To: Members of the 2010-2011 Graduate Council

From: Nasser Zawia, Interim Dean
Keith Killingbeck, Associate Dean

Date: 12 April 2011

RE: Agenda for Meeting Number 454 of the Graduate Council to be held on Monday 18 April 2011 at 2:00 p.m. in the large conference room of the Alumni Center

I. Call to order

II. Approval of Minutes of Meeting Number 453, March 2011 (please see attached)

III. Announcements

A. Thank you to the members of the Graduate Council whose three-year terms have expired -- Lori Ciccomascolo and Brian Gallagher – and whose one-year terms have expired – John Szczepanski, Benjamin Young, and Arthur McDonald.

B. Recent appointments to the Graduate Faculty

Sherri Wills, Professor, Department of Art and Art History
Aftab Ahmed, Professor, College of Pharmacy
Bruce Curran, Adjunct Associate Professor, Department of Physics
Jessica Hiatt, Adjunct Instructor, Department of Physics
Edward Sternick, Adjunct Professor, Department of Physics
Ivaylo Mihaylov, Adjunct Assistant Professor, Department of Physics
Sung-Woo Lee, Adjunct Assistant Professor, Department of Physics

C. Pearson Test of English -- minimum scores to qualify for admission to the Graduate School at the University of Rhode Island:

- Reading 53
- Writing 59
- Listening 47
- Speaking 47

Expectation for Teaching Assistants = 62

IV. Committees

A. Curriculum Committee
I. 400 – level courses

Changes:

1) College of Engineering
   Department of Mechanical, Industrial, and Systems Engineering

ISE 401 Industrial and Systems Engineering Capstone Design – change in prerequisites to read: 240, 412, and 432 or 433, or permission of instructor

ISE 411 Probability and Statistics for Engineers – change in prerequisites to read: MTH 142 or permission of instructor

ISE 432 Operations Research: Deterministic Systems – change in prerequisites to read: MTH 362 or 215 or permission of instructor

ISE 443 Machining and Machine Tools – change in prerequisites to read: 240 and CVE 220

ISE 444 Assembly and Handling Automation – change in prerequisites to read: 240 and MCE 263

ISE/MCE 446 Metal Deformation Processes - change in prerequisites to read: 240, CVE 220, and CHE 333

ISE/MCE 449 Product Design for Manufacture - change in prerequisites to read: 240 or permission of instructor

ISE 451 Production System Design – change in prerequisites to read: 432 or 433 or permission of instructor.

ISE 460 Product Design for Environment – change in prerequisites to read: 240, CHE 332 or CHE 333

MCE 448 Heat and Mass Transfer – change in course listing to MCE 348 and prerequisites to read: 341 and 354 and 372, or permission of instructor.

MCE 472 Power Plant System Design and Safety Analysis– change to crosslist with CHE 472 and change catalog description to read: Energy production, power systems, energy conversion system design, safety engineering and design, phenomenological modeling and analysis, probabilistic risk assessment, risk-informed design, advanced power plant system design.

   Department of Ocean Engineering

CVE/ OCE 483 Foundations Engineering - change in title to Shallow Foundations and catalog description to read: Applications of geotechnical engineering principles to analysis and design of shallow foundations. Foundation types, bearing capacity,
settlement, lateral earth pressures, gravity retaining walls, introduction to deep foundations.

2) College of Human Science and Services
   Department of Communications Studies

**COM 461 Managing Cultural Differences in Organizations** – remove 361 as a prerequisite

**New Courses:**

1) College of Engineering
   Department of Mechanical, Industrial, and Systems Engineering

**MCE/CHE 476 Mechanics of Materials in Nuclear Applications**
Nuclear systems, material microstructure and mechanical properties, high temperature deformation mechanisms, radiation effects, reactor materials, materials selection for primary and secondary cycles. (3 Credits) Pre: (CVE 220 and (CHE 332 or CHE 333)), or permission of instructor.

II. 500/600-level courses

**Changes:**

1) College of Nursing

**NUR/THN 506 Independent Study** – change in credits from 2-6 to 1-6 and prerequisites to read: Pre: permission of graduate faculty or chair of thanatology.

**NUR 590 Directed Study and Practice in Advanced Clinical** – change in credits from 3 to 1-6

2) College of Engineering
   Department of Mechanical, Industrial and Systems Engineering

**ISE 541 Advanced Materials Processing** – change in prerequisites to read: 240 or permission of instructor.

**ISE 543 Fundamentals of Machining** – change in prerequisites to read: 240 or permission of instructor. Not for graduate credit for students with credit in 443.

**ISE 546 Advanced Metal Deformation Processes** – change in prerequisites to read: 240 or permission of instructor. Not for graduate credit for students with credit in 446.
ISE/MCE 549 Advanced Product Design for Manufacture – change in prerequisites to read: 240 or permission of instructor. Not for graduate credit for students with credit in 449.

Department of Electrical, Computer and Biomedical Engineering

ELE 544 Computer Arithmetic for VLSI – change in title to Arithmetic Algorithms and Hardware Designs and a change in catalog description and prerequisites to read: Hardware algorithms and implementations of fixed and floating-point adders, multipliers, and dividers. Error and time complexity analysis. Applications to DSP algorithms. Circuit design in VHDL and prototype with FPGA. Pre: 301 or equivalent or permission of instructor.

ELE 545 Advanced Digital Circuits and Systems – change in prerequisite to read: 301 or equivalent or permission of instructor

Department of Chemical Engineering

CHE 574 Biochemical Engineering I – change in title to Biochemical Engineering and change in catalog and prerequisite description to read: Application of chemical engineering principles to topics in bioprocessing and biotechnology, such as enzyme and cell-growth kinetics, enzyme and cell immobilization, bioreactors, medium sterilization. (Lec 3). Pre: permission of instructor.

Department of Civil and Environmental Engineering

CVE 579 Soil Behavior – change in title to Advanced Soil Mechanics and catalog description to read: Physico-chemical properties of soils, hydraulic conductivity, consolidation, and shear strength.

CVE/OCE 583 Advanced Foundation Engineering – change of title to Deep Foundations and catalog description to read: Applications of soil mechanics principles to analysis and design of piles and drilling shafts under vertical and lateral loading. Static and dynamic load testing. Introduction to ground improvement technologies.

3) College of Arts and Sciences
   Department of English

ENG 514 Studies in Critical Theories – change in title to History of Critical Theories and in prerequisites and catalog description to read: Historical survey of critical theory from antiquity to the present. Pre: Graduate standing or permission of instructor.

Department of Computer Science and Statistics

CSC 593 Computer Science Seminar Series – course to be deleted

New Courses:
1) College of Business Administration

**MBA 588 Marketing Communications Management (3)**
Provides an in-depth knowledge base for developing effective and efficient strategic marketing communications. Covers communication objectives, strategies, and tactics, and explores when to use them. Pre: MBA 505.

**Additional Curricular Matters**

1) College of Engineering
   Department of Chemical Engineering
Minor Change to Doctor of Philosophy section of the Chemical Engineering Graduate Program portion of the URI Catalog

Summary of proposed change:

Clarify that all on-campus graduate students in both the M.S. and Ph.D. programs are required to attend the Chemical Engineering department seminar during every semester of their graduate program. That expectation is stated explicitly in the catalog for M.S. students but is only implied for Ph.D. students. The proposed change copies the phrasing from the M.S. program into the description of the Ph.D. program.

Current text: M.S.

Program requirements: 30 credits including CHE 501, 502, 513, 541, 599 (6-12 credits). For 12 thesis credits, no special problems or graduate seminar credit is permitted, 18-24 credits of course work. Non-thesis option for part-time students, with permission of the chair; master's examination and comprehensive report with oral examination. Attendance in CHE 501 or 502 is required every semester for all on-campus students.

Current text: Ph.D.

Program requirements: Candidate's program will be determined in consultation with his or her committee and will be based on his or her background and career goals, but must include CHE 501, 502, 614, 641, 699 (24 credits). Twelve credits of course work in addition to the required courses would be needed. A comprehensive examination and an acceptable dissertation are required to complete the program, along with CHE 501, 502.

Proposed new text for Ph.D.

Program requirements: Candidate's program will be determined in consultation with his or her committee and will be based on his or her background and career goals, but must include CHE 501, 502, 614, 641, 699 (24 credits). Twelve credits of course work in addition to the required courses would be needed. A comprehensive examination and an acceptable dissertation are required to complete the program. Attendance in CHE 501 or 502 is required every semester for all on-campus students.

Dept. approval: 
Date: 3/14/2011

Coll Engr Graduate Curricular Affairs: 
Date: 3/25/2011

Coll Engr approval: 
Date: 3/30/11

Curriculum Committee continued............

In response to the Council's charge to consider wording to be added to the 'New Course Proposal Form' that would help clarify expectations of graduate students in 400/500-level courses, the following possibility is submitted for your consideration:
“If this is a 500-level course that is to become paired with an existing 400-level course (e.g., 400/500 course), please describe in detail how the expectations, assignments, and learning outcomes for graduate students differ from those for undergraduates.”

This would be followed by a text box for the response.

V. New Business

VI. Old Business

A. Graduate School Scholarships, Fellowships, and Diversity Awards: an update and a call for the formation of a committee to study the process.

B. Continued discussion of a request from Associate Dean David Smith, GSO, regarding the final approval of successfully-defended theses and dissertations (Graduate Manual section 11.28).

Proposed wording of GM section 11.28:

11.28. Approval of the thesis/dissertation itself will be certified by the signatures of the major professor and the remainder of the research committee on the formal signature page of the thesis/dissertation. These signatures confirm that any changes and corrections to the thesis/dissertation required by the entire defense committee have been made. Only the members of the research committee, not the additional members of the defense committee, sign the formal signature page of the thesis/dissertation. In the event that a student passed the oral examination in defense of the thesis denoted by choice 1(c) or 1(d) on the current oral defense examination form, the major professor or examination chairperson must obtain the signatures of faculty members that were listed to review the corrections (1c), or the entire examination committee (1d) on a form provided by the Graduate School.

C. Electronic submission of defendable thesis/dissertation copies to members of the defense committee.

D. Online graduate courses and the addition of online sections to existing graduate courses -- the role of the Graduate School in the review process

VII. THANK YOU, and Adjournment---------have a great summer.