4-12-1990

Curricular Report No. 1989-90-8 from the Graduate Council to the Faculty Senate

University of Rhode Island Faculty Senate

Serial Number #89-90--25

THE UNIVERSITY OF RHODE ISLAND
Kingston, Rhode Island

FACULTY SENATE
BILL

Adopted by the Faculty Senate

TO: President Edward D. Eddy

FROM: Chairperson of the Faculty Senate

1. The attached BILL, titled Curricular Report No. 1989-90-8 from the Graduate Council to the Faculty Senate, is forwarded for your consideration.

2. The original and two copies for your use are included.

3. This BILL was adopted by vote of the Faculty Senate on April 12, 1990 (date).

4. After considering this bill, will you please indicate your approval or disapproval. Return the original or forward it to the Board of Governors, completing the appropriate endorsement below.

5. In accordance with Section 10, paragraph 4 of the Senate's By- Laws, this bill will become effective May 3, 1990, three weeks after Senate approval, unless: (1) specific dates for implementation are written into the bill; (2) you return it disapproved; (3) you forward it to the Board of Governors for their approval; or (4) the University Faculty petitions for a referendum. If the bill is forwarded to the Board of Governors, it will not become effective until approved by the Board.

April 13, 1990
(date)

C. B. Peters
Chairperson of the Faculty Senate

ENDORSEMENT

TO: Chairperson of the Faculty Senate

FROM: President of the University

Returned.

a. Approved ✓.

b. Approved subject to final approval by Board of Governors _____.

c. Disapproved _____.

May 2, 1990
(date)

Edward D. Eddy
President

Form revised 4/86

UNIVERSITY OF RHODE ISLAND
The Graduate School

CURRICULAR REPORT FROM THE GRADUATE COUNCIL TO THE FACULTY SENATE
REPORT NO. 1989-90-8

At its Meeting No. 281 held on March 23, 1990, the Graduate Council considered and approved the following curricular matters which are now submitted to the Faculty Senate for information or confirmation as indicated.

I. Matters of Information.

A. College of Business Administration

1. Department of Accounting

a. Temporary Course

ACC 622X Advanced Management Accounting and Controllership I,3
Readings and discussion on advanced profit planning and control models. Includes study of decentralization, multinational transfer pricing, executive contracts, and cost allocation. Also covers the organization of the controller's office. (Sem) Pre: ACC 321 or ACC 611; MGS 309 or MGS 640.

II. Matters Requiring Confirmation by the Faculty Senate.

A. College of Arts and Sciences

1. Department of Library Science

a. Add (New)

LSC 571 Database Mgt. Systems for Information Services I or II,3
This course provides concepts of database management systems (DBMS) for the design and use of bibliographic and nonbibliographic databases. It includes DBMS models, query processing, file organization; security, accuracy, and privacy of databases, and evaluation of DBMSs. Pre: LSC 548 or equivalent knowledge and permission of instructor.

2. Department of Physics

a. Add (New)

PHY 626 Statistical Physics II,3
Stochastic processes. Markov condition. Master equation. Fokker-Planck equation. Brownian motion. Langevin equation. Transport phenomena. Onsager theory of irreversible processes near equilibrium. Boltzmann equation. Linear response theory, fluctuation dissipation theorem. (Lec 3) Pre: 525. Muller

PHY 672 Quantum Mechanics III II,3
Atomic systems (structure, semi-classical radiation theory, collisions). Quantum fields (scalar, spin-1/2, electromagnetic). Applications: Quantum field theory (Feynman diagrams in QED and weak interactions, renormalization). Fock space. Many-body theory. (Lec 3) Pre: PHY 570, PHY 670. In alternate years. Next offered Spring 1993.

PHY 690 Topics in Physics I,II,3
Advanced topics in areas of research specializations: (a) Neutron Physics; (b) Quantum fluids; (c) Magnetism; (d) Surface Physics; (e) Nonlinear Phenomena; (f) Advanced Quantum Physics; (g) Nuclear Physics; (h) Low Temperature Physics. (Lec 3) Pre: Permission of department. Staff

PHY 691 Advanced Special Topics I,II,1-6
Special topics related to current developments by visiting or permanent faculty. (Lec 3) Pre: Permission of instructor. Staff

3. Department of Music

a. Changes

MUS 551 Performance as Minor or Elective - description to read- last sentence: "Recital performance as required by chairperson and instructor" be changed to "Recital performances and master classes as required by chairman and instructor."

MUS 561 Performance as Major - description to read- last sentence: "Recital performance as required by chairperson and instructor" be changed to "Recital performances and master classes as required by chairman and instructor."

B. College of Engineering

1. Department of Electrical Engineering

a. Add (New)

ELE 549 Computer System Modeling I,3
Basic techniques used in computer system modeling, queueing theory, stochastic processes, Petri net, Product form networks, approximation techniques, solution algorithms and complexity, computer simulation, performance studies of modern computer systems. (Lec 3) Pre: ELE 548 and ELE 509 or MTH 451 concurrent.

ELE 575 Approximation Theory & Applications to Signal Processing II,3
Interpolation, Uniform Approximation; Least Squares Approximation; Hilbert Space; the Projection Theorem; Computation of Best Approximations; Applications to the design of filters and beamformers, position location and tracking, signal parameter estimation. (Lec 3) Pre: Advanced Calculus Elements of the Theory of Functions of a Complex Variable and Elements of Linear Algebra.

ELE 630 Advanced Topics in Solid State I,II,3
Seminar for advanced students. Selected topics of current research interest. Material will be drawn primarily from recent literature. (Lec 3) Pre: ELE 531/532 or permission of instructor.

b. Deletions

ELE 631 Electronics of Solids I
ELE 632 Electronics of Solids II

c. Changes

ELE 511 Electromagnetic Fields - title changed to-
Engineering Electromagnetics

ELE 531 Solid State Engineering I - description changed to-

ELE 531 Solid State Engineering I I,II,3
Review of quantum mechanics, crystal properties, energy-band theory, introduction to scattering, generation-recombination processes, Boltzmann's transport equation, semiconductor junctions, devices. (Lec 3) Pre: ELE 331 or equivalent.

ELE 532 Solid State Engineering II - description changed to-

ELE 532 Solid State Engineering II I,II,3
Properties of insulators, semiconductors, conductors and superconductors from quantum mechanical principles. Semiconductor physics and band theory of solids as applied to current semiconductor and opto-electronic devices. (Lec 3) Pre: ELE 531 or equivalent.

ELE 548 Computer Architecture - description changed to-

ELE 548 Computer Architecture I,II,3
Classification and taxonomy of different computer architectures. Pipelining and RISC machines, vector and array processors, multiprocessors, dataflow computers. Cache memory and virtual memory systems, and multiprocessor algorithms. (Lec 3) Pre: ELE 405.

2. Department of Mechanical Engineering

a. Change

MCE 563 Advanced Dynamics - prerequisite changed to-
Pre: MCE 366 and MCE 372 or equivalent

C. College of Resource Development

1. Department of Fisheries, Animal and Veterinary Science

a. Changes

FST 510 Marine Fisheries Ecology - title, method of instruction and prerequisites changed to-

FST 510 Applied Problems in Marine Fisheries Ecology I,3
A study of the interaction between the marine environment and the fisheries, the effects of the environment on individual fish, the life histories of fish, fish behavior, and fish migration. (Lec 2, Lab 3) Pre: Permission of instructor. DeAlteris

FST 521 Advanced Fishing Gear Technology - title, description, method of instruction and prerequisite changed to-

FST 521 Evaluation of Fish Capture System II,3
Evaluation of fish capture system behavior and performance using empirical, theoretical, model scaling and statistical analysis techniques. Field and laboratory measurement procedures. (Lec 2, Lab 3) Pre: FST 421 or permission of instructor. DeAlteris

b. Deletion

FST(FMT) 518 Marine Fisheries Technology