Credit	Fourth Year	Credit
HED 390, 392, 6 adv. hrs.	12	HED 460, 487	6
FCS 167	3	HED 492, 493, 494	9
ENG 330	3	Minor	12+
MTH 169	3	Additional electives to meet degree requirement **	4+
Minor	6		31+
Fine Arts from Core Curriculum	3		
Cultural Studies	3		
	33		

* Choose 3 hours from ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, 264

** Degree must have at least 128 total hours and at least 42 advanced hours.

A non-teaching minor is also offered to students interested in community health education. Health minors take 21 hours including HED 166, 487, 493, 494 and nine additional hours from health education with at least 3 of those hours advanced.

Major in Health – Teacher Certification

Bachelor of Science

Completion of this degree program will certify students to teach all-level health in Texas. Students can also attain teacher certification in health by completing a 24-hour health minor on a certification degree.

First Year	**Credit**	**Second Year**	**Credit**
HED 160, 166	6	HED 230, 280, 282	9
ENG 164, 165	6	ENG 265, 266 or 267	3
HIS 163, 164	6	POL 261, 285	6
BIO 134, 114	4	BIO 246; CHM 135/115	8
BIO 245	4	CS 133, 138 or 143	3
MTH 164 or 170	3	MTH 169	3
Social and Behavioral Sciences*	3	KIN 215	1
	32		33

Third Year	**Credit**	**Fourth Year**	**Credit**
HED 390, 391, 392	9	HED 460, 487, 493, 494	12
SCM 384	3	SED 392, 394, 464	9
ENG 330	3	SED 480, 496, 497	9
Fine Arts	3	Cultural Studies	3
SED 374, 383	6		33
CHM 136/116	4		
FCS 167	3		
KIN – 1 hr. activity	1		
	32		

* Choose 3 hours from ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, 264

Note: 1) It is highly recommended that a second teaching field be added to the teacher certification degree plan.

2) This degree plan is subject to change pending action of the State Board of Educator Certification. Students should check with their academic advisor.

Major in Health – Fitness Emphasis

Bachelor of Science

This degree option prepares students for employment as managers of adult fitness settings including private health clubs, YMCAs, and corporate wellness programs.

First Year	Credit	Second Year	Credit
HED 166, 230	6	HED 280, restricted elective	6
ENG 164, 165	6	CHM 135/115	4
HIS 163, 164	6	BIO, CHM, or PHY	4
BIO 134, 114	4	ENG 265, 266, or 267	3
BIO 245	4	POL 261, any 200 POL	6
Computer Science	3	Cultural Studies	3
MTH 164 or 170	3	ACC 231	3
	32	MTH or STA 169	3
		KIN 215W, 214	2
			34

Third Year	Credit	Fourth Year	Credit
HED 391, 392, 461	9	HED 492, 493, 494	9
HED restricted electives	6	HED restrictive elective*	3
KIN 362, 370, 373	9	KIN 473, 477	6
CHM 136/116	4	MGT 380, MKT 371	6
ENG 330	3	Visual/Performing Arts	3
KIN 219	1	GBA 362	3
ECO 230, 233, or 234	3	FCS 167 or 363	3
	35		33

* Choose HED electives from: HED 272, 281, 385, 390, 470, 490

Bachelor of Applied Arts and Sciences Degree

Students may combine an Associate Degree in Allied Health with a Health minor for a Bachelor of Applied Arts and Sciences Degree. Students should see the advisor for B.A.A.S degrees for specific courses.

Health Education Course Descriptions

HED 160 **Introduction to Health Education and Health Careers.**
This course explores the determinants of health, theories of health behavior, the nature and history of health education, and the role of the health educator as a professional in the school, work, clinical, and community settings to promote health and prevent disease. Credit 3.

HED 166 **Lifestyle and Wellness.**
Lifestyle and Wellness explores a variety of health issues which influence the well-being of an individual throughout the life cycle. The student is given an opportunity to develop a personal philosophy of wellness and self responsibility for health through self assessment, investigation of factors affecting one's health, and the examination of behavior modification strategies. Credit 3.

HED 230 **First Aid: Red Cross and Instructor's Course**.
A course for those who wish to acquire a knowledge of Red Cross emergency and preventive measures. Successful completion leads to CPR, first aid, and responding to emergency certification. Students may also become instructors through additional American Red Cross training. (Also listed as KIN 230). Credit 3.

HED 272 Health and Medical Terminology.
This course provides medically-oriented students with the cognitive skills they need to understand the foundations of medical technology for health professionals. The content of this course focuses on the prefixes, suffixes, and roots of medical terms that are associated with multiple disease processes, medical protocols, and the human anatomical system. Prerequisite: Senior standing. Credit 3.

HED 280 Drug Use and Abuse.
This course explores the use and misuse of drugs and their effects on the health of man. Credit 3.

HED 281 Consumer Health Education.
A study of the factors which influence the consumer marketplace for health related products and services. Topics include fraud and quackery, advertising, health care professional services, alternative medicine, consumer protection agencies, and consumer protection through self-responsibility. Credit 3.

HED 282 Child and Adolescent Health.
This course focuses on the causes of and approaches to physical, social, mental, and emotional health problems among young people. Emphasis is placed on creating an environment in which children and adolescents can learn to make prudent decisions regarding health related behaviors. Credit 3.

HED 283 Multicultural Health Issues.
This course addressed health issues and problems that various ethnic groups face in the United States. Cultural differences in health behaviors, health care access, and promotion and prevention programs are emphasized. Credit 3.

HED 385 Safety Education.
This course presents the foundations of accident prevention and injury control. Applications are made to motor vehicle, home, recreational, and occupational safety. Credit 3.

HED 390 Family Life and Sex Education.
This course focuses on the formation of intimate relationships: family, marriage, friends. Individuals are directed into the study of their personal backgrounds, lives, and dreams in preparation for marriage. Includes problems of today's relationships: rape, battering partners, sexually transmitted diseases, divorce. Credit 3.

HED 391 Study of Human Diseases.
Introduction to the relationship between the human body and disease, both communicable and non-communicable. Includes historical aspects of various diseases, etiology, prevention and control, prevalence, symptoms, and treatment. Credit 3.

HED 392 Communication Skills for Health Education.
An exploration of different modalities of communicating health issues and information to audiences in different settings. Emphasis is given to listening, writing and speaking skills. Students will learn how to make effective presentations using computer applications to design print and visual aid materials. Prerequisites: HED 160 and 166, 3 hours of CS. Credit 3.

HED 460 Health Education Research: Methodology and Statistics.
An introduction to research methodology, evaluation, and statistical analysis with direct application to health education and health promotion. Students will learn how to apply these techniques to writing a grant proposal. Prerequisites: Junior standing, 9 hours of health courses, MTH 169. Credit 3.

HED 461 Managing Health Promotion in the Workplace.
A course designed to prepare the health educator to establish special programs which promote health in corporate, occupational, or industrial settings. Credit 3.

HED 470 Aids: Current Health Problems and Prevention Strategies.
An examination of the intensity and magnitude of health problems due to HIV and AIDS. Student will explore the nature of HIV; its transmission and progression; and the management of AIDS. The course will focus on prevention of the spread of AIDS among school-age children and young adults, and will address the economical, sociological, and ethical issues of AIDS. Prerequisite: Junior standing. Credit 3.

HED 487 Community Health.
This course is an overview of the political, social, economic, and cultural variables affecting the health of a community. Topics include: foundations of community health, health resources, health through the life span, governmental and voluntary programs, and international health initiatives. Prerequisite: Junior Standing. Credit 3.

HED 490 Environmental Health.
This course is designed to investigate community environmental health problems. Topics include population problems, housing, sanitation, air and water pollution, and other environmental health issues. Emphasis is on school-community action programs to conserve the environment. Prerequisite: Junior standing. Credit 3.

HED 492 Problems in Health.
A directed individual study of an approved field problem in health and/or allied fields. Prerequisites: HED 493 and departmental approval. Credit 3.

HED 493 Principles and Practices of Community Organization and Community Development.
This course is designed to prepare students for their professional internship. Course content focuses on the contemporary areas of: assessing, planning, implementing, and evaluating health programs; communicating health needs; serving as a resource person; and coordinating health needs in a community. Prerequisite: 12 hours of Health including HED 487. Credit 3.

HED 494 Internship Program.
This course provides the student with opportunities to demonstrate assessment, organization, group process and program planning skills in a health community setting. Prerequisites: 18 hours of Health including HED 493. Credit 3.

KINESIOLOGY PROGRAM

Chair: Alice Fisher (936) 294-1165; edu_axf@shsu.edu

Faculty: Mark Gaus, Jon Gray, Bob Case, Brenda Lichtman, Gary Oden

Mission

The mission of the Kinesiology program is to advance students' understanding of relationships among movement, exercise, and skill that occur in the contexts of development, learning, rehabilitation, and training. The program seeks to prepare future professionals for movement-related fields such as teaching, coaching, personal exercise, training and fitness. Learning occurs through the study of movement and exercise processes within a framework that emphasizes the clinical and practical implications of theory and research.

Academic Programs

- All-Levels Teacher Certification
- Exercise Science
- Sports Medicine (Athletic Training)
- Physical Education Generalist

Highlights

- Nationally recognized (NCATE) teacher certification program making our majors in high demand by school district administrators.
- Successful completion of the Sports Medicine (Athletic Training) program prepares individuals to sit for the Advisory Board of Athletic Trainers' state license.
- Web-based courses.
- Outstanding faculty and staff.
- Value student diversity (various ethnic and cultural backgrounds).

Suggested Minors

- Teacher Certification students will minor in Education but should select another content area which is taught within the public schools.
- Exercise Science students should select Health as a minor.
- Sports Medicine (Athletic Training) students should select either Health or Biology as a minor.
- Kinesiology (non teacher certification) students can choose any content area for a minor.

Career Opportunities

- All Levels Teacher Certification
- Athletic training
- Corporate fitness
- Commercial fitness
- Hospital-based wellness
- Cardiac rehabilitation
- Assistants to chiropractors and physical therapists
- Recreational specialists in camps, communities and YMCA's
- Personal trainers

Student Organizations

S.H.A.W. – Sam Houston Alliance for Wellness – promotes healthy lifestyles; open to all SHSU students.

Internships

Students completing the Exercise Science track complete a 6-credit, 480-hour internship at a site which is aligned with their career aspirations under the instruction and supervision of a qualified and experienced professional in the field.

Scholarships

- **Betty Alexander Scholarship** – Kinesiology major with at least two years of academic preparation at SHSU having earned a minimum of 3.0 in the major.
- **H.O. "Molly" Crawford Scholarship** – Male, junior standing in Kinesiology seeking teacher certification with at least a 2.5 GPA and demonstrating financial need.
- **Joe and Mary Kirk Scholarship** – Male, senior standing in Kinesiology seeking teacher certification with at least a 2.8 GPA.
- **Margaret Powell Award** – Female majoring in Kinesiology displaying excellence in academics.
- **Robert J. Wagner Memorial Scholarship** – Graduate student in Adult Fitness Management with 3.0 GPA, 1000 GRE and 3.5 graduate GPA reflecting a lifestyle of physical fitness and demonstrating financial need.
- **Department of Health & Kinesiology Scholarship** – Health or Kinesiology major demonstrating financial need with a satisfactory GPA.
- **Health & Kinesiology Wellness Scholarship** – Health or Kinesiology major displaying leadership potential with at least a 3.0 GPA and reflecting a high level of fitness.

Program Specific Requirements

Those seeking Teacher Certification must have a minimum GPA of 2.5 (includes transfer and SHSU hours) and must earn a "C" or better in their Kinesiology or Education courses.

Curriculum

Curriculum Description

The curriculum integrates the physiological, biomechanical, and psycho-social bases of movement. Students develop their own movement skills which transition into a focus on movement analysis, physiological function, and skill assessment. Students gain greater depth as they consider problems related to exercise, fitness and motor skill development within the context of lifestyle physical activity (i.e., play, games, sport, and other forms of human motor behavior). Students

finish the program with strong theoretical and problem solving skills based on a comprehensive knowledge of movement and exercise science. It is expected that graduates will be able to apply their knowledge and skills to a wide variety of movement-related problems and career possibilities.

Major in Kinesiology

Bachelor of Science

First Year	Credit
KIN 131, 230	6
KIN 114W, 215W	2
ENG 164, 165	6
HIS 163,164	6
BIO 134/114	4
CHM 135/115 or CHM 138/118	4
KIN Restrictive Elective**	3
	31

Second Year	Credit
KIN Majors' Activity Core*	2
ENG 265 or 266 or 267	3
POL 261	3
BIO 245 or 341	4
CHM 136/116 or CHM 139/119 or PHY 135/115	4
CS 133 or 143	3-4
MTH 164 or 170	3
Social and Behavioral Sciences***	3
KIN Restrictive Electives**	6
	31-32

Third Year	Credit
KIN 321 and 322	4
KIN Majors' Activity Core*	1
KIN 362, 373	6
POL (any 200 level)	3
MTH or STA or PHL 262	3
Minor	9
Visual & Performing Arts	3
Cultural Studies	3
	32

Fourth Year	Credit
KIN 378, 469	6
KIN Majors' Activity Core*	1
KIN 372	3
Minor	9
Additional electives to meet degree requirement****	14+
	33+

* Select from KIN 110T, 113, 115, 211, 213, and 214

** Select from KIN 263, 265, 266, 267, 268, 288, 368, 369, 370, 388, 430, 435, 463, 473, 477 and 492. A maximum of 6 hours can come from coaching classes (KIN 265, 266, 267, 268)

*** Choose 3 hours from ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, 264

**** A minimum of 42 advanced hours are needed for graduation.

Teaching Certification (All-Levels)

Bachelor of Science

First Year	Credit
KIN 131, 230	6
KIN 114, 215W	2
ENG 164, 165	6
HIS 163, 164	6
MTH 164 or 170	3
BIO 134/114	4
CHM 135/115 or CHM 138/118	4
Social and Behavioral Sciences***	3
	34

Second Year	Credit
KIN 263	3
KIN Majors' Activity Core*	2
POL 261, 285	6
ENG 265 or 266 or 267	3
BIO 245 or 341	4
CHM 136/116 or CHM 139/119 or PHY 135/115	4
CS 133 or 143	3-4
KIN Restrictive Elective**	3
MTH or STA or PHL 262	3
	31-32

Third Year	Credit
KIN 321, 322, 362	7
KIN Majors' Activity Core*	2
KIN 111, 368	4
KIN Restrictive Elective**	3
SCM 384	3
Cultural Studies	3
SED 374 or EED 374 or PSY 374; SED 383	6
Visual & Performing Arts	3
	31

Fourth Year	Credit
KIN 373, 469, 378	9
KIN 372	3
KIN 463	3
SED 392, 394, 464	9
SED 480, 496; EED 497	9
	33

* Select from KIN 110T, 113, 115, 211, 213 and 214

** Select from KIN 263, 265, 266, 267, 268, 288, 368, 369, 370, 388, 430, 435, 463, 473, 477 and 492. A maximum of 6 hours can come from coaching classes (KIN 265, 266, 267, 268)

*** Choose 3 hours from ECO 230, 233, 234, GEO 161, PHL 262, PSY 131, 289, SOC 261, 264

Exercise Science

Bachelor of Science

First Year	Credit
KIN 131, 230	6
KIN 110 (racquetball), 215W	2
HED 166	3
ENG 164, 165	6
HIS 163, 164	6
BIO 134/114	4
CHM 135/115 or CHM 138/118	4
ACC 231	3
	34

Second Year	Credit
KIN 214, 219	2
FSC 167	3
HED 280	3
HED Restrictive Electives*	3
ENG 265 or 266 or 267	3
POL 261	3
BIO 245 or 341	4
CHM 136/116 OR CHM 139/119 or PHY 135/115	4
CS 133 or 143	3-4
MTH 164 or 170	3
ECO 230	3
	34-35

Third Year	Credit
KIN 373	3
KIN 362, 370	6
HED 391, 392	6
ENG 330	3
POL (any 200 level)	3
MTH or STA or PHL 262	3
MGT 380	3
Visual & Performing Arts	3
Cultural Studies	3
	33

Fourth Year	Credit
KIN 417, 473, 477	7
KIN 493, 494, 494	9
HED 461	3
HED Restrictive Electives*	3
MKT 371; GBA 362	6
	28

* Choose HED elective from: HED 272, 281, 385, 390, 470 and 490

Athletic Training Endorsement

Bachelor of Science

First Year	Credit
KIN 131, 230	6
KIN 114, 215W	2
ENG 164, 165	6
HIS 163, 164	6
BIO 134/114	4
CHM 135/115 or CHM 138/118	4
KIN 265 or 266 or 267 or 268 or 288	3
	31

Second Year	Credit
KIN Majors' Activity Core*	2
MTH 164 or 170	3
HED 280 or 391	3
PSY 131	3
ENG 265 or 266 or 267	3
POL	3
BIO 245 and 246, or BIO 341	4-8
CHM 136/116 or CHM 139/119 or PHY 135/115	4
CS 133 or 143	3-4
Electives	3
	31-36

Third Year	Credit
KIN 321, 322	4
KIN 362, 370	6
KIN Majors' Activity Core*	2
MTH or STA or PHL 262	3
POL any 200-level	3
Minor	9
Visual & Perf. Arts	3
Cultural Studies	3
	33

Fourth Year	Credit
KIN 369, 373, 469	9
KIN 372, 492 (Adv. Athlet. Tr.)	6
KIN 378 or 388 or 435	3
KIN 473, 477	6
Minor	9
	33

* Select from KIN 110T, 113, 115, 211, 213 and 214

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Note: Kinesiology majors seeking teacher certification will be required to earn at least a grade of C in every major class.

Kinesiology Minor

Kinesiology core (KIN 131, 230, 321, 322, 362, 373 and 469)	19
Select 3 hrs from KIN 110T, 113, 115, 211, 213 and 214	3
KIN 372	3
KIN 114 and 215W	2

Special Endorsement

Athletic Training: This endorsement is applicable to an appropriate degree in Kinesiology. It is strongly recommended that the candidate choose either Health or Biology as the minor. The program will meet the preparation requirements of the state licensing agency. Interested students are urged to confer with the Head Athletic Trainer concerning required field experience, examinations, and other pertinent information.

Kinesiology Course Descriptions

KIN 110 Racquet Sports.
Instruction is provided in skills, knowledge, and strategies in one or more of the racquet-related activities listed in the class schedule. Credit 1.

KIN 111 Elementary Activities.
This course provides an overview of the program of activities in elementary school physical education with emphasis on the understanding of movement, common problems and possible solutions. Credit 1.

KIN 113 Basketball/Soccer.
This course will offer skills, knowledge, and techniques presented at either the beginning or intermediate level in each of these activities. Enrollment limited to Kinesiology majors and minors. Credit 1.

KIN 114 Rhythmic Activities and Innovative Games.
The rhythmic portion of the course will include experiences in basic musical signature and pattern identification. These will be applied to selected regional and square dances, jumping rope, and aerobic dance routines. During the innovative games half principles upon which novel activities are based will be presented along with games which depict each tenet. Enrollment limited to Kinesiology majors and minors. Credit 1.

KIN 115 Track and Field/Gymnastics.
The student will gain proficiency in fundamental skills in gymnastics and track and field events, as well as an understanding of basic terminology associated with judging and spotting. Enrollment limited to Kinesiology majors and minors. Credit 1.

KIN 116 Varsity Sports.
This course is based upon the National Collegiate Athletic Association CHAMPS/ Life Skills Program and is designed to assist the student-athlete in developing skills in the areas of academics, personal growth, career choice, and commitment to service. Enrollment is limited to members of athletic teams. Substitution of this class for the University's activity requirement is not permitted. No more than four hours of KIN 116 can be counted toward the degree. Approval for enrollment must be obtained from the student's coach prior to registration. Credit 1.

KIN 117 Lifetime and Individual Sports.
Each class will have skills, knowledge and techniques presented at either the beginning or intermediate level in one or more of the lifetime and individual sports. Credit 1.

KIN 131 Foundations of Kinesiology.
This course serves as a base for all kinesiology courses. Units will include historical development, philosophical implications, physical fitness, scientific bases of movement, and educational values of kinesiology and career path options. Credit 3.

KIN 210 Aquatics (Swimming, Standard Red Cross Life Saving, and Scuba Diving).
This course will be offered for all levels of swimming (beginning through advanced), diving, synchronized swimming, or scuba diving. For advanced life saving and water safety instructors see KIN 232. Credit 1.

KIN 211 Golf and Recreational Activities.
This course presents rules, knowledge and skills in golf, archery and another leisure time activity selected on a rotational basis. Half a semester is devoted to golf, with equal time allotted to archery and the other named activity. Enrollment limited to Kinesiology majors and minors. Credit 1.

KIN 212 Archery.
This course will include skills, knowledge and techniques of archery at the beginning level. Credit 1.

KIN 213 Softball/Volleyball.
The student will gain skills, knowledge, and techniques of softball and volleyball at the beginning level. Enrollment limited to Kinesiology majors and minors. Credit 1.

KIN 214 Weight Training and Physical Conditioning.
Experiences in this course will include skills, knowledge and techniques of weight training and physical conditioning at the beginning level. Credit 1.

KIN 215 Fitness for Living.
Students will gain an understanding of physical conditioning and wellness pertaining to the five components of health-related fitness. Students will develop an understanding of lifestyle related diseases and behavior modification techniques. In addition, there will be opportunities to participate in a variety of movement experiences related to fitness. Credit 1.

KIN 219 **Kinesiology Activities.**
Activities can include special or unique areas as instructors are available. This will include those activities which are not offered on a regular basis including aerobic dance, aquatic exercise, etc. Credit 1.

KIN 230 **First Aid: Red Cross and Instructor's Course.**
A course for those who wish to acquire a knowledge of Red Cross emergency and preventive measures. Successful completion leads to CPR and first aid certification. Students may become instructors through additional American Red Cross training. (Also listed as HED 230.) Credit 3.

KIN 233 **Honors Fitness for Living.**
This course will substitute for HON 215 for students in the Honors Program. Specific topics include flexibility, muscular strength, muscular endurance, nutrition, weight control and theories of obesity, ergogenic aids, date rape, sexually transmitted diseases, Title IX, sexual harassment, message, care and prevention of athletic injuries and aging. Other content will be presented as time permits. Students will be required to complete a formal research project which will involve data collection and analysis.

KIN 263 **Motor Development.**
This course investigates theories of motor learning and motor development of children, K-6. Special emphasis is placed upon sequential motor development patterns, the needs, interests, and abilities of the child in relation to physical, social, mental and emotional domains. Opportunities are provided to work with elementary school children in guiding their perceptual-motor learning and development. Credit 3.

KIN 265 **Coaching of Track And Baseball or Softball.**
This course includes a study of the skills and techniques used in coaching baseball/softball and track and field in the schools. The skills and techniques are demonstrated and performed on the baseball/softball field and track. Credit 3.

KIN 266 **Coaching of Football.**
The latest techniques of offensive and defensive football are stressed with emphasis on the problems that will confront high school coaches. Some techniques are demonstrated and performed on the football field. Credit 3.

KIN 267 **Coaching of Basketball.**
A study is made of the fundamental preparation, operation, expertise and management necessary to coach and conduct a basketball program. Credit 3.

KIN 268 **Coaching of Volleyball.**
A study is made of the individual fundamentals, strategy, scouting, practice preparation and administrative duties associated with coaching a volleyball program. Credit 3.

KIN 288 **Officiating Sports.**
This course includes a study of the rules, interpretations, and the mechanics of officiating. The course is designed to develop the skills and knowledge required in the officiating of football, basketball, baseball, soccer, track and field, and other interscholastic sports. Credit 3.

KIN 321 **Assessment in Kinesiology.**
This course presents information on the construction and administration of tests evaluating fitness and motor skills used in sports. Issues in grading and evaluation are also addressed. Prerequisite: Junior standing. Credit. 2.

KIN 322 **Motor Learning.**
This class explores the processes involved in the acquisition of motor actions. Emphasis is placed on how teachers can apply theoretical concepts to more effectively structure their classes. Prerequisite: Junior standing. Credit 2.

KIN 362 **Biomechanics.**
A study of human motion in two broad areas: the neurological and mechanical aspects of human movement, as well as muscle structure and functions. Application of these two areas to motor skills analysis is emphasized. Prerequisite: BIO 245 or 341. Credit 3.

KIN 368 Motor Programming.
This course includes a study of motor programming with special focus on the child, his/her needs and abilities, and the administration, organization, evaluation, and implementation of sequential motor programs which enhance motor development. Prerequisites: KIN 114 and 263. Co-requisite: KIN 111. Credit 3.

KIN 369 Therapeutic Modalities of Athletic Training.
A study of the theories and principles involved in the use of therapeutic modalities in treating injuries to the physically active, providing students with the necessary skills and theoretical knowledge to formulate treatment plans for injuries. Prerequisites: KIN 370. Credit 3.

KIN 370 Prevention and Care of Injuries.
This course includes instruction and laboratory work in the care and prevention of injuries. It is designed to meet the needs of the athletic coach and physical education teacher. Prerequisite: Junior standing in Kinesiology or permission of the instructor, and BIO 245 or 341. Credit 3.

KIN 372 Team and Individual/Dual Sport Skill Analysis.
This course will introduce the instructional process of analyzing and sequencing skill components and performance techniques found within team and individual/dual sports. The course is designed to allow the student to engage in individual and cooperative teaching experiences that utilize multiple instructional strategies. The student will investigate the process of a task analysis and other skill sequencing experiences. Aspects of lesson progression and construction will be incorporated throughout the course while maintaining a focus on motor skill acquisition. Prerequisites: KIN 322 and three from KIN 110T, 113, 115, 211, 213 and 214. Credit 3.

KIN 373 Physiology of Exercise.
This course is designed to develop an understanding of the manner in which the body reacts to the exacting requirements of activity and exercise. Prerequisite: Junior standing. Credit 3.

KIN 378 Administration of Kinesiology and Recreation.
The first half of this course is concerned with the organization and administration of physical education and recreation in the public schools; the second half, with the organization, administration, and business management of a high school athletic program. Prerequisite: 18 hours in Kinesiology. Credit 3.

KIN 388 Sports in Contemporary Society.
A study is made of sport and its impact upon society. Credit 3.

KIN 417 Practicum in Kinesiology.
A course in which students serve as interns in a laboratory situation where emphasis is placed upon teaching skills. This provides a qualified student with an opportunity to gain teaching experience. Prerequisite: Permission of department chair. Credit 1.

KIN 430 History and Philosophy of American Physical Education and Sport.
This course provides a historical and philosophical survey of the events which have influenced the exercise and sporting practices of contemporary American society. The focus is on the development of physical education, exercise, sport, dance, and the Olympic movement with interpretations and analyses of these events. Prerequisite: Senior standing. Credit 3.

KIN 435 Psychology of Coaching.
This course deals with understanding of the psychological make-up of the athlete. It explores traditional myths, syndromes and stumbling blocks facing the modern day athlete and how these may be overcome. The course will focus on the dynamics of the coach/athlete relationship. Credit 3.

KIN 463 Laboratory Experiences in the Motor Domain.
This course is concerned with a study of fine and gross-motor activities and developmental progressions of pre-school children. Opportunities are given for field-based experiences in teaching children motor skills. Prerequisite: KIN 368. Credit 3.

KIN 469 **Adaptive Kinesiology**.
A study of the special needs of handicapped individuals with emphasis on the adaptations of activities for them in a program of kinesiology. Credit 3.

KIN 473 **Advanced Topics in Physiology of Exercise.**
This course bridges the gap between basic undergraduate and graduate physiology of exercise. Selected topics will include: perceived exertion, biorhythms, mood elevation and exercise, interval training, periodization, LBW gain, somatotyping, effects of high altitude, blood doping, ergogenic aids, vegetarian diets, pregnancy and exercise, theories of obesity and endocrine functioning. Other topics will be presented as time permits. Prerequisite: KIN 373. Credit 3.

KIN 477 **Principles of Exercise Testing and Prescription.**
This course is designed to provide the student with the theoretical background and practical experience necessary for the safe and scientific evaluation of physical fitness, particularly as it relates to health and disease and the development of programs for remediation, maintenance and enhancement of motor and health-related qualities. Prerequisite: KIN 373. Credit 3.

KIN 492 **Problems in Kinesiology.**
A directed individual study of an approved problem related to the field of kinesiology. Prerequisites: 9 advanced hours in Kinesiology and permission of the department chair. Credit 3.

KIN 493 **Principles and Practices of Adult Fitness Management.**
This course is designed to provide the student with the theoretical background and practical experience necessary for a successful internship experience. Prerequisite: Senior standing. Credit 3.

KIN 494 **Internship.**
This course provides the study with opportunities to demonstrate competencies developed in previous courses by working in an agency under the supervision of a qualified practitioner. Prerequisites: Senior standing and KIN 493 or HED 493. Credit 3.

DEPARTMENT OF LANGUAGE, LITERACY, AND SPECIAL POPULATIONS

Chair: Mary Robbins (936) 294-3890; ROBBINS@shsu.edu
Faculty: Paula Adams, Helen Berg , Leonard Breen, Linda Ellis, Betty Higgins, Sharon Lynch, Joyce McCauley, Margaret McGuire, Melinda Miller, , Diana Nabors, Debra Price, Mary Robbins, Phillip Swicegood, Laverne Warner

Academic Programs

- Academic Studies B.A., B.S.

Highlights

- Close working relationship with faculty
- Wide offering of field-based classes
- Field experience in a variety of diverse settings
- High pass rate on the Texas Examination of Educator Standards (ExCET)
- Individual program advisors assigned
- Courses use Blackboard as online feature
- Courses taught on-campus and at the University Center

Suggested Minors

- Special Education can be designated as a minor for other degree programs
- SPD Minor requires SPD 231, SPD 331, SPD 367, SPD 377, SPD 478, SPD 490

Career Opportunities

- Bilingual Education and Special Education are both high-need areas
- The state of Texas emphasizes the need for highly qualified teachers, with a specific need for reading teachers

Student Organizations

- Best Buddies
- Bilingual Education Student Organization (BESO)
- Sam Houston Association for the Education of Young Children
- Sam Houston Student Council for Exceptional Children
- Sam Houston Association of Reading Educators

Scholarships

- Jessie Lewis Scholarship for Reading
- Bess Osborn Reading Scholarship
- Alberto Sandoval Bilingual Education Scholarship
- Frances Elmer Scholarship for Special Education
- Laverne Warner Early Childhood Scholarship
- Woman's Club of Houston Early Education Scholarship

Internships

Internships in public schools are permitted only for candidates who already have a baccalaureate degree. Undergraduate teaching candidates participate in the student teaching block as the capstone of their professional program sequence.

Program Specific Requirements

Required Field Experiences

Candidates for any teaching certificate participate in field experiences in the public schools. Requirements for these activities vary by course and are coordinated by the Field Experience office.

Admission to the Educator Preparation Program
Students seeking initial Teacher Certification will apply for admission to the Educator Preparation Program in their first Education class. Subsequent program specific requirements are explained below.

Admission to the Literacy Block
Candidates for certification EC-4, 4-8, EC-8, and EC-12 must participate in a one-semester 9 hour literacy block (RDG 370/RDG 390/RDG 431) the semester prior to the ACS methods block. Students must apply for placement in the literacy block through the Department of Language, Literacy and Special Populations (LLSP). The LLSP Department determines the eligibility based on criteria which include admission to the Educator Preparation Program, course work completed, and dispositions. Students should consult their program area advisor to determine the process for application and admission.

Admission to the Special Education Block
Candidates seeking special education certification must apply for the 6-hour Special Education Block (SPD 460/480) through the Department of Language, Literacy and Special Populations. This class is usually taken the semester prior the ACS methods block. Prerequisites include SPD 231, SPD 331, SPD 377, and SPD 367.

Bilingual Target Language Proficiency Test
Candidates seeking certification in Bilingual Education must demonstrate Spanish language proficiency in reading, writing, and speaking on the Bilingual Target Language Proficiency Test (BTLPT).

Admission to Student Teaching
Student teaching is intended to be the culminating experience in a candidate's preparation to become a teacher. Candidates should enroll in student teaching the final semester of their preparation program (contact edu_efo@shsu.edu for student teaching information).

Bilingual Education Courses

BSL 236 Multicultural Influences on Learning.
This course examines the rich cultural heritages of the United States and their influences on learning. Linguistic dialects, cultural patterns, practices and contributions of various cultural groups are studied in their relation to the educational process. Particular emphasis is given to the cultural groups in the Southwest. Prerequisite: Sophomore standing. Credit 3.

BSL 333 Language Acquisition Theory for Second Language Learners.
This course examines language acquisition theories and philosophies related to learning a second language from early childhood to adult. The course also examines the history, rationale, political, community and global perspectives of bilingual education and English as a second language programs. Emphasis is placed on the principles and implementation of how children learn a language or languages, and how educators can develop academic programs and curriculum plans incorporating local, state, and national policies. Field experiences in PK-12 public schools required. Taken concurrently with BSL 478. Prerequisite: Junior standing. Credit 3.

BSL 430 Language Learning and Literacy Development in Multilingual Students.
This course provides an intensive study of the theories of language learning and literacy development for students learning English. Processes and strategies on the development of oral language and reading in the primary language, in particular Spanish, and transitions into English reading are emphasized. Correlations between the fundamental concepts and principles of reading and learning a second language are emphasized. Spanish is often used to teach this course. Field experience in PK-4 public schools required. Taken concurrently with BSL 477. Prerequisite: Junior standing. Credit 3.

BSL 437 Spanish Fluency in the Classroom.
This course is designed for persons interested in teaching in a Spanish instructional environment. Terminology specific to the instructional process, curriculum, and community is emphasized. Linguistic and cultural comparisons among different Spanish dialects represented in Texas are examined. The course is taught in Spanish. Prerequisite: Admission to educator preparation program required, field experiences in PK-12 public schools included in this course. Credit 3.

BSL 475 Individual Problems in Bilingual Education and English as a Second Language Programs.
This course is designed for persons interested in enhancing educational principles related to current bilingual and English as a second language issues. This course will address specific topics for independent study related to second language learning, methodologies, curriculum, instruction, evaluation, parent/community involvement, program design and field experiences. Credit 3.

BSL 477 Content Based Learning for Second Language Learners.
This course identifies appropriate curricula and teaching strategies to teach reading, language arts, mathematics, science and social studies to second language learners. Principles of current content area curriculum and instructional theory as related to language learning in a bilingual classroom are studied. Spanish is often used to teach this course. Field experiences in PK-4 schools required. Taken concurrently with BSL 439. Prerequisite: Junior Standing Credit 3.

BSL 478 Teaching English as a Second Language.
The course identifies current instructional methods and approaches to teaching English as a second language to nonnative speakers of English beginning at the early childhood level through adult. Principles and concepts of second language learning, linguistic contrasts between English and other languages, and the instructional processes are emphasized. Field experience in PK-12 schools required. Taken concurrently with BSL 333. Prerequisite: Junior Standing. Credit 3.

BSL 488 Student Teaching in a Bilingual or ESL Classroom.
The student is assigned to student teaching in a bilingual and elementary classroom fulltime for twelve weeks. The student is assigned to student teaching in an English as a second language classroom or period full-time at the elementary or secondary level for six weeks or one-half day for twelve weeks. Prerequisite: Admission to Student Teaching program. Credit 3.

Early Childhood Education Course Descriptions

ECE 273 Curriculum in the Public Schools.
The curriculum in the preschool and primary grades is presented with an emphasis on the Texas Essential Knowledge and Skills. The philosophical orientation of early learning and development, classroom arrangements, selection of material and activities, evaluation procedures, and developmentally appropriate practices will be studied. Prerequisite: 45 hours. Credit 3.

ECE 275 Study of the Preschool Child.
This course is intended to provide a foundation in the basic principles and theories of child development. Field experience in child care facilities will be required. Prerequisite: 45 hours. Credit 3.

ECE 319 Guidance of Young Children: Field Experience.
Students will practice behavior management techniques with children in public school pre-kindergarten or kindergarten classrooms. This course is taken concurrently with ECE 329. Prerequisite: Either ECE 273 or 275. Credit 1.

ECE 329 Guidance of Young Children.
Classroom and behavior management techniques which are appropriate for young children will be presented with an emphasis on inductive discipline which leads to self-discipline. This course is taken concurrently with ECE 319. Prerequisite: Either ECE 273 or 275. Credit 2.

ECE 363 **Working with Families in Diverse Communities.**
This course is an in-depth study of the relationships between families and schools in diverse communities. Topics addressed in this course include discussions of major theories that support partnerships with parents; models for parent, school, and community partnerships; home, school and community influences on children's lives; parenting styles; family dynamics; parent education strategies; communication with parents; and the rights and responsibilities of parents, children and teachers. Field experience with young children, their families, and the community will be required. Prerequisites: ECE 273 and SPD 231. Credit 3.

ECE 433 **Developmentally Appropriate Programs for Young Children.**
An in-depth study will be made of developmentally appropriate practices in schools for young children. Appropriate curriculum and instruction, thematic unit development, and a study of the Texas Essential Knowledge and Skills are major areas of emphasis. Field experiences is required. Prerequisites: ECE 273 and ECE 275. Credit 3.

ECE 439 **Language and Literacy Development in the Early Years.**
This course provides a foundation in the basic principles and theories of language and literacy development. Students prepare an assessment portfolio on a preschool child. Prerequisites: ECE 273 and/or ECE 275, SPD 231. Credit 3.

ECE 475 **Problems in Early Childhood Education.**
This course is designed to permit individual students to study specific areas of interest and need. Prerequisite: Approval of Department Chair. Credit 3.

ECE 486 **Student Teaching in the Kindergarten and Pre-kindergarten.**
Six weeks of student teaching experience in a public pre-kindergarten or kindergarten is provided. Prerequisite: Admission to Student Teaching Program. Credit 3.

Reading Course Descriptions

RDG 011 **Reading and Study Skills**.
This course provides intense study of vocabulary, text organization, reading comprehension, and study skills related to specific content area texts. Credit 1.

RDG 031D **Developmental Reading**.
An intense study of vocabulary, text organization, comprehension and other reading. Strategies to develop criteria reading skills. Instruction is delivered through a combination of class lectures and individual Reading Center tutorials. Credit in this course does count toward graduation and computation of grade point averages and classification of students by hours completed.

RDG 131 **Strategies for College Reading and Thinking.**
Students will learn and practice strategies and skills necessary to read and think critically at the college level. Course focus is on reading in all academic disciplines, especially those with heavy reading content. Two hour class and on hour computerized tutorial. Credit 3.

RDG 235 **Literacy Processes of Culturally and Linguistically Diverse Populations**.
The fundamental concepts, principles, and conflicts of second language learning and teaching. Effective instructional approaches for students of diverse cultural and linguistic backgrounds are learned and applied. The use of multiethnic literature in the classroom is a special focus of this course. Credit 3.

RDG 275 **Literacy as a Foundation for Learning**
Students examine their personal literacy development and their philosophical assumptions underlying literacy instruction in order to build a basis for the theories and practices provided in the advanced reading courses. Credit 3.

RDG 285 **Literacy Across the Curriculum.**
This course focuses on using reading and writing as tools for learning in all academic areas, i.e. math, science, social studies, in elementary and intermediate school classrooms. Credit 3.

RDG 370 The Teaching of Reading.
The fundamental concepts and principles of reading instruction and focus on the developmental stages of reading. Word attack, comprehension, study strategies and other aspects of a balanced literacy program are learned and applied. Must be taken concurrently with RDG 390 and RDG 431. Field experiences in PK-12 public schools required. Advance Departmental Approval Required. Prerequisite: EED/SED 374. Credit 3.

RDG 385 Phonemic Awareness and Word Study.
Students will explore phonemic awareness, decoding skills, and vocabulary. Specifically included in the study are phonic generalizations, structural analysis, word derivations and etymology, and strategies for technical and other specialized vocabularies. Credit 3.

RDG 390 The Teaching of Language Arts.
Focus on the developmental stages of writing and the interrelated language processes of listening, speaking and reading and writing. Pre-service teachers will explore theories and instructional practices in the elementary school language arts program. Must be taken concurrently with RDG 370 and RDG 431. Field experiences in PK-12 public schools required. Advance Departmental Approval Required. Prerequisite: EED 374. Credit 3.

RDG 392 Content Area Reading and Writing.
Students will learn to determine pupils' needs and abilities in content area reading and writing through the use of assessment instruments and will plan instructional strategies appropriate to their needs within specific secondary teaching fields. Field experiences in PK-12 public schools required. Prerequisites: EED/SED 374. Credit 3.

RDG 393 Emergent and Beginning Literacy.
Language and cognitive development, listening, speaking, reading, and writing theories and instructional practices with children from birth to grade 3. Credit 3.

RDG 431 Literacy Assessment and Instruction.
Students will administer and interpret varied assessment tools as well as select and implement appropriate instructional techniques to plan and conduct effective classroom literacy instruction. Field experiences in PK-12 public schools required. Must be taken concurrently with RDG 370 and RDG 390. Admission to educator preparation program required. Credit 3.

RDG 471 Reading in the Middle Grades.
This course focuses on the uniqueness of middle grade students, middle school structures and explore literacy theories and activities that meet these needs and structures. Prerequisites: RDG 370, RDG 390 or instructor's permission. Credit 3.

RDG 475 Individual Problems in Reading.
Designed for students interested in extending conceptual knowledge in literacy issues. This course addresses special topics and independent study related to methodologies, curriculum, assessment, and language processes. Advance Departmental Approval Required. Credit 3.

Special Education Course Descriptions

SPD 231 Introduction to Special Education.
This survey course presents case studies of students with special needs, historical perspectives of special education, recommended educational approaches, and current models and issues in special education. Field experiences in PK-12 public schools and various appropriate field placements required. Prerequisite: Admission to educator preparation program required. Credit 3.

SPD 331 A Study of Emotional and Behavioral Disorders.
This course provides a study of the defining characteristics, systems of assessment and classification, theories of causality, and interventions for students with Emotional and Behavioral Disorders. Prerequisites: SPD 231 and Sophomore standing. Credit 3.

SPD 367 Student-Centered Planning and Learning in Special Education.
Emphasis is placed on the selection of assessment strategies, teaching methods, lesson planning, use of technology, and the preparation of instructional materials appropriate for students with special needs. Field experiences in PK-12 public schools required. Prerequisite: SPD 231. Credit 3.

SPD 377 A Study of Learning and Learning Disabilities.
The field of learning disabilities is examined with emphasis on history, definition, causation, teaching methods, and inclusive practices. Prerequisites: SPD 231 and Junior standing. Credit 3.

SPD 478 Behavioral Intervention and Family Involvement in Special Education.
This course addresses a variety of instructional techniques that can be utilized to change, maintain, increase, or decrease individual and group behaviors. Proactive behavioral intervention techniques from a variety of theoretical models are examined. Behavioral change strategies emphasize functional assessment principles, positive behavioral supports, and self-management. The basic principles, tools, and techniques of communicating with parents of children with disabilities and implementing parent education programs also are addressed. Prerequisites: SPD 231 and Junior standing. Credit 3.

SPD 438 Diagnostic Assessment of Exceptional Children and Youth.
An overview of formal and informal assessment for special education is provided. This course includes basic concepts of measurement, assessment of academic achievement, screening tools, diagnostic testing, review of individual and group intelligence tests, perceptual skills, sensory acuity and adaptive behavior. Prerequisites: SPD 231, 331, and 377. Credit 3.

SPD 460 Study of Cognitive and Low Incidence Disabilities.
This course includes a study of the characteristics and needs of students with mental retardation and low incidence disabilities. Topics include appropriate curriculum methods and instructional needs for all ages, life span issues, vocational, and transition issues. Twenty (20) hours of field placement required. This course must be taken concurrently with SPD 480. Prerequisites: SPD 231, SPD 331, SPD 367, SPD 377. Credit 3.

SPD 474 Individual Problems in Special Education.
Designed to permit individual students to study specific areas of interest and need. Prerequisite: Approval of Department Chair. Credit 3.

SPD 480 Collaborative Partnerships Across the Lifespan.
This course is designed to equip the prospective teacher with the collaborative skills needed in inclusive school and community environments. Areas that are emphasized include adaptations for instruction, transition planning, vocational/career education, and assistive technology. Twenty (20) hours of field placement required. This course must be taken concurrently with SPD 460. Prerequisites: SPD 231, SPD 331, SPD 367, SPD 377. Credit 3.

SPD 490 Learning and Instruction for Young Children with Disabilities.
This course provides opportunities for students to demonstrate competencies by working with young children with disabilities under the supervision of a qualified teacher. This course provides experiences in designing individual instructional plans, assistive technology, data collection, and instructional adaptations. Field experiences in PK-12 public schools required. Prerequisite: SPD 231. Admission to educator preparation program required. Junior standing. Credit 3.

DEPARTMENT OF LIBRARY SCIENCE

Chair: Mary A. Berry (936) 294-1150; lis_mab@shsu.edu
Faculty: Mary Ann Bell, Marie Hayden, Frank Hoffmann, Teri Lesesne, William Pichette

Mission

The Department of Library Science is charged with applying the University's mission specifically to the field of Library and Information Science.

Program Specific Requirements

Electives: Library Science courses may be included as requirements or electives in any curriculum, and are recommended as providing the basis for effective, efficient use of libraries. These courses provide students with research techniques.

Library Science Course Descriptions

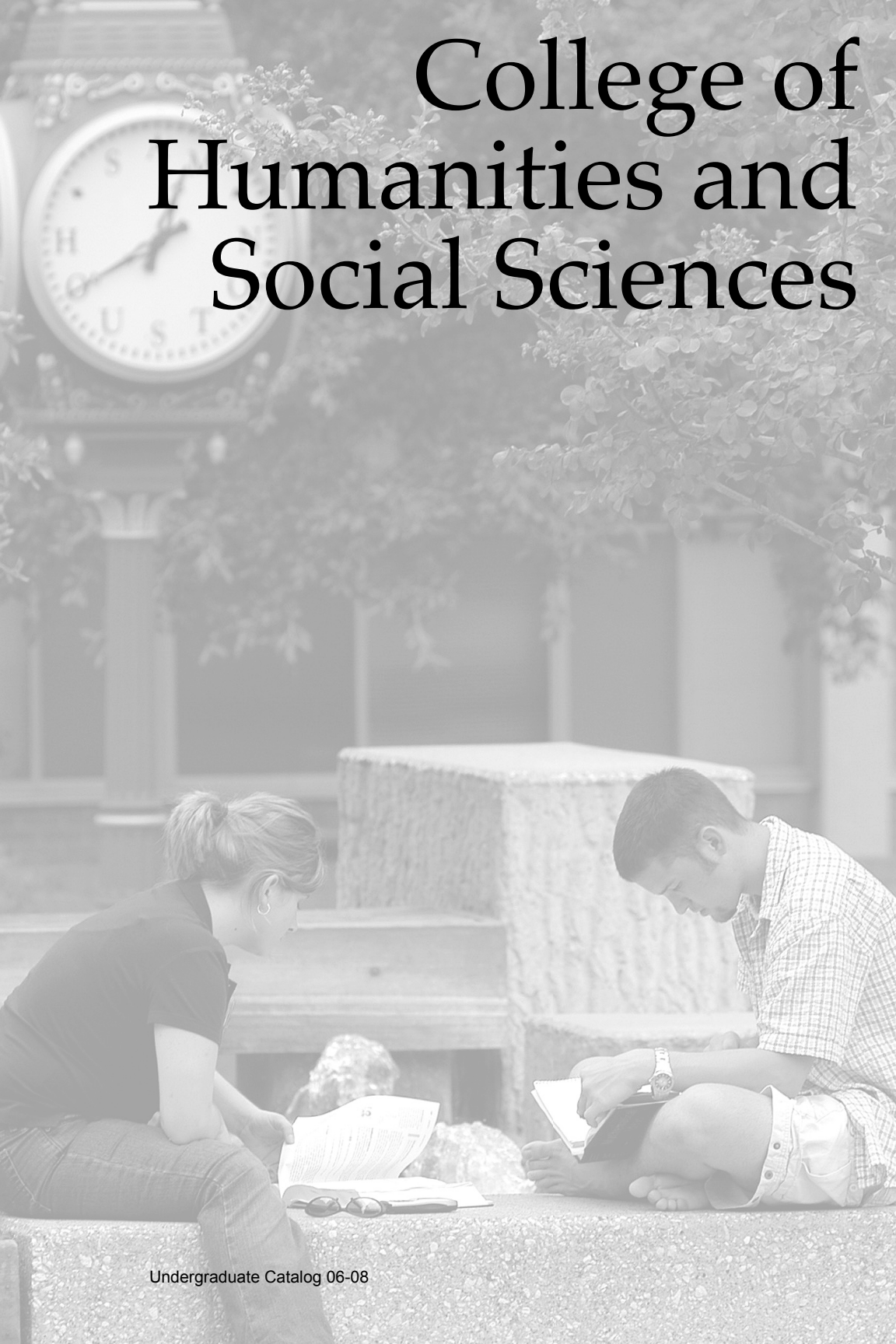
LS 130 **Information Access Strategies.**
This course will introduce students to the fundamental principles of information search, access, retrieval and transfer. Emphasis will be placed upon the basic tools and skills of traditional library research as well as the more innovative technologies that facilitate research and learning. Credit 3.

LS 361 **Literature And Related Materials For Children.**
The historical development, critical analysis, and selection of materials for children. Identification and use of folklore, poetry, imaginative, realistic and informational literature. Stresses developmental needs of children including those of various ethnic groups. Emphasis on motivational techniques. Writing Enhanced. Credit 3.

LS 362 **Literature And Related Materials For Young Adults.**
Selection of literature approved selection tools, the preparation of bibliographies, oral and written reports, book talks, critical evaluations annotations, and the sharing of reading experiences. Stresses developmental needs of young adults. Emphasis on motivational techniques. Writing Enhanced. Credit 3.

LS 363 **Survey Of Juvenile Literature.**
Designed to acquaint students with the selection, critical analysis, and historical development of literature for children and young adults. Emphasis will be placed on selecting materials which meet the needs and interest of children and young adults, identifying techniques and strategies which will motivate ALL children and young adults to read and respond to literature, and developing critical abilities for evaluating literature and related materials for children and young adults. A strong multicultural element will also be a part of this course. Writing Enhanced. Credit 3.

College of Humanities and Social Sciences



Undergraduate Catalog 06-08

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

Administrative Officers

Interim Dean	Terry M. Thibodeaux, Ph.D. (936)294-2200; thib@shsu.edu
Interim Associate Dean	A. Jerry Bruce, Ph.D. (936)294-2202; bruce@shsu.edu
Interim Associate Dean	Kandi A. Tayebi, Ph.D. (936)294-2203; kanditayebi@shsu.edu

Department of English and Foreign Languages	Charles W. Bridges, Ph.D., Chair
Department of Family and Consumer Sciences	Janis D. White, Ph.D., Chair
Department of History	Terry D. Bilhartz, Ph.D., Chair
Department of Mass Communication	Janet Bridges, Ph.D., Chair
Department of Political Science	Robert E. Biles, Ph.D., Chair
Department of Psychology and Philosophy	Donna M. Desforges, Ph.D., Chair
Department of Sociology	Alessandro Bonanno, Ph.D., Chair
Department of Speech Communication	James D. Ragsdale, Jr., Ph.D., Chair

Website: www.shsu.edu/~hss001/

The College of Humanities and Social Sciences consists of eight academic units: English and Foreign Languages; Family and Consumer Sciences; History; Mass Communication; Political Science; Psychology and Philosophy; Sociology; and Speech Communication.

Mission

The College of Humanities and Social Sciences (CHSS) provides an essential component to a liberal arts education: understanding human beings in their diversity as expressed in their literatures, histories, ideas, values, oral and written expressions, and behavior. By promoting analytic, interpretive, interpersonal, and communication skills, the College of Humanities and Social Sciences facilitates personal growth, competent professionalism, and responsible citizenship.

Academic Programs

Major	Degree(s)	Page
English	B.A.	323
Family and Consumer Sciences	B.A., B.S.	338
Family and Consumer Sciences-Fashion Merchandising	B.A., B.S.	340
Family and Consumer Sciences-Food Science and Nutrition	B.S.	341
Family and Consumer Sciences-Food Service Management	B.A., B.S.	342
Family and Consumer Sciences-Interior Design	B.A., B.S.	343
History	B.A.	349
Mass Communication	B.A.	358
Philosophy	B.A.	378
Political Science	B.A., B.S.	369
Psychology	B.S.	381
Sociology	B.A., B.S.	386
Spanish	B.A.	331
Speech Communication	B.A.	391

Note: This listing of undergraduate degree programs is correct as of December, 2005 and does not include those degree programs being phased out.

Highlights

- Annual Teaching Conference — Each year the College of Humanities and Social Sciences hosts a teaching conference, celebrating important accomplishments of faculty members. Faculty members are recognized for their excellence in teaching and explore new approaches to teaching.
- Faculty in the College of Humanities and Social Sciences are committed to teaching excellence, curriculum innovation, and research.
- Faculty in the College of Humanities and Social Sciences have been recognized for their research with national awards.
- Writing Center—The Writing Center helps students, staff, and faculty become better writers through individual and group instruction.
- Ronald E. McNair Post-baccalaureate Achievement Program—This program is designed to provide talented first-generation, low income or ethnic minority undergraduate students with effective preparation for doctoral study. The program encourages students to engage in research with a faculty mentor and to acquire the skills necessary to succeed in doctoral studies.

Scholarships

Clay and Margaret B. Smith Memorial Humanities and Social Sciences Scholarship--This scholarship is a one year award of $1000 divided between Fall and Spring semesters and is disbursed on the basis of financial need and academic performance. An application is available on the College of Humanities and Social Sciences webpage.

DEPARTMENT OF ENGLISH AND FOREIGN LANGUAGES

Chair: Charles W. (Bill) Bridges (936) 294-1402; bridges@shsu.edu

The Department of English and Foreign Languages is comprised of two programs: one in English, one in Foreign Languages. Each program offers students the opportunity to study language, literature, composition and cultures.

Mission

The Department of English and Foreign Languages strives to provide students with opportunities to grow as learners and as individuals. Students in the English Program may, through study of literature, gain an awareness and knowledge of themselves and their contemporary world. Other English students combine their cultural interests with specific vocational objectives, such as professional writing, teaching, or pre-professional training for law, business, or medicine. Students in the Foreign Languages Program may broaden their experience and increase their awareness of other cultures by acquiring a second language. Students in this program may also develop the skills and knowledge leading to such vocational positions as teachers and translators.

ENGLISH PROGRAM

Coordinator: Bill Bridges (936) 294-1402; bridges@shsu.edu

Faculty: William Abbott, Robert Adams, Kim Bell, Tracy Bilsing, Paul Child, Linda Cook, Lee Courtney, Robert Donahoo, Diane Dowdey, Julie Hall, Helena Halmari, Melanie Hanson, Darci Hill, Douglas Krienke, Melissa Morphew, Carroll Nardone, , Ralph Pease, Deborah Phelps, Paul Ruffin, April Shemak, Kandi Tayebi, Gene Young

Information: (936)294-1404; Evans Building 458; English@shsu.edu
Website: http://www.shsu.edu/~eng_www/

English forms the cornerstone of the humanities. In a variety of courses in literature, writing, and the English language, students find a source of personal enrichment, and they develop verbal, analytical, and cultural skills readily adaptable to a variety of careers.

English students learn to write with grace and precision, to read and analyze texts with accuracy, to conduct research and organize a welter of materials, to speak and listen well — in short, to sharpen their critical thinking and critical inquiry skills. These skills are highly valued by prospective employers. Most professions, while expecting new employees to be familiar with their specific fields, stress above all else the ability of their employees to read, write, and speak efficiently. Similarly, professional schools are interested in the student who reads, writes, and speaks well. Brochures from medical and law schools, for example, reflect an increasing awareness of the importance of an English background for future physicians and attorneys.

Academic Programs

Students in English may elect any of several degree options. A student may choose the Bachelor of Arts in English or elect to major in English and obtain composite teacher certification in English, Language Arts, and Reading. An emphasis in writing is available, and a minor in English is offered for students who major in other fields of study.

Highlights

- Students are provided opportunities to publish and present their writing and to enter writing contests. Numerous students have published works in regional and national journals.
- Academy of American Poets Prize—students compete for a poetry writing prize judged by a nationally recognized poet.

- The English Department focuses on good teaching, featuring a Minnie Stevens Piper Teaching Award winner, a Distinguished Professor, and numerous Sam Houston State University Teaching Excellence Award winners.
- Faculty actively publish in national journals, win national literary awards, and serve as editors of scholarly journals.
- Students have the opportunity to write technical documents for non-profit and other community groups.
- Nationally recognized writers are brought to campus each year to read their works to students and discuss the writing and publishing process. Such writers have included Larry McMurtry, Richard Bausch, George Garrett, X.J. Kennedy, Galway Kinnell, Allison Joseph, Maurice Kilwein, and Marilyn Nelson.

Suggested Minors

SHSU offers a wide range of courses and areas students may use to structure a minor, and students should choose a minor to fit their individual interests and career goals. Common minors for English majors include History, Journalism, Political Science, Speech Communication, and Education.

Career Opportunities

When graduates leave SHSU with a degree in English, they are prepared for career opportunities or advanced study in teaching, technical and professional communication, journalism, government service, editing, scholarly and trade publishing, law, and business.

Student Organizations and Activities

Students in English may participate in many activities that will enrich their undergraduate experience and support the courses they take. These include:

- **Sigma Tau Delta**, the English honor society, invites junior and senior English majors and minors to become members of this prestigious national organization, with membership in the society recorded on the student's transcript. Each year Sigma Tau Delta is an active student organization, sponsoring an annual food drive and readings throughout the school year. Applications for Sigma Tau Delta are available in the English office.
- **The Writer's Forum** provides opportunities for all SHSU students to publish their writing.
- **The *Sam Houston State Review*** is a literary magazine that publishes the writing of SHSU students. The *Review* staff consists of SHSU students who work closely with a faculty advisor.
- **The *Texas Review*** is a nationally-recognized literary magazine that, twice a year, publishes fiction, poetry, nonfiction prose, and reviews by writers from around the world. The *Texas Review* Press sponsors the publication of five to seven books a year, including works of fiction, poetry, and nonfiction prose. Students have the opportunity to serve as interns while working as a member of the *Review* and the Press staff.

Internships and Study Abroad

- The Texas Review Press — Students have the opportunity to serve as interns at the Texas Review Press. Interns are involved in a variety of tasks, ranging from charting the development of a manuscript to evaluating submissions to the literary journal.
- Internships in business and industry may be available for qualified students enrolled in the Writing Option.

Scholarships

Several scholarships are available for outstanding undergraduate students. Please see the Department Chair and/or the department's website for more information. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/scholarships or telephone (936) 294-1672.

Program Specific Requirements

The English major requires a total of 36 hours of English coursework. (Note: ENG 164 and 165 may not be used to meet this requirement.) All general degree requirements including a minor in a non-English area also must be met.

Curriculum

Required courses: ENG 265, 266 or 267, 360, 361, 384, and 385	18 hrs.
The total must include a minimum of 18 upper division hours (6 hrs. at the 400 level)	18 hrs.
Total	36 hrs.

Major in English

Bachelor of Arts

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG 265; 3 hrs. from 266 or 267*	6
HIS 163, 164	6	PHL 261 or PHL 471	3
Component Area 3 (Natural Science from two different departments)	8	POL 261, POL (200-level)	6
		MTH 164	3
Foreign Language 141 and 142 (Four semesters in one language)	8	Elective	3
		Foreign Language 263 and 264 (Four semesters in one language)	6
Component Area 6 (Computer Literacy)	3	ART, DNC, MUS, THR or PHL 366	3
KIN 215	1	Component Area 4 (Visual and Performing Arts)	3
	32		33

Third and Fourth Years	Credit
ENG 360, 361, 384, and 385	12
ENG Advanced 400 Elective	6
ENG Advanced General Elective	12
Minor (6 hr adv)	18
Component Area 5	3
Elective	6
General electives (Adv)	6
	63

English Writing Option: Students who wish to strengthen their writing skills may wish to pursue the technical or creative writing option, taking such courses as

ENG 330, 377, 381, 382, 380, 430, 481, 482, or 475

Students with interest in a particular discipline may elect a specialty track, combining their interests in writing with such disciplines as Animal Science, General Agriculture, Health, Criminal Justice, Journalism, Psychology, Political Science, Radio/Television/Film, Sociology, and Speech Communication.

Students interested in the Multimedia Authoring and Communication major should refer to degree programs in the Department of Speech Communication and the Department of Mass Communication.

CHSS

English, Language Arts, and Reading Teaching Certification

Bachelor of Arts

Bachelor of Arts with Certification: A student pursuing the Bachelor of Arts degree may obtain teaching certification by completing the English certification major below and the required coursework in professional education (SED). A second teaching field is no longer required (although an

academic minor is), but a second teaching field would enhance employability in the public schools. See the English certification advisor for advice on recommended coursework.

First Year	Credit
ENG 164, 165	6
HIS 163, 164	6
MTH 164 (or approved substitute)	3
Natural Science (from two different departments)	8
Foreign Language 141 and 142 (Four semesters in one language)	8
Component Area 4 (Visual and Performing Arts)	3
KIN 215	1
	35

Second Year	Credit
ENG 265; ENG 266 or 267*	6
PHL 261	3
Foreign Language 263, 264 (Four semester in one language)	6
CS 133 or 138	3
ART, DNC, MUS, THR or PHL 366	3
SED 383	3
POL 261, POL (200-level)	6
SCM 384 or accepted substitute	3
	33

Third Year	Credit
ENG 360, 361, 373, 380, 384, 385	18
SED 374	3
Minor	12
	33

Fourth Year	Credit
ENG 464	3
RDG 392, SED 394, 480	9
SED 464, 496, 497	9
Minor (Adv.)	6
	27

Requirements for English Minor

Curriculum: Minor in English

ENG 265; 266 or 267 (choose 1)	3
ENG 360, 361, 384, or 385 (choose 3)	9
300- or 400-level English electives (choose 1)	3
400-level English elective (choose 1)	3
	18

Curriculum: Minor in Creative Writing

ENG 380	3
ENG 381	3
ENG 382	3
ENG 383	6
ENG 481 or 482	3
	18

Curriculum: Minor in Professional Writing

ENG 330	3
ENG 377	3
ENG 380, 381, or 382	3
ENG 430	3
ENG 435	3
ENG 300/400-level elective	3
	18

Curriculum: Minor in English (Standard Secondary Certification)

ENG 265, 266 or 267 (Choose any 2)*	6
ENG 373, 380, 464	9
Advanced English electives	9
	24

* Students with a “B” average or better in the first nine hours of English may take any 300-level course in lieu of a second 200-level course.

English Course Descriptions

ENG 031D **Developmental English.**
An intense study of grammar and mechanics, effective sentence construction, and basic essay organization and development. Credit in this course will not be allowed to count toward graduation or computation of grade point average or classification of students by hours completed. Students failing EITHER the English Placement (Pre-TASP) Test or the *writing* section of the TASP Test must enroll in this course. (Does not fulfill University degree requirements.)

ENG 164 **Composition I.** [ENGL 1301]
Basic studies in English diction, syntax, and rhetoric with emphasis on the development of a single thesis. Credit 3.

ENG 164H (Honors Class) **Composition I.**
Students with high marks in English on the SAT/ACT exams may qualify to enroll in ENG 164H, an accelerated class for students with superior skills in English. Students earning an A or B in ENG 164H will receive advanced credit for ENG 165 and automatically become eligible for sophomore English. Credit 3-6.

ENG 165 **Composition II.** [ENGL 1302]
A continued study of basic writing skills in English, begun in ENG 164, with emphasis on more complex modes or patterns of composition. In addition to writing expository essays, the student will write a research paper. Prerequisite: ENG 164. Credit 3.

ENG 265 **Readings in Literature of The Western World.** [ENGL 2331 or ENGL 2332]
Readings in the classical, medieval, and modern masterpieces of the western world. Written assignments are based on themes and concepts found in the works studied. Open to all students. Required of English majors and minors. Suggested for all majors in the College of Arts and Sciences. Prerequisite: 6 hours of freshman English. Credit 3.

ENG 266 **Readings in Literary Genres.** [ENG 2342 Intro to Literature I]
A study of the various kinds of literature on the basis of their content, form, or technique, with emphasis on the conventions or usages which govern each type. The major genres of poetry, fiction, and drama will be covered, but each instructor will be free to choose his/her own emphasis. Prerequisites: 6 hours of freshman English. Credit 3.

ENG 267 **Literature and Ideas.** [ENG 2343 Intro to Literature II]
A study of the ways in which literature concerns itself with challenging and assimilating other ways of knowing that other disciplines pursue, and with the ways that other fields incorporate literary strategies of argument and representation as a form of persuasion. As an interdisciplinary course, it is designed to show how literature and other fields of knowledge interact. Prerequisites: 6 hours of freshman English. Credit 3.

ENG 330 **Introduction to Technical Writing.**
A course in the special problems of technical literature and technical report writing. Prerequisite: 6 hours of freshman English. Credit 3.

ENG 334 **Literature and Film.**
A study of the structure, imagery, characterization, and themes of novels, short stories, essays and poems with those of selected motion picture films. Prerequisite: 9-12 hours of English. Credit 3.

ENG 336 **Studies in Women's Literature.**
A study of works by women writers encompassing a variety of genres, nationalities, and literary periods. Prerequisite: 9 hours of English. Credit 3.

ENG 337 **African-American Literature.**
Explores historical, political, and literary problems particular to African-American writers; also explores the development of African-American identity through cultural expression in a variety of media and genres. Prerequisites: 9 hours of English. Credit 3.

ENG 338 **Studies in Multicultural Literature.**
Study of themes, techniques, and literary movements from different cultures. Focus will typically be on more than one ethnic or national culture. Prerequisite: 9 hours of English. Credit 3.

ENG 360 Survey of American Literature, Beginning to 1865.
A survey of themes, genres, and authors in American literary history from the period of exploration and settlement through the American Renaissance and the Civil War. Required of all English majors; also required of all English minors not seeking certification. Prerequisites: 9 hours of English. Credit 3.

ENG 361 Survey of American Literature, 1865 to the Present.
A survey of authors, genres, and movements in American literature from 1865 to the present, including representative works of Realism, Naturalism, Modernism, and Post-Modernism. Required of all English majors. Also required of all English minors not seeking certification. Prerequisites: 9 hours of English. Credit 3.

ENG 363 Mythology.
The study of myths and their application to literary studies. Recommended for certification program in Language Arts composite (see Secondary Education Requirements). Prerequisite: 9 hours of English. Credit 3.

ENG 364 Folklore.
The study of folk motifs of various cultures throughout the world. Recommended for certification program in Language Arts (see Secondary Education Requirements). Prerequisite: 9 hours of English. Credit 3.

ENG 375 Teaching Composition in the Secondary School.
Theory and practice of teaching writing in the secondary school. Discussion and application of classroom practices, definition of standards, and evaluation of student writing. Prerequisites: English composition (6 hr), 200- or 300-level ENG (6 hr). Credit 3.

ENG 376 Teaching Literature in the Secondary School.
Theory and practice of teaching literature in the secondary school. The course will examine various critical approaches to literature and how those approaches are put into practice in the classroom and according to existing curriculum standards for the State of Texas. Prerequisites: English composition (6 hr), 200- or 300-level ENG (6 hr). Credit 3.

ENG 370 Modern Drama.
The major figures in modern British, American and Continental drama. Prerequisite: 9 hours of English. Credit 3.

ENG 372 The English Language.
Study of area of language to which elementary education majors would need to be exposed, such as acquisition of English, language and education, the play and history of the English languages among the languages of the world, the basics of the sound system of English, and dialect variation. Prerequisite: 9 hours of English. Credit 3.

ENG 373 English Grammar.
Introduction to descriptive linguistics. Survey of such current grammatical descriptions of English as traditional prescriptive grammar, structural grammar, and generative-transformational grammar. Prerequisite: 9 hours of English. Credit 3.

ENG 377* Argument and Persuasion.
An advanced writing class that focuses on successful argumentative and persuasive writing. Study will include a survey of the history of argument, structuring a sound argument, and stylistics. Credit 3.

ENG 380 Advanced Composition.
A study of rhetorical forms and approaches to problems of composition. Prerequisite: 9 hours of English. Credit 3.

ENG 381 Introductory Creative Writing: Fiction.
Directed writing in fiction. Prerequisites: 9 hours of English and permission of the instructor. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

ENG 382 Introductory Creative Writing: Poetry.
Directed writings in poetry. Prerequisite: 9 hours of English. Credit 3.

ENG 383 Practicum in Publishing.
The study of topics and issues related to editing and publishing. Students will be placed with internal or external organizations for semester-long internships. Credit 3.

ENG 384 Early English Masterworks.
A study of the major figures in English literature from the beginning to 1798. Required for all English majors. Prerequisite: 9 hours of English. Credit 3.

ENG 385 Later English Masterworks.
A study of the major figures in English literature from 1798 to the present. Required for all English majors . Prerequisite: 9 hours of English. Credit 3.

ENG 390 The Bible as Literature.
Narrative, structural, and thematic study of selected books of the Old and New Testament. Course of study includes an examination of Hebrew and Christian scriptures in translation and an analysis of various genres. Consideration will also be given to the cultural and mythological context of selected portions and to some of the literary influences exerted by these passages. Prerequisites: 9 hours of English. Credit 3.

ENG 391 Shakespeare: Tragedies & Histories.
A study of Shakespeare's tragedies and histories, from the earliest experiments of his career to the great history plays of the 1590's through the major tragedies of the early 1600's. Credit 3.

ENG 392 Shakespeare: Comedies & Romance.
A study of Shakespeare's comedies and romances from his early years through the great festive comedies of the late 1590's through the "Dark Comedies" of the 1600's to the romances of the last years of his career. Credit 3.

ENG 430 Writing in the Professions.
Additional training in technical writing, including instruction in the preparation and editing of specialized documents in various subject areas, such as Computer Science, Conservation, Marketing, etc. Prerequisite: ENG 330. Credit 3.

ENG 431 Composition Theory and the Teaching of Writing.
An introduction to pedagogical technique for composition appropriate for elementary and secondary students. Major theories of composition will be studied. Prerequisite: 15 hours of English. Credit 3.

ENG 435 Studies in Rhetoric.
Selected topics may include rhetorical theory, style and stylistics, rhetorical criticism, ethical issues in rhetoric, and rhetoric literature. Prerequisite: 15 hours of English. Credit 3.

ENG 439 Literature of Diversity.
A study of literature by women and by persons of color appropriate for the secondary English classroom. Prerequisite: 9 hours of English. Credit 3.

ENG 460 The English Romantic Movement.
A survey of the Romantic movement in England, with major emphasis upon the works of Wordsworth, Coleridge, Byron, Keats, and Shelley. Prerequisite: 15 hours of English. Credit 3.

ENG 463 Studies in the English Renaissance.
A study of non-dramatic literature of England written between 1500 and 1660. Prerequisite: 15 hours of English. Credit 3.

ENG 464 Methods of Teaching English in Secondary Schools.
Directed studies and practice in the selection, organization, and presentation of English subject matter and skills to students. Required for English majors and minors who are working for a secondary teaching certificate. Prerequisite: 18 hours of English. Credit 3.

ENG 465 Victorian Literature.
A survey of major writers of the Victorian period, supplemented by lectures on the political, social and economic background of the age. Prerequisite: 15 hours of English. Credit 3.

ENG 467 History of the English Language.
A survey of the English language, including its relationship to other Indo-European languages, followed by a study of the changes in English sounds, spelling, and syntax from Anglo-Saxon times to the present. Prerequisite: 15 hours of English. Credit 3.

ENG 469 Studies of Selected Genres in American Literature.
Readings in major writers, themes, and/or historical movements within a selected genre in American literature. The approach may vary from semester to semester, and will include such subjects as modern poetry, the short story, the Naturalists, folklore, regional literature, nonfiction prose, or others. Prerequisite: 15 hours of English. Credit 3.

ENG 470 American Regional Literature.
Selected representative South/Southwestern writers. Readings will emphasize works of artistic merit, but they may include ancillary material such as folklore, "local color," and historical documents for background study. Prerequisite: 15 hours of English. Credit 3.

ENG 472 American Literature: 1820's to 1860's.
A study of the emergence of a distinctive American literary art, including such writers as Poe, Emerson, Thoreau, Hawthorne, Melville, and Whitman. Prerequisite: 15 hours of English. Credit 3.

ENG 474 Studies in the English Novel.
The study of a variety of topics and figures in the English novel. Prerequisite: 15 hours of English. Credit 3.

ENG 475 Special Problems in English.
Directed study on individual topics or problems for advanced students. Admission by permission of the department chair. This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog. Credit 3.

ENG 476 Tudor and Stuart Drama.
The development of the drama in England, the predecessors and contemporaries of Shakespeare. Prerequisite: 15 hours of English. Credit 3.

ENG 477 English Literature of the Restoration and Eighteenth Century: 1660-1800.
Varying topics, including Restoration drama, Augustan poetry and prose, and later writings through the age of Goldsmith, Boswell, and Johnson. Prerequisite: 15 hours of English. Credit 3.

ENG 478 Studies in World Fiction.
The study of a variety of topics and figures in world fiction. Prerequisite: 15 hours of English. Credit 3.

ENG 481* Advanced Creative Writing: Fiction
An advanced undergraduate writing workshop that emphasizes the theory of modern and contemporary fiction, with special attention to peer review of student writing in the areas of the novel and short fiction. Credit 3.

ENG 482* Advanced Creative Writing: Poetry
An advanced writing class which emphasizes the writing of poetry, with related outside readings in poetic theory and form. Credit 3.

ENG 483 The Development of Drama in America.
A study of major movements and significant figures in American dramatic literature from Royall Tyler to the present. Prerequisite: 15 of English including ENG 360 or its equivalent. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

ENG 484 Studies in the American Novel.
The study of a variety of topics and figures in the American novel. Prerequisite: 15 hours of English. Credit 3.

ENG 485 Studies in Chaucer.
A close study of the works of Chaucer, with primary emphasis on *The Canterbury Tales* as they reflect the man and his times. Prerequisite: 15 hours of English. Credit 3.

ENG 486 Literature of the Middle Ages.
A study of selected works of Old and Middle English literature with some continental works. The course will include, at various times, works as early as *Beowulf* (ca. 8th-9th c.) to ones as late as Malory's *Morte D'Arthur* (late 15th c.). Prerequisite: 15 hours of English. Credit 3.

ENG 487 Twentieth-Century Literature of England, Ireland, and the Commonwealth.
A study of a variety of 20th-century literature by writers associated with England, Ireland, or English-speaking groups (not American) formerly colonized by the British. Though the course varies from term to term, it generally aims to have students read literary works by major figures, learn of the cultural and historical forces influencing these works and writers, and develop an understanding of the main concepts and movements that distinguish this body of literature. Prerequisite: 15 hours of English. Credit 3.

ENG 488 Texas Crossroads.
An interdisciplinary study of intersections between literature, history science, culture and politics of the "Crossroads" area of Texas. Prerequisites: ENG (9 hours). Credit 3.

ENG 490 Literary Criticism and Theory.
A survey of the major modes of literary criticism. Study of the basic concepts underlying specific theories of literary criticism and their application and impact within a literary field selected by the instructor. Prerequisite: 15 hours of English. Credit 3.

FOREIGN LANGUAGES PROGRAM

Coordinator: Rafael E. Saumell (936) 294-1449; fol_res@shsu.edu

Faculty: Yasser Djazaerly, Shirin Edwin, David Gerling, Mary Gutermuth, Frieda Koeninger, Alcibiades Policarpo, Kay Raymond, Joaquin Rodríguez-Barberá, Rafael Saumell-Muñoz

Information: (936)294-1441; Evans 305; foreignlanguages@shsu.edu

Website: www.shsu.edu/~fol_www

The study of foreign languages not only enables a person to communicate in another language, but it also opens new doors to different cultures. Students of languages may experience foreign thought, literature, and heritage that enrich their lives. Knowledge of languages provides exciting opportunities to travel and have rewarding careers.

Academic Programs

BA in Spanish

Minors are available in French, Spanish, and German.

Highlights

Puebla Field School: Each summer, SHSU offers courses in the beautiful city of Puebla, Mexico. Students may take advanced Spanish courses and courses at all levels in such disciplines as art, business, and agriculture on the campus of the Universidad Iberoamericana.

Suggested Minors

SHSU offers a wide range of courses and areas students may use to structure a minor, and students should choose a minor to fit their individual interests and career goals. Common minors for Spanish majors include Criminal Justice, Education, History, Journalism, and International Business.

Career Opportunities

Professionals with competence in one or more foreign languages are needed in agriculture, business, computer science, criminology, education, the fine arts, government service, industry, international business, medicine, science, and related areas. The Foreign Languages Program prepares students for professions requiring a foreign language as a major skill and also functions as a service area in career preparation.

Student Organizations and Activities

The Foreign Languages Program sponsors several activities designed to enhance the language student's experience at Sam Houston State University.

The Foreign Languages Program sponsors *Pi Delta Phi*, the national French honor society and *Sigma Delta Pi*, the national Spanish honor society. Students also may participate in the French and Spanish Clubs.

Internships and Study Abroad

Each summer students have the opportunity to study abroad in Puebla, Mexico. Students and faculty come together as a community of scholars to study different aspects of Mexican culture and interact with the Mexican community.

Scholarships

Scholarships: Students in languages may apply for the Foreign Languages Scholarship and for the Mozelle Powell Spanish Scholarship. For more information, contact the Foreign Languages office or the Foreign Languages program website. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672.

Program Specific Requirements

A major in Spanish requires a total of 36 hours of coursework. These include 141, 142, 263, 264, plus 22 hours of advanced courses (12 hours of which must be taken in residence.)

Foreign language majors and language students in the teacher certification program must take at least one history or geography course dealing with the country or countries whose language they are studying in order to promote interdisciplinary and international education. **Students are required to have a 3.0 or the equivalent in their advanced major/minor teaching areas prior to being permitted to take the certification examinations.**

Curriculum
Major in Spanish
Bachelor of Arts

First Year	Credit	Second Year	Credit
SPN 141 and 142 (four semesters in one language)	6-8	SPN 263 and 264 (four semesters in one language)	6
ENG 164, 165	6	Component Area 4 (Literature)	3
MTH 164 or 170	3	Literature (English or American, Adv.)	3
Component Area 3 (Natural Science, from two different departments)	8	Component Area 6 (Computer Literacy)	3
		ART, DNC, MUS, THR, or PHL 366	3
Component Area 4 (Visual and Performing Arts)	3	POL 261, POL (200-level)	6
HIS 163, 164	6	HIS 265, HIS 266, GEO 265, GEO 266,SOC 168, or BSL 236	3
KIN 215	1	PHL 261 or 471	3
	33-35	Component Area 5	3
			33

Third and Fourth Years	Credit
SPN (300-400 level)	18
Minor	18-23
Advisor approved HIS or GEO	3
Advisor Approved Electives	17-25
	56-69

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement. All students must complete at least 128 hours to graduate.

Major in Spanish with Teaching Certification
Bachelor of Arts

First Year	Credit	Second Year	Credit
SPN 141 and 142 (four semesters in one language)	6-8	SPN 263 and 264 (four semesters in one language)	6
ENG 164, 165	6	Component Area 4 (Literature)	3
MTH 164 or 170	3	CS 133 or 138	3
Component Area 3, Natural Science (from two different departments)	8	PHL 261 or 471	3
		POL 261, POL (200-level)	6
Component Area 4 (Visual and Performing Arts)	3	Component Area 5	3
		ART, DNC, MUS, THR, or PHL 366	3
HIS 163, 164	6	SED 383	3
KIN 215	1	SCM 384 or accepted substitute	3
	33-35		33

Third Year	Credit	Fourth Year	Credit
SPN (300-400 level)	15	SPN (300-400 level)	3
Minor	15	SED 394, 464, RDG 392	9
SED 374	3	SED 480, 496, and 497	9
HIS or GEO (Advisor approved)	3	Minor	3
	36		24

Note: All students must complete at least 128 hours to graduate.

Minor in French or Spanish or German

A minor in French or Spanish requires a total of 23 hours of coursework. These include 141, 142, 263, 264, plus nine hours of advanced courses (six hours of which must be taken in residence.) The German minor requires 368, 380, and 460.

Foreign Language Requirement: The 12-14 semester hour requirement consists of four courses in one language: 141, 142, 263, and 264. These courses must be taken in sequence. No two courses in the series may be taken concurrently without the written approval of the Department Chair. The requirement reads "12-14 hours" to accommodate transfer students from institutions that award only 3 hours credit for each semester of the first year.

Placement Examination: The University offers a CLEP subject exam in order to determine the level of a student's high school foreign language preparation. Credit is given for courses which need not be taken because of adequate performance on the examination. Inquiries should be directed to the Office of Undergraduate Admissions.

French Course Descriptions

FRN 141 **Elementary French.** [FREN 1411]
For students who have had no previous instruction in French. The work includes vocabulary acquisition, international cultural components, pronunciation, drills, sentence formation, and everyday conversation leading to proficiency. Two one-hour language laboratory periods weekly are required. Credit 4.

FRN 142 **Elementary French.** [FREN 1412]
A continuation of FRN 141 with more speaking and writing toward advancing proficiency. Two one-hour language laboratory periods weekly are required. Prerequisite: Grade of C or better in FRN 141 or equivalent. Credit 4.

FRN 263 **French Reading and Composition.** [FREN 2311]
A continuation of FRN 142 with emphasis on written and oral skills. Prerequisite: Grade of C or better in FRN 142 or equivalent. Credit 3.

FRN 264 **Comprehension and Communication.** [FREN 2312]
A continuing emphasis on fluent usage of oral and written French. Intensive study of selected written work with the purpose of mastering mid-level proficiency skills. Prerequisite: Grade of C or better in FRN 263 or equivalent. Credit 3.

FRN 364 **Survey of French Literature.**
A detailed study of the various schools and periods of literature from the 19th century to modern times. Conducted in French. Prerequisite: FRN 264 or equivalent. Credit 3.

FRN 365 **French Grammar And Stylistics.**
A review of the structure of the French language combined with detailed study of the various tenses and moods. Emphasis is placed on writing and composition. The objective is to acquire facility in writing about everyday topics. Prerequisite: French 364 or the equivalent. Credit 3.

FRN 367 **French Phonetics and Conversation.**
Basic theory of French pronunciation and intonation. With ample opportunity for drill, students achieve an intermediate level of oral proficiency. Prerequisite: FRN 264 or consent of instructor. Credit 3.

FRN 380 **French Culture and Civilization.**
A course to portray the overall picture of the role played by French culture and civilization throughout the world. This course will provide cultural background for French majors or minors. Conducted in French. Prerequisite: FRN 264 or consent of instructor. Credit 3.

FRN 464 **Modern French Usage and Conversation.**
A useful course for all levels, including those seeking oral proficiency. Emphasis is placed on extemporaneous speech and conversation dealing with modern topics. Conducted in French. Prerequisite: FRN 264 or consent of instructor. Credit 3.

FRN 470 **Seminar In Selected Topics in Literature, Language, or Civilization.**
This course will be an in-depth study of a selected topic by which French majors and minors, lacking specific skills, may acquire the necessary knowledge of francophone culture and/or the ability to speak, read, and write the French language at an advanced level. The topic to be explored will change from semester to semester. The course may be repeated for credit as the content varies. Prerequisite: Advanced standing in French or consent of instructor. Credit 3.

FRN 475 **Individual French Readings.**
This course is designed for the individual student who may need study of a particular era or genre or author. Enrollment in this course is restricted and approval for such must be obtained from the Program Coordinator. The course may be repeated for credit as content varies. Credit 3.

German Course Descriptions

GER 141 **Elementary German.** [GERM 1411]
For students who have had no previous instruction in German. The work includes vocabulary acquisition, international cultural components, pronunciation, drills, sentence formation, and everyday conversation leading to proficiency. Two one-hour language laboratory periods weekly are required. Credit 4.

GER 142 **Elementary German.** [GERM 1412]
A continuation of GER 141 with more speaking and writing toward advancing proficiency. Two one-hour language laboratory periods weekly are required. Prerequisite: Grade of C or better in GER 141 or equivalent. Credit 4.

GER 263 **German Reading and Composition.** [GERM 2311]
A continuation of GER 142 with emphasis on written and oral skills. Prerequisite: Grade of C or better in GER 142 or equivalent. Credit 3.

GER 264 **German Reading And Composition.** [GERM 2312]
A continuing emphasis on fluent usage of oral and written German. Intensive study of selected written work with the purpose of mastering midlevel proficiency skills. Prerequisite: Grade of C or better in GER 263 or equivalent. Credit 3.

GER 333 **Multicultures of America: German.**
A survey course designed to increase an awareness of Central- European culture in America with particular emphasis on the nineteenth and the twentieth centuries. This course may be conducted in English or German. Credit for this course may be applied to the major or minor only with permission. Credit 3.

GER 368* **German Media.**
Study of German Media. Focus on conversational, listening, reading, and vocabulary skills. Students will watch German television programs and will read articles from major German magazines and newspapers. Includes a review of German grammar. Prerequisite: GER 264. Credit 3.

GER 380* **Modern German Culture.**
An overview of the cultures of German speaking countries (Germany, Austria, and Switzerland) from 1780 to the present. Prerequisite: GER 368. Credit 3.

GER 460* **Modern German Literature.**
An overview of the literatures of German-speaking countries (Germany, Austria, and Switzerland) from 1770 to the present. Prerequisite: GER 360. Credit 3.

GER 475 **Individual Readings in German.**
This course is designed for the individual student who may need study of a particular era, genre, or author. Enrollment in this course is restricted and approval of such must be obtained from the Program Coordinator. The course may be repeated for credit as content varies. Credit 3.

Spanish Course Descriptions

SPN 141 **Elementary Spanish I.** [SPAN 1411]
For students who have had no previous instruction in Spanish. Introduction to Spanish pronunciation, vocabulary, and basic language codes stressing an oral approach to the language with special emphasis on conversation and oral drill. Two one-hour language laboratory periods weekly are required. For non-native speakers of Spanish. Native Spanish speakers should take the CLEP or register for 264. Credit 4.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

SPN 142 **Elementary Spanish II.** [SPAN 1412]
This course is a continuation of SPN 141. Language codes with more complexity are discussed and drilled. Stress is placed on aural and oral skills. Two one-hour language laboratory periods weekly are required. Prerequisite: Grade of C or better in SPN 141 or equivalent. For non-native speakers of Spanish. Native Spanish speakers should take the CLEP or register for 264. Credit 4.

SPN 263 **Intermediate Spanish I.** [SPAN 2311]
Readings of medium difficulty are used as a basis for reading and aural comprehension as well as for oral communication. Prerequisite: Grade of C or better in SPN 142 or equivalent. For non-native speakers of Spanish. Native Spanish speakers should take the CLEP or register for 264. Credit 3.

SPN 264 **Intermediate Spanish II.** [SPAN 2312]
Continuation of SPN 263 with special emphasis on practical needs for communication. Prerequisite: Grade of C or better in SPN 263 or equivalent. A section may be reserved for native Spanish speakers. Credit 3.

SPN 361 **Spanish Grammar and Composition.**
Study of the syntactical and morphological characteristics of the Spanish language with emphasis on developing the ability to write in Spanish. Prerequisite: SPN 264, the equivalent of SPN 264, or consent of instructor. Credit 3.

SPN 362 **Survey of Spanish Literature I.**
A study of the development of the literature of Spain from the Middle Ages to the 18th century. Various eras, genres, and authors are studied. Prerequisite: SPN 361, the equivalent of SPN 361, or consent of the Coordinator or Chair. Credit 3.

SPN 363 **Survey of Spanish Literature II.**
Will focus on the literature of Spain beginning with the eighteenth century to the present. Masterworks from genres of drama, poetry, and prose will be read, discussed in Spanish and analyzed in written reports. Prerequisite: SPN 361, the equivalent of SPN 361, or consent of the Coordinator or Chair. Credit 3.

SPN 365 **Modern Spanish Short Story.**
Study of selected short stories written by prominent Spanish authors since 1950. Prerequisites: Grade of C or better in SPN 264 (or equivalent). Credit 3.

SPN 367 **Introduction to Spanish Linguistics and Phonology.**
A study of descriptive, applied, and contrastive linguistics. Prerequisite: SPN 361, 368, or the consent of the Coordinator or Chair. Credit 3.

SPN 368 **Conversational Spanish I.**
Emphasis is placed on extemporaneous speaking and conversation. Reading materials from Spanish speaking countries will be included as a basis for conversation and composition. This course cannot be taken for credit by native Spanish speakers. Prerequisite: SPN 264, the equivalent of SPN 264, or consent of instructor. Credit 3.

SPN 369 **Conversational Spanish II.**
Emphasis is placed on extemporaneous speaking and conversation. Reading materials from Spanish speaking countries will be included as a basis for conversation and composition. Prerequisite: SPN 361,368 or consent of instructor. Credit 3.

SPN 370 **Spanish for Business.**
Study of business terminology in Spanish related to banking, accounting, international trade, marketing, management, and finance and of cultural aspects of Latin America and Spain, with practice in speaking, reading and translating business Spanish. Prerequisites: Grade of C of better in SPN 264 (or equivalent). Credit 3.

SPN 371 **Spanish for Criminal Justice.**
Study of Spanish and Spanish-related issues and topics for Criminal Justice, criminology, law enforcement, and Sociology. Prerequisite: Grade of C or better in SPN 264 (or equivalent). Credit 3.

SPN 374 Introduction to The Literature of Spanish America.
Study of the texts of Spanish-American writers from the Conquest to the present with emphasis given to the historical, cultural, and political factors which influenced their writing. Instruction is in Spanish. Prerequisite: SPN 361, the equivalent of SPN 361, or consent of instructor. Credit 3.

SPN 375 Genres in Spanish-American Literature.
Studies of themes and techniques of outstanding Spanish- American poets, dramatists or novelists. Prerequisite: SPN 361, 368 or the consent of the instructor. Credit 3.

SPN 376 The Mexican Short Story.
A study of the short story form in Mexico, particularly from the years 1934 to the present. Students will read and analyze short stories and discuss them in Spanish in class. They will also keep a daily diary, in Spanish, using vocabulary from the stories. Each student will also have an individual project. A midterm and a final examination will be required. Prerequisite: SPN 361 or permission of the instructor. Credit. 3.

SPN 380 Spanish Culture and Civilization.
An overview of the culture and civilization of Spain. Prerequisite: SPN 264, the equivalent of SPN 264, or consent of instructor. Credit 3.

SPN 385 Spanish Presence in the New World.
A study of the culture and civilization of the Spanish-speaking areas of the Americas. Prerequisite: SPN 264, the equivalent of SPN 264, or consent of instructor. Credit 3.

SPN 460 Don Quijote.
Analysis of the counter-reformation masterpiece by Miguel de Cervantes, with special attention to the author's experimentation with various literary genres of his epoch to create the 'first modern novel." Prerequisites: SPN 369; SPN 461 or consent of instructor. Credit 3.

SPN 461 Advanced Spanish Grammar and Composition.
An in-depth study of the usage of the Spanish language as it relates to creative writing and scholarly reports. Prerequisite: SPN 361 or consent of instructor. Credit 3.

SPN 464 Spanish-American Prose.
A study of selected authors, short stories, essays, or novels. Emphasis on themes, techniques, and current literary themes. Prerequisite: SPN 361, 368, the equivalent, or consent of instructor. Credit 3.

SPN 470 Seminar in Selected Topics in Literature, Language, or Civilization.
An in-depth study of a selected topic. The topic to be explored will change from year to year. This course may be repeated for credit as the content varies. Prerequisite: advanced standing in Spanish. Credit 3.

SPN 475 Individual Readings in Spanish.
Designed for the individual student who may need to study a particular era, genre, or author. Enrollment in this course is restricted. Credit 3.

SPN 486 Contemporary Spanish Peninsular Literature.
A study of selected works by contemporary peninsular writers. Prerequisite: SPN 361, 368, the equivalent, or consent of instructor. Credit 3.

DEPARTMENT OF FAMILY AND CONSUMER SCIENCES

Chair: Janis H. White (jwhite@shsu.edu)

Faculty: Eileen Boaz**,** Laura Burleson, Ryan Fenley, Harriet Griggs, Zaheer Kirmani, Donna Pharris, Claudia Sealey-Potts, Carol Smith, Brook Speer, Paula Tripp

Information: familyandconsumersciences@shsu.edu; www.shsu.edu/~hec_www/; (936) 295-8717; Box 2177 SHSU, 1700 Sam Houston Ave., Huntsville, TX 77341-2177

Website: familyandconsumersciences@shsu.edu

Mission

The Department of Family and Consumer Sciences is dedicated to meeting the needs of its students through periodic monitoring and improving each program area offered. The curriculum aims to provide students with a holistic theoretical base with awareness of physiological, psychological, sociological and intellectual characteristics and human needs of the public they will serve. There is a continuous striving for the professional development of students through educational opportunities and wise use of faculty and university resources.

Academic Programs

- BA in Family and Consumer Sciences
- BA in Family and Consumer Sciences – Interior Design
- BA in Family and Consumer Sciences – Fashion Merchandising
- BA in Family and Consumer Sciences – Food Service Management

- BS in Family and Consumer Sciences
- BS in Family and Consumer Sciences – Interior Design
- BS in Family and Consumer Sciences – Fashion Merchandising
- BS in Family and Consumer Sciences – Food Science and Nutrition
- BS in Family and Consumer Sciences – Food Service Management

- Teacher Certification

Highlights

- 100% pass rate for Teacher Certification students taking the content area exam
- Food Science and Nutrition program accredited by the American Dietetic Association
- Dietetic Internship Program available for qualified FSN graduates (leads to R.D. credential)
- Kappa Omicron Nu Honor Society for Family and Consumer Sciences (Kappa Alpha Phi Chapter)

Suggested Minors

- The FCS programs that do NOT require a minor are the 48-hour FCS major, the Food Science and Nutrition major, and the Interior Design major.
- For the Fashion Merchandising major, suggested minors include General Business, Marketing, and Art.
- For the Food Services Management major, suggested minors include General Business, Marketing, and Management.
- Other minors, such as Journalism, may be elected in keeping with student career goals.

Career Opportunities

For the following program areas, employment opportunities for graduates include but are not limited to:

- Family and Consumer Sciences
  - sales representative for consumer products
  - county extension agent
  - consumer specialist
- Family and Consumer Sciences with certification
  - secondary teacher
- Fashion Merchandising
  - retail store manager
  - retail apparel buyer
  - visual display specialist
- Food Science and Nutrition
  - clinical dietitian
  - school lunch dietitian
  - nutritional consultant
- Food Service Management
  - restaurant manager
  - food service manager for hospitals, schools
  - food production developer
- Interior Design
  - interior designer
  - lighting or color specialist
  - set stylist

Upon completion of a bachelor's degree, a student may choose to enroll in the Graduate Program in Family and Consumer Sciences. Refer to *Graduate Catalog* for more details.

Student Organizations and Activities

- American Society of Interior Design student chapter
- Family and Consumer Sciences Teachers Association of Texas student chapter
- Fashion Merchandising Club
- Kappa Omicron Nu, Kappa Alpha Phi Chapter (honor society for Family and Consumer Sciences)
- Sam Houston Student Dietetic Association

Internships and Study Abroad

All students who complete programs in Fashion Merchandising, Food Service Management, General Family and Consumer Sciences (without teacher certification), and Interior Design must complete a supervised internship (FCS 469) of at least 300 clock hours as a requirement for graduation. Students are given leads for securing internship opportunities, but part of the internship experience is the securing of a suitable position.

Students have the opportunity to travel to Europe to study the works and lives of chemists and their influence on our world. This program is offered in coordination with the Chemistry Department.

Scholarships

Competitive scholarships and awards are given annually to full-time students of at least junior standing majoring in one of the program areas in Family and Consumer Sciences. **(Award recipients must be enrolled at Sam Houston State University for a minimum of one semester as a full-time student, must have completed 12 hours in FCS, and must be following the curriculum of a program area major within the Department of Family and Consumer Sciences.)**

Scholarships Available:

- Lynch Family Endowed Scholarship
- Fray Stallings Wells Endowed Scholarship

- Family and Consumer Sciences Memorial Endowed Scholarship
- Elmadel Driscoll Robinson Home Economics Endowed Scholarship
- Drs. Robert (Bob) and Mary Barnes Harris Endowed Scholarship **(Teacher Certification Majors Only)**
- Mattie Bea Prather Medford Family and Consumer Sciences Endowed Scholarship
- Wiley G. and Marian Boyd McDonald Endowed Scholarship
- J. E. "Bo" Crews Retailing Award **(Fashion Merchandising Majors Only)**

Brochures and information concerning the department and scholarships may be obtained by writing: Department of Family and Consumer Sciences, Box 2177, Sam Houston State University, Huntsville, Texas 77341-2177 or email your request to familyandconsumersciences@shsu.edu. Website: www.shsu.edu/~hec_www/.

Program Specific Requirements

Minor Requirement: All degrees require a minor with the exception of the 48-Hour Family and Consumer Sciences Major, the Food Science and Nutrition Major, and the Interior Design Major.

Curriculum

Minor In Family And Consumer Sciences

A minor in Family and Consumer Sciences (18 hours) is available. The minor requires the completion of one core course (FCS 268 or FCS 362) and can be tailored so that the remainder of courses come from a specific program area (fashion merchandising, food science and nutrition, food service management, , general family and consumer sciences, or interior design). Six (6) of the 18 hours must be advanced.

Major in Family and Consumer Sciences
Teacher Certification

All students seeking certification as a teacher must successfully satisfy the THEA Test standards and complete other requirements established by the State Board for Educator Certification and the Sam Houston Center for Professional Development. Information regarding admission, retention, and exit requirements can be found in the Certification section of this catalog.

Bachelor of Arts

First Year	Credit	Second Year	Credit
FCS 140, 141, 160, 167	14	FCS 268, 269	6
ENG 164, 165	6	ENG Lit (200 level or higher)	3
HIS 163, 164	6	CHM 135/115, 4 hrs. from BIO,	
MTH 164 or 170	3	GEO 131/111, GEL or PHY	8
CS 133,138, LS 130, or MIS 188	3	POL 261, 200-level POL	6
KIN 215	1	FRN, GER, or SPN (one field)	8
	33		31

Third Year	Credit	Fourth Year	Credit
FCS 342, 345, 362, 364, 369	17	FCS 442, 443, 468X	11
SED 383, RDG 392	6	SED 394, 480	6
FRN, GER, or SPN (one field)	6	FCS 464; SED 496, 497	9
Fine Arts (Comp. 4)	3	PHL 261	3
	32	Fine Arts	3
			32

Bachelor of Science

First Year	Credit	Second Year	Credit
FCS 140, 141, 160, 167	14	FCS 268, 269	6
ENG 164, 165	6	ENG Lit (200 level or higher)	3
HIS 163, 164	6	CHM 135/115, 136/116	8
MTH 164 or 170, MTH elective	6	POL 261, 200-level POL	6
CS 133, 138, or 143	3-4	BIO, GEL, or PHY (1 field)	8
KIN 215	1		31
	36-37		

Third Year	Credit	Fourth Year	Credit
FCS 342, 345, 362, 364, 369	17	FCS 442, 443, 468X	11
RDG 392, SED 383	6	SED 394, 480	6
SOC 168	3	FCS 464, SED 496, 497	9
Soc. & Behavioral Sciences (Comp. 5)	3	Fine Arts (Comp. 4)	3
	29	Elective – Science	3-4
			32-33

Teaching option must include completion of core requirements. The plan must include at least 48 semester hours in Family and Consumer Sciences with the following approved minimum requirements:

Clothing and Textiles: 6-12 hours
Foods and Nutrition: 6-12 hours
Home Management and Consumer Education: 9-12 hours
Human Development and the Family: 9-12 hours
Housing / Interior Design: 6-9 hours
Certification in a second teaching field may be obtained by meeting certification requirements for the particular area of specialization.

Major in Family and Consumer Sciences

Bachelor of Arts

First Year	Credit	Second Year	Credit
FCS 140, 141, 160	11	FCS 241, 268, 269	10
ENG 164, 165	6	ENG Lit (200 level or higher)	3
MTH 164 or 170	3	BIO, CHM, GEO 131/111, GEL,	
CS 133, 138, LS 130, or MIS 188	3	or PHY (2 different departments)	8
HIS 163, 164	6	POL 261, 200-level POL	6
Fine Arts (Comp. 4)	3	Fine Arts	3
KIN 215	1	PHL 261	3
	33		33

Third Year	Credit	Fourth Year	Credit
FCS 362, 369	6	FCS 442, 443, 469	11
FRN, GER, or SPN (one field)	8	FRN, GER, or SPN (one field)	6
Electives (minor, general)	6	Adv. electives (minor, general)	13
Adv. electives (minor, general)	12		30
	32		

Note: Those electing the 48-hour FCS general major will opt to complete at least 12 additional FCS hours from the following list: FCS 342, 345, 364, 373, 377, 470. These additional advanced hours will replace 12 of the advanced elective hours specified in the above schematic. A minor is not required of the 48-hour FCS general major.

Bachelor of Science

First Year	Credit	Second Year	Credit
FCS 140, 141, 160	11	FCS 241, 268, 269	10
ENG 164, 165	6	ENG Lit (200 level or higher)	3
HIS 163, 164	6	BIO	8
MTH 164 or 170, MTH elec.	6	CHM	8
Fine Arts (Comp. 4)	3	POL 261, 200-level POL	6
KIN 215	1		35
	33		

Third Year	Credit	Fourth Year	Credit
FCS 362, 369	6	FCS 442, 443, 469	11
CS 133	3	SOC 168	3
MTH-SCI elective	3-4	Adv. electives (minor, general)	13
Electives (minor, general)	6	Elective (minor, general)	3
Adv. electives (minor, general)	12		30
	30-31		

Note: Those electing the 48-hour FCS general major will opt to complete at least 12 additional FCS hours from the following list: FCS 342, 345, 364, 373, 377, 470. These additional advanced hours will replace 12 of the advanced elective hours specified in the above schematic. A minor is not required of the 48-hour FCS general major.

Combinations of courses in Family and Consumer Sciences and related fields are recommended for specific careers as follows:
Family and Consumer Sciences in Business and Industry: FCS 345, 362, 469, 470. Options: FCS 342, 373, 377, 442.
Family and Consumer Sciences in Extension Service: FCS 362, 364, 369, 442, 443, 469. Options: FCS 342, 345.
Family and Consumer Sciences in Family Services: FCS 362, 364, 369, 442, 443, 469.

Major in Family and Consumer Sciences
Program in Fashion Merchandising

Bachelor of Arts

First Year	Credit	Second Year	Credit
FCS 140, 160	7	FCS 266, 268, 269	9
ENG 164, 165	6	ENG Lit (200 level or higher)	3
CHM (4 hrs.) and 4 hrs. from BIO,		MTH 164 or 170	3
GEO 131/111, GEL OR PHY	8	CS 133, 138, LS 130, or MIS 188	3
HIS 163, 164	6	POL 261, 200-level POL	6
Fine Arts (3 hrs. meets Comp. 4)	6	FRN, GER, or SPN	8
KIN 215	1		32
	34		

Third Year	Credit	Fourth Year	Credit
FCS 342, 371, 376, 378	13	FCS 362, 463, 467, 469	12
FRN, GER or SPN (one field)	6	ECO 230	3
MKT 371	3	MGT 380	3
Elective (minor)	3	Electives (minor, general)	3
PHL elective	3	Adv. electives (minor, general)	11-12
ACC 231	3		32-33
	31		

Bachelor of Science

First Year	Credit	Second Year	Credit
FCS 140, 160	7	FCS 266, 268, 269	9
ENG 164, 165	6	ENG Lit (200 level or higher)	3
CHM (8 hrs.)	8	MTH elective	3
HIS 163, 164	6	CS 133, 138, or 143	3-4
Fine Arts (Comp. 4)	3	POL 261, 200-level POL	6
MTH 164 or 170	3	BIO, PHY, or GEL	8
KIN 215	1		32-33
	34		

Third Year	Credit	Fourth Year	Credit
FCS 342, 371, 376, 378	13	FCS 362, 463, 467, 469	12
MKT 371	3	ECO 230	3
MTH or lab science elective	3-4	MGT 380	3
ACC 231	3	SOC 168	3
Electives (minor, general)	3	Electives (minor, general)	4-6
Adv. electives (minor, general)	6	Adv. electives	6
	31-32		31-33

Major in Family and Consumer Sciences Program in Food Science and Nutrition

Bachelor of Science

First Year	Credit	Second Year	Credit
FCS 141	4	FCS 241, 268, 262	10
ENG 164, 165	6	BIO162/112	4
HIS 163, 164	6	CHM 138/118, 139/119	8
BIO 161/111	4	ENG Lit (200 level or higher)	3
MTH 170, STA 169	6	POL 261	3
CS 133	3	PSY 131	3
Fine Arts (Comp. 4)	3		31
KIN 215	1		
	33		

Third Year	Credit	Fourth Year	Credit
FCS 345, 367, 373, 478	13	FCS 362, 369, 460, 470	12
CHM 238/218	4	FCS 468X	3
ACC 231	3	MGT 380	3
BIO 341	4	BIO 247	4
ECO 230	3	SOC 168	3
Elective	3	PSY 432	3
POL 285	3	ENG 330	3
	33		31

Note: Student should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

The Didactic Program in Dietetics (DPD) is currently granted Accreditation by the Commission on Accreditation for Dietetics Education (CADE) of the American Dietetic Association (ADA), 120 South Riverside Plaza, Suite 2000, , Chicago, IL 60606-6995. (317) 899-0040, ext. 5400. Website: www.eatright.org.

Major in Family and Consumer Sciences
Program in Food Service Management

Bachelor of Arts

First Year	Credit	Second Year	Credit
FCS , 141	4	FCS 241, 262, 268	10
ENG 164, 165	6	ENG Lit (200 level or higher)	3
HIS 163, 164	6	FRN, GER, or SPN (one field)	8
MTH 164 or 170	3	ECO 230	3
CHM 135, 115	4	POL 261,200-level POL	6
Fine Arts (3 hrs. meets Comp. 4)	6	KIN 215	1
PSY 131	3	CS 133, 138, LS 130, or MIS 188	3
	32		34

Third Year	Credit	Fourth Year	Credit
FCS 345, 373, 377	10	FCS 362, 367, 469, 470	12
PHL elective	3	MGT 380	3
FRN, GER or SPN (one field)	6	ACC 231	3
BIO 134/114	4	Elective	3
Adv. electives (minor, general)	9	Adv. electives (minor, general)	9
	32		30

Note: Use electives for minor and/or to complete total of 42 advanced hours. A minor requires a minimum of 18 hours.

Bachelor of Science

First Year	Credit	Second Year	Credit
FCS 141	4	FCS 241, 262, 268	10
ENG 164, 165	6	ENG Lit (200 level or higher)	3
HIS 163, 164	6	POL 261, 200-level POL	6
CHM 135/115, 136/116	8	BIO 134/114, 137/117	8
MTH 164 or 170, 169	6	Fine arts (Comp. 4)	3
		KIN 215	1
PSY 131	3	ACC 231	3
	33		34

Third Year	Credit	Fourth Year	Credit
FCS 345, 373, 377	10	FCS 362, 367, 469, 470	12
CS 133, 138, or 143	3-4	SOC 168	3
MTH or lab science elective	3-4	Elective (minor)	6
ECO 230	3	Adv. electives (minor, general)	12
MGT 380	3		33
Adv. elective	6		
	28-30		

Note: Use electives for minor and/or to complete total of 42 advanced hours. A minor requires a minimum of 18 hours.

Major in Family and Consumer Sciences
Program in Interior Design*

Bachelor of Arts

First Year	Credit	Second Year	Credit
FCS 140, 160	7	FCS 261, 268, 269, 287	12
ART 161, 163	6	ENG Lit (200 level or higher)	3
ENG 164, 165	6	MTH 164 or 170	3
HIS 163, 164	6	IT 161, 263	6
IT139	3	FRN, GER, or SPN (one field)	8
CS 133, 138, LS 130, or MIS 188	3	BIO, CHM, GEO 131/111, GEL,	4
KIN 215	1	or PHY	36
	32		

Third Year	Credit	Fourth Year	Credit
FCS 360, 362, 364, 377	12	FCS 430, 431, 432, 469	12
ART 370	3	Electives	6
FRN, GER or SPN (one field)	6	Adv. electives	9
POL 261, 200-level POL	6	IT 372 or IT 368	3
PHL (3 hours)	3	BIO, CHM, GEO 131/111, GEL, or PHY	4
Adv. elective	3		34
	33		

Bachelor of Science

First Year	Credit	Second Year	Credit
FCS 140, 160	7	FCS 261, 268, 269, 287	12
ENG 164, 165	6	ENG Lit (200 level or higher)	3
HIS 163, 164	6	MTH 164 or 170	3
KIN 215	1	BIO, CHM, GEL, PHY (one field)	8
ART 161, 163	6	IT 161, 263	6
IT139	3	MTH or lab science elective	3-4
CS 133, 138, or 143	3-4		35-36
	32-33		

Third Year	Credit	Fourth Year	Credit
FCS 360, 362, 364, 377	12	FCS 430, 431, 432, 469	12
ART 370	3	Elective	3
SOC 168	3	Adv. electives	9
POL 261, 200-level POL	6	IT 372 or IT 368	3
Soc. & Behavioral Sciences (Comp. 5)	3	BIO, CHM, GEL, PHY (one field)	8
MTH elective	3		35
Adv. elective	3		
	33*		

* A minimum grade of C is required for Interior Design majors in all FCS, ART, and IT courses.

Family and Consumer Sciences Course Descriptions

FCS 131 Introduction to Hospitality Industry.
Overview of the hospitality industry, including restaurants, hotels and resorts. Includes historical perspective, analysis of the industry in terms of professional opportunities and the future outlook for the industry. (3-0). Credit 3.

FCS 140 Introductory Construction.
Fundamental principles and techniques of clothing and textiles-based interior elements construction are studied. Pattern alteration and fitting techniques are included. Practical applications are provided through laboratory experiences. (2-4). Usually offered alternate semesters. Credit 4.

FCS 141 Food Preparation and Selection.
Scientific principles in the preparation of selected basic food products are applied. Consideration is given to the composition and properties of food, methods of preparation and processing to retain nutrients, standards for desirable products, simple meal service, and food economics. Practical application is made through laboratory experiences. (3-2). Credit 4.

FCS 160 Art in Design, Education, and Fashion.
Specific attention is given to fundamental art elements and principles of design as they function in the lives of individuals and their environments. Opportunities are provided for a variety of experiences with art media through lecture-demonstrations. Practical application in two-dimensional and three-dimensional projects is made through laboratory experiences. (2-2). Credit 3

FCS 167 Basic Nutrition.
Basic principles of nutrition in health and disease. The modern concept of an adequate diet based upon the nutritional needs of the individual is stressed. Two interrelating factors, the influence of nutrition on disease and the influence of disease on nutrition, are stressed. Emphasis is placed on food selection and quality of nutrients in normal diets. (3-0). Credit 3.

FCS 241 Meal Management in Hospitality.
This course includes choice, purchase, preparation and service of meals in hospitality settings. Through laboratory experiences emphasis is given to table settings and appointments, various forms of meal service and special occasion functions. The importance of acceptable social procedures and aesthetic values related to the above activities are stressed. Prerequisite: FCS 141. (3-2). Offered alternate semesters. Credit 4.

FCS 261 Development and History of Furniture.
A study of history of interior furniture and furnishings from the Egyptian period to the present. Emphasis is given to the social, economic, and political conditions that influenced furniture design and use. (3-0) Credit 3.

FCS 262 Nutrition.
Study is made of the fundamental concepts of nutrition. The various nutrients, their sources, metabolism, physiology and interrelationships are emphasized. Requirements at different stages of growth and development are studied. Experience is provided in making dietary studies and in adjusting meals for individuals and population groups. (3-0). Meets requirement for pre-nursing curriculum. Credit 3.

FCS 266 Fashion in Society.
Basic fashion theory is studied along with theories of dress and adornment from both psychological and sociological perspectives. The course also examines the individual's attitudes toward and perceptions of personal dress and the appearance of others. Usually offered alternate semesters. (3-0). Credit 3.

FCS 268 Consumer Education.
Study of consumer goods and services. It includes the study of rational consumer decisions in an electronic economy, major consumption expenditures, budget management, risk management, financial management, quality assessment, branding, grading, marketing, and consumer legislation. (3-0). Credit 3.

FCS 269 Introduction to Textiles.
An introduction to fiber science and technological advances in the manufacture of textile products. Focuses on the complex interrelationships of fibers, yarns, fabrics, finishes, and coloring processes. Usually offered alternate semesters. (3-0). Credit 3.

FCS 287 Architectural Graphics for Interiors.
The course focuses on the development of two- and three-dimensional graphic representations of architectural design. Practical application is achieved through development of drafting skills and representational sketching. (2-2). Credit 3.

FCS 342 Pattern Making and Apparel Production.
Industry techniques in the construction and fit of garments from original designs. Construction using superior quality techniques is emphasized. Students develop skills in use of apparel production equipment. Prerequisite: FCS 140. (2-4). Usually offered alternate semesters . Credit 4.

FCS 345 Quantity Food Purchasing, Preparation and Service.
Experience in menu planning, food preparation service, and use of institutional equipment in quantity food service. Principles and methods of buying, preparing, and serving food for various types of quantity food facilities are considered. Factors affecting food quality, food costs, and quantity food production as related to the time factor are emphasized. Planned to meet the needs of dietitians, food service administrators, lunchroom supervisors, family and consumer sciences teachers and others in related areas. Field and practical application is provided. Laboratory experiences arranged. Prerequisites: FCS 141 or 241. (2-4). Usually offered alternate semesters. Credit 4.

FCS 360 Interior Design Professional Practices and Procedures.
This course includes fundamentals of business procedures used in interior design residential and commercial establishments. Practical application is implemented through design project management. Prerequisite: FCS 287. (3-0). Usually offered alternate semesters. Credit 3.

FCS 362 Presentation Techniques.
A study is made of different types of lecture presentations used to present a technique, an idea, or a product. Principles and techniques of communication and media with emphasis on classroom, extension and commercial presentation. Classroom experience includes actual preparation and presentation of lecture materials for direct and video audiences. (3-0). Credit 3.

FCS 364 Design Theory and Materials.
A theoretical analysis of design is merged with understanding of interior materials and products which meet human needs. Assessment of quality and performance criteria is emphasized, along with the design process. Prerequisite: Junior standing. (3-0). Usually offered alternate semesters. Credit 3.

FCS 367 Introductory Food Science.
To provide fundamentals of physical and chemical structures and properties of food materials and foods during harvesting, preparation, processing, preservation and storage. Prerequisites: BIO 4 hrs., CHM 4 hrs., Nutrition 3 hrs. or instructor's consent. (1-4). Usually offered alternate semesters. Credit 3.

FCS 369 Family Relationships.
Analysis of the changing and supportive role of the members in the contemporary stages of the family life cycle. Focus is on family heritage, family interaction patterns as well as an emphasis on the individual development and the network of family-based care, and socio-cultural variation forms. Prerequisite: Junior standing. (3-0). Usually offered alternate semesters. Credit 3.

FCS 371 Fashion Merchandising.
Fundamental principles for successful merchandising of fashion goods; sales, buying, and marketing procedures. Analysis of consumer and customer demands. Prerequisite: Junior standing. Taken prior to FCS 469 Internship. (3-0). Usually offered alternate years. Credit 3.

FCS 373 Cultural and Experimental Food Technology.
Investigation of the chemical and physical factors influencing the quality in food; consideration is given to proportions, manipulation of ingredients, and additives in preparation. Prerequisites: Junior standing, FCS 141. (1-4). Usually offered alternate semesters . Credit 3.

FCS 376 Textile Science.
Exploration of textiles from a scientific perspective is emphasized, explaining the interactions among textile fibers, finishes, dyes and laundry products that impact maintenance of textile products and performance criteria. Students are exposed to hands-on experiences with various fibers, finishes, and dyeing processes. Prerequisite: FCS 269. (3-0). Usually offered alternate semesters. Credit 3.

FCS 377 Design Problems, Codes and Standards.
A study of laws, codes, standards and regulations that are in effect to protect human health and safety. Included are the fire and life safety codes, barrier-free design, and ergonomics. (3-0). Usually offered alternate semesters. Credit 3.

FCS 378 Fashion Promotion.
Promotion principles are applied to the merchandising of fashion goods through special events, displays of merchandise, and advertising and personal selling. (3-0). Usually offered alternate years. Credit 3.

FCS 430 Interior Design Application I.
A study is made of residential interiors through analysis of space and structure. Focus is on a comprehensive solution implemented through a multiphase project including space planning, elevations, isometric, specifications, and finish selection. Prerequisites: FCS 364 and IT 263. (1-4). Usually offered alternate semesters. Credit 3.

FCS 431 Interior Design Application II.
A study is made of contract interiors including commercial, retail, restaurant, and health care facilities. Focus is on a comprehensive solution implemented through a multiphase project including space planning, sections, perspective, custom detailing, lighting, and specification. Prerequisites: FCS 364 and IT 263. (1-4). Usually offered alternate semesters. Credit 3.

FCS 432 Lighting Applications for Interiors.
This course provides basic principles of light and color, measurement and control of light as applied to human needs in both residential and commercial interiors. Environmental systems for day lighting and solar design are studied. Prerequisite: FCS 287 and junior standing. (3-0). Usually offered alternate semesters . Credit 3.

FCS 442 Resource Management.
Managerial and social problems pertaining to family or group living are examined. Emphasis is placed on actual experiences in decision-making. Appropriate laboratory arranged. (2-4). Offered alternate years or through the FCS Alliance. Credit 4.

FCS 443 Child Development and Guidance.
This course includes directed observation and participation in a child development center to provide students with experience in the practical aspects of child development. Emphasis is placed upon helping children build feelings of security and adequacy and maintaining limits of behavior. Lectures are concerned with types of child-based care, rearing and guidance; growth and development; clothing; and nutrition for pre-school children. Prerequisite: Junior standing or permission of instructor. (2-4). Offered alternate years or through the FCS Alliance. Credit 4.

FCS 460 Clinical Dietetics.
Study is made of diet therapy as it is concerned with its use as an agent in affecting recovery from illness. Course includes the latest developments in dietary manipulations during disease states including enteral and parenteral nutrition. Nutritional adequacy of therapeutic diets is stressed, with emphasis placed on sociological, economic, emotional and psychological factors in feeding the sick. Students enrolled are required to spend 4-5 hours per week in the Dietary Department of Huntsville Memorial Hospital to gain hands-on knowledge of clinical dietetics. Prerequisites: FCS 262, 478. (3-0). Usually offered alternate semesters . Credit 3.

FCS 463 Merchandising Control.
Techniques of merchandise control including retail mathematics involved in markup, markdown, stock control, open-to-buy, inventory control, pricing and financial statements are studied. Consideration is given to managerial decisions based on the mathematical information encountered in retailing. Recommended prior to FCS 469 Internship. Consent of instructor is required if student has not completed FCS 371 and ACC 231. (3-0). Usually offered alternate years. Credit 3.

FCS 464 Methods in Teaching Family and Consumer Sciences.
A study of professional competencies required to teach family and consumer sciences including development of curriculum. Analysis and evaluation of teaching methods, procedures, strategies, and resource materials used in Family and Consumer Sciences. Laboratory situation includes preparing, presenting and video taping micro teaching experiences. Prerequisites: Admission to Teacher Education program, SED 383, and forty hours family and consumer sciences. (3-0). Also offered through the FCS Alliance. Credit 3.

FCS 465, FCS 466 **Student Teaching in Family and Consumer Sciences.**
Supervised observation and teaching in Family and Consumer Sciences. Off-campus teaching centers furnish laboratory experiences for the courses. Activities include work with the total school program, supervising and working with occupational activity program, parental contacts, advisory council, and FCCLA. Prerequisites: Twelve hours secondary education, forty hours family and consumer sciences, FCS 464, and forty-five clock hours of observation in secondary family and consumer sciences must be documented and completed prior to enrolling. Advance registration required. (6-0). Credit 6.

FCS 467 **Seminar in Clothing, Textiles, and Merchandising.**
Inquiry in special areas of clothing: marketing, production, consumption and socio-economic behavioral aspects of consumers of textiles and clothing. Prerequisite: Junior standing in fashion merchandising or family and consumer sciences. (3-0). Usually offered alternate semesters. Credit 3.

FCS 468x **Research Problems.**
Seminars provide adequate research experiences for students having special needs and requirements for the completion of work for a degree. Registration is permitted only by approval of the department chair. Prerequisite: Junior standing. Course may be repeated for credit. Credit 1-4.

FCS 469 **Internship.**
A supervised off-campus work experience in an approved cooperative business or agency to better understand the challenges and potential of various careers in family and consumer sciences professions and services. Student obtains own position in keeping with the major program area. A minimum of three hundred (300) supervised clock hours is required for appropriate credit. Student must be concurrently enrolled in FCS 469. Taken on acceptance of the application. Prerequisite: Senior standing in program major. Offered summer and fall only. Credit 3.

FCS 470 **Advanced Food Systems, Organization and Management**.
Principles of organization and management as they relate to food service systems; development of managerial and motivational skills; communications; decision making; management by objectives. Prerequisite: FCS 345. (3-0). Usually offered alternate semesters. Credit 3.

FCS 478 **Advanced Nutrition.**
Concepts of normal nutrition in relation to the chemistry and physiology of the human body; analysis of methods used in assessing human nutrition status; evaluation of current nutritional problems. Prerequisite: FCS 262. (3-0). Usually offered alternate semesters. Credit 3.

DEPARTMENT OF HISTORY

Chair: Terry D. Bilhartz (936) 294-1483; his_tdb@shsu.edu

Faculty: Rosanne Barker, Robert Bruce, Ty Cashion, Thomas Cox, Caroline Castillo-Crimm, Brian Domitrovic, Yvonne Frear, Ken Hendrickson, Jeff Littlejohn, David Mayes, James Olson, Nicholas Pappas, Bernadette Pruitt, Joseph Rowe, Robert Shadle, Tracy Steele

Information: (936)394-1483; AB 4 Room 441; history@shsu.edu

Website: www.shsu.edu/~his_www/

Knowledge of history is a key to the future. History is the foundation of virtually all academic disciplines because intellectual progress is based on a critique of traditional assumptions, dogmas, and paradigms. In a series of writing-intensive courses, students develop analytical, verbal, and cultural skills that can be applied to a variety of professional settings.

Mission

The Department of History will prepare students to analyze major historical events, evaluate changes in values and institutions over time, assess complex forces at work in the past and today, and learn how, in written and oral expression, to explain those changes. In doing so, the department will prepare students for any career requiring critical and analytical skills. The Department of History considers itself a vehicle—through teaching, research and service—for presenting and critiquing the values of the past and for conveying those values and critiques to future generations.

Academic Programs

- BA in History
- Teacher Certification

Highlights

With more than 3,700 students, the History Department is one of the largest and fasting growing departments on campus. Its enrollments have increased by 50% in just three years. SHSU's History faculty is nationally renowned for the quality of its teaching and research. Since 2001, three members of the department have won SHSU Excellence in Teaching Award, the prestigious Minnie Stevens Piper Award and the Carnegie Foundation for the Advancement of Teaching Texas Professor of the Year Award, and nine members have received more than $2.6 million in federal grants to train Texas high school teachers in Traditional American History. During this period, faculty members within the 18 member department also have published or signed contracts for the publication of more than 30 scholarly books.

Suggested Minors

Last year about one hundred SHSU students graduated with a History minor. These students majored in a wide variety of disciplines, including English, Political Science, Criminal Justice, General Business, Economics, Computing Science, Psychology, Math, Speech Communication, Journalism, Sociology, Geography, Radio/television, Dance, Theater, Health, Kinesiology, Agriculture, Industrial Technology, Photography and Spanish.

Career Opportunities

History students enhance their critical abilities by examining original texts, acquiring research skills, learning to write, and analyzing social, political, economic, and cultural change over time, talents that will serve them well in any employment setting. Although most history students pursue careers in teaching, museum studies, and records management, they can also be found working successfully in medicine, the law, government service and business.

Student Organizations and Activities

The History Department sponsors Phi Alpha Theta, a national history honor society, and the Webb Society, a student service club. Webb Society students engage in a wide variety of fun and educational activities, including the Sam Houston Folk Festival, the Renaissance Festival, Encuentro, and numerous historical re-enactments.

Internships and Study Abroad

Because the Sam Houston Memorial Museum is part of Sam Houston State University, history majors interested in museum careers have the opportunity of completing a museum internship as part of their undergraduate curriculum.

On special occasions SHSU History faculty offer classes abroad. In recent years Dr. Rosanne Barker has offered summer classes in England, Dr. Tracy Steele in China, and Dr. Nicholas Pappas in Russia and Greece. Check with the department on courses being offered abroad.

Scholarships

A variety of University and departmental scholarships are available. Since all history department scholarships are arranged by faculty nomination, students do not apply for them directly. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672.

Program Specific Requirements

History majors are required to take four semesters of a single foreign language. The languages offered at Sam Houston State University are French, German, and Spanish. However, any language can be accepted in transfer.

Curriculum

Required History Courses for Majors

The Bachelor of Arts degree requires 36 semester credit hours of coursework, including HIS 163, 164, 265, 266, and 369. All History majors are required to complete at least one 400-level history course. At least 12 hours of advanced history must be taken in residence.

Major In History

Bachelor of Arts

First Year	Credit	Second Year	Credit
HIS 163, 164	6	HIS 265, 266	6
ENG164, 165	6	Component Area 4 (Literature)	3
MTH (164 or approved substitute)	3	Component Area 6 (Computer Literacy)	3
Component Area 3 (Natural Science,		POL 261, POL (200 - Level)	6
Foreign Language 263, 264	6	PHL 261	3
from two departments)	8	Minor	3
Foreign Language 141, 142	8		30
KIN 215	1		
	32		

Third Year	Credit	Fourth Year	Credit
HIS 369 and HIS 398	6	ART, DNC, MUS, THR or PHL 366	3
HIS 376, 377, 378 or 379	3	HIS (Advanced)	6
HIS (Advanced)	6	HIS (400-level)	3
Component Area 4		Minor	9
(Visual & Performing Arts)	3	Advanced Electives	12
Minor (Advanced)	6		33
ENG (200 level or higher) or SCM	3		
Elective	6		
	33		

Social Science Composite
History Emphasis
Secondary Teaching Certificate
Bachelor of Arts

First Year	Credit	Second Year	Credit
HIS 163, 164	6	HIS 265, 266	6
ENG 164, 165	6	GEO 161, 265	6
MTH 164 (or approved substitute)	3	Component Area 4 (Literature)	3
Component Area 3 (Natural Science,		POL (200-level)	6
POL 261, from two departments)	8	Foreign Language 263, 264	6
Foreign Language 141,	8	Component Area	6
KIN 215	1	(Computer (Literacy)	3
	32		30

Third Year	Credit	Fourth Year	Credit
GEO 266, 369, 471	9	POL 378	3
SOC 261	3	PHL 366	3
ECO 234	3	HIS 400 – level	3
Component Area	4	HIS 300 - or 400 – level	9
(Visual & Performing Arts)	3	HIS 331, 332, 333, 336, 381, 389,	
HIS 369, 398	6	391 or 478	3
HIS 376, 377, 378 or 379	3	Advanced Electives*	15
SCM 161 or 384	3		36
	30		

Teacher Certification

Students seeking a Bachelor of Arts (BA) Degree with teacher certification at the secondary level (grades 8-12) should use their 18 elective hours and an additional 9 hours to satisfy the required certification courses. The required education courses are listed below. With teacher certification, the BA degree total is 134 hours. Those students not seeking certification should use their electives to fulfill the University requirement for advanced hours.

SED 383, 394, 464, 480, 496, 497, RDG 392, SED 374

For teacher certification, no grade below C in social science courses is accepted.

Minor in History

Minor in History (without Teacher Certification)

A minor in history requires 21 semester credit hours, including 163, 164, 265, 266, and nine hours of upper-level history electives. For history courses, no grade below C is accepted.

Minor in History (with Teacher Certification)

A history minor with teacher certification requires 27 semester credit hours, including HIS 163, 164, 265, 266, 369,398, (376 or 377 or 378 or 379), (331 or 332 or 333 or 336 or 381 or 389 or 391 or 478 or 495), and three hours of any upper-level history elective. For history courses, no grade below C is accepted.

History Course Descriptions

United States History

HIS 163 **United States History to 1876.** [HIST 1301]
The colonial origins of the United States and growth of the Republic to 1876. Credit 3.

HIS 164 **United States History Since 1876**. [HIST 1302]
Continuing survey of the United States to the present. Credit 3.

HIS 360 **American Religious History**.
A study of selected themes bearing on the relation of religion and culture in America from colonial times to the present. Credit 3.

HIS 361 **The United States and the Vietnam War.**
The course will focus on the United States involvement in Southeast Asia from 1945 to 1975. In particular, it will deal with the issues of nationalism and communism in Southeast Asia, the first Indochina war between the French and Vietnamese, the United States military effort in Indochina from 1965 to 1975, and the postwar political, economic, and social problems in the region. The course will also deal with the impact of the Vietnam War on American culture and foreign policy. Credit 3.

HIS 376 **Early America to 1783**.
A survey of early American history from the beginnings of European colonization through the American Revolution and the War for American Independence. Credit 3.

HIS 377 **America in Mid-Passage, 1783-1877.**
The course will survey United States history from 1783 to 1877 and will examine the origins of the U.S. Constitution, the early republic and rise of the two party-system, the nature of Jeffersonian and Jacksonian democracy, the sectional crisis and the Civil War, and the era of Reconstruction. Credit 3.

HIS 378 **The Emergence of Modern America, 1877-1945.**
This course will examine United States history from 1877 to 1945 and will include discussions of the Industrial Revolution, the Populist and Progressive movements, World War I, the era of the 1920s, the Great Depression and New Deal, and World War II. Credit 3.

HIS 379 **Recent America, 1945 to the Present.**
This course will examine United States history from the end of World War II to the present and will include discussions of the Cold War; the civil rights and environmental movements; the Vietnam War, the Gulf War, and the war on global terrorism; the public policy debates surrounding the role of the federal government in the modern economy; and the evolution of American popular culture. Credit 3.

HIS 382 **Immigration and Ethnicity in American History.**
A study of ethnic group relations, nativism, and racism in the historical development of American civilization, with special emphasis on the patterns of assimilation and non-assimilation of particular ethnic groups. Credit 3.

HIS 383 **American Women's History**.
A survey of American women's history, focusing on everyday concerns (including work, marriage, family, sexuality, reproduction, and education) and on the social forces which have aided or blocked change in women's roles in American society. Particular attention is paid to differences in race, class, and ethnicity. Credit 3.

HIS 385 **American Diplomatic History**.
A study of selected topics in American Diplomatic History. Credit 3.

HIS 386 **The Military and War in America.**
This course is a survey of the American military experience from the Colonial period to the present, emphasizing the growth of the military institution and the relationship between that institution and American society. Credit 3.

HIS 392 **American Indian History.**
A course which will examine the history of Native Americans in the United States. Although the emphasis is historical, the course does include ethnographic material. Credit 3.

HIS 393 **African-American History**.
A comprehensive course in the African American experience which explores the various forces shaping race relations in the United States. Credit 3.

HIS 398 **Texas and the Southwest.**
As a study of the Greater Southwest, this course surveys Spanish expansion and the Spanish-French rivalry in the lower Mississippi region and Texas. Special emphasis is given to geographic factors and cultural developments. Credit 3.

HIS 433 **History of the Black Civil Rights Movement.**
This course examines the black civil and human rights struggle in the United States. While many scholars point to the landmark 1954 Brown Decision as the pivotal event that signaled the birth of the modern Civil Rights Movement, this course first examines earlier periods of activism. Special emphasis is placed on the black response to Jim Crow, the emergence of national organizations, World War I, the New Deal, and World War II as immediate catalysts for change, school desegregation, local activism, student sit-ins, national leadership, "Black Power", the white backlash, and the ongoing affirmative action discourse. Credit 3. Prerequisites: HIS 163, 164.

HIS 468 **The Era of the American Revolution, 1763-1789.**
An intensive study of the issues of conflict between English continental colonies and British imperial policy which led to the movement for independence. Consideration is also given to internal colonial conflicts and attempts to solve the federal problem culminating in the formation of the Constitution. Credit 3.

HIS 469 **The Civil War and Reconstruction**.
An examination of the sectional conflicts of the 1850s and the Civil War. This is primarily a military, political, institutional and diplomatic study. Credit 3.

HIS 470 **The History of the West.**
A study of the settlement and development of the Trans-Mississippi West and its influence upon national and international affairs. Credit 3.

England and British Empire History

HIS 363 **Tudor-Stuart England, 1485-1714.**
This course explores the era of the Wars of the Roses, the Reformation and Henry VIII, the Elizabethan Renaissance, the English Civil War and the Stuart restoration, following the major themes of social, political, economic and intellectual development during the period. Credit 3.

HIS 364 **Modern England, 1714 to Present**.
A continuation of HIS 363, emphasizing the effects of industrial change, the enmity of France in foreign affairs, Great Britain's renewed expansion overseas following the American Revolution, movements favoring social and economic reform, and political trends to the present. Credit 3.

HIS 381 **British Empire and Commonwealth.**
The study of the British Empire and Commonwealth to the present time. Special emphasis is given to the rise of colonial and dominion nationalism, the imperial conferences, and the unfolding of the British Commonwealth of Nations. Credit 3.

Latin American History

HIS 391 **Colonial Latin America.**
This course is designed to trace the conquest and development of the colonial institutions of Spain and Portugal in the Americas, including the Spanish borderlands as the center of Spanish colonial activity and power in the Americas. Credit 3.

HIS 495 **Contemporary Latin America.**
The development of the South American Republics from their independence to the present. Social, economic, and political development will be closely examined. Credit 3.

European History

HIS 265 **World History from the Dawn of Civilization Through the Middle Ages.** [HIST 2311]
A survey of world history from the dawn of civilization in Mesopotamia, China, India, Egypt, and Mesoamerica through the Middle Ages in Europe and Asia. The Middle Ages, Renaissance, and Reformation, as well as the rise of nation states and the commercial economy are stressed as background to modern history. Recommended as a basic history course for all liberal arts majors. Credit 3.

HIS 266 **World History from the Renaissance to the Age of Imperialism.** [HIST 2312]
A survey of world history since sixteenth century. Special attention is given to European expansion overseas, imperialism and colonization, the Industrial Revolution, the Enlightenment, the French Revolution, nineteenth century nationalism and democracy, and the colonial rebellions in Africa, Latin America, and Asia. Such 20th century problems as World War I, World War II, the Cold War, and the collapse of the Soviet Union are also considered. Recommended as the second half of a basic history course for all liberal arts majors. Credit 3.

HIS 333 **Religion in World History.**
This course will survey the origins, development, and modern manifestations of the major living world religions. It will discuss the peoples, times and places of the founders of each tradition, the classical literature within each tradition and the canonization of these sacred writings, and the significant sects and schisms within the religions that have influenced major events in world history. Credit 3.

HIS 336 **The Modern Middle East**.
This course will study the political, social, economic, and cultural development of the Middle East since the seventeenth century. The course will study such topics as the decline of traditional empires; the encroachment of Europe; the Eastern Question; the development of nationalism among the Turks, Arabs, and Iranians; Islam and modern ideologies; and the Middle East in the twentieth century. Credit 3.

HIS 339 **The French Revolution & Napoleonic Era, 1789-1815.**
This course examines the history of France during the French Revolution & Napoleonic Era, 1789-1815. The course is focused primarily on the military and political history of the era, with a detailed examination of the battles and campaigns of the Napoleonic Wars. Credit 3.

HIS 365 **Russian History.**
After an introduction to the roots of Russia (Kiev, Christianity, the Mongol occupation, Ivan the Terrible, the Times of Troubles), the course of Russian history from Peter the Great to the present is surveyed. Credit 3.

HIS 367 **Europe in the Age of Absolutism and Revolution, 1648-1815.**
Europe in the Age of Absolutism and Revolution. A study of main trends in European history from 1648 to 1815. A major emphasis is on the Ancient Regime, the French Revolution and the period of Napoleon. Credit 3.

HIS 368 **European History, 1815-1914.**
The history of the principal European powers from the Congress of Vienna to World War I. Credit 3.

HIS 369 **The World in the Twentieth Century.**
A study of global politics and diplomacy since World War I. Credit 3.

HIS 370 **Ancient History.**
The history of the civilizations of the Ancient Near East, Greece, and Rome with special emphasis upon their contribution to the cultural heritage of the western world. Credit 3.

HIS 371 **Medieval History.**
A study of the political, economic, social, intellectual, and religious institutions and developments in Europe from the collapse of the Roman Empire in the fifth century to the Renaissance. Credit 3.

HIS 334 **Renaissance and Reformation.**
A history of Europe from the humanistic movement of the fourteenth century to the seventeenth century, with particular emphasis on intellectual and aesthetic trends as well as political sidelights. Credit 3.

HIS 335 **Germany and Central Europe Since 1815.**
A study of German and Central European history, emphasizing the principal political, economic and social trends since the Congress of Vienna. Credit 3.

HIS 480 **Modern France: From the Revolution to the Present.**
This course is a survey of the history of France from the French Revolution to the present. Credit 3.

Asian History

HIS 331 Early Asian History.
A survey of Asian history from its beginnings to the fourteenth century. The emphasis is on the social and political foundations of traditional Asian society and the historical influences of religion on Asian culture. Credit 3.

HIS 332 Modern Asian History.
A survey of Asian history since the fourteenth century. The emphasis is on the modernization of Asia and the influence of colonization, nationalism, and industrialization on present-day Asia. Credit 3.

HIS 478 Modern China and Japan.
This course will focus on the history of modern China and Japan from the last Chinese dynasties to the present, with emphasis on the resilience and weaknesses of China's imperial system; the challenges posed to China's traditions by Western economic and cultural penetration; China's twentieth century experiments in forms of government and in direction of its cultural development; and the political, economic, social, and intellectual history of Japan from the beginning of the Meiji period (1868) to the present. Credit 3.

Courses of Special Interest

HIS 372 Historiography.
Special emphasis is devoted to a survey of historical interpretations and to the development of research skills. Credit 3.

HIS 373 Topics in the History of Science and Medicine.
This course will survey selected topics in the history of science and medicine. Emphasis will be placed on the development of scientific knowledge across the centuries. Because the geographic regions, time frame, and topics will vary from semester to semester, with departmental approval, this course may be repeated for credit. Credit 3.

HIS 387 World War II.
A comprehensive study of the World War II period, emphasizing the events leading to the war in Europe, the progress of the war in the entire European theatre, the collapse of the Axis in 1945, the aftermath of the war, and the Cold War. In the Pacific theatre, the course traces the emergence of Japan, the effects of the collapse of the European colonial powers on Japan, relations between the U.S. and Japan, and the outbreak and progress of the Pacific war through the defeat of Japan. Credit 3.

HIS 388 Public History.
This course will explore topics in the field of Public History, including architectural preservation and restoration, museum studies and oral history. The topics will vary from semester to semester, but each semester students will receive instruction on the techniques of analyzing oral sources, primary textual materials and historical artifacts of various types, including architectural dwellings, tools, and local and family records. Credit 3.

HIS 389 Africa: Past and Present.
A survey of the problems, potentials, and upheavals of Modern Africa. Emphasis is on such topics as the impact of the slave trade on African society, racial conflicts, apartheid, the emergence of African nationalism, the end of white colonial rule, and the difficulties of achieving economic and political stability in contemporary Africa. Credit 3.

HIS 390 Conceptualizing History Education.
This capstone course will examine conceptualization techniques in Texas, U.S., and World History. The course is designed to enable History students to organize a vast amount of material into a logical framework that will help them to better understand the interactions of individuals, communities, nations, and cultures across time and place. Special emphasis will be placed on subject areas included in the Texas Examination for Educator Standards. Credit 3.

HIS 475 Readings in History.
A course designed especially for advanced students in history with schedule problems who are capable of independent study. Prerequisites: Twelve hours of history, approval of the department chair, the instructor directing the study and a 3.4 overall GPA. This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog. Credit 3.

DEPARTMENT OF MASS COMMUNICATION

Chair: Janet A. Bridges (936) 294-1341; JABridges@shsu.edu

Faculty: Michael Blackman, Rene Chen, Tony DeMars, Hugh Fullerton, Mickey Herskowitz, Richard Kosuowei, Ruth Pate, Mel Strait, Wanda Reyes Velazquez, Christopher White, Patsy Ziegler

Information: (936)294-1341; Dan Rather Communications Building 123

Website: http://www.shsu.edu/~com_www/

The Department of Mass Communication offers five interrelated emphases: Broadcast Journalism, Broadcast Production, Media Sales and Management, Print Journalism, and Public Relations.

Journalism, whether print or broadcast format, is vital to the operation of a democracy, because it furnishes the information that citizens must have to participate in their own governance. The business side of mass communication is also important, as it enables not only journalism but also non-journalism, media activities to exist. Public relations provides a mechanism for organizations to communicate effectively with both journalists and other organizational publics; broadcast production provides both the mechanism and the techniques needed for electronic communication to take place, and media sales and management are the backbone of any industry, including the media/mass communication industries.

Recognition of the critical importance of journalism as well as these allied fields is the driving force behind the programs offered in the Department of Mass Communication. Our department's degree emphases offer the opportunity for students to develop the specific skills, background and experiences demanded for a smooth transition into this working world of mass media.

Mission

The mission of the Department of Mass Communication is to acquire, synthesize and disseminate knowledge related to print, broadcast and other forms of electronic communication for the purpose of producing media literate, socially aware, professionally competent graduates.

Program emphasis is on the preparation of ethical and technologically proficient communication professionals who are capable of making a positive impact on their environment and on society. Our graduates will acquire the skills for today's media marketplace and also develop the broader, theoretical background for:

- Negotiating convergence in the communication fields;
- Communicating with and servicing diverse populations;
- Understanding the economic and political pressures on professional integrity; and
- Intelligently assessing and interpreting unfolding events.

Academic Programs

- BA in Mass Communication
- BA in Multimedia Authoring and Communication**
- BS in Multimedia Authoring and Communication**

** Multimedia Authoring programs are no longer available. Students already admitted to a Multimedia Authoring and Communication program should see Jim Barker at the SAM Center or Tom Seifert in Photography.

Highlights

The Department of Mass Communication offers a comprehensive blend of courses to prepare students for media production and reporting, media-related decision making, audience assessment, mass communication theory, and other professional development areas. Our department curriculum introduces our students to each of the five emphasis areas during their first year in the

mass communication program. During the remaining three years, classes are offered that include digital audio and video editing, newspaper-style writing, research techniques, communication law, media marketing, scriptwriting, global communication and broadcast journalism. Students with a major or minor in the department will have the opportunity to work with departmental media: KSHU FM, KSHU TV-7, *The Houstonian* newspaper, or the *Alcalde* yearbook as part of their college experience.

Suggested Minors

Students in Mass Communication should select a minor compatible with their professional plans. Therefore the list here is only representative, and students should discuss their career plans with an advisor. Minors in Management or Marketing are desirable for public relations, broadcast production and media sales and management emphases. History, English, foreign languages, sociology and other social sciences are helpful to all emphases. Both print and broadcast journalism and/or public relations emphasis students could benefit from a special-interest minor such as political science, community health, finance, and banking and financial institutions.

Career Opportunities

Career opportunities in Mass Communication vary as widely as our internship opportunities. Traditional preparation is for a reporting or editing position with a newspaper, television or radio station, magazine, or professional newsletter. Mass Communication graduates may also develop careers with public relations and advertising agencies, with corporate communication programs, and within government, hospital and other institutional settings. Graduates can affiliate with non-profit agencies, and some move into sales and other promotional positions. Graduates may also work with training programs and interactive media.

Student Organizations and Activities

The Department supports student chapters of the American Advertising Federation (AAF), the National Broadcasting Association (NBS), the Minority Multimedia Group (3MG), the Texas Association of Broadcast Students (TABS), the Public Relations Student Society of America (PRSSA), and the National Association of Black Journalists (NABJ).

Internships and Study Abroad

Junior and senior level students who meet minimum requirements may enroll in semester-long professional internships. Students have interned nationally with CBS News, *Entertainment Tonight*, ESPN, *David Letterman*, *The Jerry Springer Show*, MTV, Disney World and KTLA News in Los Angeles, plus many professional sites within Texas newspapers, advertising agencies, broadcast stations, and production houses. Examples of these Texas sites include the *Conroe Courier*, *The Victoria Advocate*, Pierpont Public Relations, the Houston Symphony and the Texas State Senate.

Scholarships

Many scholarships are available both for incoming freshmen and for outstanding undergraduate students continuing in the program. Most scholarship deadlines are March 1 for the following academic year.

Please contact the Department of Mass Communication or visit http://www.shsu.edu/~sfa_www/scholarship.html#masscommunication.

Program Specific Requirements

All students in the Mass Communication Program will complete a departmental five-course core that provides a foundation for success in any of the media fields. To help students understand the role of media, the core includes an analysis of Mass Communication and Society. Because specific skills are expected, both applied Writing for Mass Media and Information Analysis courses are part of the core. A course in Mass Media Law and Ethics will explain the legal environment of the press and require students to understand ethical obligations of the field. Recognizing that the world is becoming more interdependent, a Global Media Communications course will help students understand media systems outside the United States as well as expose them to the

techniques needed to communicate with global audiences. At the end of their programs, all students complete a senior-level professional seminar designed to prepare them for the transition from study to work.

In addition to the core, students in four of the emphases will complete six emphasis-specific courses and two electives within a foundation of liberal arts courses. Public Relations students complete five emphasis-specific courses plus two electives. These course requirements are explained below. Each student works with an advisor to select elective courses and an appropriate minor field.

All Mass Communication majors and minors must earn a grade of 'C' or better in each Mass Communication course.

Curriculum

Two journalism emphases are available through the department:

- Broadcast Journalism
- Print Journalism

Both Journalism emphases provide students with the knowledge and skills to communicate effectively through the traditional print and broadcast media as well as the developing digital/on-line media. Skills emphasized for both types of media include information gathering, writing, and presentation/dissemination techniques. Students completing the emphasis in Broadcast Journalism take the Mass Communication five-course core plus audio production and performance, an introductory visual communication course, beginning single camera/nonlinear editing, television studio production, broadcast journalism writing and reporting, television news producing and reporting, and two Mass Communication electives.

Those in the Print Journalism emphasis complete the Mass Communication core courses plus reporting, editing, on-line journalism, a practicum, and two Mass Communication electives. Other required Mass Communication courses in this emphasis are Mass Media Messages and Effects and Changing Roles in Mass Media. The practicum ensures that every print-journalism student works on one of the major student media. Computer skills are necessary for all Journalism students.

Emphasis In Broadcast Journalism

First Year	Credit	Second Year	Credit
MCM 130, 132, 171	9	MCM 271, 372	6
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	MTH 164 or 170	3
Component Area 3 (Natural Science)	8	POL 261	3
MCM 232/330	3	Foreign Language 141, 142	8
KIN 215	1	Minor	6
	33	PHO 181	3
			32

Third Year	Credit	Fourth Year	Credit
MCM 373, 374, 471, 493	12	MCM 470, Electives (Adv.)	9
Foreign Language 263, 264	6	MCM 432/412	1
Component Area 4 (Visual and Performing Arts)	3	POL (200-level)	3
ECO 230	3	Advanced Liberal Arts Electives*	13
Minor	6	PHL	3
	30	Minor	6
			35

* Select at least 6 of these liberal arts hours from the courses listed below.

Note: Students should use elective and/or minor hours to satisfy the 42 advanced-hour requirement.

Emphasis In Print Journalism

First Year	Credit	Second Year	Credit
MCM 130, 132, 262	9	MCM 364, 362	6
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	MTH 164 or 170	3
Component Area 3 (Natural Science, (from two departments)	8	POL 261	3
		PHO 181	3
MCM 232/330	3	Foreign Language 141, 142	8
KIN 215	1	Minor	6
	33		32

Third Year	Credit	Fourth Year	Credit
MCM 471, 493, Elective (Adv.)	9	MCM 465, 466, Elective(Adv.)	9
MCM 326	2	MCM 432/412	1
Foreign Language 263, 264	6	POL (200-level)	3
Component Area 4 (Visual and Performing Arts)	3	Advanced Liberal Arts Electives*	13
		PHL	3
ECO 230	3	Minor	6
Minor	6		35
	29		

* Select at least 6 of these liberal arts hours from the courses listed at the end of this section.

Note: Students should use elective and/or minor hours to satisfy the 42 advanced-hour requirement.

Emphasis In Public Relations

The Public Relations emphasis prepares students for both agency work and leadership positions in corporate and/or nonprofit communication. While writing and presentation skills are essential, emphasis is on application of these writing and presentation skills for managing communication with individuals and groups that make up the stakeholders of each organization. Students in the public relations emphasis complete the Mass Communication five-course core and the professional seminar plus courses in public-relations principles, public-relations writing, and either strategic planning or campaigns for public relations and advertising. They also complete Communication Research Methods, two Mass Communication electives, and two courses in marketing.

First Year	Credit	Second Year	Credit
MCM 130, 132, 282	9	MCM 381, 383	6
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	MTH 164 or 170	3
Component Area 3 (Natural Science, (from two departments)	8	POL 261	3
		PHO 181	3
MCM 232/330	3	Foreign Language 141, 142	8
KIN 215	1	Minor	6
	33		32

Third Year	Credit	Fourth Year	Credit
MCM 471, 483, electives	12	MCM 384 or 480, 493	6
Foreign Language 263, 264	6	MCM 432/412	1
Component Area 4 (Visual and Performing Arts)	3	POL (200-level)	3
		Advanced Liberal Arts Electives*	13
ECO 230	3	PHL	3
MKTG elective	3	MKTG elective	3
Minor	6	Minor	6
	33		35

* Select at least 6 of these liberal arts hours from the courses listed at the end of this section.

Note: Students should use elective and/or minor hours to satisfy the 42 advanced-hour requirement.

Emphasis in Broadcast Production

Students completing the Broadcast Production emphasis are preparing for decision-making and technical responsibilities in electronic communication. Technical, artistic, and management skills combine to ensure that quality electronic content is presented in an effective, appropriate and engaging manner, within budget.

Broadcast production students complete the Mass Communication five-course core, the professional seminar, and four of the courses in the Broadcast Journalism emphasis: audio production and performance, introductory visual communication, beginning single camera/nonlinear editing, TV studio production, and two Mass Communication electives. In addition broadcast production students complete a scriptwriting course for fiction and nonfiction and an advanced production course where they create and produce programming for the departmental television station. Every broadcast-journalism student will work at KSHU-TV during his/her college tenure and each will write, produce, shoot and edit his/her own television series for KSHU-TV. Unless students plan to specialize in a content-specific field, a marketing or management minor is strongly recommended for this emphasis.

First Year	**Credit**	**Second Year**	**Credit**
MCM 130, 132, 171	9	MCM 271, 372	6
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	MTH 164 or 170	3
Component Area 3 (Natural Science, (from two departments)	8	POL 261	3
		PHO 181	3
MCM 232/330	3	Foreign Language 141, 142	8
KIN 215	1	Minor	6
	33		32

Third Year	**Credit**	**Fourth Year**	**Credit**
MCM 373, 375, 471, elective	12	MCM 493, 473, elective	9
Foreign Language 263, 264	6	MCM 432/412	1
Component Area 4 (Visual and Performing Arts)	3	POL (200-level)	3
		Advanced Liberal Arts Electives*	13
ECO 230	3	PHL	3
Minor	6	Minor	6
	30		35

* Select at least 6 of these liberal arts hours from the courses listed at the end of this section.

Note: Students should use elective and/or minor hours to satisfy the 42 advanced-hour requirement.

Emphasis in Media Sales and Management

The Media Sales and Management emphasis focuses primarily on the unique management issues associated with broadcast media. However, the program is designed to be useful to students with print and/or on-line management interests as well. Media sales and management students complete the Mass Communication five-course core and the professional seminar, plus courses in media sales, management, and marketing and promotions and two Mass Communication electives. In addition they complete Communication Research Methods, Case Studies in Public Relations and Advertising, and the History and Theory of Communication Technologies. A marketing or management minor is strongly recommended for students in this emphasis.

First Year	Credit	Second Year	Credit
MCM 130, 132	6	MCM 386, 388, elective	9
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	MTH 164 or 170	3
Component Area 3 (Natural Science)	8	POL 261	3
Minor	6	PHO 181	3
KIN 215	1	Foreign Language 141, 142	8
	33	MCM 330	3
			32

Third Year	Credit	Fourth Year	Credit
MCM 471, 477, 482, elective	12	MCM 493, 483, 491	9
Foreign Language 263, 264	6	MCM 432/412	1
Component Area 4 (Visual and Performing Arts)	3	POL (200-level)	3
		Advanced Liberal Arts Electives*	13
ECO 230	3	PHL	3
Minor	6	Minor	6
	30		35

* Select at least 6 of these liberal arts hours from the courses listed below. NOTE: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Liberal Arts Elective List: ENG 336, 337, 338; HIS 383, 392, 393, 433, 391, 495, 366, 331, 332, 478, 389; SOC 335, 465; POL 361, 368, 387; any advanced literature or culture course in Foreign Languages.

Note: Science courses may be used to satisfy the 15-hour Liberal Arts requirement.

Minor In Mass Communication

The 21-hour minor in Mass Communication requires students to complete the Mass Communication core courses: MCM 130, 132, 232/330, 471 and 493, plus two advanced electives appropriate to the student's interests and career plans. Students must earn a 'C' in each minor course.

Mass Communication Course Descriptions

Core Courses

MCM 130 Mass Communication and Society
This course will survey the history and theory of mass media in American society with an emphasis on issues in broadcast television, cable television and print journalism. Topics addressed include: the impact of the printing press, the evolution of print media, the telegraph and the film camera and wireless technologies; the structure of contemporary media industries; the influence of advertisers, regulatory agencies and ratings services; the production, distribution and syndication systems; the social influence and use of mass media content; and the relationship of media content to the development of personal and collective values. Credit 3.

MCM 132 Writing for Mass Media
Designed to introduce writing for media across a wide spectrum of disciplines, this course will provide hands-on practice in basic writing skills for news, broadcast, the web, public relations and advertising. Emphasis is placed on the enhancement of language and grammar skills. Prerequisite: 'C' in ENG 164 or equivalent. Credit 3.

MCM 330 Information Analysis
Comparative survey of communication investigation, including practical training in ethical gathering, interpretation and presentation of data. Students will be introduced to information-gathering methods including direct interviewing, questioning techniques, electronic document retrieval and manipulation, database management and Internet skills. Prerequisite: MCM 132. Credit 3.

MCM 412 Professional Seminar
This capstone class summarizes, updates and puts in context skills, concepts and theories addressed in lower level MCM classes and helps students develop portfolios, resumes and interviewing skills to prepare them to enter the media marketplace. Prerequisites: Senior standing; MCM majors only. Credit 1.

MCM 471 Mass Media Law and Ethics
This course will examine legal and ethical concepts as they apply to broadcast and cable television, radio, print media and Internet-based publishing. It will focus on the evolution of the American legal system with specific attention to state statutes, regulatory agencies, ethical issues and precedent-setting cases as they relate to free speech, open records, privacy, libel, copyright and obscenity laws. Prerequisites: MCM 130, Junior standing. Credit 3.

MCM 493 Global Media Communication
This course studies world media systems in comparison to the United States. Emphasis will be placed on the means by which history, politics, government, culture and other social components affect the mass media of countries and international media development and relations. Prerequisite: Junior standing. Credit 3.

Emphasis and Elective Courses

MCM 171 Audio Production and Performance
This course will survey the mechanics of audio production and the operation of studio equipment. Students will study and practice the use of microphone techniques, music, sound effects and performance and be introduced to digital audio production using appropriate audio software. Lecture and laboratory projects will be designed to acquaint students with audio production requirements and responsibilities. Students will receive practical hands-on experience with attention to mixing, recording and editing. Lab experience will include on-air shifts, news and commercial production. The course will include hours of lab experience. Credit 3.

MCM 262 News Reporting
This course will cover theory and practice in writing specialized stories typically covered in mass media outlets in the average American city, including news assignments in public safety, legal issues, government, education, health care, military and politics. Emphasis will also be placed on knowledge of current events. Prerequisite: MCM 232/330. Credit 3.

MCM 271 Introduction to Visual Communication
This course is designed to introduce students to the basics of visual- image production, focusing on graphic design, creative visualization, video editing, lighting, on-camera performance, and studio producing/directing. The course structure allows students to rotate through three instruction modules, concentrating on PhotoShop, nonlinear editing, and studio production. Prerequisite: MCM 171. Credit 3.

MCM 282 Desktop Publishing
This course introduces students to the principles of design applicable to publications created using desktop publishing software and technology. Special attention is given to design principles, typography, layout and production techniques. Credit 3.

MCM 326 Media Practicum
Advanced instruction in practice and projects. Students do assigned work on the student media in a laboratory environment. Prerequisite: MCM 262 or MCM 271. No more than two (2) credits of 326 may be applied to a degree program. Credit 1 or 2.

MCM 332 Analysis of Electronic Media
This course will examine the central role of the electronic media in American society with an emphasis on analysis of industry processes and various forms of television content. Prerequisites: MCM 130 or Junior standing. Credit 3.

MCM 360 Specialized Writing
This course will cover study and practice in writing for mass media in specialized areas. Emphasis is on developing a level of writing suitable for publication. Course may be repeated as topics vary. Prerequisites: MCM 132, 6 hours of ENG. Credit 3.

MCM 362 Mass Media Messages and Effects
This course provides a comprehensive exploration of the two main bodies of mass communication theory: social-behavioral and critical-cultural. It emphasizes how the same issues (e.g. media violence) recur over time and how ideas about media have changed as new media technologies have emerged. Prerequisites: MCM 130 or Junior standing. Credit 3.

MCM 364 News Editing
This course focuses on the editor's functions in handling news copy from writing to the printed page or script with emphasis on writing quality and new technology of production. Content includes copy editing and headline writing, computers as tools of the trade, picture cropping and caption writing, working with wire service copy and type, typography and graphics. Prerequisite: MCM 262. Credit 3.

MCM 366 Photojournalism
This course will explore photography as a tool of investigation and interaction. Emphasis is on the creation, documentation, ethics, history, and social role of photojournalism. Includes basic camera technique, digital photo imaging methods and evaluation of pictorial communication effects. Prerequisite: PHO 181. Credit 3.

MCM 371 Advanced Audio Production
This course presents advanced concepts in audio and radio recording and editing, sound processing systems and multi-track mix down recording techniques. Prerequisite: MCM 171. Credit 3.

MCM 372 Single Camera and Non-linear Editing I
This course emphasizes pre-production, production and post-production techniques in field production. Elements include field camera setup and operation, remote lighting, remote sound, and basic continuity editing with an emphasis on underlying principles of video technology. Prerequisite: MCM 271. Credit 3.

MCM 373 TV Studio Production
This course will cover fundamentals of video production in a studio environment including pre-production, production and direction. Students will understand the functions and responsibilities of the production crew and equipment utilization. Emphasis is given to multiple camera techniques and studio production. Prerequisites: MCM 271. Credit 3.

MCM 374 Broadcast Journalism Writing
Philosophy, techniques and practice of electronic journalism; practice in writing and editing news copy covering the style, form and content needed for effective broadcast news; improvement of audio/video skills applied to news; production of broadcast news content; discussion of current issues facing broadcast journalists. Prerequisites: MCM 132, MCM 372. Credit 3.

MCM 375 Scriptwriting
This course emphasizes the study of style, format, principles and techniques of writing for radio, TV and film. The process of writing fiction and non-fiction will examine the development of the script from research to marketing. Prerequisite: MCM 132. Credit 3.

MCM 378 Media Program Planning & Scripting
Study of legal clearances, budgeting, funding, resource management and scheduling as each relates to radio and television production. Prerequisite: Junior standing. Credit 3.

MCM 379 Multi-Camera Field Production
This course emphasizes the techniques and approaches to multi-camera directing and production. MCM 379 will train students to adapt to varied projects and circumstances of out-of-studio production including sports, dance, music and special events coverage. Prerequisites: MCM 373. Credit 3.

MCM 380 Broadcast & Cable Programming
This course will examine audience psychology and principles of audience analysis, determining characteristics of program appeal to a desired audience. This course is an examination of program types, ratings, and program selection. Prerequisite: Junior standing. Credit 3.

MCM 381 Principles of Public Relations
This course will examine the principles of public relations, advertising, sales promotions, direct marketing and on-line communication with emphasis on the way organizations promote their products and images to their publics. The traits of leadership, crisis management and ethics will be explored. Prerequisite: Sophomore standing. Credit 3.

MCM 284 Writing for Public Relations and Advertising [expected to become 383]
This course examines the process of communicating to persuade and inform. Students learn the techniques of strategic thinking and practice writing for advertising and promotions, news media and special audience materials such as newsletters, brochures and catalogues. The growing area of online communications for internal and external audiences will also be explored. Prerequisite: MCM 132. Credit 3.

MCM 383 Writing for Public Relations and Advertising
This course examines the process of communicating to persuade and inform. Students learn the techniques of strategic thinking and practice writing for advertising and promotions, news media and special audience materials such as newsletters, brochures and catalogues. The growing area of online communications for internal and external audiences will also be explored. Prerequisite: MCM 132. Credit 3.

MCM 384 Strategic Planning for Public Relations and Advertising
The techniques and skills used in securing publicity for promoting the image of and maintaining critical relationships for organizations. Course includes advertising and publicity writing, including preparation of media kits, and planning events and news conferences. Emphasizes research to discover problems, strategic planning to solve them and methods for executing the strategies. Prerequisites: MCM 280/381, MCM 284/383, MCM 382/483. Credit 3.

MCM 385 Innovative Communication and Special Events
This course will examine the use of innovative communication channels in the special-event planning process. Students will learn to effectively research, design, organize, coordinate and evaluate all stages of planning special events such as corporate meeting, fundraisers, galas, conferences, conventions and expos. Special emphasis will be placed on the role of emerging technologies in the process. Prerequisite: MCM 280/381. Credit 3.

MCM 386 Media Sales
This course will provide the basic tools relevant to the media salesperson in today's marketplace. Students will develop accounts and design sales campaigns specifically for the mass media. Prerequisites: MTH 164 and Junior standing. Credit 3.

MCM 388 Media Marketing and Promotions
This course will provide the student with an overview of the marketing strategies used by mass media companies. This course will examine media marketing, market surveys, advertising, content promotion, and public relations as efforts to create and support customer bases and maintain goodwill. The course will include an analysis of current publications in each of these areas and will provide students an opportunity to create model marketing strategies. Special attention will be paid to industry changes and professional ethics. Prerequisite: Junior standing. Credit 3.

MCM 462 Business News
This course will cover the theory and practice of writing specialized stories typically covered in business sections of a mid- to large-sized daily newspaper or in specialty business magazines. Emphasis will also be placed on knowledge of the inter-relationship of business events around the world. Prerequisites: MCM 262 and Junior standing. Credit 3.

MCM 465 On-line Journalism
Students will use techniques drawn from all media to produce well-designed, effective communication packages for online distribution. Working in teams, students will integrate written material, video, sound and graphics into a multimedia online publication. Prerequisite: MCM 232/330. Credit 3.

MCM 466 Changing Roles of Mass Media
A study of the trends, people, and economic, social, political and technological factors that produced the institutions and traditions of the American mass media. Emphasis is placed on the changing roles of media and the impact of new communications technologies in the 21st century. Prerequisite: Junior standing. Credit 3.

MCM 470 TV News Producing and Reporting
Advanced instruction and practice on student-produced TV newscast. Students are assigned duties in producing a newscast once a week as well as gathering, shooting, writing and editing TV news. Prerequisite: MCM 374, Credit 3.

MCM 472 Single Camera and Non-linear Editing II
This course is the continuation of Single Camera and Non-linear Editing I with an emphasis on complexity editing and the aesthetic applications of digital editing and design. Advanced non-linear editing techniques and principles, graphic design and animation are covered in addition to dramatic visual storytelling. Prerequisite: MCM 372. Credit 3.

MCM 473 Advanced Production
This course provides students the opportunity to assume the primary responsibility, under faculty supervision, of creating and producing programming for KSHU-TV This course will also provide portfolio material for graduating students. Prerequisite: MCM 373. Credit 3.

MCM 477 Media Management
This course surveys station and/or publisher procedures, problems and management responsibilities. Topics include required reports (FCC, FTC), financial problems, personnel organization, management theory, public service responsibilities in comparison to profits, the station's position within the social structure of an area, and the problems involved in operating a station successfully. Prerequisite: Junior standing. Credit 3.

MCM 480 Campaigns and Promotions for Public Relations and Advertising
Integration of theory, research and communication techniques for implementing and evaluating public relations and advertising campaigns. Focus on creative strategies and media planning, target analysis and buying tactics. Students will research, prepare and present an integrated communication plan. Prerequisites: MCM 280/381, MCM 284/383, MCM 382/483. Credit 3.

MCM 482 Case Studies in Public Relations and Advertising
Case study approach to managerial goal setting, strategic thinking, budgeting and working with clients. Successful problem solving, critical thinking and leadership styles will be explored in depth. Prerequisite: MCM 280/381 or Senior standing. Credit 3.

MCM 483 Communication Research Methods
This course will introduce students to the history and application of research methods, both quantitative and qualitative, that are employed in commercial media markets and academic environments to assess media audiences, media content and media use. Topics addressed include: survey methods, content analysis, experimental research, ethnographic and critical research, research ethics and statistical analysis. Special attention will be devoted to research in print and electronic media. Prerequisites: MTH 164 and Junior standing. Credit 3.

MCM 491 History and Theory of Communication Technologies
This course will examine the history of communication technologies and the theories of technological change, specifically comparing the impact of the printing press, the telegraph, film, radio, and television technologies to the impact of the Internet. Emphasis will be on theories of innovation, the integration of new technologies into contemporary society and hands-on use of the Internet for research, classroom presentations and group discussions. Prerequisites: MCM 232/330, Junior standing, Credit 3.

MCM 498 Professional Internship
On-the-job application of skills and knowledge learned in the classroom for students who have completed their sophomore year and appropriate courses. Internships may be with print media, electronic media, agencies, institutions, businesses, non-profit groups or government agencies. Prerequisites: Junior standing, permission of the Internship Coordinator; MCM majors only. Credit 3.

MCM 499 Directed Study in Mass Communication
This course provides an opportunity to develop skills or to conduct supervised investigation in an area of special interest. This course is designed specifically for advanced students who are capable of independent research. Prerequisites: Junior standing, 9 hours advanced MCM credits; permission of department chair. This course may not be used to replace a required course. Credit 3.

DEPARTMENT OF POLITICAL SCIENCE

Chair: Robert E. Biles (936) 294-1460; gov_reb@shsu.edu

Faculty: Robert Biles, Robin Bittick, John Bolus, Rhonda Callaway William Carroll, James Carter, , John Domino, John Holcombe, Masoud Kazemzadeh, Corliss Lentz, Witold Lukaszewski, Mitzi Mahoney, and Tamara Waggener.

Information: E-mail Ellenberger@shsu.edu, Phone 936-294-1457, On Campus Building AB1, Rm. 315, Mail P.O. Box 2149, Huntsville, TX 77341-2149.

Web Site: www.shsu.edu/~pol_www/

The study of political science is exciting. It mixes the drama of politics and public issues with the development of skills of analysis and communication. Students examine major problems such as the influence of interest groups on Congress's decisions, how candidates win elections, what election results mean, and how decisions about war and peace are made. In the process, students learn tools of analysis, explore major philosophical issues, and develop their skills in writing and speaking – tools of value in any profession.

Mission

The mission of the Political Science Department is to challenge students to achieve higher levels of thinking, writing, and speaking. This is accomplished through excellence in teaching, scholarship, and service.

To carry out this mission, the Political Science faculty endeavor to:

- Develop students' analytic, writing, speaking, interpersonal, and professional skills
- Prepare students for professional careers in the 21st century
- Build students' citizenship skills, knowledge, and activism
- Help students understand human beings in their diversity and appreciate democratic values
- Expand the frontiers of knowledge in political science and public and nonprofit administration
- Contribute to a better community within the university and the society.

Academic Programs

- BA in Political Science
- BS in Political Science
- Program in Prelaw (see Preprofessional Programs within this catalog)
- Teacher Certification

The department offers courses in five areas: American government and politics, international relations and foreign policy, comparative politics (the study of politics in other nations), public administration, and political theory. Students should consult with their advisor as to what mix of these areas best meets their needs. Political science courses can be combined with courses in other areas such as criminal justice, environmental studies, or business to prepare for careers in both the public and private sector.

Highlights

Political Science faculty members bring unique backgrounds to the classroom. They have strong academic credentials, with doctorates from top schools such as Columbia, Johns Hopkins, and the University of Texas, and they write scholarly books and articles. But they also have practical experience in government and politics to bring to the classroom. They have served on local school boards and city councils, as party county chairs, members of state boards of citizens groups, U.S. Senate staff, Foreign Commercial Officer, local, state, and federal administrators, and political consultants. Visiting professors have included a Nobel Peace Prize winner and a former member of Congress and the Texas Supreme Court.

Suggested Minors

There is no preferred minor for Political Science. Students should select a minor that suits their interests and career needs. Common minors include Agriculture, Criminal Justice, English, Environmental Science, General Business, Geography, History, Journalism, Philosophy, Psychology, Sociology, Spanish (or other foreign language), and Speech Communication.

Career Opportunities

Studying political science meets the career needs of two different sets of students. Some want a liberal arts education that provides a foundation to deal with a broad range of ideas and challenges. With today's economy, in which most people experience several major career changes, this is a valuable foundation. Other students want to prepare for specific career goals. Most graduates work successfully in private business. Others attend the major Texas law schools, teach (from junior high to university level), work in public service (at the federal, state, county, or city level), or go into political life (such as state legislator, judge, or lobbyist). Recent graduates have held a range of positions — congressional aide, state director of a cattleman's association, city planner, director of a local development organization, and radio talk-show host. There is an increasing need for trained people to work in nonprofit organizations, and the department has a program in administration, research, and writing that prepares graduates to enter this exciting area.

Student Organizations and Activities

Outstanding students are recognized with membership in Pi Sigma Alpha, the national political science honor society. Political Science students are active in (and often lead) the student government, the campus organizations of both political parties, the NAACP, and service organizations. A student group affiliated with the department organizes field trips to events such as the presidential inauguration and presentations by national leaders at the Bush Library. Recently, students organized a model political convention featuring speakers from the local, state, and national level. In department-sponsored events, students have listened to and questioned members of Congress, leading political scientists, and foreign scholars.

Internships and Study Abroad

Advanced students are encouraged to gain professional experience, make contacts, and explore career options through the department's successful internship program. Recently, students have interned in city and county governments, the state legislature, the U.S. Congress, nonprofit groups, both major political parties, and the Washington office of the NAACP. The department's Junior Fellows program allows undergraduates to work with faculty members on research and special projects.

All students are eligible for the department's summer field school in Italy and the University's field school in Mexico.

Scholarships

In addition to the University's student financial aid programs, the Department of Political Science also offers scholarships to majors and minors. For information, contact the department secretary. Information on University scholarships may be obtained from the Office of Academic Scholarships website at www.shsu.edu/~sfa_www/scholarship.html or telephone (936) 294-1672.

Program Specific Requirements

Political Science Majors:

- Bachelor of Arts (B.A.) 31 hours of political science, including at least 15 advanced hours; 6 hours of Fine Arts (or PHL 366), including 3 from Core; 3 hours of PHL; and 12-14 hours of a Foreign Language.
- Bachelor of Science (B.S.) 37 hours of political science, including at least 18 advanced hours; 6 hours of math (met in other requirements); 16 hours of lab science (8 from each of two fields preferred); and 6 hours of Math or Lab Science (3 met by Core CS requirement).
- All Political Science majors are required to take POL 261, 377, 379, 410, 472, and one course in International Relations or Comparative Politics.

- All Political Science majors are required to take STA 379 and one of the following courses: SCM 161, 282, 284, THR 164, or 231.
- No grade below C in a Political Science course will count toward this major or minor.
- At least 12 hours of advanced political science must be taken in residence.

Curriculum

Typical curriculum outlines are provided below for guidance. Adjustments, particularly in timing, may be made to suit individual needs.

Major in Political Science

Bachelor of Arts

First Year	Credit	Second Year	Credit
POL 261	3	POL 379	3
ENG 164, 165	6	Component Area 4 (Lit. or PHL)*	3
MTH 164, 170, or approved substitute	3	Component Area 4 (Visual & Performing Arts)	3
POL (200 level)	3	Foreign Language 263, 264	6
HIS 163, 164	6	STA 379	3
Foreign Language 141, 142	8	Component Area 3 (Natural Science)	8
KIN 215	1	POL elective**	3
	30	CS 143 or accepted substitute	3
			32

Third Year	Credit	Fourth Year	Credit
POL 377 and International Relations or Comparative Politics	6	POL 410, 472	4
Advanced POL electives **	3	POL (Adv)**	6
PHL elective*	0-3	Minor**	9-12
Component Area 5*	3	General Elective	5-20
SCM 161, 282, 284, THR 164, or 231	3		33
Minor	9-12		
Fine Arts or PHL 366*	3		
General Electives**	0-3		
	33		

* Students may wish to take some courses that meet more than one requirement. For example, three hours of philosophy (PHL) is required for the B.A. and may be taken in any one of three places that are marked.

** Students must have 42 advanced hours. Depending on the number of advanced hours in the minor, students will generally need at least 12 advanced hours of the POL electives and 11 hours of General Electives or PHL. At least 15 hours of POL must be advanced.

Major in Political Science

Bachelor of Science

First Year	Credit	Second Year	Credit
POL 261	3	POL (200 level) and 379	6
ENG 164, 165	6	STA 379	3
Component Area 3 (Natural Science)	8	Laboratory Science (to make 8 hrs. from each of two departments, including first year courses)	8
MTH 164, 170 or approved substitute	3	CS 143 or accepted substitute	3
Mathematics or laboratory science from a third department	3-4	Component Area 4 (Visual and Performing Arts)	3
HIS 163, 164	6	Component Area 4 (Lit. or PHL)	3
KIN 215	1	Component Area 4 (Cultural Studies)	3
	31-31	Component Area 5	3
			32

Third Year	Credit	Fourth Year	Credit
POL 377and International Relations or Comparative Politics	6	POL 410, 472	4
POL Electives*	9	POL*	9
SCM 161, 282, 284,THR 164, or 231	3	Minor*	9-12
Minor*	9-12	Electives*	7-11
General Electives*	3-6		32-33
	33		

* Students must have 42 hours of advanced classes. Depending on the number of advanced hours in the minor, students will generally need at least 12 advanced hours of the POL Electives and 11 hours of General Electives. At least 18 hours of POL must be advanced.

Minor in Political Science

Bachelor of Arts and Bachelor of Science: 19 hours in Political Science, including 261, 379, and 410. At least 6 hours must be advanced and taken in residence. No grade below C in Political Science will count toward this minor.

Requirements for Teacher Certification

Students who want to teach in a high school or junior high school can do so with the Social Science Composite program. A graduate with the social science certification will be able to teach government, economics, history, sociology, or geography at the eighth to twelfth grade level. The ability to teach several areas makes it much more likely to find and keep a job. To teach just government, the social science composite gets the student in the door, and with time graduates can move to other areas. Under present state rules, certification in political science (government) alone is no longer available. History is the only social science for which certification is available without the social science composite.

Students may qualify for teacher certification in the social sciences under either the Bachelor of Arts or Bachelor of Science degrees. Students seeking certification in the social studies for grades 4-8 should pursue the Interdisciplinary Academic Studies Major for a Bachelor of Science Degree with certification for 4-8 Social Studies. This is found in Elementary Education in the Department of Curriculum and Instruction.

Students interested in certification should consult with their political science advisor and a secondary education advisor in the College of Education early in their program. Because of the number of courses required, students should take as many courses as possible that meet more than one requirement. These are indicated in the model curricula. Note that for teacher certification, no grade below C in social science courses is accepted.

Social Science Composite with Political Science Emphasis For Teaching Grades 8-12

Bachelor of Arts or Bachelor of Science:
Political Science: BA 24 hours; BS 27 hours: 261*; 265*; 235, 378; 379; 433; 6 hours from among 285, 336, 337, and 377. For BS: STA 379

Geography: 131/111*, 161, 265, 266, 369, 471
History: 163*, 164*, 265*, 266, 369, 379, 398
Economics: 234* and 233**
Sociology: 261

* Courses that should be taken as part of the Core Curriculum.

** For the B.S., ECO 233 and 234 are required; for the B.A., ECO 234 is required, and ECO 233 is strongly recommended.

Requirements for Teacher Certification: SED 374, 383, 394, 464, 480, 496, 497; RDG 392; and SCM 384 (preferred) or 161.

Ordinarily, SCM 384, SED 374, and SED 383 are taken prior to the teaching methods block (RDG 392, SED 394, and SED 464). This is followed by student teaching (SED 480, 496 and 497).

Social Science Composite with Political Science Emphasis

Bachelor of Arts

First Year	Credit	Second Year	Credit
POL 261 and 265	6	POL 379 and 235	6
ENG 164 and 165	6	Component Area 4 (Lit.-or PHL)*	3
MTH 164, 170, or approved substitute	3	HIS 265	3
HIS 163 and 164	6	CS 143 or accepted substitute	3
Foreign Language 141 & 142	8	Foreign Language 263 and 264	6
KIN 215	1	Component Area 4 (Visual and Performing Arts)	3
	30	Component Area 3 (Natural Science, GEO 131/111 and 4 hrs. additional laboratory science)	8
			32

Third and Fourth Years	Credit
POL 378, 433, and 6 hrs. from among 285, 336, 337, & 377	12
Fine Arts or PHL 366*	3
ECO 234**	3
GEO 161, 265, 266, 369, & 471	15
HIS 266, 369, 379, 398	12
SOC 261	3
SCM 384	3
SED 374 & 383	6
RDG 392; SED 394 & 464	9
SED 480, 496, & 497	9
	75

* Take PHL in one of the two areas marked.
** In addition, ECO 233 strongly recommended.

Social Science Composite with Political Science Emphasis

Bachelor of Science

First Year	Credit	Second Year	Credit
POL 261	3	POL 265 and 379	6
ENG 164, 165	6	Component Area 4 (Lit.-or PHL)*	3
MTH 164, 170, or approved substitute	3	STA 379	3
GEO 131/111 & GEL	8	Laboratory Science (from one department, not GEO/GEL)	8
CS 143 or accepted substitute	3	Mathematics or Laboratory Science (from a third department)	3
HIS 163 and 164	6	HIS 265	3
KIN 215	1	ECO 234	3
	30	Component Area 4 (Visual & Performing Arts)	3
			32

Third and Fourth Years	Credit
POL 235, 378, 433, and 6 hrs. from among 285, 336, 337, & 377	15
GEO 161, 265, 266, 369, 471	15
HIS 266, 369, 379, 398	12
SOC 261	3
ECO 233	3
SCM 384	3
SED 374 & 383	6
RDG 392; SED 394 & 464	9
SED 480, 496, & 497	9
	75

Political Science Course Descriptions

Required Introductory Course

POL 261 **Principles of American Government — National and State.** [GOVT 2301]
This course deals with the origin, development, and Constitution of the American governmental system, citizenship and civil rights, suffrage, the national party system, the national executive, organization of congress, national judiciary, federal-state relations, and the Constitution of the State of Texas. This course meets the legislative requirement for a course on the Constitutions of the United States and Texas. Credit 3.

Other Introductory Courses

POL 231 **Local Political Systems.**
An introduction to the structure, process, and politics of local governments in Texas and the nation. Topics covered range from Metropolitan governments to special districts to county government. Rural and small town politics are also a focus of attention, along with urban and suburban political structures. Home rule, leadership recruitment and behavior, local elections, budgeting, services, and intergovernmental relations are addressed. Prerequisite: POL 261. Credit 3.

POL 232 **State Political Systems.**
A comparative analysis of politics in the fifty states, including Texas. Variations and similarities in state politics are examined, described, and related to other features of the states. Prerequisite: POL 261. Credit 3.

POL 235 **Politics of Ethnic Minorities and Gender.**
A study of political theory, behavior, beliefs, and public policy as they relate to race, ethnicity, and gender in the United States. Prerequisite: POL 261. Credit 3.

POL 265 **Comparative Survey of World Political Systems.**
A survey of important issues and trends in world political systems that places American government and politics in a comparative context. Included will be terminology, concepts, and methods of comparative politics. Topics may include institutions, behavior, constitutional processes, political parties and interest groups, public policy, political development, transitions from authoritarianism to democracy and from statist to market economies, sources of domestic violence, and other major concerns of the field. Prerequisite POL 261. Credit 3.

POL 266 **Introduction to Public Administration.**
A survey of national public administration with emphasis on the political processes within the surrounding administrative agencies. Topics include development of the administrative function, policy formulation and budgeting, the relations of administrators to Congress, interest groups, courts and the public. State and local topics may be included. Prerequisite: POL 261. Credit 3.

POL 281 American Foreign Policy.
This course examines the domestic and international forces which influence the development of American foreign policy. The course emphasizes the post-World War II era and includes discussion of such major issues of U.S. foreign policy as the settlement of World War II, the politics and crises of the Cold War, and America's role in the post-Cold War world order. Prerequisite: POL 261. Credit 3.

POL 285 American Public Policy. [GOVT 2302]
This is a study of national and state policy. Both the policy process and the substance of selected policies will be examined. Topics may include foreign policy, civil liberties, health care, social issues, economic problems, environmental policy, and/or others. Prerequisite: POL 261. Credit 3.

American Politics

POL 334 Judicial Systems.
An orientation course for pre-law students and others interested in the legal aspects of government. Emphasis is placed on the development of judicial systems and the policy making role of courts. Prerequisite: POL 261. Credit 3.

POL 336 The Presidency and Executives.
A study of the office of President including the institutionalization of the presidency along with a consideration of state governors and the heads of local governing bodies in the United States. Emphasis is placed on comparative development, roles, structures, processes, and functions. Prerequisite: POL 261. Credit 3.

POL 337 The Congress and Legislatures.
An examination of the powers, organization, procedures, and operations of legislative bodies in the United States. Consideration is given to such matters as selection of legislators, legislative leadership, influence of lobbyists, political parties, legislative committees, executives, and legislative roles and norms. Prerequisite: POL 261. Credit 3.

POL 360 Political Parties and Interest Groups.
This course is a survey of the development of the party system from the founding of the republic to the present, together with an examination of party processes, party machines, pressure groups, party finances, the electorate, nominating techniques, political campaigns, and elections. Prerequisite: POL 261. Credit 3.

POL 364 Politics and the Media.
The primary focus of this course is on the role and impact of the media on US politics. The relationship between the media and politics in other nations may also be considered. (Media is defined broadly to include the Internet, radio, television, and the various forms of print media.) Some of the topics that may be explored in the course include: the impact of the media on campaigns and election outcomes, the media as a source of political information, the agenda setting power of the media, the role of the "free press" in a democracy, and citizens' relationship to the media. The course makes use of textbooks but also relies heavily on media product being offered each day through the various contemporary media. Prerequisite: POL 261. Credit 3.

POL 433 Constitutional Law.
An analysis of the development of constitutional principles and doctrines with emphasis on the influence of courts in the exercise of judicial review. Particular attention is given to the issues of civil liberties, the attempts to adjust the constitutional system to the requirements of large scale industrialization and the urbanization of life in the United States. Prerequisites: 6 hours of Political Science. Credit 3.

POL 472 Political Attitudes and Behavior.
An examination of political socialization, political recruitment, voting behavior, and public policy outputs. The approaches examined include role, group, political culture, systems analysis, and functional analysis. Prerequisites: 6 hours of Political Science. Credit 3.

Political Theory and Methodology

POL 377 Introduction to Political Theory.
An introduction to the political ideas, philosophers, and relevant historical events in Western Europe over the past two thousand years. Representative political writings from the time of Plato to Nietzsche are surveyed. Political ideas and values are addressed in their original historical context as well as independently of any particular historical or cultural limitations. Prerequisite: POL 261. Credit 3.

POL 378 American Political Thought.
This course surveys American political ideas and movements from colonial times to the present. Prerequisites: 6 hours of Political Science. Credit 3.

POL 379 Research and Writing in Political Science.
This course has two primary objectives. First, students will gain knowledge of basic research methods and design in the social sciences. Particular attention will be given to survey research. Second, students will learn research and writing skills including: how to locate, evaluate, and cite electronic and printed sources; how to conduct a literature review; how to write proposals, reports, and research papers; and how to edit proposals, reports, and papers. Prerequisite: POL 261. Credit 3.

International Relations

POL 376 International Politics in the Post-Soviet Era.
A study of the relations among nations and states in the wake of the dissolution of the Soviet Union and the disintegration of communism. Problems such as internal stability, national conflicts, and internal security will be given particular emphasis. Prerequisite: POL 261. Credit 3.

POL 380 Introduction to International Relations.
An analysis of the relations between nation-states in the international system and the factors influencing their behavior. The changing nature of the international system is analyzed, as are the political and economic sources of tension, war and diplomacy, international law and organization, and the bases of power. Prerequisite: POL 261. Credit 3.

POL 385* International Organization and International Law
This course is a comprehensive overview of the role of international organizations and law. Specifically it examines the evolution of the United Nations and its precursors, its structure and governance role in international peace and security, emerging human rights law, laws governing war, and issues of development and the global environment. Prerequisite: POL 261. Credit 3.

POL 482 International Conflict and Terrorism.
This course examines cases and theories of international and domestic conflict, as well as methods of their resolution. Interstate violence, terrorism, guerilla warfare, and revolution are given special emphasis. Prerequisite: 6 hours of Political Science. Credit 3.

Comparative Politics

POL 361 Central and Eastern European Politics.
A comparative study of the political systems of Central and Eastern European states, including the European portions of the former Soviet Union, with emphasis on the problems of transition from communism to democracy and market economy. Prerequisite: POL 261. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

POL 368 Asian Politics.
A comparative survey of contemporary politics and government in Asia. The course encompasses most of the countries of East Asia: China, Japan, the Koreas, and Southeast Asia, including Indonesia, Malaysia, Singapore, the Philippines, Vietnam and Cambodia. Time permitting, the course may also include India and South Asia. Considerable attention is given to the history and culture of each country as well as the dynamics of change in the region. Prerequisite: POL 261. Credit 3.

POL 369* Religion and Politics
This course examines the historical and contemporary relationship between religion and politics. Topics include politics and religion in the United States, the proper role of religion in American public life, the relation between religion and state in the Islamic world, religion and conflict situations, and the role of religion in conflict resolution. Prerequisite: POL 261. Credit 3.

POL 370 Western European Politics.
A comparative survey of contemporary politics and governments in Western Europe. The course typically concentrates on Britain, France, Germany, and Italy, but usually includes other important and interesting countries, such as Belgium, the Netherlands, Spain, Portugal, and the Scandinavian countries. The European Union - its policies, institutions, and expansion - is fully treated in the course. Prerequisite: POL 261. Credit 3.

POL 375* Politics of the Middle East
A comparative survey of contemporary patterns of government and politics in the Middle East. The course encompasses most of the countries of the Middle East, including Egypt, Israel, Lebanon, Jordan, Saudi Arabia, the Gulf States, Iraq, Iran, and Turkey. North Africa may also be included. Considerable attention is given to the historical legacies and continuing impact of colonialism and nationalism, political Islam and secularism, challenges of authority, and legitimacy. The impact on the region and U.S. foreign policy of the Israeli-Palestinian conflict and regime change in the region is covered at length. Prerequisite: POL 261. Credit 3.

POL 387 Latin American Politics.
A survey of contemporary patterns of government and politics in Latin America with emphasis on institutions, processes, behavior, and problems of democracy, authoritarianism, and political development in selected nations. Historical, social, and economic background factors are also considered, along with major issues of U.S.-Latin American relations. Prerequisite: POL 261. Credit 3.

Public Administration and Public Policy

POL 338 Victims' Rights: Politics and Policies.
This course introduces students to the politics and policies of victims' rights. The course examines the emergence of victims' rights as a political issue and as a social movement. The course surveys victims' rights policies and programs at the local, state, national, and international level and analyzes their development, their implementation, and their impact. This is the introductory course for the Victim Studies Program. Prerequisite: POL 261. Credit 3.

POL 339 The Roles of Nonprofit Organizations.
This course introduces students to the history, roles, and types of nonprofit organizations and offers students an overview of the development of nonprofit organizations. Topics covered in the course include: nonprofit and government relations, nonprofit and business relations, nonprofits and policymaking, nonprofits in an international context, and organizational issues. Prerequisites: 6 hours of Political Science. Credit 3.

*Subject to action by the Board of Regents, The Texas State University System, and the Texas Higher Education Coordinating Board.

POL 391 Government Organization and Management.
Comparison of governmental organizations within society and analysis of the differences and their impact upon practices of administration in public agencies. Consideration is also given to the management tools available to governmental agencies and their capabilities and limitations. Prerequisites: 6 hours of Political Science. Credit 3.

POL 392 Economic Policy.
A general study of the role of modern government in the economy and society. Particular attention is given to governmental activity in regulating and promoting business activity. Prerequisite: POL 261. Credit 3.

POL 393 Social Policy.
A general study of the roles, actions, and problems of modern governments in dealing with social issues such as education, health, housing, transportation, and welfare services. Prerequisite: POL 261. Credit 3.

POL 395 Environmental Policy.
A survey of the major environmental issues and policies existing in the United States and the world today. An in-depth investigation of such environmental policy areas as clean air and water, endangered species, invasive alien species, public land management, ecosystem management, the conservation of biodiversity, nuclear power, waste disposal and energy production and use. Prerequisite: POL 261. Credit 3.

POL 438 Grant Research and Writing.
This course teaches students grant research and writing skills as well as introduces students to the many sources for grants. Topics covered in the course include: identifying key grant sources, matching grant proposals to grant sources, planning grants, and writing successful grant proposals. Prerequisites: 6 hours of Political Science. Credit 3.

General Courses

POL 410 Seminar in Political Science.
Discussions of current literature and developments in political science. Required of Political Science majors and minors. Prerequisites: 12 hours in Political Science and junior or senior standing. Credit 1.

POL 481 Problems in Political Science.
This course is designed to examine special topics which cut across the usual areas of concentration in government. A single topic will be considered each semester this course is offered. Topics may include political socialization, ethnic politics, crises in political systems, research techniques, and other subjects. May be repeated when topic varies. Prerequisites: 6 hours of Political Science. Credit 3**.**

POL 495 Directed Studies and Internships in Political Science.
This course is designed especially for advanced students in Political Science who are capable of independent study. Work may involve advanced readings, directed research, or assignment as an intern in a political or government office. Registration is upon the approval of the Chair of the Department of Political Science and the instructor directing the course. This course may be taken for Academic Distinction Credit. Prerequisites: 12 hours of Political Science and departmental permission. Credit 1-3.

DEPARTMENT OF PSYCHOLOGY AND PHILOSOPHY

Chair: Donna M. Desforges (936) 294-1178; psy_dmd@shsu.edu

Mission

The Department of Psychology and Philosophy supports the Mission Statement of the University and that of the College of Humanities and Social Sciences. The Department is committed to providing a quality educational environment conducive to scholarship and the acquisition of knowledge and applicable skills. We recognize that this ideal requires the effective use of faculty expertise and creativity, a sensitivity to needs of university and community, as well as a genuine concern for the abilities and goals of students.

PHILOSOPHY PROGRAM

Coordinator: Frank Fair (936)294-1509; psy_fkf@shsu.edu

Faculty: Marshall Bradley, Richard Cording, Frank Fair, Glenn Sanford

Information: (936)294-1509; AB4 317

Website: www.shsu.edu/~psy_www

Academic Programs

BA in Philosophy

Highlights

- Opportunities for collaborative scholarly research.
- Texas Gamma Chapter, the local chapter of Phi Sigma Tau, the National Honor Society in Philosophy offers networking opportunities with undergraduate students and faculty

Suggested Minors

- Psychology
- English
- History
- Political Science
- Sociology
- Criminal Justice
- Mathematics
- Physics
- Biology
- Art
- Photography
- Music

Career Opportunities

A Philosophy major is an excellent preparation for law school. Other careers pursued by Philosophy majors include theology, teaching, systems analysis, and medicine.

Student Organizations and Activities

Texas Gamma Chapter, the local chapter of Phi Sigma Tau, the National Honor Society in Philosophy

Scholarships

- **Richard A. Cording Endowed Scholarship**
- **Thomas W. Satre Endowed Scholarship.** The fund is established in memory Dr. Thomas W. Satre, Professor of Philosophy at Sam Houston State University.

Contact the department for details on how to apply and scholarship deadlines.

Program Specific Requirements

Philosophy majors choose an approved minor of 18 semester hours, 6 of which must be advanced. It is suggested that students visit with their advisors in choosing a minor.

Minors in Philosophy take a minimum of 18 hours including PHL 262 or 362, and 6 hours advanced. Consult the Program Coordinator for additional information.

Curriculum
Major in Philosophy
Bachelor of Arts

First Year	Credit	Second Year	Credit
ENG 164, 165	6	ENG Lit (200-level or higher)	3
HIS 163, 164	6	CS 133, 138, 143, LS 130, or MIS 188	3
BIO, CHM, GEO 131/111/ GEL, PHY		POL 261, 285	6
(from 2 different departments)	8	PSY 131	3
FL 141, 142	8	PHL 261, 262	6
MTH 164 or 170	3	FL 263, 264	6
KIN 215	1	Minor	6
	32		33

Third Year	Credit	Fourth Year	Credit
PHL 263, 366	6	PHL 364, 365	6
PHL	3	PHL	9
Visual and Performing Arts	3	Minor	6
Minor	6	Electives	9
Electives	15		30
	33		

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Philosophy Course Descriptions

PHL 261 **Introduction to Philosophy.** [PHIL 1301]
A general examination of the fields and issues of philosophy as discussed by both classical and modern philosophers. Philosophical problems discussed include the existence of God, the nature of knowledge and truth, the issue of human free will, and theories of moral judgment. Credit 3.

PHL 262 **Critical Thinking.** [PHIL 2303]
Designed to improve students' ability to think critically. The course covers the fundamentals of deductive reasoning, the identification of common fallacies, and an introduction to inductive reasoning, as well as sensitizing the students to some of the ways information is distorted, e.g., by advertising and news management. Credit 3.

PHL 263 **Contemporary Moral Issues.** [PHIL 2306]
A study of major moral issues in contemporary society. Includes topics such as abortion, euthanasia, censorship, capital punishment, and other issues that confront today's society. Credit 3.

PHL 362 Introduction to Contemporary Logic.
Introduces the student to the principles of ordered though t and to the terminology and rules of symbolic logic. Discusses the logic of statements and the logic of predicates, quantifiers, and identity. Credit 3.

PHL 364 Ancient and Medieval Philosophy.
A survey of philosophical thought from the time of the pre-Socratics to about 1500. Includes the study of the work of Socrates, Plato, Aristotle, the Hellenistic schools, and medieval philosophy through the late scholastic period. The artistic, scientific, ethical, political and general cultural ramifications of the major systems of thought are noted. Credit 3.

PHL 365 Modern Philosophy.
A survey of philosophical thought from about 1500 through the twentieth century. The course will examine the philosophical significance of the rise of modern science, the classical philosophies of rationalism, empiricism, the philosophy of Kant, and the development of these philosophies through the nineteenth and twentieth centuries. Credit 3.

PHL 366 Aesthetics.
An inquiry into the nature and meaning of art. Analysis of aesthetic experience, the relation of art to value, and an examination of aesthetic theories concerning representation, form and expression. This course satisfies 3 semester hours of the fine arts requirement for the BA degree program. Credit 3.

PHL 367 Philosophy of Religion.
An examination of the nature and meaning of religion and religious expression. Philosophical and scientific critiques of religious faith and experience are considered. The nature of faith and reason, the question of the existence and nature of God, and the relation of religion and value are typical course topics. Credit 3.

PHL 371 Philosophy of Self-Awareness.
An examination of the major themes of existentialism and its impact on contemporary society. Existential works from literature, psychology, psychoanalysis, and religion are included. Examines the existential concepts of anxiety, fear, guilt, meaninglessness, death, and authentic and inauthentic existence. Taught with PSY 371. Credit 3.

PHL 372 Philosophy of Science.
A survey of topics in philosophy of science including the logic of explanations in the physical and social sciences, the relations of science to the realm of values, and a look at the “mind-body problem”. Credit 3.

PHL 460 Philosophy of Biology.
A seminar course investigating philosophical questions concerning the development and application of evolutionary theory. This course addresses issues relating to concepts such as adaptation, speciation, the comparative method, levels of selection, and phylogenetic reconstruction. Credit 3.

PHL 463 Ethical Theories.
This course will cover classical views about the foundation of ethics such as divine commands, cultural relativism, subjectivism, egoism, utilitarianism, Kantianism, and virtue ethics. Significant attention will also be given to a variety of contemporary approaches to understanding ethics.

PHL 471 Death and Dying.
An examination of the philosophical reflections on death and dying from the literature of philosophy, psychology, theology, medicine and other contemporary sources. Course includes discussions of the nature of grief, sorrow, anxiety, fear, and suicide as related to death, and the social implications of death for the individual, family, friends, and community. Credit 3.

PHL 480 Seminar in Philosophy.
Affords students a chance for in-depth study of a particular topic or area in philosophy not covered fully in the other course offerings and a chance for participation in a course conducted on a seminar basis. As the topics vary, the course may be repeated for credit. Credit 3.

PHL 485 Readings in Philosophy.
This course is designed especially for advanced students who are capable of independent study. The particular program of study for the course must be discussed in advance with the prospective instructor. Admission to the course requires permission of the instructor. Credit 3.

PSYCHOLOGY PROGRAM

Faculty: Marcus Boccaccini, Jerry Bruce, Stacy Carter, Donna Desforges, Mary Alice Conroy, Richard Eglsaer, Marsha Harman, Craig Henderson. Melanie Kercher, Thomas Kordinak, Rowland Miller, Daniel Murrie, David Nelson, Paul Neunuebel, Ramona Noland, T.C. Sim, Christopher Wilson, Thomas Wood

Information: (936)294-3552; AB4 315

Academic Programs

BS in Psychology

Highlights

- Faculty-student collaborative research opportunities.
- Local Chapter of Psi Chi, the National Honor Society for Psychology and the Psychology Club offer networking opportunities with undergraduate and graduate students and faculty.
- Psychology faculty publish in nationally recognized scientific journals.

Suggested Minors

- Biology
- Business Administration
- Computer Science
- Philosophy
- Statistics

Career Opportunities

The bachelor of science degree in psychology is a useful and interesting program of study for liberal arts students and those desiring work in such areas as human services, public relations, correctional institutions, rehabilitation facilities, program development, and research to name just a few.

Student Organizations and Activities

- Psi Chi Chapter, the National Honor Society for Psychology, Local Chapter
- Psychology Club

Scholarships

John D. Symonds Scholarship. The fund is established in memory of Dr. John Dobie Symonds, Associate Professor of Psychology at Sam Houston State University. Dr. Symonds published and presented scholarly papers in several areas including sleep research, cross-cultural research, and social learning theory.

Contact the department for information on how to apply and for scholarship deadlines.

Program Specific Requirements

The courses within the Psychology Program are divided into four blocks:
Required Courses: PSY 131, 332, 234/214, 387/317
Experimental Block: PSY 333/313, 336, 337, 382, 391, 432, 492
Personality-Social-Developmental Block: PSY 365, 374, 381, 431, 434, 491
Clinical-Adjustment Block: PSY 237, 289, 331, 334, 371, 383, 488

In order to complete a major in Psychology, a student takes 13 hours from the Required Courses plus 6 hours from each of the three remaining blocks. Six hours of elective Psychology completes the 38 semester hours required for the major.

Psychology majors choose an approved minor of 18 semester hours, 6 of which must be advanced. Some suggested minors are Biology, Philosophy, Business Administration, Computer Science, and Statistics.

Minors in Psychology take 18-24 hours. Courses required of non-teaching minors are PSY 131, 3 hours from each of the remaining three blocks, plus 6 hours PSY electives. Of these hours, 6 must be advanced, taken in residence.

Curriculum
Major In Psychology
Bachelor of Science

First Year	Credit	Second Year	Credit
PSY 131, 3 hrs. PSY elective	6	PSY 234/214, 332	7
ENG 164, 165	6	ENG literature or PHL 261 or 263	3
HIS 163, 164	6	SCM	3
BIO elective	4	BIO elective	4
MTH 164 or 170	3	POL 261, 285	6
Visual and Performing Arts	3	CS 133, 138, LS 130, or MIS 188	3
GEL/PHY/CHM	4	GEL/PHY/CHM	4
	32	KIN 215	1
			31

Third Year	Credit	Fourth Year	Credit
PSY 387/317, 9 hrs. PSY	13	PSY (advanced)	12
PHL 262	3	PHL 372	3
Cultural Studies	3	Minor	9
Minor	9	Electives	9
Electives	3		33
	32		

Note: Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

Psychology Course Descriptions

PSY 131 **Introduction to Psychology.** [PSYC 2301]
This course is designed to be a broad survey of the field of psychology covering such topics as learning, perception, personality, development, psychopathology, etc. It covers both the theoretical basis and the empirical content of these areas. Credit 3.

PSY 214 **Introduction to Research Methods: Lab.**
Laboratory to be taken concurrently with PSY 234. Credit 1.

PSY 234 **Introduction to Research Methods.**
This course is designed to introduce the student to the scientific method in general and research methodology in psychology in particular through laboratory and field experiments. Laboratory period required. Credit 3.

PSY 237 **Professional Psychology.**
A survey is made of clinical/counseling psychology, e.g. psychopathology, diagnostic instruments, methods and techniques; individual and group psychotherapy, theories, community psychology; professional ethics of the clinical/counseling psychologist. Credit 3.

PSY 289 **Psychology of Adjustment.** [PSYC 2315]
A study is made of the dynamics of human behavior applying psychological theory to the development of the wholesome well adjusted personality. Techniques for managing stress, reducing anxiety, coping with anger, increasing assertiveness, and achieving self-control are considered. Credit 3.

PSY 313 **Physiological Psychology Lab.**
Laboratory to be taken concurrently with PSY 333. Credit 1.

PSY 317 **Statistics Laboratory.**
Laboratory to be taken concurrently with PSY 387. Credit 1.

PSY 331 **Abnormal Psychology.**
This course includes an introduction to behavioral disorders. Biological and social factors in the development, diagnosis, and treatment of psychopathology are studied. Prerequisite: 3 semester hours of Psychology. Credit 3.

PSY 332 **History of Psychology.**
This course includes an historical survey of the scientific and philosophic antecedents of modern psychology. Prerequisite: 3 semester hours of Psychology. Credit 3.

PSY 333 **Physiological Psychology.**
This course is designed to acquaint the student with the biological substrates of behavior. A study is made of the genetic, neuroanatomical, neurochemical and neurophysiological mechanisms of such psychological processes as sensation, movement, learning, memory, motivation and emotion. This course is offered primarily for psychology majors and minors but may serve as an elective for majors in biology, chemistry, and public health. Laboratory period required. Prerequisite: 3 hours in Psychology and 4 hours in Biology or consent of instructor. Credit 3.

PSY 334 **Human Sexuality.**
A study is made of the biological, social, emotional, cognitive, and spiritual elements of our human sexuality. Topics such as sexual health, sexual dysfunction, sexuality education, and intimate relationships are covered.. Credit 3.

PSY 336 **Sensation/Perception.**
A study is made of the sensory processes, the relationship between physical stimuli and sensory/perceptual experience, and perceptual phenomena. Topics such as pain, constancies, illusions, and psychophysics are covered. Credit 3.

PSY 337 **Cognition.**
This course is intended to provide a broad survey of the field of cognitive psychology covering such topics as attention, memory, forgetting, consciousness, and organization/structure. It covers both the theoretical basis and empirical content of the area. Credit 3.

PSY 365 **Close Relationships.**
This course examines the processes of social interaction, using the perspective of psychological theory and research. Topics include the growth of relationships, love, social exchange, impression management, communication, jealousy, and loneliness. Techniques for improving interactions are considered. Credit 3.

PSY 371 **Humanistic Psychology.**
An examination of the major themes of humanistic/existential psychology/philosophy and their impact on contemporary society. Works from literature, psychology, philosophy, and religion are included. Taught with PHL 371. Credit 3.

PSY 374 **Developmental Psychology.**
A study is made of the physical, mental, emotional, and social growth and development of the person across the entire life span. Credit 3.

PSY 381 **Social Psychology.**
This course examines individual human behavior as it is influenced by cultural and social stimuli. Topics studied include interpersonal attraction, aggression, prejudice and sexism, conformity, altruism, and group behavior. Credit 3.

PSY 382 Comparative Psychology.
This course deals with physical and behavioral differences in animals and how these differences can be adaptive. Specific topics include habitat selection, territoriality, predator and anti-predator behavior, reproductive behavior, and social behavior. Prerequisites: PSY 234 and 387. Credit 3.

PSY 383 Psychology and the Law.
This course is designed to examine the application of scientific and professional principles of psychology in the legal system, the use of social science methods to study the legal system, and the impact of law on the practice of psychology. Content areas include legal competencies, the insanity defense, jury consultation, psychologists and the death penalty, the accuracy of eyewitness testimony, prediction of violence, the psychology of victims, family law, and ethical dilemmas. Prerequisites: 6 hours of PSY. Credit 3.

PSY 387 Elementary Statistics.
This course is a study of statistics as applied to problems in psychology and education, to include frequency functions, correlation and regression, and statistical tests of significance. Credit 3.

PSY 391 Psychopharmacology.
This course includes a study of the field of behavioral pharmacology: the systematic study of the effects of drugs on behavior and the way in which behavioral principles can help in understanding how drugs work. The course focuses on the neurophysiological mechanisms of action of various psychoactive drugs. Credit 3.

PSY 431 Personality.
A study is made of the major theories of personality; the biological and social factors in the development and functioning of personality are considered. Prerequisite: 6 semester hours of Psychology. Credit 3.

PSY 432 Learning.
This course includes a study of the major theories of learning and their historical backgrounds; experimental procedures in the study of learning are discussed. Prerequisite: 6 semester hours of Psychology. Credit 3.

PSY 433 Seminar in Psychology.
This course includes discussions of selected topics in psychology. Credit 3.

PSY 434 Applied Social Psychology.
This course examines the use of social psychological theory and method to explain and solve real world problems. Topics include physical and mental health, the environment, law, consumerism, and processes of conflict and social influence. Prerequisite: PSY 381. Credit 3.

PSY 475 Problems.
Designed for advanced students in psychology who are capable of independent study. Prerequisites: Approval of Program Coordinator and the instructor directing the study. Credit 3.

PSY 488 Psychological Testing.
A study is made of group and individual differences and their assessment. The student is introduced to instruments and techniques used in the measurement of intelligence, aptitudes, achievement, interest, attitudes, and other dimensions of personality and behavior. Prerequisites: 9 hours in Psychology including PSY 131 and 387. Credit 3.

PSY 491 Divorce: The Psychological Impact.
A comprehensive investigation is made of psychological, legal, moral, religious, and cultural variables related to cause, process, and adjustment to divorce is made. Emphasis is placed on the impact of divorce on the individual. Prerequisite: Consent of instructor. Credit 3.

PSY 492 Industrial/Organizational Psychology.
This course provides an integration of psychological principles as applied to industrial/organizational milieu. The focus is on the application of research methodology, psychological assessment, personality, and organizational theories to the work environment. Specifically, research related to the application of psychological theory related to personnel, work environment, organizational, and pertinent legal issues will be considered. Prerequisite: PSY 131 or PSY 289. Credit 3.

DEPARTMENT OF SOCIOLOGY

Chair: Alessandro Bonanno (936) 294-1488; soc_aab@shsu.edu

Faculty: David Bailey, Walter Bennett, Douglas Constance, Furjen Deng, Karen Douglas Manges, Lee Miller

Information: Ms. Ronda Harris (936) 294-1512 ; soc_rrh@shsu,.edu ; AB1 311

Website: www.shsu.edu/~soc_www/

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies, and how people interact within these contexts. The subject matter of sociology ranges from the intimate family to the hostile mob, from organized crime to religious cults, from the divisions of race, gender and social class to the shared beliefs of a common culture, and from the sociology of the environment to the sociology of sports. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field whose potential is tapped by those who craft policies and create programs.

Mission

The Department of Sociology is committed to the study of society in its various aspects and trajectories. It provides high quality instruction to, and opportunities for, students to develop skills and tools that will allow them to understand the functioning of society and the strategies and techniques required to address social issues.

Academic Programs

- BA in Sociology
- BS in Sociology

Highlights

- The Sociology Department is considered one of the prominent departments for the study of Globalization in the nation
- Members of the Sociology Department regularly publish in important scientific journals
- Members of the Sociology Department occupy leadership positions in professional organizations domestically and internationally

Suggested Minors

- Psychology
- Political Science
- Criminal Justice
- English
- History
- Speech Communication

Career Opportunities

Sociology graduates find successful employment in the private sector (management, human resources, public relations), public sectors (Federal, State and Local Government agencies) and in non-profit organizations (NGOs) particularly in the areas of social services and analysis of social trends.

Student Organizations and Activities

Students in the Sociology Club are introduced to the profession of Sociology through activities including research opportunities, volunteer work, organization of special events, participation in professional meetings, and programs highlighting speakers of note in the many interest areas of Sociology. The Sociology Club also actively supports the Sociology Scholarship fund.

Internships and Study Abroad

Students with an interest in Sociology may take courses abroad through the SHSU Field School in Italy. Further information is available at the website: www.shsu.edu/~soc_www/italy/. Internship possibilities include work with the City of Huntsville and social services organizations throughout the area.

Scholarships

The department offers the Sociology Scholarship. For information contact the department or visit the departmental website.

Program Specific Requirements

Students must successful complete SOC 261 before taking additional sociological courses with the exception of SOC 168; and SOC 462. In order to graduate with a Sociology major or minor, students must successfully complete all the Sociology requirements with a 2.5 GPA.

Curriculum

Students receive instruction in classical and contemporary sociological theory, qualitative and quantitative techniques of sociological investigation, and major substantive areas in the field. The primary objective of the curriculum is to provide students with the scientific tools to understand the functioning of society, study social phenomena, and acquire the necessary skills to enter the global labor market. The department focuses on the study of the **Globalization of the Economy and Society**. Students are encouraged to participate in research projects and extra-curricular activities designed to foster critical sociological thinking and knowledge of today's world.

Instruction in general sociology is complemented by specialization in three substantive areas. Students can select to concentrate their undergraduate curriculum in Change, Economy and Society; Culture and Social Institutions; or Inequality and Society. Change, Economy and Society explores the relationships between society and the economy, patterns of change in the global society, the environment, social movements, and the organization of urban and rural societies. Culture and Social Institutions focuses on culture, social institutions such as the family and religion, and courses which analyze the most relevant social problems in today's society. Inequality and Society examines social inequality, gender and inequality, age and inequality, race and ethnic inequality, and complex organizations.

Core Courses and Areas of Specialization

Core Courses: SOC 261, 366, 383, 386, 499

Areas Of Specialization:

- **Change, Economy and Society:** SOC 336, 337, 376, 384, 392
- **Culture and Social Institutions:** SOC 264, 266, 365, 378, 381, 462, 468
- **Inequality and Society:** SOC 168, 333, 335, 364, 465, 477

Required Courses for Major

The **Sociology Bachelor of Arts** major requires a total of 30 hours in Sociology and should be distributed as follows:

Required courses: SOC 261, 366, 383, 386, 499 — 15 hrs.

Students are expected to select the following from the three areas of specialization (Change, Economy and Society; Culture and Social Institutions; and Inequality and Society):

Two courses **in each** of **two** of these areas of specialization — 12 hrs.
One course from the third area of specialization. — 3 hrs.

The **Sociology Bachelor of Science** major requires a total of 36 hours in Sociology and should be distributed as follows:

Required courses: SOC 261, 366, 383, 386, 499 — 15 hrs.

Students are expected to select the following from the three areas of specialization (Change, Economy and Society; Culture and Social Institutions; and Inequality and Society):

Two courses **in each** of these areas of specialization	18 hrs.
One course from the student's choice of specialization	3 hrs.

Required Sociology Courses for Minors

The **Sociology Minor** requires a total of 18 hours in Sociology and should be distributed as follows:

Required courses: SOC 261, 366, 383, 386	12 hrs.

Students are expected to select the following from the three areas of specialization (Change, Economy and Society; Culture and Social Institutions; and Inequality and Society):

Two courses from among these areas of specialization	6 hrs.

Major in Sociology
Bachelor of Arts

First Year	Credit	Second Year	Credit
SOC 261 (first semester)	3	SOC 366, 383	6
SOC 168 or 264 (second semester)	3	Minor	3
ENG 164, ENG 165	6	Component Area 4 (Literature)	3
HIS 163, HIS 164	6	Foreign Language 263, 264	6
MTH 164 or MTH 170	3	Component Area 3 (Natural Science, from 2 departments)	8
Component Area 6 (Computer Literacy)	3	POL 261, POL (200-level)	6
Foreign Language 141, 142	8		32
KIN 215	1		
	33		

Third Year	Credit	Fourth Year	Credit
SOC	9	SOC 386, 499, SOC (Adv.)	9
Minor	6	Minor	9
Component Area 4 (Visual and Performing Arts)	6	General/Advanced Electives*	12
English (200-level or higher), or SCM	3		30
ART, DNC, MUS, THR, or PHL 366	3		
General/Advanced Electives*	6		
	33		

* A minimum of 42 advanced hours is required for the B.A and B.S. Sociology Degrees.

Major in Sociology
Bachelor of Science

First Year	Credit	Second Year	Credit
SOC 261 (first semester)	3	SOC 366, 383	6
SOC 168 (second semester)	3	Minor	3
ENG 164, ENG 165	6	Component Area 4 (Literature)	3
HIS 163, HIS 164	6	MTH	3
MTH 164 or MTH 170	3	Natural Science, (same 2 fields as taken in Component Area 3)	8
Component Area 6 (Computer Literacy)	3	POL 261, POL (200-level)	6
Component Area 3 (Natural Science from 2 different fields)	8	General Electives	3
KIN 215	1		32
	33		

Third Year	Credit	Fourth Year	Credit
SOC	12	SOC 386, 499, SOC (Adv.)	12
Minor	6	Minor	9
English (200-level or higher, or SCM)	3	General/Advanced Electives*	6
Science, MTH, CS, or GEO 113/111	6	Component Area 4 (Visual and Performing Arts)	3
General/Advanced electives*	6		
	33		30

* A minimum of 42 advanced hours is required for the B.A and B.S. Sociology Degrees.

Sociology Course Descriptions

SOC 168 **Introduction to Ethnic Studies.** [SOCI 2319]
A survey of the field and problems of Ethnic Studies as an area of knowledge and investigation. The instruction is to be interdisciplinary in nature. Major considerations of the entire Ethnic Studies field will be defined and analyzed. Although the course is not prerequisite to any of the others, students are strongly urged to take it before attempting other Ethnic Studies courses. Credit 3.

SOC 261 **Principles of Sociology.** [SOCI 1301]
Introduction to the discipline with a focus on concepts and principles used in the study of group life, social institutions and social processes. This course is a prerequisite to many other courses taught in the department. It is required of all Sociology majors and minors. Credit 3.

SOC 264 **Social Problems.** [SOCI 1306]
Application of sociological principles to the major problems of contemporary society. Special attention is given to mental disorders, use and abuse of drugs and alcohol, sexual deviance and crime and delinquency; problems of youth and the family in contemporary society; institutionalized aspects of inequality, prejudice and discrimination; and population and environmental concerns. Credit 3.

SOC 266 **Sociology of Sport.**
This course utilizes the application of the social science mode of inquiry to the study of the sociocultural characteristics of sport. These include examinations of the cultural, economic, political and structural factors (i.e., gender, race, etc.) which form salient aspects of today's sport activities at various levels. Focus is placed on the characteristics of sports and how these characteristics both reflect and have impact upon the social climate of a given society. Credit 3.

SOC 333 **Age and Inequality.**
This course underscores the influence of age on income and wealth, status and power. It includes an examination of institutional discrimination against the young and the old, as well as individual discrimination, such as child and elder abuse. It studies the relationship between life-cycle changes and changes in placement in the class, status and power stratification system. Prerequisite: SOC 261 or consent of instructor. Credit 3.

SOC 335 **Gender and Inequality.**
This course studies the influence of gender on socialization and placement in class, status and power stratification systems. It includes an analysis of institutional discrimination against women in major social institutions such as religion, education, family, heath care and work, and an examination of the feminization of poverty. Prerequisite: SOC 261 or consent of instructor. Credit 3.

SOC 336 **Social Change and Development.**
An analysis of world population growth and the associated problems of social development: urbanization, unemployment, secularization, hunger, and war. Prerequisite: SOC 261 and upper division standing. Credit 3.

SOC 337 Environment and Society.
The purpose of this course is to examine the "environment" as a social and cultural issue. Topics discussed include an overview of the field of environmental sociology, traditional sociological perspectives on environmental issues, paradigmatic implications of environmental sociology, the development of environmental movement, the rise of environmental deterioration, public attitudes toward environmental issues, national environmental policies, and social impact assessment. Prerequisite: SOC 261 and upper division standing. Credit 3.

SOC 364 Social Inequality.
This survey course studies the distribution of three primary resources: class, status and power. Special attention is given to the way birth-ascribed statuses such as age, sex and race interact with class, status and power stratification systems. Special attention is also given to the popular and scientific explanations of inequality, especially with respect to the high and low ends of the distribution of income and wealth. Prerequisite: SOC 261 or consent of instructor. Credit 3.

SOC 365 Sociology of Health and Illness.
Processes by which persons assume, act, and relinquish the sick role; interrelationships between patient and family, doctors, and hospital; quality and quantity of health services distributed by class and race. Problems posed by "mental illness": diagnosis, treatment, and involuntary commitment. Prerequisite: SOC 261 or consent of instructor. Credit 3.

SOC 366 Research Methods in Sociology.
This course is designed to introduce the student to the logic and character of scientific and alternative means of social inquiry. Examines the function of observation, concept formation, proposition arrangement and testing of theory as components of the scientific process in sociology. Prerequisite: SOC 261. Credit 3.

SOC 376 Rural and Urban Sociology.
Examines the human community in its ecological, cultural, and associational aspects. The folk, rural, and urban community considered from the standpoint of various sociological perspectives. Special attention is given to social change, including decision-making as it affects local life. Prerequisite: SOC 261. Credit 3.

SOC 378 Socialization, Social Control and Deviant Social Behavior.
Examines structures and processes through which social systems (e.g., groups, institutions, organizations, and societies) secure and maintain order and social control. Sociological concepts, principles and theories used to explain sanctioning in various social systems whereby people are socialized to want to act the way they have to act for social order to prevail. Prerequisite: SOC 261. Credit 3.

SOC 381 Cultural Anthropology.
Cultural and social organization among primitive or preliterate societies; marriage, property, religion, magic and tribal control. Significance of the study of primitive cultures for understanding of urban industrial civilizations. Prerequisite: SOC 261 or consent of instructor. Credit 3.

SOC 383 Social Statistics.
Examination of basic concepts, techniques and data necessary for an adequate understanding of social structure and change: observational, experimental, sample survey, and demographic. It includes an introduction to computers, computer software, and social statistics. Prerequisite: SOC 261. Credit 3.

SOC 384 Economy and Society.
Changing employment opportunities for college graduates; blue collar, white collar, and professional lifestyles; origins of industrial society and effects on social stratification, minorities, and the family. Issues such as workers' control of industry, relationships between industry and government. Sociology of labor relations and personnel management. Prerequisite: SOC 261. Credit 3.

SOC 386 Sociological Theory.
A historical survey of the development of sociological thought. Emphasis is placed upon the growth of Sociology as a discipline, major areas of interest and major contributors. Prerequisite: SOC 261. Credit 3.

SOC 392 Social Movements.
Examines the characteristics of social movements useful to the sociological study and interpretations of major social trends involving both social and cultural change in community and society. Theoretical frameworks for understanding and the causes, types, and theories of change in contemporary society are given special attention. Prerequisite: SOC 261. Credit 3.

SOC 462 Marriage and the Family.
A sociological examination of marriage and family life. Problems of courtship, mate selection, and marriage adjustment in modern American society. Prerequisite: SOC 261 or consent of instructor. Credit 3.

SOC 465 Race/Ethnic Inequality.
This course examines ethnic stratification, i.e., placement in the class, status and power stratification systems on the basis of birth ascribed and socially defined race/ethnicity, and of the ideologies which serve to rationalize these inequalities. The course includes the study of institutional discrimination and ethnic stratification in major social institutions such as education, health care, religion and work. Broadly defined, ethnic stratification includes inequality based on other birth ascribed statuses, such as age and gender. Prerequisite: SOC 261 or consent of instructor. Credit 3.

SOC 468 Sociology of Religion.
Identity and comparative understanding of religious beliefs and practices of peoples of the world. Attention is given to particular archaeological and ethnographic problems in the study of religion. Special emphasis is given to the functional perspective in examining the relation between religious beliefs and other institutions in selective social systems. Prerequisite: SOC 261 or consent of instructor. Credit 3.

SOC 475 Readings in Sociology.
Designed for advanced students in the behavioral sciences who are capable of independent study. Registration upon written approval of the chair of the department and of the instructor directing the course. Credit 3.

SOC 477 Complex Organizations.
Examines the structure and functioning of large-scale organizations and bureaucratic social systems in various institutional settings (e.g., business or industry, health, education, religion, military, prison and political). Attention is given to personal and social consequences of organizational involvement. Prerequisite: SOC 261. Credit 3.

SOC 499 Senior Seminar in Sociology.
The content of this seminar will have alternate emphasis placed, at the discretion of the instructor, on special areas or issues of Sociology meeting the career needs of Sociology majors, minors, and/or prospective teachers of Sociology. Prerequisite: Advanced standing in Sociology. Credit 3.

DEPARTMENT OF SPEECH COMMUNICATION

Chair: J. Donald Ragsdale (936) 294-1848; ragsdale@shsu.edu

Faculty: Rick Bello, Frances Brandau-Brown, Patricia Capps, Mary Evelyn Collins, Debbi Hatton, Terry Thibodeaux, Shaun Zhang

Information: (936)294-1848; 212C Dan Rather Communications Building

Website: www.shsu.edu/~scm_www

Speech communication is the modern heir to one of the world's oldest disciplines. Its connection to thought and language is fundamental, and its primacy in marriage and the family, in obtaining employment, and in advancing a career regardless of one's field are well documented.

Mission

Speech Communication students learn how to prepare and present informative and persuasive speeches using the latest technologies and learn the skills necessary to engage in interpersonal, small group, and organizational forms of communication. They also study the nuances of nonverbal communication, the intricacies of argumentation and debate, the details of the anatomy and physiology of the speech and hearing mechanism, the dynamics of communication in the family, the principles of persuasion, and both historical and contemporary speakers and theories of rhetoric and communication.

Academic Programs

- BA in Speech Communication
- Teacher Certification

Highlights

The Department of Speech Communication provides a rich climate in which to pursue the study of communication. All classrooms are equipped with VHS/DVD playback, television monitors, and Internet-connected computers, and have software available for media-based presentations.

Suggested Minors

There is no preferred minor for Speech Communication. Students should select a minor that suits their interests and career needs. Common minors include English, History, Journalism, Political Science, Psychology, and Sociology.

Career Opportunities

The Department of Speech Communication offers coursework which provides for a wide variety of career choices; however, its focus is on family communication. Faculty members and students have ongoing research programs into such areas as relationship maintenance and repair in the family and child and family advocacy. The program is actively involved in advising students about course sequences available to prepare them for careers in public and private agencies which specialize in family matters.

Speech Communication graduates enter a variety of fields, including teaching at all levels, public advocacy and public relations, governmental relations, the ministry, motivational speaking, and website development and marketing. Some become ministers and motivational speakers. Many continue their studies in Speech Communication graduate programs and in law schools.

Student Organizations

Students may take advantage of the department's student organization, National Communication Association Sam Houston (NCASH). The department is also home to the Lambda Beta chapter of Lambda Pi Eta, the official honor society of the National Communication Association.

Internships

The department offers internship opportunities for qualified students through SCM 477 (described below).

Scholarships

The Department of Speech Communication offers several scholarships. Most scholarship deadlines are in March for the following academic year. Contact the Speech Communication Chair for information and applications.

Curriculum

Speech Communication students learn how to prepare and present informative and persuasive speeches using the latest technologies and learn the skills necessary to engage in interpersonal, small group, and organizational forms of communication. They also study the nuances of nonverbal communication, the intricacies of argumentation and debate, the dynamics of communication in the family, the principles of persuasion, and both historical and contemporary speakers and theories of rhetoric and communication.

Required Courses for Major

Students choosing to pursue a Bachelor of Arts degree with a major in Speech Communication must complete at least 33 hours of credit in Speech Communication (SCM) courses, including at least 15 hours of advanced courses in the program. To satisfy the foreign language requirement, all hours must be taken in the same language. All students must take the following courses:
SCM 161, 231, 286, 481,,486

Major in Speech Communication

Bachelor of Arts

First Year	Credit	Second Year	Credit
SCM 161, 231, 286	9	SCM electives	9
ENG 164, 165	6	Component Area 4 (Literature)	3
HIS 163, 164	6	POL 261	3
Foreign Language 141, 142 (one field)	8	Foreign Language 263, 264 (one field)	6
KIN 215	1	MTH 164 or approved substitute	3
Component Area 3 (Natural Science, from two departments	4	Component Area 3 (Natural Science, from two departments)	4
	34	PHL elective	3
		ART, DNC, MUS, THR, or PHL 366	3
			34

Third Year	Credit	Fourth Year	Credit
SCM 486, SCM (6 hrs. Adv.)	9	SCM 481, 482	6
Minor*	9	Minor*	9
POL (200-level)	3	Component Area 4 (Visual and Performing Arts)	3
Component Area 4 (Cultural Studies)	3	Electives*	12
Component Area 6 (Computer Lit.)	3		30
Component Area 5	3		
	30		

* Minor and elective hours should be chosen with the **university requirement of 42 advanced hours** in mind.

Minor in Speech Communication

Students choosing a minor in Speech Communication must complete at least 18 hours in the program, including SCM 161, SCM 231, 286, and at least 6 advanced hours.

Speech Communication with Secondary Teaching Certification

Students seeking Secondary Teacher Certification in Texas with Speech Communication as the major (first teaching area) must complete the same requirements as for the major listed above, with the addition of SCM 490 (as part of the 33 SCM hours for the major) and RTV 178.

Students seeking Secondary Teacher Certification in Texas with Speech Communication as the minor (second teaching area) must complete 24 SCM hours. In addition to the requirements for the non-teaching minor listed above, SCM secondary education minors must complete an additional 6 advanced credit hours, including SCM 490, for a total of 12 advanced hours of the 24 SCM hours.

Speech Communication with Elementary Teaching Certification

Students seeking Elementary Teacher Certification in Texas with a Specialization in Speech Communication must complete 24 SCM hours. Required courses include: SCM 131, 233, 286, 384, and 9 hours advanced SCM electives.

Speech Communication Course Descriptions

SCM 131 **Introduction to Human Communication.** [SPCH 1311]
A survey of the speech communication field. Students will be introduced to the basic principles, concepts, and modes of human communication in the contemporary world through class activities, projects, and lectures. Designed for non-majors. Credit 3.

SCM 161 **Public Speaking.** [SPCH 1315]
An introductory course in research, composition, organization, and delivery of informative and persuasive speeches for various purposes and occasions. Includes strategies for reducing speaker apprehension. Credit 3.

SCM 231 **Introduction to Communication Theory and Research.**
An introduction to theory and research in the field of communication with an emphasis on interpersonal and family communication. Students prepare reviews of literature as well as scholarly abstracts. Credit 3.

SCM 233 **Performance of Literature.** [SPCH 2341]
The study of literary materials through the mode of interpretive performance. Emphasis is on the interaction between performer, text, and audience. Credit 3.

SCM 282 **Speech for Business and the Professions.** [SPCH 1321]
This course examines theory and research in interpersonal principles, leadership strategies, listening, and nonverbal communication. Emphasis is on the application of this knowledge to develop communication skills in settings such as interviewing, group decision-making, speech preparation and presentation. Not for Speech Communication majors, minors, or specializations. Credit 3.

SCM 284 **Argumentation and Debate.** [SPCH 2335]
A study of argumentation as a type of discourse and an instrument of critical decision making. Instruction and public practice in research, analysis, organization, use of evidence, refutation, and delivery. Prerequisite: SCM 161 or permission of the Chair. Credit 3.

SCM 286 **Interpersonal Communication.** [SPCH 1318]
Theory and research in one-to-one communication in relationships. Topics include perception, listening, conflict management, and the development and maintenance of relationships. Credit 3.

SCM 290 **Multimedia Communication.**
Applications of technology to the preparation and presentation of speeches and other forms of oral discourse. Credit 3.

SCM 370 **Intercultural Communication.**
A study of the theory, research, and practice of communicating within and across cultures. Research in intercultural communication will be studied with an emphasis on application to the student's own intercultural communication. Credit 3.

SCM 380 Colonial and Nineteenth Century American Public Address.
An examination of significant speakers, speeches, campaigns, and movements in U.S. history to 1900. Credit 3.

SCM 381 Twentieth Century American Public Address.
A critical study of modern social movements and campaigns through analysis of speakers and speeches, 1900-2000. Credit 3.

SCM 382 Persuasion.
A study of the principles of attitude change and theories of persuasion as they apply to the speaker, political campaigns, and social movements. Fall. Credit 3.

SCM 383 Small Group Communication.
An examination and application of the research, theories, and practices of interaction, leadership, and problem-solving in formal and informal small group settings. Prerequisite: SCM 286 or SCM 384. Spring. Credit 3.

SCM 384 Speech for Teachers.
Designed primarily for prospective teachers, this course focuses on the research, theory, and practice of communication in classrooms as well as other instructional settings. Students will organize and present formal and instructional presentations in simulated classroom situations. Limited to juniors and seniors. Credit 3.

SCM 465 Nonverbal Communication.
The study of systems of nonverbal communication and their effective use, including body language, vocalic, facial, and spatial communication. Students will apply current theory and research in nonverbal communication to their own communication. Credit 3.

SCM 477 Mentorship in Speech Communication.
An independent study practicum in the pragmatic requirements of a career in speech communication education. The student will work closely with a faculty member to experience and practice as many of the roles of a professional speech communication educator as possible by serving as mentor for a college speech communication class. The goal is to prepare students to function effectively as a faculty member at whatever educational level they aspire. Prerequisites: At least Junior standing, 12 SCM hours completed, and approval of the Chair. Credit 3.

SCM 478 Internship in Speech Communication.
An on-the-job application of skills and theories learned in the classroom for selected individual students who have completed their junior year. Internships are with public relations and governmental agencies, businesses and non-profit organizations. Prerequisites: At least junior standing, 12 SCM hours completed, and approval of the Chair. Credit 3.

SCM 481 Communication Theory.
A survey of contemporary theories of communication. Prerequisite: 12 hours SCM completed. Credit 3.

SCM 482 Applied Rhetorical Theory.
A study of the major theories of rhetorical analysis from ancient times to the present with basic applications to American public communication. The course also presents non-American and non-traditional rhetorical methodology. The student will be required to apply the various paradigms in analyzing communication artifacts past and present. Prerequisite: 12 SCM hours completed. Spring. Credit 3.

SCM 486 Family Communication.
An intensive examination of interpersonal communication at all levels in the context of families. Students pursue original research projects, reviews of literature, and annotated bibliographies. Prerequisite: SCM 286 or the equivalent. Credit 3.

SCM 490 Directing Speech Activities.
A hands-on course designed to assist the student in understanding and practicing the skills necessary for effective leadership in the classroom and competitive areas. Students are required to develop materials necessary for teaching debate, public speaking, and interpretation. Fall. Credit 3.

SCM 491 Undergraduate Seminar in Speech Communication.
This course allows a student to pursue particular problems or issues beyond the limits of current course offerings. The problem or issue, however, will be within the student's area of specialization. This course may be taken for Academic Distinction credit. See Academic Distinction Program in this catalog. Prerequisite: 12 hours SCM completed and approval of the Chair. May be repeated for credit. Credit 3.