1. New Courses

**BMEN 306. Biomeasurements Lab. (0-3). Credit 1.** Introduction into experimental methods useful in biomedical engineering; includes the role of empiricism in biomedical research and development; the differences between observation and experimentation; and how to acquire, reduce, interpret, and present data. Prerequisites: BMEN 240 and 341.

**CPSC 437. Engineering Software Products. (3-0). Credit 3.** Links theory and practice in providing hands-on experience in development of growth-oriented new software products; student teams prepare and present a plan for a new software product; skills conducive to new software product success are developed including team building; organizing; planning; integrating and persuading. Prerequisites: Senior classification and approval of instructor.

**ELEN 119. Practice of Electrical and Computer Engineering. (1-0). Credit 1.** Discussion of some well-known and major contributions that electrical and computer engineers have made to society; development of the integrated circuit, advanced vehicle research, magnetic resonance imaging, communication and others.

**ELEN 303. Random Signals and Systems. (3-0). Credit 3.** Concepts of probability and random variables necessary for study of signals and systems involving uncertainty; applications to elementary problems in detection, signal processing and communication. Prerequisites: ELEN 214, MATH 308; junior or senior classification.

**ELEN 478. Wireless Communications. (3-0). Credit 3.** Overview of wireless applications, models for wireless communication channels, modulation formats for wireless communications, multiple access techniques, wireless standards. Prerequisites: ELEN 455; junior or senior classification.

**ENTC 419. Technical Project Management. (3-0). Credit 3.** Fundamentals of technical project management and associated topics; planning and approval activities necessary to prepare a formal technical proposal including scope, time, cost, quality, and risk for following semester's technical design project. Prerequisites: Senior classification and approval of instructor; must be taken semester immediately preceding ENTC 420.

**SOCI 211. Sociology of Deviance. (3-0). Credit 3.** Perspectives on non-normative behavior; theories of deviance.

**SOCI 305. Juvenile Delinquency. (3-0). Credit 3.** Social scientific aspects of juvenile delinquency including social construction, theoretical explanations, social structural determinants, prevention and societal responses. Prerequisite: Junior or senior classification with approval of instructor.
2. Changes in Courses

ELEN 455. Digital Communications.

Course description
From: Digital transmission of information through stochastic channels; analog-to-dialog
conversion, entropy and information, Huffman coding; signal detection, the
matched-filter receiver, probability of error; baseband and passband modulation,
signal space representation of signals, PAM, QAM, PSK, FSK; block coding,
convolutional coding; synchronization; communication through fading channels;
spread-spectrum signaling.

To: Digital transmission of information through stochastic channels; analog-to-dialog
conversion, entropy and information, Huffman coding; signal detection, the
matched-filter receiver, probability of error; baseband and passband modulation,
signal space representation of signals, PAM, QAM, PSK, FSK; block coding,
convolutional coding; synchronization; communication through fading channels;
spread-spectrum signaling; simulation of digital communication systems.

Credit hours
From: (3-0). Credit 3.
To: (3-3). Credit 4.

ENGL 324. Structure of Present-Day English.

Course number
From: ENGL 324.
To: ENGL 224.

Course description
From: The English language—its sound patterns, morphology, syntax and patterns of
meaning; linguistic concepts explained and demonstrated; practical applications
of linguistic concepts to language arts teaching.

To: Descriptive survey of the major elements of grammar of modern English,
including word and clause types and their combinatory potential for creating
sentences and longer text types; of special interest to both native and nonnative
speakers and teachers of English.

Prerequisite
From: LING 209.
To: none.

Cross-listing
From: LING 324.
To: LING 224.
LING 324. Structure of Present-Day English.

Course number
From: LING 324.
To: LING 224.

Course description
From: The English language—its sound patterns, morphology, syntax and patterns of meaning; linguistic concepts explained and demonstrated; practical applications of linguistic concepts to language arts teaching.
To: Descriptive survey of the major elements of grammar of modern English, including word and clause types and their combinatorial potential for creating sentences and longer text types; of special interest to both native and non-native speakers and teachers of English.

Prerequisite
From: LING 209.
To: none.

Cross-listing
From: LING 324.
To: LING 224.
3. Texas A&M University at Galveston

New Courses

BIOL 111. Introductory Biology. (3-1). Credit 4. First half of an introductory two-semester survey of contemporary biology that covers the chemical basis of life, structure and biology of the cell, molecular biology and genetics.

BIOL 112. Introductory Biology II. (3-1). Credit 4. The second half of an introductory two-semester survey of contemporary biology that covers evolution, history of life, diversity and form and function of organisms. Prerequisite: BIOL 111.

CAEN 102. Career Awareness. (2-0). Credit 2. Introduction to the concepts of career planning, employment trends, and methods of researching and preparing for the job market.

ENGL 338. American Ethnic Literature. (3-0). Credit 3. Multi-ethnic study of American Literature, the writings of Black Americans, American Indians, Mexican-Americans, Jewish Americans, as well as Euro-American ethnic groups. Prerequisite: ENGL 104.

GEOG 202. Geography of the Global Village. (3-0). Credit 3. Uses of resources, identification of problems pertaining to poverty, hunger, overpopulation, relations between nations and races, environmental destruction, and violence within the major geographic regions of the world.

MARB 200. Introduction to Marine Biology: The Sea World Experience. (3-3). Credit 4. Exploration of marine organisms, survey topics in vertebrate marine biology, and introduction to the role that aquatic oriented parks play in education, research, and conservation. Students will have hands-on experiences by participating in aspects of maintaining aquatic organisms in captivity including animal care and nutrition, physiology, behavior, animal training, and water quality. Exposure to marine organismal taxonomy, natural history, anatomy, and ecology. Prerequisite: BIOL 113 and 123 with a C or better average; 2.0 or better GPA; freshman or sophomore status, or instructor permission.


Course Changes

MARS 450. Electrical and Physical Measurements.

Course title
From: Electrical and Physical Measurements.
To: Principles of Marine Instrumental Analysis.

Course description
From: Study of basic instrumentation pertinent to marine sciences and biology as well as simple circuit body design and digital electronics. Laboratory emphasizes spectroscopy, environmental measurements, and basic oceanographic measurements.

To: Fundamental principles and practical applications for state-of-the-art analytical instrumentation applied to marine and environmental science; includes atomic and molecular spectroscopy, gas and liquid chromatography, radiochemistry, x-ray spectroscopy, mass spectrometry, and field instrumentation; students work with instruments and make presentations on them to the class.