SENATE REPORT FOR OCTOBER 2005

This report was approved by the Faculty Senate at its October 24, 2005 meeting.

(Unless otherwise noted, course additions/changes/deletions take effect in Summer/Fall 2006; program changes/additions may take effect as early as Spring 2006.)

1. Marketing

a. course addition (reinstates course deleted 5 years ago): MKT 496 Practicum in Marketing

Prerequisite: Permission of department chair. Students work on a real world project under the direct supervision of a faculty adviser. Projects will be sponsored by a host organization. Student performance is monitored and evaluated in relation to conditions set forth in an approved project plan. May be repeated for a maximum of 6 credits. On Demand. 3 credits.

b. course addition (reinstates course deleted 5 years ago): MKT 498 Marketing Seminar

Prerequisite: MKT 295 (C- or higher) and senior standing. Exposes students to the latest developments the field of marketing. Emphasis is placed on current advanced books and literature in relevant journals. Cont will vary from semester to semester. On Demand. 3 credits.

2. Computer Electronics & Graphics Technology:

Program revision: Graphics Technology

Delete DES100 as required course; replace with ART 120 as required course. (No other changes to the specialization have been made at this time.)

4. Biomolecular Sciences

a. course revision: BMS 415 Advanced Exploration in Cell, Molecular, and Physiological Biology

Change prerequisites to: BMS 306 or BMS 311 or BMS 316; or permission of the department chair.

Change description to: The focus will be on understanding a modern biological issue at the level of molecular, cellular, and physiological inquiry. The treatment of the topic will be at an advanced level, reflectiv current research in the field. May be repeated under different topics for a total of 6 credits.

Change cycling to: Irregular.

Add [G] credit.

(Effective Intersession 2006.)

5. English

a. course addition: ENG 298 Introduction to Literary Studies

Prerequisite: ENG110. Introduces students to the basic formal and methodological elements of the stuc literature. Intended for English majors. 3 credits.

b. Program revision: Major in English, B.A.

42 credits in English, as follows: *ENG 298*; *ENG 205, 210, and either 203 or 204; one additional course from among ENG 203, ENG 204, ENG 206, or ENG 211;* and one course from the following: LING 200, 230, 400, 430, 431. In addition, 24 credits on the 300-400 level* as follows: four courses (12 credits) in British literature, one each in the following areas: I. 700-1660 A.D., II. 1660-1900, III. 1900-Present, IV. Major figure (Chaucer, Shakespeare, Milton); three courses (9 credits) in American literature, one in a period preceding 1865, one in a period following 1865 and ENG 449; and one course (3 credits) in world literature.

6. Engineering Technology:

a) course revision: ET 150 Introduction to Engineering Technology

Change designator to: ENGR 150.

Change title to: Introduction to Engineering

Change description to: Introduction to engineering technology problem-solving techniques unique to areas of the technical world, including chemical, civil, construction, nuclear, manufacturing, mechanical, and electrical disciplines. Problem solving is presented in both English and International (SI) Units.

b) course addition: :ENGR 251 Engineering Mechanics I - Statics

Prerequisites: ENGR 150 and MATH 221 and PHYS 125. Engineering vector mechanics of equilibrium (statics), covering force resolution and composition, force moments and couples, and equilibrium equations for analysis. Forces and moments acting on structures and machines, centroids, and moments of inertia, are evaluated. Fall. 3 credits.

c) course addition: :ENGR 252 Engineering Mechanics II - Dynamics

Prerequisite: ENGR 251. Engineering vector mechanics of non-equilibrium conditions (dynamics), covering the kinematics of motion and kinetics of particles and rigid bodies. Spring. 3 credits.

d) course addition: :ENGR 257 Mechanics of Materials

Prerequisite: ENGR 251. The analysis of simple and combined stress, torsion, flexure, and deflection of beams, continuous and restrained beams, combines axial and bending loads, and columns. [c] Spring. 3 credits.

e) course addition: :ME 216 Manufacturing Engineering Processes

Prerequisite: ENGR 150. Engineering fundamentals of manufacturing processes for metals, ceramics and plastics, including forming, forging, rolling, drawing, EDM, laser cutting, welding, casting, molding and machining operations, are developed through analytical class work and manufacturing laboratory experiments. 2 hours lecture and 2 hours laboratory per week. Spring. 3 credits.

f) course addition: :ME 258 Engineering Thermodynamics

Prerequisites: CHEM 122 and PHYS 125. Engineering thermodynamic concepts involving storage, transformation, and transfer of energy and properties of substances. First and second law analysis of thermodynamic systems and control volumes for engineering design. Spring. 3 credits.

g) -

h) course addition: :ME 354 Fluid Mechanics

Prerequisites: ENGR 251 and ME 258 and MATH 463. Basic principles of fluid mechanics. Hydrostatic forces, kinematics of fluid motion, integral and differential representation of conservation of mass, momentum and energy, Bernoulli's equation, dimensional analysis, viscous flow, frictional losses, pipeline network analysis and design. 2 hours lecture and 2 hours laboratory per week. Fall. 3 credits.

i) -

j) course addition: :ME 367 Machine Design

Prerequisites: ENGR 252 and ENGR 257. Analysis for the design of basic mechanical elements, and their role in the design of machines; theories of failure, fatigue design, design of bolted connections, welds, springs, bearings, gears, clutches, and brakes. Spring. 3 credits.

k) course addition: :ME 370 Instrumentation

Prerequisite: ENGR 257. Introduces data acquisition using A/D converters; fundamentals of transducers; static and dynamic response; amplifiers; theory of A/D and D/A converters. Applies error analysis and elementary statistics. 2 hours lecture and 2 hours laboratory per week. [c] Spring. 3 credits.

l) course addition: :ME 400 Special Topics in Mechanical Engineering

Special topics introduce knowledge of advanced mechanical engineering concepts, materials, and techniques. May be repeated under different topics for a total of 9 credits. Irregular. 3 credits.

m) course addition: :ME 403 Mechanical Systems and Control

Prerequisites: MATH 463 and ENGR 252. Topics include lumped physical system models; electrical, fluid, mechanical, and thermal system analysis; linear system transient, steady-state behavior; Analysis and design of feedback control systems; transfer functions; block diagrams; proportional, rate, and integral controllers; and hardware and implementation. [c] Spring. 3 credits.

n) course addition: :ME 454 Heat Transfer

Prerequisites: MATH 463 and ME 354. Introduces the transport of heat by steady and transient heat conduction; forced and natural convection; radiation; introduction to phase change heat transfer and to heat exchangers. [c] Fall. 3 credits.

o) -

p) course addition: :ME 466 Inventive Engineering Design

Prerequisite: PHYS 126. Design methodology and practice in problem solving using various techniques. Creative concept generation. Use of inventive principles and engineering contradictions in problem solving applied to product, process and system design. Patents and intellectual property protection. Spring. 3 credits.

q) course addition: :ME 480 Propulsion Systems

Prerequisite: ME 354. Concepts of heat and mass transfer, conservation of mass momentum and energy, the basic operating principals and design methods for flight vehicle systems. Turbojets, ramjets, turboprops and turbofans and rocket engines will also be examined. Fall. 3 credits.

r) course addition: :ME 483 Aerodynamics

Prerequisite: ME 354. Presentation of aerodynamic theory. Course covers differential equations of fluid mechanics theory, wings, potential flows and laminar and turbulent flows. Flight mechanics, stability and control of aircraft, airfoil design, and computer simulations. Aerodynamic design project required. Spring. 3 credits.

s) course addition: :ME 486 Aerospace Structures and Materials

Prerequisites: MATH 228 and ENGR 257. Topics will include bending, torsion and buckling of built up aerospace structures. Strain energy, fundamentals and applications of composite and alloys as applied to aerospace structures are covered along with computer modeling techniques. Spring. 3 credits.

t) course addition: :ME 497 Senior Project I: Project Research

Prerequisite: Senior standing. First of a two course capstone design sequence. Students work in teams in an environment appropriate to an industrial setting. Teams propose and begin development of designs. Teamwork and oral and written communication skills emphasized. Mechanical Engineering majors only. Fall. 2 credits.

u) course addition: :ME 498 Senior Project II: Design Project

Prerequisite: ME 497. Second course in capstone design sequence. Student design teams finalize capstone projects through oral and written presentation. Final design analysis must satisfy requirements and show sound engineering judgment. Computer simulation and prototype development expected. Spring. 2 credits.

v) –

w) course revision: ET 357 Strength of Materials

Add special condition: Not intended for Engineering students.

7. Physical Education :

a. course revision: :PE 315 Practicum in Athletic Training I

Change prerequisites to: PE 217, Admission to the Professional Program in Athletic Training, and current EMT-B Certification (State of CT or National Registry)

b. course revision: :PE 316 Practicum in Athletic Training II:

Change prerequisites to: PE 218, PE 315, Admission to the Professional Program in Athletic Training, and current EMT-B Certification (State of CT or National Registry)

c. :course revision: :PE 319 Practicum in Athletic Training III

Change prerequisites to: PE 316, PE 317, Admission to the Professional Program in Athletic Training, and current EMT-B Certification (State of CT or National Registry)

d. :course revision: :PE 406 Adapted Physical Education

Change prerequisites to: PE 300 and Admission to the Professional Program in Physical Education.

Change cycling from: Fall to: Fall Spring.

Delete [G] credit

e. :course revision: :PE 408 The Curriculum Process in K-12 Physical Education

Change prerequisites to: PE 300 and Admission to the Professional Program in Physical Education.

Change cycling from: Fall to: Fall Spring.

f. :course revision: :PE 409 Psycho-Social Aspects of Physical Education

Change prerequisites to: PE 300 and Admission to the Professional Program in Physical Education.

Change cycling from: Spring to: Fall Spring.

g. :course revision: :PE 420 Lifespan Motor Development

Change prerequisites to: PE 300 and Admission to the Professional Program in Physical Education.

Change description to: Study of changes in motor behavior across the lifespan; processes that underlie these changes, and factors that affect them. Emphasis upon the young learner, task analysis and developmentally appropriate instruction.

Change cycling from: Fall to: Fall Spring.

Delete [G] credit

h. :course revision: :PE 422 Motor Learning:

Change prerequisites to: Admission to the Professional Program in Teacher Education and (PE 420 or permission of instructor).

Change cycling from: Spring to: Fall Spring.

Delete [G] credit

8. Management & Organization

a. Course revision: MGT 295 Fundamentals of Management and Organizational Behavior

Add special condition: Sophomore standing (or higher).

END OF SENATE REPORT