

Minutes of the University Curriculum Committee
May 8, 2009
217 Koldus

Members present: Robert Knight (Chair), College of Agriculture and Life Sciences; Tim Scott (Vice-Chair), College of Science; Lynn Burlbaw, College of Education and Human Development; Lale Yurttas, College of Engineering; Sarah Bednarz, College of Geosciences; Pamela Matthews, College of Liberal Arts; George Fowler, Mays Business School; Norma Funkhouser, Medical Sciences Library; Bill McMullen, Texas A&M University at Galveston; Kristin Harper (for Martyn Gunn), Undergraduate Programs and Academic Services; Karen Snowden (for James Herman), College of Veterinary Medicine and Biomedical Sciences; Mark Womack, Student Representative.

Guests: Ashlea Schroeder and Steve Searcy, Department of Biological and Agricultural Engineering; Kathleen O'Reilly, Department of Geography; Steve Hague and Frank Hons, Department of Soil and Crop Sciences; Vijay Panchang, Texas A&M University at Galveston – Maritime Systems Engineering.

The University Curriculum Committee recommends approval of the following:

1. The minutes of the April 10, 2009 meeting.
2. New Courses

GEOG 327. Geography of South Asia. (3-0). Credit 3. South Asian geography; political and physical geographic divisions of South Asia; diversity of region; people, history, religion, cultures, political systems, rural and urban settings, climate, and environment; current problems and solutions. Prerequisite: Junior or senior classification or approval of instructor.

SCSC 421. International Agricultural Research Centers - Mexico. (3-0). Credit 3. International agricultural research; CIMMYT interaction; modern and underdeveloped tropical agricultural systems; introduction to Mexican culture; critical evaluation of complex and international agricultural issues and research programs. Prerequisites: Junior or senior classification and approval of instructor.

SCSC 425. Biofuels and the Environment. (2-0). Credit 2. Biofuel crop use and disposal; production systems; conversion technologies; impacts of bioenergy production on sustainability, environment, and soil and water quality; carbon and energy budgets. Prerequisites: SCSC 301 or approval of instructor; junior or senior classification.

3. Change in Course

ENTC 361. Solids Modeling and Analysis.

Course title

From: Solids Modeling and Analysis.

To: Product Design and Solid Modeling.

Course description

- From: Fundamentals of part geometry development and mechanical assembly; simple finite element analysis used to evaluate and optimize design; rapid prototyping of simple product models.
- To: Design processes and methodologies including quality function deployment, materials and process selection, and design for manufacturing and assembly; fundamentals of modeling part geometry and mechanical assembly using parametric CAD software.

4. Texas A&M University at Galveston

New Courses

MART 309. Advanced Topics in Shipboard Operations. (2-0). Credit 2. Advanced concepts and techniques related to navigation and cargo watch responsibilities on container, dry and liquid bulk and gas tank vessels; focusing on professional licensing. Prerequisite: Junior or senior classification.

MART 407. Liquefied Gas Tankers. (2-3). Credit 3. Preparation as cargo officer for loading, discharging and transit of liquefied gas cargoes. Emphasis on physical and chemical properties, operations, safety, firefighting and pollution prevention. Prerequisites: PHYS 201, MART 300, 406; junior or senior classification.

MASE 100. Introduction to Offshore and Coastal Engineering. (2-0). Credit 2. Introduction to offshore and coastal engineering principles with emphasis on offshore structures, underwater pipelines, floating production systems, current advances in offshore technologies; coastal structures, coastal processes, port and harbor design, and advances in ocean/wind energy technologies. Prerequisite: MATH 151 or registration therein.

MASE 216. Principles of Thermodynamics. (2-0). Credit 2. Theory and application of thermodynamics as an engineering science; study of work, heat, and energy as applied to open and closed systems; introduction to entropy, reversible and irreversible processes; intended as a terminal course in these areas for MASE students. Prerequisites: ENGR 221 and MATH 251 or registration therein.

MASE 217. Electrical Engineering: Circuits. (2-0). Credit 2. Fundamental principles of electric circuit analysis, DC, and AC electricity, electric power; designed to prepare students for topical questions from the F.E. exam; intended as a terminal course in these areas for MASE students. Prerequisite: PHYS 208.

MASE 402. Applied Underwater Acoustics. (1-0). Credit 1. Theory and applications of underwater sound generation and propagation, SONAR equations, and acoustics transducers and arrays; applications include design and prediction of SONAR systems, acoustical oceanography measurements, positioning of offshore marine equipment and environmental impact issues. Prerequisites: CVEN 311, OCEN 300, or approval of instructor.

Change in Courses

MART 302. Marine Cargo Operations I.

Course number

From: MART 302.

To: MART 312.

Course description and prerequisites

From: Objectives and problems with break-bulk cargo handling during loading, discharging, and in-transit carriage. Requirements of special refrigerated and dangerous cargoes. Heavy lift operations with conventional cargo gear and its restraints. Cargo loss prevention, safety and related documentation, as well as log book entries, modern cargo concepts – containerization, roll-on, roll off, lash and others. Maximum cargo efficiency with relation to space, cargo gear, crew and labor costs. Practical cargo gear use and cargo observations during lab periods. Prerequisites: NAUT 200, 202, 301 or concurrent registration. Junior or senior classification or approval of instructor.

To: Objectives and problems with break-bulk cargo handling during loading, discharging, and in-transit carriage; requirements of special refrigerated and dangerous cargoes; heavy lift operations; cargo loss prevention, safety and related documentation, log book entries; modern cargo concepts – containerization, roll-on/roll-off and others; maximum cargo efficiency with relation to space, cargo gear, crew and labor costs. Prerequisites: MART 200, 301 or concurrent registration, or approval of instructor; junior or senior classification.

Lab and semester credit hours

From: (3-3). Credit 4.

To: (3-0). Credit 3.

NAUT 103. Maritime Orientation and Lifesaving.

Course prefix

From: NAUT 103.

To: MART 103.

Course title

From: Maritime Orientation and Lifesaving.

To: Basic Safety and Lifeboatman Training.

Course description

From: Introduction to the maritime industry, the ships, the seamen and the purpose of the U.S. Merchant Marine. Shipboard nomenclature, cargoes and recent trends in the maritime industry. Practical lifeboat and lifesaving training for certification as Lifeboatman by the U.S. Coast Guard.

To: Introduction to the maritime industry, ship types, nomenclature, cargoes and recent trends in the maritime industry; practical lifeboat and lifesaving training for certification as Lifeboatman by the U.S. Coast Guard.

NAUT 302. Seamanship III.

Course prefix and number

From: NAUT 302.

To: MART 422.

Prerequisites

From: NAUT 202, 301 or concurrent enrollment or approval of instructor.

To: MART 301 or concurrent enrollment or approval of instructor; junior or senior classification.

NAUT 304. Electronic Navigation.

Course prefix

From: NAUT 304.

To: MART 304.

Lecture, lab, and semester credit hours

From: (2-2). Credit 3.

To: (1-3). Credit 2.

Prerequisites

From: NAUT 303 or approval of instructor.

To: MART 303 or approval of instructor; junior or senior classification.

NAUT 305. Ship Construction and Stability.

Course prefix

From: NAUT 305.

To: MART 305.

Course description and prerequisites

From: Shipbuilding nomenclature, dimension, construction and classification. Classification societies, shipbuilding materials and methods, structural components. Ship's line drawing and form calculations; principles of flotation and buoyancy; inclining experiments; free liquids; transverse stability; trim and longitudinal stability; motion of ship in waves, seaways and dynamic loads; ship's structure tests and propulsion. Prerequisites: NAUT 103, PHYS 201 or 218. Junior or senior classification or approval of instructor.

To: Shipbuilding nomenclature; dimensions, construction and classification; classification societies, shipbuilding materials and methods, structural components; ship's line drawing and form calculations; principles of flotation and buoyancy, inclining experiments; free surface; transverse stability; trim and longitudinal stability; motion of ships in waves, seaways and dynamic loads; ship's structure tests and propulsion. Prerequisites: MART 103, PHYS 201 or 218, or approval of instructor; junior or senior classification.

Lab and semester credit hours

From: (3-3). Credit 4.

To: (3-0). Credit 3.

NAUT 306. RADAR/ARPA.

Course prefix

From: NAUT 306.

To: MART 306.

Course title

From: RADAR/ARPA.

To: RADAR/ARPA/ECDIS.

Course description and prerequisites

From: Introduction to the theory, operation and interpretation of marine radar and automatic radar plotting aids (ARPA). Students examined for U.S. Coast Guard Certification as “RADAR Observer” and for Standards of Training and Certification and Watchkeeping (STCW) RADAR and ARPA endorsement. Minimum grade of 70% required for USCG and STCW endorsements. Prerequisites: NAUT 200, PHYS 202 or approval of instructor. Junior or senior classification.

To: Introduction to the theory, operation and interpretation of marine radar and automatic radar plotting aids (ARPA) and Electronic Chart Display Systems (ECDIS). Student examined for U.S. Coast Guard Certification as “RADAR Observer” and for Standards for Training and Certification of Watchkeepers (STCW) Radar and ARPA endorsements. Minimum grade of 70% required for USCG and STCW endorsements. Prerequisites: MART 200, PHYS 202, or approval of instructor; junior or senior classification.

NAUT 307. Global Maritime Distress Safety System.

Course prefix

From: NAUT 307.

To: MART 307.

Course description and prerequisites

From: Requirements, regulations, equipment, principles and hands-on operating procedures of each Global Marine Distress Safety System subsystem, including: SARTS, EPIRBs, NAVTEX, INMARSAT, SAFETYNET, VHF Survival Craft Transceivers, DSC, and HF Radiotelephone. USCG and FCC certification as GMDSS Operator and Maintainer, Minimum passing grade 75%. Prerequisites: NAUT 300, PHYS 202 or 208. Junior or senior classification or approval of instructor.

To: Requirements, regulations, equipment, principles and hands-on operating procedures of each Global Maritime Distress Safety System subsystem, including SARTS, EPIRBs, NAVTEX, INMARSAT, SAFETYNET, VHF Survival Craft Transceivers, DSC, and HF Radiotelephone. USCG and FCC certifications as GMDSS Operator and Maintainer. Minimum passing grade 75%. Prerequisites: MART 300, PHYS 202 or 208, or approval of instructor; junior or senior classification.

Lecture and semester credit hours

From: (3-3). Credit 4.

To: (2-3). Credit 3.

NAUT 404. The Navigator.

Course prefix

From: NAUT 404.
To: MART 404.

Lecture and semester credit hours

From: (2-3). Credit 3.
To: (1-3). Credit 2.

Prerequisites

From: NAUT 204, 304, 400. Junior or senior classification or approval of instructor.
To: MART 400 or approval of instructor; junior or senior classification.

NAUT 406. Bridge Watchstanding.

Course prefix and number

From: NAUT 406.
To: MART 410.

Course description and prerequisites

From: Bridge Watchstanding (simulator-based training) is a Bridge Resource Management (BRM) capstone course designed to enhance the third mate candidate's decision-making skills as they apply to ship traffic and voyage planning situations. Practical application of the nautical rules of the road and correct bridge procedures. Day and night open sea, coastal transit and harbor conditions will be simulated. Prerequisites: NAUT 304, 306, 400, MART 321. Junior or senior classification or approval of instructor. Prerequisites: NAUT 304, 306, 400, MART 321. Junior or senior classification or approval of instructor.
To: Integration of navigation, communications and seamanship in Bridge Resource Management (BRM) training required under the International Convention of the Standards for Training and Certification of Watchkeepers, using simulator-based teaching techniques. Prerequisites: MART 304, 306, 321, 400. Junior or senior classification or approval of instructor.

Department of Marine Transportation

**NAUT course prefix change to MART
(see memorandum from Dr. McMullun)**

NAUT 200	NAUT 203	NAUT 301
NAUT 201	NAUT 204	NAUT 303
NAUT 202	NAUT 300	NAUT 400

Change in Curricula

Texas A&M University at Galveston
Department of Marine Transportation
B.S. in Marine Transportation

Department of Maritime Systems Engineering
B.S. in Maritime Systems Engineering

5. Special Consideration

College of Agriculture and Life Sciences
Department of Biological and Agricultural Engineering
Minor in Agricultural Systems Management

College of Science
Department of Chemistry
Minor in Chemistry – Requirement Changes

6. Tabled Items

- Change in course ENTC 251; committee requested clarification on hours.
- New course MARS 427 (TAMUG); committee requested updates to course form and syllabus.

7. Other Business

- Dr. Matthews discussed the concept of offering a diversity certificate that would be established in each college; the concept paper to be emailed to members; she will be working with Multicultural Services to establish a certificate for the College of Liberal Arts.
- Reiterated when to attach a syllabus for a change in course; a syllabus is required for changes in course numbers, contact hours, or semester credit hours; other changes only require a brief supporting statement; this was previously discussed at the March 2009 meeting.
- Ms. Funkhouser inquired about identifying the top-tier journalist in every discipline.
- Dr. McMullen left an open invitation to hold a UCC meeting in Galveston.
- Discussion on grading and participation effort.
- George Fowler, Mays Business School representative, stated this was his last meeting; he is retiring.
- Mark Womack, student representative, also stated this was his last meeting; Maria Garnett would be his replacement.