Minutes of the Undergraduate Curriculum Committee
December 4, 2015
MSC, Room 1401

Members present: Tim Scott (Chair), College of Science; James Herman (Vice Chair), College of Veterinary Medicine and Biomedical Sciences; Bob Knight, College of Agriculture and Life Sciences; Leslie Feigenbaum, College of Architecture; Kisha Bryan, College of Education and Human Development; Prasad Enjeti, Dwight Look College of Engineering; Chris Houser, College of Geosciences; Nancy Street (for Steve Oberhelman), College of Liberal Arts; Brian Holland, College of Nursing; Glenn Jones, Texas A&M University at Galveston; Stephanie Graves, Texas A&M University Libraries; Kristin Harper (for Ann Kenimer), Undergraduate Studies; John Louis Bolch, Office of the Registrar; Jean Layne, Center for Teaching Excellence.

Guests: Nancy Klein, Department of Architecture; Gail Rowe, Department of Aerospace Engineering; Ashlea Schroeder, Department of Biological and Agricultural Engineering; John Keyser and Lynn Schlemeyer, Department of Computer Science and Engineering; Joe Horlen and Shelley Smith, Department of Construction Science; Ivan Damnjanovic, Department of Civil Engineering; Chris Cherry, College of Education and Human Development; Trez Jones, Department of Educational Administration and Human Resource Development; Aydin Karsilayan, Department of Electrical and Computer Engineering; Sally Kallina and Matthew Pariyothorn, Department of Engineering Academic and Student Affairs; Jay Porter, Department of Engineering Technology and Industrial Distribution; Craig Coates, Department of Entomology; Lori Greenwood, Paul Keiper and Alyssa Locklear, Department of Health and Kinesiology; Natarajan Gautam, Department of Industrial and Systems Engineering; Timothy Jacobs, Department of Mechanical Engineering; Ann Alexander, Department of Recreation, Park and Tourism Sciences; Steve Hague, Department of Soil and Crop Sciences; Tim McLaughlin, Department of Visualization.

The Undergraduate Curriculum Committee recommends approval of the following:

1. The minutes of the November 6, 2015 meeting.

2. New Courses

**AERO 451. Human Spaceflight Operations. (3-0). Credit 3.** Essential aspects of human spaceflight operations as performed by NASA; in-depth understanding of the state-of-the-art in spacecraft operations, including spacecraft systems, ground and launch operations, mission management and on-orbit activities such as science, robotics, spacewalking and human health maintenance; applications to future space systems. Prerequisite: Grade of C or better in AERO 321 or equivalent; senior classification.

**AGCJ 411. Audience and Communications Research Methods. (2-2). Credit 3.** Evaluation and implementation of research designs and methods used in audience and communications research; data collection methods and strategies, including interviews, observations, focus groups, surveys and content analyses, use of descriptive and comparative analyses to develop data-driven personas and recommendations for engaging target audiences. Prerequisite: Junior or senior classification.

**AGSC 305. Management of Supervised Agricultural Experiences. (3-0). Credit 3.** Overview of supervised agricultural experiences (SAEs) and content that can be used in the secondary agricultural science program; engagement in SAE programs; management practices for SAE projects including record keeping and student reports. Prerequisite: Junior or senior classification.

**ANSC 351. Current issues in Animal Agriculture. (3-0). Credit 3.** Preparation to project a professional image and the use of communication skills to describe animal agriculture; converse about the strengths and weaknesses of animal agriculture. Prerequisite: Junior or senior classification.

**ARAB 104. Intensive Beginning Arabic. (8-0). Credit 8.** Accelerated elementary language study, with oral, listening, reading and writing practice. Equivalent to ARAB 101 and ARAB 102.
ARAB 204. Intensive Intermediate Arabic. (6-0). Credit 6. Accelerated intermediate language study, with oral, listening, reading and writing practice. Equivalent to ARAB 201 and ARAB 202. Prerequisite: ARAB 102 or ARAB 104.

ARCH 281. Seminar in Contemporary Architecture. (1-0). Credit 1. Presentations by and discussions with professionals representing specialty areas related to environmental design through the Department of Architecture Lecture Series. May be taken four times for credit.

ARCH 353. History of Product Design. (3-0). Credit 3. History of product design in Europe and America including the relationship between designer and object, the relationship of design, industry and media over time and design criticism; focus on material/technical and typological approaches, comparative method and content analysis in context of original environment and social history. Prerequisite: Junior or senior classification or approval of instructor.

ARCH 381. Design Seminar. (1-0). Credit 1. Presentations by and discussions with professionals representing specialty areas related to architectural fabrication and product design. May be taken three times for credit. Prerequisite: Junior or senior classification or approval of instructor.

ATTR 201 Field Experience in Athletic Training I. (0-4). Credit 1. Field based experience in athletic training to provide on-the-job training designed to enhance and clarify career objectives; knowledge and skill development in professional behaviors, injury prevention and risk management. Prerequisite: Kinesiology majors.

ATTR 202. Field Experience in Athletic Training II. (0-4). Credit 1. Field based experience in athletic training to provide on-the-job training designed to enhance and clarify career objectives; knowledge and skill development in recognition and evaluation of common injuries and illnesses and their management. Prerequisite: ATTR 201.

ATTR 301. Field Experience in Athletic Training I. (0-4). Credit 1. Field based experience in athletic training to provide on-the-job training designed to enhance and clarify career objectives; knowledge and skill development in the treatment and rehabilitation of athletic injuries. Prerequisite: ATTR 202.

ATTR 302. Field Experience in Athletic Training II. (0-4). Credit 1. Field based experience in athletic training to provide on-the-job training designed to enhance and clarify career objectives; knowledge and skill development in athletic training administration; exploration of policy and position statements; professional development. Prerequisite: ATTR 301.

BAEN 484. Internship. No Credit. Practical experience working in a professional biological and agricultural engineering setting. May be taken three times. Prerequisite: Junior or senior classification; approval of the instructor.

BESC 311. International Perspectives on Environmental Issues. (3-0). Credit 3. Role of the United Nations and other institutions that promote international cooperation toward sustainable development goals; influence of cultural views on critical thinking about environmental issues, including population, water and agriculture, biodiversity and energy. Prerequisite: Junior classification or approval of instructor; must attend two mandatory pre-departure meetings.

CARC 181. First Year Seminar. (3-0). Credit 3. Seminar on various contemporary topics; introduction to high quality college instruction and research; focus on writing, speaking, exploration, discussion and
research. May be taken two times for credit. Prerequisite: First time in college and College of Architecture undergraduate studies.

**CHIN 405. Modern Chinese Fiction. (3-0). Credit 3.** Analysis of major Chinese literary and other prose works of the twentieth and twenty-first centuries; taught in English. May be taken two times for credit. Prerequisite: Junior or senior classification or approval of instructor.

**CHIN 465. Chinese Film. (3-0). Credit 3.** Consideration and analysis of major works and directors of Chinese film; interpretation of culture through film; relationship of film to history, literature and other arts; taught in English. May be taken two times for credit. Prerequisite: Junior or senior classification or approval of instructor. Cross-listed with FILM 465.

**CSCE 451. Software Reverse Engineering. (2-2). Credit 3.** Overview of the compilation mechanism to generate executable files and raw binary codes from source codes; executable file formats for an operating system to run the binary code; disassembly algorithms and control graph analysis; static and dynamic analyses; case studies on code obfuscation, codebreaking, malware analysis. Prerequisite: CSCE 313 or approval of instructor.

**COSC 202. Introduction to Housing. (3-0). Credit 3.** Overview of the social, economic, environmental and cultural impacts of housing on communities and nations; varied prospectives to understand the different facets of housing and their impacts on the human experience; critical thinking skills to gain knowledge and to be informed of housing choices.

**COSC 310. Design and Construction Leadership Education I. (1-0). Credit 1.** Promotion of personal leadership skills utilized within the design and construction professions; primary understanding and developing management skills with specific attention to developing personal attributes and skills necessary for achieving organizational goals. Prerequisites: CARC majors only pursuing the minor in leadership in the design and construction professions; junior or senior classification or approval of instructor.

**COSC 333. Project Management for Faculty Managers. (3-0). Credit 3.** Overview of project management for facility managers covering concepts and components of project management and their interrelationships in construction practice. Prerequisite: Minor in facility management; junior or senior classification or approval of instructor.

**COSC 410. Design and Construction Leadership Education II. (1-0). Credit 1.** Development of competencies in various leadership and management practices that are useful in an array of situations; emphasis on organizational leadership and management development with specific attention to intragroup relationships and techniques for achieving group goals. Prerequisites: COSC 310, CARC majors only pursuing the minor in leadership in the design and construction professions; junior or senior classification or approval of instructor.

**COSC 411. Seminar in Design and Construction Executive Leadership. (1-0). Credit 1.** Promotes an understanding of leadership and builds the capacity to understand and meet the challenges involved in developing and leading ethical and sustainable organizations in today's economy; examination of theory, conceptualizing, reflection and application; share experiences in everyday life and learn to predict outcomes based on theoretical models. Prerequisite: COSC 410; CARC majors only pursuing the minor in leadership in the design and construction professions; junior or senior classification or approval of instructor.

**CVEN 399. Mid-Curriculum Professional Development. No Credit.** Participation in an approved high-impact learning practice; reflection on professional outcomes from civil engineering body of
knowledge; documentation of experience appropriate to eventual professional licensure; self-assessment of learning at mid-curriculum point. Prerequisites: CVEN 207, CVEN 250, CVEN 303, CVEN 306, CVEN 311, CVEN 322, CVEN 345 and CVEN 363.

**ECEN 423. Computer and Wireless Networks. (3-0). Credit 3.** Fundamentals of wired and wireless computer networks, design and performance evaluations of wired and wireless networks, various unguided media characterizations and classifications/comparisons, digital-data representations/transmissions, error control, MAC protocols, routing, TCP/UDP/IP, wireless TCP, queuing-delay/loss modeling, IEEE 802.11 and its interconnections with Internet, and QoS provisioning over wired/wireless networks. Prerequisite: Grade of C or better in MATH 311; junior or senior classification.

**ECEN 484. Professional Internship. (1-0). Credit 1.** Professional internship in a private company, government agency or laboratory, university or organization to provide work and/or research experience related to the student’s major and career objectives. May be taken three times for credit. Prerequisites: Grade of C or better in ECEN 214 or ECEN 248; junior or senior classification; approval of instructor and internship agency.

**ENDS 108. Design and Visual Communication Foundations II. (1-12). Credit 5.** Approaches to problem identification and problem solving emphasizing human, physical and cultural factors influencing architectural design; understanding of space, materiality and tectonics in a human body scale; development of drawing methods with emphasis on analytical drawing; reinforcement of visual and verbal communication as applied to design processes. Prerequisite: ENDS 105 and ENDS 115.

**ENGL 305. Texas Literature. (3-0). Credit 3.** Examination of Texas literature, culture and multi-media; exploration of the development of Texas identities and responses to the rich cultural diversity within the state; topics vary from each section. Prerequisite: Junior or senior classification.

**ENGR 380. Seminar Series in Engineering Project Management. (1-0). Credit 1.** Presentations by practicing engineers and professionals addressing engineering project management process and practice; discussion forum to better understand the opportunities and challenges of engineering project management and the analytical tools and skills required to be successful. Must be taken on a satisfactory/unsatisfactory basis. Prerequisites: ENGR 333 or approval of instructor; junior or senior classification in the Dwight Look College of Engineering or biological and agricultural engineering (BAEN).

**ENGR 430. Fundamentals of Subsea Engineering. (3-0). Credit 3.** Orientation to subsea engineering fundamentals, including SURF (Subsea, Umbilicals/Controls, Risers, Flowlines) equipment and configurations; exposure to practical, industry focused problems; subsea equipment components; design considerations and design drivers; subsea production operations; integrity critical maintenance activities. Prerequisite: Junior or senior classification; enrolled in the Dwight Look College of Engineering or approval of instructor.

**ENTO 209. Veterinary Entomology Laboratory. (0-2). Credit 1.** Insects and their relatives causation of economic loss, impacts to well-being and transmission of disease pathogens to domestic and companion animals and wildlife, as well as health and well-being of humans through occupational or recreational exposure; laboratory emphasizes identification of major arthropod pests, use of microscopy and dissection equipment. Prerequisite: Concurrent enrollment with ENTO 208.

**FILM 465. Chinese Film. (3-0). Credit 3.** Consideration and analysis of major works and directors of Chinese film; interpretation of culture through film; relationship of film to history, literature and other
GEOG 391. Geodatabases. (3-1). Credit 3. GIS data modeling; introductory and advanced spatial SQL (structured query language); spatial database management system (DBMS) server setup, management and maintenance; spatial DBMS design, implementation, tuning, performance analysis and indexing; connecting spatial data services and warehouses to GIS software. Prerequisite: Junior or senior classification.

GEOL 102. Principles of Geology Laboratory. (0-2). Credit 1. Laboratory exercise-based introduction to the physical and chemical nature of the Earth and dynamic process that shape it; rock and mineral types; topographic and geologic maps; a complement to GEOL 101, but may be taken independently.

MATH 140. Mathematics for Business and Social Sciences. (3.0). Credit 3. Application of common algebraic functions, including polynomial, exponential, logarithmic and rational, to problems in business, economics and the social sciences; includes mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. No credit will be given for more than one of MATH 140, MATH 141 and MATH 166. Prerequisite: High school algebra I and II and geometry.

NRSC 350 Science of Mind and Brain. (3-0). Credit 3. Research in cognitive neuroscience; methodological advances that enable the study of the human brain safely in the laboratory; complex aspects of the mind like emotion, social behavior, and consciousness. Prerequisite: Junior or senior classification.

PHLT 484. Public Health Studies Field Experience. (3-0). Credit 3. On the job training in the area of public health studies industry; development of objectives and goals; evaluation by supervisor required. Prerequisites: Approval of instructor; junior or senior classification; public health major with a minimum overall 3.0 TAMU GPA.

PHYS 328. Experimental Physics II. (1-1). Credit 1. Laboratory experiments in modern physics and physical optics with an introduction to current, state-of-the-art recording techniques. Prerequisites: PHYS 225, PHYS 309, PHYS 327.

PHYS 416. Physics of the Solid State. (3-0). Credit 3. A survey of solid state physics; an introduction to crystal structures and the physics of electrons, lattice vibrations and photons; applications to semiconductors; magnetism; superconductivity; physics of nanostructures; brief introduction to selected current topics in condensed matter physics. Prerequisites: PHYS 304 and PHYS 412.

PSYC 350. Sciences of Mind and Brain. (3-0). Credit 3. Research in cognitive neuroscience; methodological advances that enable the study of the human brain safely in the laboratory; complex aspects of the mind like emotion, social behavior and consciousness. Prerequisite: Junior or senior classification. Cross-listed with NRSC 350.

SPAN 208. Spanish for Health Professionals I. (3-0). Credit 3. First half of a two-semester sequence for intermediate level Spanish; for those interested in careers in the health professions; presentation and practice of the most important basic communication functions in patient-provider interaction. Prerequisite: SPAN 102 or placement by exam.

SPAN 218. Spanish for Health Professionals II. (3-0). Credit 3. Second half of a two-semester course sequence for intermediate level Spanish; for those interested in careers in the health professions;
presentation and practice of the most important basic communication functions in patient-provider interaction. Prerequisite: SPAN 201, SPAN 208, or placement by exam with approval of instructor.

**SPAN 318. Oral Communication for Health Professionals. (3-0). Credit 3.** Development of advanced oral communication skills in Spanish within the context of the medical professions through discussion and study of health related and cultural issues relating specifically to the Latino/Hispanic community. Field trips, service learning, volunteering, interviews, impromptu speaking and formal presentations may be required. Prerequisite: Junior or senior classification or approval of instructor with placement exam, or SPAN 202 or SPAN 218.

**SPAN 407. Spanish-English Translation. (3-0). Credit 3.** Foundations of translation methodology, strategies and practice; rendering of literary and non-literary texts; ethics of translation; emphasis on translation into the first language. Prerequisite: 6 credits of upper division SPAN with a grade of B or better or approval of instructor.

**SPAN 417. Advance Spanish-English Translation. (3-0). Credit 3.** Expansion of translation practice and development of lexical and stylistic competence in specialized fields, including commercial, legal, medical, technical and scientific; mandatory service learning component included. Prerequisite: SPAN 407 with a grade of B or better or approval of instructor.

**SPMT 481. Seminar. (1-0). Credit 1.** A variety of topical seminars in communicating contemporary and historical sport management subjects designed to complement the curriculum in sport management. May be taken three times for credit. Prerequisite: Admission to the professional phase of the sport management program; junior or senior classification; or approval of instructor.

**VIBS 243. Introductory Mammalian Histology. (1-2). Credit 2.** Biological aspects of the human body by integrating histology and anatomy and physiology; emphasis on the transition of cell and tissue organization to organ systems that comprise mammalian organisms; builds upon concepts introduced in lower-level biology and builds a foundation to succeed in upper-level histology, anatomy and physiology.

**VIST 432. Applied Perception. (3-0). Credit 3.** An advanced introduction to perceptual science, including the cognitive, neural and evolutionary processes that undergird perceptual systems as well as the variety of perceptual factors that influence design decision. Prerequisite: Visualization major; junior or senior classification or approval of instructor.


3. Change in Courses

**AERO 291. Research.**

Variable credit hours

From: Credit 1 to 4.

To: Credit 0 to 4.
AERO 491. Research.

Variable credit hours
From: Credit 1 to 4.
To: Credit 0 to 4.


Prerequisites
From: ENDS 116 or approval of instructor.
To: None.


Prerequisites
From: Junior or senior classification, or approval of instructor; ENDS 106.
To: Junior or senior classification or approval of instructor; ARCH 216 or approval of instructor.

ARCH 433. Architectural Lighting.

Prerequisites
From: Junior or senior classification.
To: ARCH 335 or junior or senior classification in EDAS.

BMEN 428. Microcontrollers & Comm. in Medical Devices.

Lecture and lab contact hours
From: (3-0). Credit 3.
To: (2-3). Credit 3.

CHEN 204. Elementary Chemical Engineering.

Lecture and lab contact hours
From: (3-0). Credit 3.
To: (2-3). Credit 3.

Prerequisites
From: Admission to chemical engineering major or approval of instructor.
To: Grade of C or better in CHEM 102, CHEM 112, ENGR 112, MATH 152 and PHYS 218; admission to chemical engineering major; or approval of instructor.

COMM 475. Media and the Middle East.

Course number
From: COMM 475.
To: COMM 367.
ECEN 314. Signals and Systems.

Lab contact hours
From: (3-0). Credit 3.
To: (3-1). Credit 3.

ENGL 320. Technical Editing and Writing.

Course title
From: Technical Editing and Writing.
To: Technical and Professional Editing.

Course description
From: Clarifying, reducing, expanding and synthesizing such technical materials created by others as manuals, annual reports, and technical articles and reports; audience adaptation, invention, organization, style and mechanics explored.
To: Principles and techniques of technical editing for print and electronic media, including standards, style, copy-editing, comprehensive editing and project management.

ENGL 460. Writing for the Web.

Course title
From: Writing for the Web.
To: Digital Authoring Practices.

Course description
From: Integration of technology instruction and proven technical communication strategies for developing effective audience-appropriate websites (infrastructure, structure, content, design, and navigation); focus on rhetorical shifts of the Internet medium, as well as ethical, sociocultural and legal issues, including web accessibility.
To: Analysis and practice of authoring in digital environments, including individual and collaborative approaches, audience concerns, theoretical, ethical and stylistic issues; environments and topics may include web design, content management system (CMS), text encoding, project management, usability, version tracking, content authoring and accessibility.

ENGR 291. Research.

Variable credit hours
From: Credit 1 to 4.
To: Credit 0 to 4.

ENGR 491. Research.

Variable credit hours
From: Credit 1 to 4.
To: Credit 0 to 4.
ENTO 208. Veterinary Entomology.

Lab contact hours and semester credit hours
From: (2-2). Credit 3.
To: (2-0). Credit 2.

Course description and prerequisites
From: Classification, biology and control of insects and other arthropods associated with livestock and poultry production; identification emphasized in laboratory.
To: Insects and their relatives causation of economic loss, impacts to well-being and transmission of disease pathogens to domestic and companion animals and wildlife as well as health and well-being of humans through occupational or recreational exposure; insect biology, economic importance and principles and methods of prevention and control.

GEOG 203. Plant Earth.

Lab contact hours
From: (3-0). Credit 3.
To: (3-1). Credit 3.


Prerequisites
From: GEOG 361 and GEOG 475 or equivalents, or approval of instructor; junior or senior classification.
To: GEOG 361, GEOG 390, GEOG 475; CSCE 110 or CSCE 111.

GEOG 484. Internship.

Course description
From: Directed internship in a private firm, government agency, or non-governmental organization to provide work experience related to the student's degree program and career objectives. May be taken 2 times for credit.
To: Directed internship in a private firm, government agency or non-governmental organization to provide work experience related to the student's degree program and career objectives.


Lab contact hours
From: (3-0). Credit 3.
To: (3-1). Credit 3.

JOUR 304. Editing for the Mass Media.

Lecture and lab contact hours
From: (2-2). Credit 3.
To: (3-0). Credit 3.
Course description and prerequisites
From: Principles and practice of editing including: improving and tightening print and broadcast copy; writing headlines, titles and subheads; photo editing and cutlines; graphics and layout. Prerequisites: JOUR 203, junior or senior classification and enrollment in journalism minor; or approval of program director.*To: Principles and practice of editing including: improving and tightening text; writing headlines, titles and subheads; self-editing and editing others; tailoring texts for specific audiences; understanding style guides. Prerequisites: Junior or senior classification; or approval of program director.

KINE 223. Introduction to the Science of Health and Fitness.

Course description
From: Overview of the human body systems; interdisciplinary focus on wellness, fitness, nutrition, disease, drug use; integrated physical activity centering on principles and applications of conditioning; collect data, evaluate information, formulate plans based on findings; experience with pedometers, heart rate monitors, bioelectrical impedance devices, software and other technology. Not open to students who have taken KINE 120.

To: Overview of the human body systems; interdisciplinary focus on wellness, fitness, nutrition, disease, drug use; integrated physical activity centering on principles and applications of conditioning; collect data, evaluate information, formulate plans based on findings; experience with pedometers, heart rate monitors, bioelectrical impedance devices, software and other technology.

LAND 200. Introduction to Landscape Architectural Practice.

Course number
From: LAND 200.
To: LAND 101.

Cross-listing
From: Cross-listed with URPN 200.
To: Cross-listed with URPN 101.

LAND 254. Landscape Architecture Communications I.

Course number
From: LAND 254.
To: LAND 111.

LAND 255. Landscape Architectural Communications II.

Course number
From: LAND 255.
To: LAND 112.

LAND 318. Landscape Design I.

Course number
From: LAND 318.
To: LAND 211.
**LAND 319. Landscape Design II.**

Course number
- From: LAND 319.
- To: LAND 212.

**LAND 320. Landscape Design III.**

Course number
- From: LAND 320.
- To: LAND 311.

Course description
- From: Design process, synthesis and design refinement; problems to stimulate highly creative self-motivated results, design thinking to integrate behavioral settings into natural and/or built landscape systems.
- To: Design process, sustainable landscape design, synthesis and design refinement; problems to stimulate highly creative self-motivated results, design thinking to integrate behavioral settings into natural and/or built landscape systems.

**LAND 321. Landscape Design IV.**

Course number
- From: LAND 321.
- To: LAND 312.

Course description
- From: Continuation of LAND 320; land design projects of increased complexity with site scale problems used to demonstrate complete design thought. One or more field trips may be required as part of the course.
- To: Continuation of LAND 311; land design projects of increased complexity and emphasis on sustainability, with site scale problems used to demonstrate complete design thought. One or more field trips may be required.

**LAND 330. Landscape Construction II.**

Course number
- From: LAND 330.
- To: LAND 232.

**LAND 421. Landscape Design VI.**

Course number
- From: LAND 421.
- To: LAND 412.
Course description
From: Advanced study and research designed to take the student beyond the core design experience; introduction of issues, methodologies, tools and techniques developing in professional practice.
To: Capstone studio; advanced study and research designed to go beyond the core design experience; introduction of issues, methodologies, tools and techniques developing in professional practice.

LAND 442. Professional Practice.

Course number
From: LAND 442.
To: LAND 431.

MATH 141. Business Mathematics I.

Course title
From: Business Mathematics I.
To: Finite Mathematics.

Course description
From: Linear and quadratic equations and applications; functions and graphs, systems of linear equations, matrix algebra and applications, linear programming, probability and applications, statistics. No credit will be given for more than one of MATH 141 and MATH 166.
To: Linear equations and applications; systems of linear equations, matrix algebra and applications, linear programming, probability and applications, statistics. No credit will be given for more than one of MATH 140, MATH 141 and MATH 166.

MATH 142. Business Mathematics II.

Course title
From: Business Mathematics II.
To: Business Calculus.

Prerequisites
From: High school algebra I and II and geometry or satisfactory performance on a qualifying examination
To: MATH 140 or equivalent or acceptable score on Texas A&M University math placement exam.

MATH 166. Topics in Contemporary Mathematics II.

Course description
From: Finite mathematics, matrices, probability and applications. No credit will be given for more than one of MATH 141 and MATH 166.
To: Finite mathematics, matrices, probability and applications. No credit will be given for more than one of MATH 140, MATH 141 and MATH 166.
MEEN 357. Engineering Analysis for Mechanical Engineers.

Prerequisites
From: ENGR 112 and MATH 308.
To: ENGR 112 and MATH 308; MEEN 210 or concurrent enrollment.

MEEN 360. Materials and Manufacturing Selection in Design.

Prerequisites
From: MEEN 222, MEEN 260; CVEN 305; junior or senior classification; or approval of instructor.
To: MEEN 210, MEEN 222, MEEN 260; CVEN 305; junior or senior classification.

MEEN 363. Dynamics and Vibrations.

Prerequisites
From: MEEN 225; MATH 308; MEEN 357 or CVEN 302, or registration therein; CVEN 305 or registration therein.
To: MEEN 225; MATH 308; MEEN 357 or concurrent enrollment; CVEN 305 or concurrent enrollment.

OCNG 251. Oceanography.

Lab contact hours
From: (3-0). Credit 3.
To: (3-1). Credit 3.

PHYS 327. Experimental Physics I.

Lecture and lab contact hours and semester credit hours
From: (2-3). Credit 3.
To: (1-2). Credit 2.

SCMT 340. Supply Chain Management.

Course title
From: Supply Chain Management.
To: Global Supply Chain Management.

Course description
From: Focus on the integrated management of the total product delivery system; purchasing, inventory management and distribution functions, with emphasis on materials and information flows.
To: Extend knowledge of basic concepts of transportation and logistics to specialized situations in international business in order to understand (a) the international trade and commercial environment, (b) exporting and importing documentation and procedures and (c) operations involving international shipping and transportation.
SCSC 305. Production Agronomy Experience.

Course title
From: Production Agronomy Experience.
To: Professional Development in Agronomy.

Course description
From: Agronomy industry practices related to crop production; site visits in Texas and in the Mississippi Delta include a review of farming equipment, conservation agriculture practices, agro-chemical distribution and sales, grain product processing and distribution and on-farm management techniques.
To: Enhancement of human relation skills related to a career in soil and crop sciences; field trip to Mississippi to interact with leadership from a global agricultural company; on-campus experiences to improve effective learning practices, job seeking and retention and setting and achieving near-term and long-term professional goals.

SCSC 312. Introductory Turfgrass Management Laboratory.

Course title
From: Introductory Turfgrass Management Laboratory.
To: Professional Development in Turfgrass.

Course description
From: Fundamentals of turfgrass anatomy, growth habit, identification and characteristics of cool- and warm-season turfgrass species; understanding of seed quality and labeling, pesticide safety, handling, and application, and fertilizer sources, safety, and application; specialized equipment used in the turfgrass industry.
To: Includes but not limited to fertilizer, pesticide, irrigation calculations; turfgrass, insect and weed identification and management, soils and rootzone construction; irrigation system operation and auditing; sprayer and spreader operation and calibration; builds upon and allows application of information obtained in SCSC 302; designed to better prepare those intending to compete in the GCSAA and STMA Collegiate Turf Bowl competitions.

SPMT 482. Seminar.

Course title
From: Seminar.
To: Professional Writing Seminar.

Course description
From: Acquaint students with current research and the research process in their chosen field of study (sport management). May be taken 4 times for credit.
To: Acquaint students with a primary means of communicating contemporary research in sport management; extensive readings, intensive writings and an oral presentation designed to complement the curriculum in sport management by introducing the application of sport management research to organizational decision making.


Course title
4. Change in Curriculum

**College of Agriculture and Life Sciences**
- Department of Biological and Agricultural Engineering
  - BS in Agricultural Systems Management

- Department of Nutrition and Food Science
  - BS in Food Science and Technology – Food Science Option
  - BS in Food Science and Technology – Industry Option

**College of Architecture**
- Department of Architecture
  - BED in Environmental Design Architectural Studies

- Department of Construction Science
  - Minor in Facility Management

- Department of Visualization
  - Minor in Art

**Mays Business School**
- Minor in Business Administration

- Department of Information and Operations Management
  - BBA in Management Information Systems
  - BBA in Supply Chain Management

**College of Education and Human Development**
- Department of Health and Kinesiology
  - BS in Health – Allied Health Track

  - Minor in Sport Management

**Dwight Look College of Engineering**
- Department of Computer Science and Engineering
  - BS in Computer Science

- Department of Engineering Technology and Industrial Distribution
  - BS in Manufacturing and Mechanical Engineering Technology

- Department of Engineering Technology and Industrial Distribution
  - BS in Industrial Distribution

- Department of Industrial and Systems Engineering
  - Minor in Industrial Engineering
**College of Geosciences**
- BS in Environmental Geosciences
- BS in Environmental Studies
- Minor in Climate Change
- Minor in Earth Sciences
- Minor in Environmental Geosciences

**Department of Geography**
- BS in Geographic Information Science and Technology
  - All tracks

**Department of Oceanography**
- BS in Environmental Geosciences and MS in Oceanography – 3+2

**Department of Geology and Geophysics**
**Department of Oceanography**
- BA in Geology and MS in Oceanography – 3+2
  - BS in Geology and MS in Oceanography – 3+2

**Department of Atmospheric Sciences**
**Department of Oceanography**
- BS in Meteorology and MS in Oceanography – 3+2

**College of Liberal Arts**
- Minor in Liberal Arts Honors

**Department of Communication**
- BA in Communication
  - BA in Telecommunication Media Studies
  - BS in Telecommunication Media Studies

**Department of History**
- BA in History

**Department of Sociology**
- BA in Sociology
  - BA in Sociology and MPSA – 3+2
  - BS in Sociology
  - BS in Sociology and MPSA – 3+2
- Minor in Latina/o and Mexican-American Studies
College of Science
Department of Mathematics
BS in University Studies - Mathematics for Business Concentration

BS in University Studies - Mathematics for Teaching

5. Texas A&M University at Galveston

a. New Courses

DIVE 250. SCUBA Diving I. (2-2). Credit 3. Fundamental academic knowledge and practical application of SCUBA diving practices and theory; introduction to diving tables and diving physiology. Prerequisite: Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination.

DIVE 251. SCUBA Diving II. (2-2). Credit 3. Methods to promote safe, self-reliant diving and improve the diver's comfort, coordination and strength in the water; to build competency in dive planning and organization. Prerequisite: Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination; open water certification from a nationally recognized agency; Divers Alert Network (DAN) insurance or equivalent.

DIVE 330. Rescue Diving. (2-2). Credit 3. Relates skills necessary to perform basic life support, administer dive first aid, evacuate victim, assist and rescue other divers in water; illustrate proper dive planning; practice accident prevention and effective accident management. Prerequisites: Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination; certification as a SDI SCUBA diver or equivalent; Divers Alert Network (DAN) diving accident insurance or equivalent.

DIVE 331. Alternative Diving Technology. (2-2). Credit 3. Illustrates the realities of operating in the scientific, public safety and military diving disciplines; practice real world training scenarios involving multiple aspects of each of the three fields. Prerequisites: Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination (or AAUS physical if rating with AAUS); certification as an Advanced and Rescue Diver or equivalent; Divers Alert Network (DAN) diving accident insurance or equivalent; junior or senior classification or approval of instructor.

DIVE 357. Dive Leadership – Divemaster. (2-2). Credit 3. Examines divemaster-level dive knowledge, dive leadership theory and application, presentations skills, physical diving skills, logistics and planning, and operational execution; develops a multi-environment capable diving leader. Prerequisites: Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination; certification as a SDI Advanced SCUBA Diver and SDI SCUBA Rescue Diver or equivalent; 60 varied dives logged; current certifications in First Aid, CPR and Emergency Oxygen Administration; Divers Alert Network (DAN) diving accident insurance (or equivalent); junior or senior classification or approval of instructor.

DIVE 457. Dive Leadership – Instructor. (2-2). Credit 3. Apply effective methods to teach skin and SCUBA diving in compliance with training agency instructional standards; evaluate instructional level dive knowledge, water skills and presentation performance in accordance with training agency teaching standards. Prerequisites: Recreational SCUBA diver's medical evaluation; certification as a
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SCUBA divemaster or equivalent; 100 varied dives logged; current certification in First Aid, CPR and Emergency Oxygen Administration; Divers Alert Network (DAN) diving accident insurance or equivalent; junior or senior classification or approval of instructor.

b. Withdrawal of Courses

MAST 110. Scuba Lecture.
MAST 120. Scuba II Lecture.
MAST 331. Alternate Diving Technology.
MAST 357. Diving Leadership-Divemaster.
MAST 457. Dive Leadership-Dive Instructor.

c. Change in Course

MASE 319. Naval Architecture Design I.

Prerequisites
From: CVEN 311, CVEN 345; MASE 221, MASE 214. Junior or senior classification or approval of instructor. Enrollment in OCSE major degree sequence.
To: CVEN 311 and CVEN 345 or concurrent enrollment; MASE 221 and MASE 214 or concurrent enrollment; junior or senior classification or approval of instructor; enrollment in OCSE major degree sequence.

CIP code
From: 1424010006.
To: 1422010006.

6. Texas A&M University at Galveston

d. Change in Curriculum

Texas A&M University at Galveston
Department of Liberal Studies
Minor in Diving Technology and Methods

Department of Marine Biology
BS in Marine Biology – License Option

7. Special Consideration

College of Agriculture and Life Sciences
Department of Recreation, Park and Tourism Sciences
BS in Community Development
Request to discontinue degree program

College of Architecture
Department of Architecture
Minor in Architectural Fabrication and Product Design
Request for a new minor
Department of Construction Science
   Minor in Leadership in the Design and Construction Professions
   Request for a new minor

Department of Visualization
   Minor in Game Design and Development
   Request for a new minor

College of Education and Human Development
   Department of Health and Kinesiology
   BS in Kinesiology and MS in Athletic Training
   Request for a new 3+2 program

Dwight Look College of Engineering
   Minor in Cybersecurity
   Request for a new minor

   Minor in Engineering Project Management
   Request for a new minor

   Department of Computer Science and Engineering
   Minor in Game Design and Development
   Request for a new minor

8. New Courses – from November 2015 UCC Meeting

   **AGSM 284. Internship. No Credit.** Practical experience working in a professional agricultural systems management setting. May be taken three times. Prerequisite: Freshman or sophomore classification; approval of the instructor.

   **AGSM 484. Internship. No Credit.** Practical experience working in a professional agricultural systems management setting. May be taken three times. Prerequisite: Junior or senior classification; approval of the instructor.

   **BAEN 284. Internship. No Credit.** Practical experience working in a professional biological and agricultural engineering setting. May be taken three times. Prerequisite: Freshman or sophomore classification; approval of the instructor.

9. Tabled Items

   **New Course**
   AGE 416 (cross-listed with GEOS 416) – The College of Geosciences requested the course be tabled in order to continue discussions on the proposed new courses and the certificate associated with the courses.

10. Pulled Items

   **Special Consideration**
   College of Science, Department of Biology, new Minor in Bioinformatics - The College of Science withdrew the minor to continue discussions about the proposed new minor with other colleges.