Minutes of the Undergraduate Curriculum Committee
December 8, 2011
101A General Services Complex

Members present: Robert Knight (Chair), College of Agriculture and Life Sciences; Tim Scott (Vice-Chair), College of Science; Christine Bergeron, College of Education and Human Development; John Tyler, Dwight Look College of Engineering; Sarah Bednarz, College of Geosciences; Mike Stephenson, College of Liberal Arts; Michael Wesson (for Liesl Wesson), Mays Business School; Daniel Xiao, Texas A&M University Libraries; Glenn Jones, Texas A&M University at Galveston; Jim Kracht (for Lesia Crumpton-Young), Undergraduate Studies; James Herman, College of Veterinary Medicine and Biomedical Sciences; Dale Rice, Core Curriculum Council.

Guests: April Place, Department of Agricultural Leadership, Education, and Communications; Fidel Fernandez, Department of Biomedical Engineering; Nancy Street, Department of Communication; Joyce Nelson and Avery Pavliska, Department of Educational Administration and Human Resource Development; Steve Wright, Department of Electrical and Computer Engineering; Matt Whiteacre, Department of Engineering Technology and Industrial Distribution; Cecelia Hawkins, Department of English, Don Collins, Environmental Programs in Geosciences; Stefanie Harris, Department of European and Classical Languages and Cultures; Richard Curry, Department of Hispanic Studies; Rebecca Hartkopf Schloss, Department of History; Jon Jasperson, Department of Information and Operations Management; Ming-Han Li, Department of Landscape Architecture and Urban Planning; Terry Creasy, Harry Hogan and David Staack, Department of Mechanical Engineering; Lt. Donald Cantrell and Col. Gerry Smith, Naval ROTC; Marna Billiter, Department of Nuclear Engineering; Igor Roshchin, Department of Physics and Astronomy ; David Appel, Charles Kenerley and Sam Murdock, Department of Plant Pathology and Microbiology; Donnalee Dox, Religious Studies Program; Kenita Rogers, College of Veterinary Medicine and Biomedical Sciences; Amanda Schwede, Department of Wildlife and Fisheries Sciences.

The Undergraduate Curriculum Committee recommends approval of the following:

1. The minutes of the November 16, 2011 meeting.

2. New Courses

ALEC 450. Global Social Justice Issues in Agriculture. (3-0). Credit 3. An in-depth evaluation of global social justice issues and leadership skills necessary to effectively solve and manage issues in agricultural development; topics include awareness, knowledge and understanding of teaching, research and service opportunities for those seeking careers in global social justice and agricultural leadership. Prerequisite: Junior or senior classification or approval of instructor.

ALEC 494. Internship. Credit 1 to 6. Supervised internship and independent study related to the student's professional interest. May be taken six times for credit. Prerequisites: Junior or senior classification; approval of departmental advisor.

ANTH 323. Nautical Archaeology of the Mediterranean. (3-0). Credit 3. The archaeology of ancient seafaring in the Mediterranean from the Stone Age through the Roman Empire. Prerequisite: Junior or senior classification.

ANTH 360. Ancient Civilizations of the World. (3-0). Credit 3. Explores recent discoveries and efforts by archaeologists to understand the rise and fall of states and civilizations that emerged in the Near East, Africa, India, Europe, China, Mesoamerica, and Peru between 3500 BCE and 1500 CE. Prerequisite: Junior or senior classification.

ANTH 412. Archaeological Theory. (3-0). Credit 3. History of scientific archaeological exploration; major theoretical paradigms and movements in archaeological theory; current trends in archaeology; intellectual developments from other disciplines that influenced archaeological thought. Prerequisites: Junior or senior classification, ANTH 202 or approval of instructor.

ANTH 418. Romans, Arabs, and Vikings—Seafaring in the Mediterranean during the early Christian Era. (3-0). Credit 3. Examination of seafaring, maritime commerce, naval affairs, and shipbuilding in the Mediterranean from the late Roman Period until the fall of Constantinople in 1453. Prerequisite: Junior or senior classification.

ANTH 434. Human Evolutionary Ecology II: Reproduction and Parenting. (3-0). Credit 3. Evolutionary ecology perspective on family-formation patterns, sexuality, reproduction and parenting of humans throughout the life course and across different cultures; part of a Human Evolutionary Ecology series along with ANTH 424. Prerequisites: Junior or senior classification; ANTH 201, ANTH 205, or ANTH 424.

ANTH 440. Studies in Globalization. (3-0). Credit 3. Selected issues on the anthropology of globalization such as the impact of global circulations of media, money and people on local cultures, identities and politics, migration and political economy. May be taken three times for credit. Prerequisites: Junior or senior classification or approval of instructor.

ANTH 445. Studies in African Diaspora. (3-0). Credit 3. Examination of topics related to global African diaspora including African descent populations outside of Africa wherever found (the Americas, the Caribbean, Europe, Asia, etc.); construction of blackness in Latin America; diversity of past and present African descent populations in the Old World; social and political mobilization; religion; popular culture; cultural politics; politics of identity. May be taken three times for credit. Prerequisite: Junior or senior classification.

ANTH 461. Environmental Archaeology. (3-0). Credit 3. Exploration of the paleoecological context in which past humans interacted with the natural environment encompassing plants, animals and landscape; advanced method, theory and applications in paleoenvironmental reconstruction. Prerequisites: ANTH 202 or approval of instructor; junior or senior classification.

BIOL 350. Computational Genomics. (2-2). Credit 3. Hands-on approach to obtaining, organizing and analyzing genome-related data; emphasis on asking and answering biologically relevant questions by designing and performing experiments using computers; understanding biology from a computational perspective. Prerequisite: Junior or senior classification in life sciences, engineering, mathematics, chemistry.

BIOL 400. Tropical Ecology Costa Rica. (2-12). Credit 6. Advanced field course taught at multiple field stations in Costa Rica; emphasis on biological, ecological, natural history and philosophical attributes of tropical ecosystems; includes planning and conducting a field-oriented research project, and presentation of results. Prerequisites: BIOL 300 and approval of instructor; junior or senior classification.

BMEN 427. Magnetic Resonance Engineering. (2-3). Credit 3. Design, construction and application of instrumentation for MR imaging; fundamentals of the architecture of an MR spectrometer and the gradient subsystem used for image localization; emphasis on the radiofrequency sensors and systems used for signal generation and reception. Prerequisites: BMEN 420, ECEN 410, ECEN 411, or approval of instructor; junior or senior classification. Cross-listed with ECEN 463

COMM 437. Visual Communication. (3-0). Credit 3. Critical analysis of visual communication including photographs, advertising, memorials, tattoos, comics, public protest. Prerequisite: Junior or senior classification.

COMM 471. Media, Health and Medicine. (3-0). Credit 3. Analysis and evaluation of representations of health in media; examination of gender, class and race as they intersect with health issues. Prerequisite: Junior or senior classification.

ECEN 463. Magnetic Resonance Engineering. (2-3). Credit 3. Design, construction and application of instrumentation for MR imaging; fundamentals of the architecture of an MR spectrometer and the gradient subsystem used for image localization; emphasis on the radiofrequency sensors and systems used for signal generation and reception. Prerequisites: BMEN 420, ECEN 410, ECEN 411, or approval of instructor; junior or senior classification. Cross-listed with BMEN 427.

ECEN 465. Experimental Optics. (2-7). Credit 4. In-depth study of experimental optic techniques; opto-mechanical assemblies; passive optics; interferometers; opto-electronics; basic op-amp circuits; feedback and control of optics with electronics. Prerequisite: Junior or senior classification or approval of instructor.

ENTC 333. Product Development. (1-3). Credit 2. Process of product development to create an idea; development of a business plan; market research; voice of customer; managing resources; project management; identifying product partners; creating a unique product and/or company. Prerequisite: Admission to upper level in electronics engineering technology.

HISP 201. Current Issues in Hispanic Studies. (1-0). Credit 1. Exploration of current issues and concerns in Hispanic Studies through attendance and participation in Hispanic Studies-related events and lectures by noted academics and professionals in Hispanic Studies; in-class discussions. May be taken three times for credit. Must be taken on a satisfactory/unsatisfactory basis. Prerequisite: ENGL 104.

HISP 205. Don Quixote and the Other Arts. (3-0). Credit 3. A study of Miguel de Cervantes' masterwork, Don Quixote, and its representations in other arts such as painting, film and music. Taught in English. Prerequisite: ENGL 104

HISP 206. Food in the Hispanic World. (3-0). Credit 3. A study of food, food preparation and consumption in the Hispanic world from historical, geographical, artistic, social and psychological perspective. Taught in English. Prerequisite: ENGL 104.

JOUR 455. Literary Nonfiction. (3-0). Credit 3. Explores the art of writing literary nonfiction, a major trend in 21st century journalism; examines several forms of literary nonfiction, including personal essay, memoir, historical biography and modern narrative: to be written in each form; provides extensive workshop experience; emphasizes the value of critiques, self-editing and revision. Prerequisite: Junior or senior classification or approval of instructor.

MATH 437. Principles of Numerical Analysis. (3-3). Credit 4. Mathematical principles of numerical analysis and their application to the study of particular methods; fixed-point iteration, Newton's method; normed vector spaces and operators, Schur decomposition, convergent matrices, minimization methods, conjugate gradient method; polynomial interpolation of Lagrange and Hermite; best approximation, Bernstein and Weierstrass Theorems, numerical quadrature. Prerequisites: MATH 304, MATH 309, MATH 311, or MATH 323; MATH 308; MATH 409; ability to program; junior or senior classification.

MEEN 361. Materials and Manufacturing in Design Laboratory. (0-3). Credit 1. Experiments in materials characterization and manufacturing processes; emphasis on material mechanical properties; microstructure production and control; manufacturing processes for producing various shapes for components and structures. Prerequisites: MEEN 222, MEEN 260; CVEN 305; MEEN 360 or registration therein; junior or senior classification or approval of instructor.

MEEN 417. Basics of Plasma Engineering and Applications. (3-0). Credit 3. Basic plasma properties and confinement techniques; single particle orbits in electric and magnetic fields, moments of Boltzmann equation and introduction to fluid theory; wave phenomena in plasmas and introduction to plasma kinetic theory; analysis of laboratory plasmas and plasma applications including fusion, electric propulsion, materials processing and plasmas enhanced chemistry. Prerequisites: PHYS 208 or equivalent; senior classification in nuclear, mechanical or aerospace engineering, physics, or approval of instructor. Cross-listed with NUEN 417.

PHYS 102. Freshman Physics Orientation II. (1-0). Credit 1. Critical thinking skills and problem solving in physics: time management and teaming skills. For physics majors. Registration by non-majors requires approval of instructor. Prerequisites: PHYS 101, PHYS 208 or registration therein; MATH 172 or registration therein; or approval of instructor.

PHYS 444. Art of Communication in Physics I: Communicating Science to Scientists. (2-0). Credit 2. Communication in physics, communicating physics to scientists, scientific presentations; scientific writing; information retrieval; reading technical publications. Prerequisite: Knowledge of oral and written English; junior or senior classification.

PHYS 445. Art of Communication in Physics II: Communicating Science to Non-Scientists. (1-0). Credit 1. Communication in physics, communicating physics to scientists, scientific presentations; scientific writing; job and graduate school application; job interview. Prerequisites: PHYS 444; knowledge of oral and written English; junior or senior classification.

VIST 442. Digital Characters: Art, Technology, Uses and Meaning. (3-0). Credit 3. Examination of the art and technology employed in the creation of digital characters; exploration of the reasons for, and impact of, their use in popular media and science; digital character creation techniques; estimating performance requirements; visual examples and written work used to illustrate topics and application areas. Prerequisite: Junior or senior classification.

VMID 927. Community Connections. (0-35). Credit 2. Clinical rotation emphasizing the veterinarian's role in their local community; focus on relationships with shelter organizations and disaster preparedness training. Prerequisite: Enrollment in the fourth year of the professional curriculum.

WFSC 433. Molecular Ecology in Wildlife and Fisheries. (3-0). Credit 3. Fundamentals of molecular ecology applied to conservation and management of wildlife and fisheries; presentation and discussion of scientific papers on wildlife and fisheries molecular ecology; topics in conservation, management and aquaculture. Prerequisites: BIOL 112 or equivalent; junior or senior classification.

3. Change in Courses

AGEC 484. Internship.

Prerequisite
From: See an advisor in Room 331 Blocker.
To: See an advisor in Room 214 AGLS Building.

Variable credit hours
From: Credit 1 to 3.
To: Credit 1 to 6.

AGEC 485. Directed Studies.

Prerequisite
From: See an advisor in Room 331 Blocker.
To: See an advisor in Room 214 AGLS Building.

Variable credit hours

From: Credit 1 to 3.
To: Credit 1 to 6.

AGEC 491. Research.

Prerequisite
From: Junior or senior classification or approval of department head; see an advisor in Room 331 Blocker.
To: Junior or senior classification and approval of department head; see an advisor in Room 214 AGLS Building.

Variable credit hours
From: Credit 1 to 4.
To: Credit 1 to 6.

ANTH 424. Introduction to Human Evolutionary Ecology.

Course title
From: Introduction to Human Evolutionary Ecology.
To: Human Evolutionary Ecology I: Culture, Cooperation and Subsistence.

Course description
From: An introduction to the field of human evolutionary ecology. Examines human behavioral adaptation through the application of evolutionary theory in an ecological context; emphasizes interdisciplinary, scientific methodologies.
To: Examines evolutionary perspective to explore culture, cooperation and sociality, and subsistence behaviors across a wide variety of human cultures; part of the Human Evolutionary Ecology series along with ANTH 434.

ASTR 119. Big Bang and Black Holes: Laboratory Methods.

Prerequisites
From: Concurrent registration in ASTR/PHYS 109 is recommended.
To: ASTR/PHYS 109 or registration therein.

BIOL 358. Ecology Laboratory.

Course description
From: Analysis of freshwater, marine and terrestrial ecosystems; field studies emphasized.
To: Quantitative analyses of freshwater and terrestrial ecosystems; includes data sampling and presentation of results in written and oral formats; required fieldtrips; analysis of competition and predator-prey interactions using ecological models.

Prerequisites
From: BIOL 112 or instructor approval.
To: BIOL 357 or concurrent enrollment; junior or senior classification.

CHEM 102. Fundamentals of Chemistry II.

Prerequisites
From: CHEM 101, 111 or their equivalent.
To: CHEM 101 or CHEM 107 or their equivalent.

CHEM 112. Fundamentals of Chemistry Laboratory II.

Prerequisites
From: CHEM 101, 111; CHEM 102 or registration therein.
To: CHEM 101 and 111 or equivalent; CHEM 102 or registration therein.

CHEM 238. Organic Chemistry Laboratory.

Prerequisites
From: CHEM 228 or registration therein; CHEM 237.
To: CHEM 228 or registration therein; CHEM 237 or CHEM 231.

COMM 230. Communication Technology Skills.

Course description
From: Introduction to new technologies, including Internet, teleconferencing and videoconferencing; addresses communication in web page design; teleconferences and videoconferences and emerging communication technologies.

To: Introduction to interactive media and media literacy skills in the digital domain; survey of technology histories, standards and markets for industries such as multichannel TV, digital radio, video games, streaming media, epublishing, teleconferencing and social networking.

Prerequisites
From: Speech Communication or telecommunication media studies majors.
To: Communication or telecommunication media studies majors.

EHRD 408. Diversity Issues and Practices in HRD.

Course title
From: Diversity Issues and Practices in HRD.
To: Globalization and Diversity in the Workplace.

Course description
From: Intended to help educators in HRD contexts to identify and understand diversity issues in work and community settings; emphasis on application of knowledge to professional practice of employees, educators, trainers, and managers in HRD context.
To: Assist learners in the identification and understanding of globalization and diversity issues in learning, work and community; exploration of current issues, theories, trends and policy issues.

ENGL 221. World Literature.

Course description
From: Representative works in translation of major authors and texts from various cultures to A. D 1500, including such authors as Homer, biblical writers, Greek dramatists, Sappho, Virgil, Marie de France, Dante, Lao Tzu, and works like Gilgamesh, and The Bhagavad Gita.
To: Survey of world literature from the ancient world through the sixteenth century in relation to its historical and cultural contexts; texts selected from a diverse group of authors, traditions and genres.

ENGL 222. World Literature.

Course description
From: Representative works in translation of major authors from A.D. 1500 to the present from various cultures, including such authors as Cervantes, Moliere, Goethe, Tolstoy, Mahfouz, Munif, Achebe, Tolstaya, Vargas Llosa and Duras.
To: Survey of world literature from the seventeenth century to the present in relation to its historical and cultural contexts; texts selected from a diverse group of authors, traditions and genres.

ENGL 227. American Literature: Colonial to American Renaissance.

Course title
From: American Literature: Colonial to American Renaissance.
To: American Literature: The Beginnings to Civil War.

Course description

From: Literature of the Puritans, revolutionaries, literary nationalists and romanticists; the artist in a frontier society and the development of a native literature; includes such writers as Bradstreet, Edwards, Poe, Hawthorne, Melville, Thoreau, Emerson and Whitman.
To: Representative writers, genres and movements of the period.

ENGL 232. Survey of English Literature II.

Course description
From: Literature of England from the late 18th century to the 20th century, including such authors as the Romantics, Austen, the Brownings, the Brontes, Dickens, Seacole, Tennyson, Wilde, Conrad, Joyce, Woolf and Lawrence.
To: Literary works from the late 18th century to the 21st century by authors in Great Britain and its colonies.

ENGL 321. Nineteenth-Century Literature (Romantic).

Course description
From: Period course in English poetry and prose of the Romantic Movement, including such writers as Blake, Wordsworth, Coleridge, Byron, Percy Bysshe Shelley, Keats, Mary Shelley, Charlotte Smith, Hunt, Lamb, Hazlitt, and Austen.
To: Representative English texts generated throughout the British empire in the late-eighteenth and early-nineteenth centuries.

ENGL 331. Fantasy Literature.

Course description
From: An exploration of the genre of the fantasy novel, including its elements from the epic and the medieval chivalric romance, with focus on how the fantasy novel deploys these elements in its critique of industrialized modern society.
To: An exploration of origins and development of fantasy literature, including representative writers, genres and texts.

ENGL 337. Life and Literature of the American South.

Course description
From: Exploration of Southern literature, including such authors as Faulkner, O'Connor, Warren, Percy, Welty and Walker.
To: Study of writing and culture of the American South based on reading and analysis of key texts by representative authors.

ENGL 350. Twentieth-Century Literature Pre-World War II.

Course title
From: Twentieth-Century Literature Pre-World War II.
To: Twentieth-Century Literature to World War II.

Course description
From: British and American novelists, poets and dramatists from late nineteenth to mid-twentieth century, including such authors as Conrad, Hardy, Joyce, Woolf, Faulkner, Eliot, Beckett, H. D., Lawrence, O'Neill, Miller and Hemingway.

To: British and American novelists, poets and dramatists from late nineteenth to mid-twentieth century.

ENGL 352. Twentieth-Century Literature Post-World War II.

Course title
From: Twentieth-Century Literature Post-World War II.
To: Literature, World War II to Present.

Course description
From: Novelists, poets and dramatists of the post-World War II era, including such authors as Morrison, Pynchon, Stoppard, Rushdie, Garcia Marquez, Kundera, Carter, Barth and O'Brien.
To: Novelists, poets and dramatists from the World War II era to the present.

ENGL 360. Literature for Children.

Course description
From: Survey of literature for children, including such authors as the Brothers Grimm, Sarah Fielding, Carroll, Burnett, Potter, Barrie, Nesbit, Dr. Seuss and Sendak.
To: Representative writers, genres, texts and movements.

ENGL 361. Literature for Adolescents.

Course title
From: Literature for Adolescents.
To: Young Adult Literature.

Course description

From: Survey of literature for adolescents, including such authors as Twain, Sutcliff, Alcott, Cormier and Blume.
To: Survey of historical and contemporary literature for adolescents, including such forms as fantasy, domestic fiction, and the problem novel.

ENGL 376. Twentieth-Century American Novel.

Course title
From: Twentieth-Century American Novel.
To: The American Novel Since 1900.

Course description
From: Representative novels of the twentieth century, including such authors as Wharton, Stein, Faulkner, Hemingway, Dos Passos, Cather, Wright, Steinbeck, Baldwin, Salinger, Oates and Morrison.
To: Representative novels by twentieth- and twenty-first century American writers.

ENGL 377. English Novel to 1870.

Course title
From: The English Novel to 1870.
To: The British Novel to 1870.

Course description
From: Representative novels of the eighteenth and nineteenth centuries, including such authors as Defoe, Fielding, Burney, Austen, Shelly, Dickens, the Brontes, Gaskell, Eliot and Braddon.
To: Representative works illustrating the development of the novel, by writers resident in Great Britain and its colonies, from its beginnings to the late nineteenth century.

ENGL 378. The English Novel, 1870 to Present.

Course title
From: The English Novel, 1870 to Present.
To: The British Novel, 1870 to Present.

Course description
From: Representative novels of the late nineteenth and twentieth centuries, such authors as Hardy, Conrad, Lawrence, Joyce, Woolf, Forster and Lessing.
To: Representative works illustrating development of the novel by writers resident in Great Britain and its colonies from the late nineteenth century forward.

ENGL 386. Creative Nonfiction.

Course description
From: Practical study and application of literary nonfiction, the general audience essay, the memoir, and related nonfiction forms; with extensive workshop time and attention given to student writing, expert and peer review as well as readings from such authors as Melville, Orwell and Ackerman.
To: Practical study and application of literary nonfiction, the general audience essay, the memoir, and related nonfiction forms; with extensive workshop time and attention given to student writing, expert and peer review as well as readings from authors in the genre.

HIST 360. History of the American Petroleum Industry.

Course title
From: History of the American Petroleum Industry.
To: History of Energy in America.

Course description
From: Impact of energy upon industrial America from 1840 to present; emphasis on relationship between energy and industrial development, emergence of state and federal energy policies, role of energy in foreign policy, growth of energy-oriented industries and impact of energy development on the environment.

To: Impact of energy upon industrial America; emphasis on relationship between energy and industrial development, emergence of state and federal energy policies, role of energy in foreign policy, growth of energy-oriented industries and impact of energy development on the environment.

HIST 435. Tudor England, 1450-1603.

Course title
From: Tudor England, 1450-1603.
To: Sixteenth-Century Britain.

Course description
From: Changes in social, economic, political and religious institutions and organization; growth of the nation state; Henry VIII and the "new monarchy"; Reformation and religious settlements; international relations; inflation and social dislocation; the role of Parliament; the age of Elizabeth and Shakespeare.
To: Changes in social, cultural, economic, political and religious institutions and organization; growth of the nation state; the "new monarchy"; Reformation and religious settlement; international relations; inflation and social dislocation; the role of Parliament.

HIST 436. Stuart England, 1603-1714.

Course title
From: Stuart England, 1603-1714.
To: Seventeenth-Century Britain.
Course description
From: Social, political, economic, and religious developments from James I to Queen Anne, Puritanism and the Revolution of the 1640s, the Restoration, establishment of constitutional monarchy after 1688, England's rise as a world commercial power.
To: Social, political, economic, cultural and religious developments, Puritanism and the Revolution of the 1640s, the Restoration, establishment of constitutional monarchy after 1688, Great Britain's rise as an imperial power.

HIST 447. Constitutional History of the United States to 1901.

Course title
From: Constitutional History of the United States to 1901.
To: Law and Society in the United States.

JOUR 230. Communication Technology Skills.

Course description
From: Introduction to new technologies, including the internet, teleconferencing and videoconferencing; addresses communication in web page design, teleconferences and videoconferences, and emerging communication technologies.
To: Introduction to interactive media and media literacy skills in the digital domain; survey of technology histories, standards, and markets for industries such as multichannel TV, digital radio, video games, steaming media, epublishing, teleconferencing, and social networking.

Prerequisites
From: Speech communication or telecommunication media studies majors.
To: Communication or telecommunication media studies majors.

MATH 172. Calculus.

Prerequisites
From: MATH 151 or 171. Credit will not be given for more than one of MATH 148, 152 and 172.
To: MATH 147, MATH 151 or MATH 171 or equivalent with a grade of C or better. Credit will not be given for more than one of MATH 148, MATH 152 and MATH 172.

MATH 220. Foundations of Mathematics.

Prerequisites
From: MATH 172.
To: MATH 148, MATH 152 or MATH 172 or equivalent with a grade of C or better.

MATH 304. Linear Algebra

Prerequisites
From: MATH 152 or equivalent.
To: MATH 152; junior or senior classification. Credit will not be given for more than one of MATH 304, MATH 309, MATH 311 and MATH 323.

MATH 309. Linear Algebra for Differential Equations.

Prerequisites
From: MATH 221, MATH 251, or MATH 253; MATH 308 or concurrent enrollment; junior or senior classification or approval of instructor.
To: MATH 221, MATH 251, or MATH 253; MATH 308 or concurrent enrollment; junior or senior classification or approval of instructor. Credit will not be given for more than one of MATH 304, MATH 309, MATH 311 and MATH 323.

MATH 311. Topics in Applied Mathematics I.

Prerequisites
From: MATH 221, 251, or 253; MATH 308 or concurrent enrollment therein.
To: MATH 221, MATH 251, or MATH 253; MATH 308 or concurrent enrollment; junior or senior classification or approval of instructor. Credit will not be given for more than one of MATH 304, MATH 309, MATH 311, and MATH 323.

MATH 323. Linear Algebra.

Prerequisites
From: MATH 148, 152 or 172; MATH 220 or approval of instructor.
To: MATH 148, MATH 152 or MATH 172; MATH 220; junior or senior classification or approval of instructor. Credit will not be given for more than one of MATH 304, MATH 309, MATH 311 and MATH 323.

MATH 415. Modern Algebra I.

Course description
From: Groups, rings, fields.
To: A study of groups, rings, fields with emphasis on the theoretical aspects and proofs.

Prerequisites
From: MATH 323
To: MATH 220 and MATH 323; junior or senior classification.

MATH 416. Modern Algebra II.

Course description
From: Continuation of topics introduced in MATH 415.
To: Continuation of topics introduced in MATH 415 including Galois Theory and the Sylow Theorems with emphasis on the theoretical aspects.

Prerequisites
From: MATH 415.
To: MATH 415; junior or senior classification.

MATH 417. Numerical Analysis I.

Course title
From: Numerical Analysis I.
To: Numerical Methods.

Course description
From: Linear systems, matrix decomposition and eigensystems, numerical integration, interpolation and numerical solution of ordinary differential equations.
To: Numerical methods for applications; qualitative discussion of convergence and stability properties; computer implementation; interpolation and quadrature, initial value problems, matrix decompositions, interactive solution of linear and non-linear systems, least squares approximation, boundary value problems for ordinary differential equations.

Prerequisites
From: MATH 304, 311, or 323; MATH 308 or equivalent; ability to program.
To: MATH 304, MATH 309, MATH 311, or MATH 323; MATH 308; ability to program; junior or senior classification.

MATH 491. Research.

Course description
From: Active research of basic nature under supervision of Department of Mathematics or affiliated department graduate faculty member. Students can earn a maximum of 4 hours of credit to use in their degree plans. Registration in multiple sections of this course is possible within a given semester provided that the per semester credit hour limit is not exceeded.

To: Active research of basic nature under supervision of Department of Mathematics or affiliated department graduate faculty member; a maximum of 6 hours of credit can be used in degree plans. Registration in multiple sections of this course is possible within a given semester provided that the per semester credit hour limit is not exceeded.

Prerequisites

From: Mathematics or applied mathematical sciences major; junior classification or approval of mathematics advisor.

To: Mathematics or applied mathematical sciences major; junior or senior classification or approval of mathematics advisor.

MEEN 221. Statics and Particle Dynamics.

Lecture and lab contact hours

From: (2-2). Credit 3.

To: (3-0). Credit 3.

MEEN 360. Materials and Manufacturing Selection in Design.

Course description

From: Selection of materials and manufacturing processes in design; emphasis on mechanical properties of materials; production and control of microstructures; manufacturing processes for producing a variety of shapes for different components and structures; use of design methodology.

To: Selecting materials and manufacturing processes in design; emphasis on material mechanical properties; microstructure production and control; manufacturing processes for producing various shapes for components and structures; use of design methodology.

Prerequisites

From: MEEN 260; CVEN 305; MEEN 222.

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

Lab and semester credit hours

From: (3-3). Credit 4.

To: (3-0). Credit 3.

MODL 221. World Literature.

Course description

From: Representative works in translation of major authors and texts from various cultures to A.D. 1500, including such authors as Homer, biblical writers, Greek dramatists, Sappho, Virgil, Marie de France, Dante, Lao Tzu, and works like Gilgamesh and The Bhagavad Gita.

To: Survey of world literature from the ancient world through the sixteenth century in relation to its historical and cultural contexts; texts selected from a diverse group of authors, traditions and genres.

MODL 222. World Literature.

Course description
From: Representative works in translation of major authors from A.D. 1500 to the present from various cultures, including such authors as Cervantes, Moliere, Goethe, Tolstoy, Mahfouz, Munif, Achebe, Tolstaya, Vargas Llosa and Duras.
To: Survey of world literature from the seventeenth century to the present in relation to its historical and cultural contexts; texts selected from a diverse group of authors, tradition and genres.

NVSC 102. Leadership and Management I.

Course number
From: NVSC 102.
To: NVSC 210.

NVSC 203. Naval Ships Systems I: Engineering.

Course number
From: NVSC 203.
To: NVSC 320.

Prerequisites:
From: None.
To: Junior or senior classification

NVSC 302. Naval Operations and Seamanship.

Course number
From: NVSC 302.
To: NVSC 404.

Prerequisites:
From: NVSC 301.
To: NVSC 301; junior or senior classification

PHYS 101. Freshman Physics Orientation.

Course description
From: Critical thinking skills and problem solving in physics: time management and teaming skills. May be taken twice for credit. For physics majors. Registration by non-majors requires approval of physics department head.
To: Critical thinking skills and problem solving in physics: time management and teaming skills. For physics majors. Registration by non-majors requires approval of instructor.

Prerequisites
From: Registration in PHYS 218 or 208.
To: PHYS 218 or registration therein; MATH 171 or registration therein; or approval of instructor.

PHYS 119. Big Bang and Black Holes: Laboratory Methods.

Prerequisites
From: Concurrent registration in ASTR/PHYS 109 is recommended.
To: ASTR/PHYS 109 or registration therein.

4. Change in Curricula

College of Agriculture and Life Sciences
B.S. in Environmental Studies

College of Architecture
Department of Landscape Architecture and Urban Planning
B.L.A. in Landscape Architecture

Dwight Look College of Engineering
Department of Engineering Technology and Industrial Distribution
B.S in Engineering Technology
Electronics Engineering Technology Option
Manufacturing and Mechanical Engineering Technology Option

Department of Nuclear Engineering
B.S. in Nuclear Engineering

College of Geosciences
B.S. in Environmental Geosciences

B.S. in Environmental Studies

College of Liberal Arts
Department of Communication
B.A. in Communication
B.A. in Telecommunication Media Studies
B.S. in Telecommunication Media Studies

Department of Hispanic Studies
B.A. in Spanish

Department of Psychology
B.A. in Psychology
B.S. in Psychology

College of Science
Department of Mathematics
B.S. in Mathematics

College of Veterinary Medicine and Biomedical Sciences
D.V.M. Professional Program in Veterinary Medicine

5. Texas A&M University at Galveston

a. New Courses

MARE 314. Gas Turbine Power Generation. (2-3). Credit 3. Application of the Brayton cycle to gas turbine power cycles, including ideal gas cycle analysis, compressor design and construction, gas turbine construction, operation and maintenance for marine and industrial installations. Prerequisites: MARE 205, MARE 303. Corequisite: MARE 309.

NAUT 200. Basic Communications, Navigation and Seamanship. (6-0). Credit 6. Practical application of student's classroom studies aboard training ship during first training cruise. Student completes basic projects in communications, navigation, seamanship and rules of the road. Prerequisites: MARE 103, MARE 201, MARE 203, or permission of MART instructor/department head.

NAUT 300. Intermediate Communications, Navigation and Seamanship. (6-0). Credit 6. Practical application of student's classroom studies aboard training ship during second training cruise. Student completes intermediate projects in communications, navigation, seamanship and rules of the road. Thorough study made of U.S. Public Health requirements in first aid. Prerequisites: NAUT 200, MART 200, MART 301, MART 303 or permission of MART instructor/department head. Junior or senior classification or approval of instructor/ department head.

NAUT 400. Advanced Communications, Navigation and Seamanship. (6-0). Credit 6. Practical application of student's classroom studies aboard training ship during third training cruise. Student completes intermediate projects in communications, navigation, seamanship and rules of the road. Prerequisites: NAUT 200 or NAUT 300, MART 300, MART 321 or permission of MART instructor/department head.

c. Change in Courses

NVSC 203. Naval Ships Systems I: Engineering.

Course number
From: NVSC 203.
To: NVSC 320.

NVSC 320. Naval Operations and Seamanship.

Course number
From: NVSC 302.
To: NVSC 404.

d. Change in Curriculum

Texas A&M University at Galveston
Department of Marine Biology
B.S in Marine Biology-License Option

6. Special Consideration

College of Agriculture and Life Sciences
Department of Ecosystem Science and Management
Watershed Certificate – requirement changes

Department of Wildlife and Fisheries Sciences
B.S. in Wildlife and Fisheries Sciences
Wildlife Ecology and Conservation Option
Natural Resource Collections & Museums Emphasis
Aquatic Ecology and Conservation Option
Fisheries Ecology Emphasis
Aquatic Emphasis
Vertebrate Zoology Option
Pre-professional Emphasis
Ecology and Evolutionary Biology Emphasis
Request to remove emphases

Request to change grade requirements

College of Architecture
Department of Landscape Architecture and Urban Planning
B.L.A. in Landscape Architecture and M.S. in Land Development
Request for a 4+2 Degree Program

B.L.A. in Landscape Architecture and M. of Urban Planning
Request for a 4+2 Degree Program

Mays Business School
Department of Accounting
Request for a new Certificate in Energy Accounting

Department of Information and Operations Management
BBA in Information and Operations Management
Request to create two stand-alone degree programs
(BBA in Management Information Systems and BBA in Supply Chain Management)
and discontinue the existing degree program

College of Geosciences
Minor in Earth Science – requirement changes

Minor in Environmental Geosciences
Request for a new minor

College of Liberal Arts
General Degree Requirements-Electives
Request to change number of hours allowed for electives

American Studies Program
B.A. in American Studies
Request to discontinue degree program

Department of Anthropology
B.A. in Anthropology
Request for a new Archaeology Track

Department of European and Classical Languages and Cultures
B.A. in French
B.A. in German
B.A. in Russian
Request to consolidate degree programs into the B.A. in Modern Languages with concentrations in French, German, and Russian

Department of Hispanic Studies
Minor in Spanish – requirement changes

Minor in Religious Studies – requirement changes

Department of Psychology
Minor in Psychology – requirement changes

College of Science
Department of Biology
Minor in Biology – requirement changes

7. Other Business