UNIVERSITY OF RHODE ISLAND
THE GRADUATE SCHOOL

To: Members of the 2013-2014 Graduate Council
From: Nasser Zawia, Dean
       Keith Killingbeck, Associate Dean
Date: 20 November 2013
RE: Agenda for Meeting Number 476 of the Graduate Council to be held on
Monday 25 November 2013 at 2:00 p.m. in the rectangular Board Room of the
Alumni Center.

I. Call to order

II. Approval of Minutes of Meeting Number 475, 28 October 2013

III. Announcements
A. Recent additions to the Graduate Faculty

   SAMANTHA MEENACH    CHEMICAL ENGINEERING   10/28/2013
   STRUAN SMITH         BIOLOGICAL SCIENCES     11/5/2013
   MARY LEVEILLEE       NURSING                11/12/2013

B. Request from our 2014 commencement speaker, Dr. Kent Morrison.

C. Coming attractions -- Ted Myatt and Mary Riedford from the Research Integrity Office
   of the URI Division of Research and Economic Development will join us in December to
discuss options for training of graduate students in the areas of research compliance,
academic integrity, and related issues. A brief heads-up on their upcoming
presentation will be provided.

D. Introduction to a proposal from Pharmacy related to their PharmD and Master’s
   Programs (please see attached). Professors Kogut and Cho will present the proposal
   and ask for feedback.

IV. Committees
   A. Curriculum Committee

   I. 400-level courses

       Changes

       1) College of Engineering
          Ocean Engineering

OCE 408 Introduction to Engineering Wave Mechanics – change in
prerequisites to “Pre: PHY 205, MCE 354 and OCE 301, or permission of instructor
of coastal area.”
New Courses:

1) College of Engineering

EGR 450 X Nano Tools (3) (Temporary Course Offering)
Hands-on introduction to nanotechnology and state-of-the-art instrumentation used within the field. Emphasis given to applications and implications. Intended for science or engineering majors at the undergraduate or graduate level.

II. 500/600-level courses

Changes:

1) College of Engineering
   Chemical Engineering

CHE 513 Advanced Chemical Engineer Thermodynamics – change in prerequisites to “Pre: CHE graduate standing, or CHE 313 and CHE 314 or their equivalent, or permission of instructor.”

CHE 541 Transport Phenomena I – change in prerequisites to proposed “Pre: CHE graduate standing, or CHE 347 and CHE 348 or their equivalent, or permission of instructor."

CHE 560 Chemical and Physical Processes in IC Fabrication – change in title to “Fabrication Engineering at the Micro and Nanoscale” and change in description to “Chemical and physical processes used in the fabrication of microscale and nanoscale devices including MEMS. Particular emphasis on crystal growth, oxidation, CVD, PVD, plasma processing, lithography, diffusion, metallization and packaging.”

2) College of Human Science and Services
   School of Education

EDC 522 Technology Applications in Education and Training – change in title to “Using Technology to Teach Adult Learners” and change in description to “The use of web-based and social networking tools will be explored and used for effectively teaching and training adult learners in a variety of settings.”

Human Development and Family Studies

HDF 536 Family Dynamics and Health – change in prerequisites from “Graduate standing or permission of instructor” to proposed “Graduate standing in HDF or permission of instructor.”
New Courses

1) College of Engineering
   Mechanical, Industrial and Systems Engineering

MCE 534 Vibration-Based Structural Health Monitoring (3)
Linear and nonlinear vibration signal analysis for the health monitoring of machines and structures; linear/nonlinear signal processing; damage sensitive features extraction; pattern recognition; damage detection, diagnosis and prognosis. Pre: Graduate standing, or MCE 366 and 372, or permission of instructor.

Ocean Engineering

OCE 562 Modeling, Simulation and Control of Marine Vehicles (3)
Design of control systems for surface and underwater vehicles; development of linear and nonlinear maneuvering models; heading and sea-keeping autopilots; waypoint navigation; thruster and control surface modeling. Pre: EGR 515 or permission of instructor.

Additional Curricular Matters

1) College of Engineering
   Mechanical, Industrial and Systems Engineering

Doctoral program in Mechanical, Industrial and Systems Engineering
  a) Change in Ph.D. programs: Currently we require a candidacy review (i.e., same as Qualifying Examination for students entering the doctoral program with only a bachelor’s degree) for all students wishing to enter the doctoral program. We have voted to eliminate this requirement for all students except those having only a bachelor’s degree. This makes our requirement that same as that of the Graduate School.

  b) Change ISE PhD degree and major names to “Industrial and Systems Engineering.” Currently, there is a discrepancy between the degree and major names for the ISE PhD at URI: the degree name says IME, the major says ISE.

2) College of Environment and Life Sciences
   Master of Environmental Science and Management degree program
Master of Environmental Science and Management – addition of new program/track: Environmental Planning and Design (EPD)

The Environmental Planning and Design track of MESM will provide graduate students with advanced training, specialization and hands-on experience in environmental planning and design. It will allow students to work with faculty from landscape architecture, planning and other disciplines while developing the scientific foundation and applied design/planning skills for addressing a range of complex environmental problems. This track is intended to enhance student preparedness for exciting careers in the public and private sectors, and it creates a new option that expands opportunities for all students enrolled in MESM.

Requirements of the MESM EPD Track (36 credits)

Environmental planning and design: 13 credits in planning and design, including at least 4 credits in design studio and at least 9 credits in planning;

Natural sciences: 9 credits from any of the following categories: geology, hydrology, soil science, ecology and management, or remote sensing and spatial analysis;

Numerical methods: 3 credits;

Other requirements: A 3 credit independent research project (EVS 598) that culminates in a substantial, high-quality, written report; at least 2 credits of graduate seminar, including a terminal oral presentation; written comprehensive examination on coursework. A minimum of 6 credits of electives which can include up to 3 credits of an internship (EVS 597) with an environmental agency, nongovernmental agency, or private consulting firm.

Planning and Design Track Course Offerings (13 credits)

Select at least 9 credits from the following planning courses:
CPL 410 Fundamentals of Community Planning Practice (3)
CPL 450 Urban Design (3)
CPL 483 Land Development (3)
CPL 485 Environmental Planning (3)
CPL 538 Site Planning (3) CPL 539 Environmental Law (3)
CPL 549 Seminar in Ecological Planning (3)

Select at least 4 credits from the following studio courses:
LAR 444 Landscape Architecture Design Studio III (4)
LAR 445 Landscape Architecture Design Studio IV (4)

1 We are attentive to Section 9.11 of the URI Graduate Manual requiring at least one-half of the total non-research related credits in the Program of Study to be at the 500 or 600 level. We are confident that this will not be a problem as many of the relevant natural science and statistics classes for this Track are offered at the 500 or 600 level.

TO: CELS Curriculum Review Committee
Graduate Council
FROM: Arthur Gold, Peter August
DATE: August 22, 2013
CC: Professor Will Green
We are delighted to propose the addition of a new track -- “Environmental Planning and
Design” (EPD) -- to the Masters of Environmental Science and Management (MESM) graduate program. The EPD track will be an exciting new addition to our portfolio of graduate programs in CELS and will attract students who wish advanced training in environmental planning and environmental design. The track meshes well with the overall structure of the MESM degree and does not require any modifications in the allocation of credits. Professor Will Green in the Department of Landscape Architecture will serve as EPD track chair. The new track requires no new additional resources. Professor Green is currently expanding the scope and breadth of the courses LAR 444 and LAR 445 and is requesting that they count for graduate credit.

MESM had its Assessment Plan approved by the URI Office of Student Learning, Outcomes Assessment, and Accreditation in June 2013. The MESM assessment plan encompasses all tracks and the addition of the EPD option will not require any modification of the plan. Nancy Neff in the Faculty Senate Office instructed us to advance this proposal as a “Notice of Change” and said that impact statements from the budget office and library would not be required.

If you have any questions, please contact us.

MEMO
From: Prof. Will Green
To: Pete August and Arthur Gold, MESM Co-Chairs
RE: Proposed new MESM Track in Environmental Planning and Design
Date: August 23, 2013

As Chair of the CELS Department of Landscape Architecture (LAR) and as the future track chair for the proposed MESM track in Environmental Planning and Design (EPD) I offer my full support for this proposed new program. My colleagues and I in LAR look forward to mentoring future MESM students interested in advanced studies in planning and design. All the classes required in the EPD track are within my department. We have sufficient capacity to accommodate the new graduate students who we hope the EPD track will attract.

As a means of preparing for new graduate students we have submitted Course Change Proposals to the CELS curriculum committee for 2 classes: LAR 444 – Design Studio III - Sustainable Design Studio and LAR 445 – Design Studio IV. Both courses have been modified so that they are eligible for grad credit.

We are excited to be a part of this new venture and look forward to working together on this.

V. Topics for Discussion
   
   A. Possible editorial change to the Defense Results form – Professor August has proposed an editorial change to the Defense Results form that we would like to discuss. Please see the attached request, along with the ‘results form’ itself.

   B. Certificate Programs -- Development of a strategy for creating an appendix to the Graduate School Manual that outlines all guidelines and policies related to certificate programs. As mentioned previously, our guiding principle should likely be to keep our certificate policies as identical to graduate degree policies as possible.

   C. Two topics from the 2013 Graduate Faculty Summit revisited -- graduate student committee structure (a primer) and policies related to master’s thesis defenses.

VI. Old Business
VII. New Business
VIII. Adjournment