

UNIVERSITY OF RHODE ISLAND
The Graduate School
CURRICULAR REPORT FROM THE GRADUATE COUNCIL TO THE FACULTY
SENATE: REPORT NO. 2005-2006-8

At meeting No. 411 held April 21, 2006, 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 Engineering

1. Department of Electrical and Computer Engineering:

a. Change:

ELE 506 Digital Signal Processing– change in prerequisite and description to read:
Review of z-transform, frequency response of LTI systems, digital filter structures, sampling theorem, spectral analysis, DFT and FFT algorithms, windows, periodogram, introduction to design of FIR AND IIR filters. (4 cr., Lec. 4) Pre: ELE501 or permission of instructor.

B. College of Environment and Life Sciences:

1. Department of Cell and Molecular Biology:

a. Changes:

MIC/BIO 521 Recent Advances in Cell Biology – change it title , prerequisite and description to read:
MIC/BIO 521 Recent Advances in Cell and Molecular Biology (2)

Reading and discussion of current literature (original research papers and review articles) in the area of molecular cell biology, and presentation of oral reports. Final written report or exam. Emphasis on eukaryotic cells. (Lec. 2) Pre: At least one of the following courses or an equivalent course emphasizing cell structure and function – MIC 453, BCH 437, 453, 481, BIO 437, 453 - or permission of instructor. May be repeated for a maximum of 4 credits.

C. College of Human Science and Services

1. Program in Physical Therapy:

a. Change:

PHT 600 Research Methods – change in title and description to read:

PHT 600 Foundations of Evidence-Based Practice(3)

Presentation and application of principles o evidence-based practice as related to current physical therapy practice, theory development, and scientific literature. Preparation of proposal through literature review.

II. Matters Requiring Confirmation by Faculty Senate

A. College of Engineering

1. Department of Mechanical Engineering:

a. Change MCE666 to 500 Level Course:

MCE 567 Experimental Nonlinear Dynamics (Nonlinear Mechanics) (3)

Fundamentals of the experimental analysis of nonlinear dynamical systems; mathematical concepts and algorithmic tools to characterize, analyze, model and predict dynamics of nonlinear systems. (Lec. 3) Pre: 366 or 464 or equivalent

b. New Course:

MCE 663 Nonlinear Dynamics (3)

Nonlinear dynamics theory and its applications to mechanical, chemical, electromagnetic or biological oscillators; stability, phase analysis, limit cycles, bifurcations, perturbation methods, chaos, fractals, strange attractors and other advanced topics. (Lec. 3) Pre: 563 or 546 or permission of instructor.

2. Department of Civil and Environmental Engineering

a. Change to Ph.D. Program Admission:

Admission requirements: master's degree in civil or environmental engineering or a related field. **Exceptional students with a Bachelor of Science in Engineering will also be considered.**

3. Department of Electrical and Computer Engineering

a. New Courses:

ELE 564 Medical Imaging (3)

Engineering and clinical applications of medical imaging systems including X-ray, computed tomography, radioisotope imaging, ultrasound, magnetic resonance imaging; picture archiving and communications system and medical image processing. Term paper required. May not be taken by students who have credit in BME464 (Lec. 3) Pre: Senior standing in electrical or computer engineering or permission of instructor.

ELE 565 Medical Image Processing Laboratory (1)

Development of medical image processing algorithms with graphical user interface in C++ under the Windows operating system: smoothing and sharpening filters, morphological filters, area measurement and edge tracer. Projects involving advanced algorithms. May not be taken by students who have credit in BME 465. (Lab. 3) Pre: Senior in biomedical engineering or permission of instructor.

b. Deletion:

ELE 588 Biomedical Engineering I

B. College of Human Science and Services

1. Program in Physical Therapy:

a. New Course:

PHT 576 Broadening Experiences in PT (2)

Provision of physical therapy service in a non-traditional setting or with a unique population.

Preparatory work and two week hands-on experience. (Lec. 1, Practicum in approved setting)

Pre: Enrolled in DPT Program and with permission of the instructor. May be repeated for credit.

2. School of Education:

b. Change from X course to permanent:

EDC 562 Methods of Intervention for Literacy Difficulties (3)

Teachers will explore methods and materials used for developing phonological awareness, sound/symbol knowledge, word reading skills, fluency, comprehension, and vocabulary through readings, discussions, application and reflection. (Lec. 3) Pre: Restricted to students accepted to teacher education, or graduate standing, or permission of instructor.