To: Members of the 2013-2014 Graduate Council
From: Nasser Zawia, Dean
       Keith Killingbeck, Associate Dean
Date: 18 February 2014
RE: Agenda for Meeting Number 479 of the Graduate Council to be held on
    Monday 24 February 2014 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 478, 27 January 2014

III. Announcements
A. Recent additions to the Graduate Faculty
   ANNU MATTHEW ART (MFA CREDENTIAL) 1/30/2014
B. The Assistantship Creation pilot program is now under way. The deadline for
   submitting requests is 15 March 2014.
C. The Excellence in Doctoral Research Award Program seeks nominations for
   exceptional doctoral students who graduated in 2013. Nominations require at least one
   letter of nomination and the student’s dissertation Abstract. The deadline for
   submission of nominations is 15 March 2013.
D. Board of Education policy on payment of back-CRG fees.
E. Signatures required on the master’s degree Programs of Study ..... an example of
   approved policies that have not yet made it into the next version of the Graduate
   School Manual.

IV. Committees
A. Curriculum Committee

   I. 500/600-level courses

       Changes:

       1) College of Human Sciences and Services
          Human Development and Family Studies

       HDF 536 Family Dynamics and Health
       Change in pre-requisites to “Graduate standing in HDF or permission of
       instructor.”
CSC 524 Advanced Incident Response: proposed change to CSF 524
Change in course code from CSC 524 to CSF 524, change in delivery method to online, and change in prerequisites to “CSF 432 or CSF 410.”

New Courses

1) College of Arts and Sciences
   English

ENG 695 Practicum: Teaching College English
Practicum for students teaching a college-level English course. Supervision of course preparation, presentation, and evaluation. (Practicum 1) S/U credit. Pre: permission of the Chair. May be repeated for a total of 3 credits with permission of the Chair.

2) College of Engineering
   Chemical Engineering

CHE 570x Research Methods in Chemical Engineering
Providing experience, practice, and knowledge of Chemical Engineering research methodology: defining a research problem, writing research papers, giving seminars, finding relevant literature, applying scientific methods in practice, setting up experiments. Pre: Graduate standing or permission of instructor.

3) College of Environmental and Life Sciences
   Geosciences

GEO 512 Seismology

Additional Curricular Matters

1) College of Engineering
   Chemical Engineering

CHE Program Changes

Summaries of changes to the CHE graduate program and rationales for these changes
Contact: Assoc Prof Michael Greenfield, greenfield@egr.uri.edu, 4-9289
Changes in required courses and course credits in the PhD program:

- Switch from mandating 2 graduates courses each in Thermodynamics (513, 614) and in Transport Properties (541, 641) [note that “Transport Processes” means fluid flow/heat transfer / mass transfer] to 1 graduate course in each area (513 or 614, and 541) . Clarify that these courses must be taken at URI.

One consequence is that URI MS students who continue for a PhD do not need to take subsequent thermodynamics and transport courses, because CHE 513 and 541 are both required for the CHE MS degree at URI.

- Convert the no-longer-required 6 course credits (614, 641) into one graduate elective (3 credits), two semesters of seminar counting toward program credit (1 credit each for CHE 501, 502), and additional graduate research (CHE 699, 1 credit).

Rationale: The Chemical Engineering faculty feel that it provides a more balanced classroom experience for students to receive a technical course of their choice rather than two additional courses in thermodynamics and in transport phenomena. While PhD programs at other universities typically require a range of courses (which depends on the specific school), such lists invariably include only a single course each in thermodynamics and in transport phenomena. This program change reduces (by 1) the total number of courses in the URI CHE PhD program. The course requirements that will be in place after this change (11 courses to reach 33 credits, of which 2 courses are the thermodynamics and transport courses and 9 are electives) are within the range of coursework requirements in Chemical Engineering PhD programs at other universities. The department considers this change in coursework/research balance to be a net positive change for our students. It raises the number of research credits in the PhD from 36 to 37.

Clarifications to the seminar requirements in the PhD program:

- Clarify that CHE 501/502 are required each semester for on-campus students.
- Clarify alternatives to CHE 501/502 for off-campus students.

Rationale: The role of the 1-credit CHE seminar (CHE 501 in fall, 502 in spring) is to expose graduate students to the diversity of chemical engineering problems and research that are being solved in academic and industrial settings. Most CHE faculty enjoy the seminar program for these same reasons. Student understanding of seminars continues to evolve throughout graduate school, so ongoing participation in the seminar program is a requirement for all on-campus MS and PhD graduate students in the program. While asking questions and otherwise engaging with the speaker is actively encouraged, attending the seminar is the only measure that is used to check on participation and to assign S/U credit. Hence the department requests the phrasing for the catalog that cites the attendance requirement is desired. The department has had occasional graduate students who decline to attend the seminar and thus are failing to meet this program requirement. The requested phrasing will provide additional emphasis to the graduate students that even though exposure to problems from outside URI (via seminars) is only a small part of the graduate program, it is not optional. Off-campus students are engaged in a part-time graduate program specifically because they are working at a job or other off-site location that invariably entails applying chemical engineering principles to problems being solved away from URI. Thus they can achieve the spirit of what is intended to be learned from CHE 501 and 502, and they are exempt from the participation requirement. This perspective also accounts for how it is difficult for off-campus students to come to URI for a 1-hour seminar in the middle of a weekday. (From a workplace perspective, it would be an unrealistic expectation.)

Editorial changes to Ph.D. description in the catalog:

- Clarify admissions background.
- Clarify the need for direct PhD candidates who lack a masters degree to take a Qualifying Exam (as is mandated by the URI Graduate School).
• Add joint CHE/Pharmacy faculty into CHE faculty listing: Samantha Meenach (51/49) and David Worthen (49/51)
• Update specializations to include Samantha Meenach’s research topics. Remove specializations that were specific to faculty who are no longer active in the department (emeritus status).

Rationale: The wording change for the admissions background reflects the actual practice that is required for successfully completing a Chemical Engineering PhD after having a different prior academic background. The courses that are chosen are specific to a student’s prior background. The wording addition about the qualifying exam emphasizes the rules that are already in place in the URI Graduate Manual. This statement is meant as a specific emphasis for direct-entry PhD students.

Assistant Prof Samantha Meenach joined URI in 2013-2014 and needs to be added.

Polymer certificate program change:
• Add CHE 529 Polymer Experimental Methods as a course that can count toward the 4-course graduate certificate.

Rationale: the course contents are appropriate for the certificate.

CHE Catalog Changes

Chemical Engineering

M.S., Ph.D.

401.874.2655

Faculty: Professor Brown, chair; Professor Greenfield, director of graduate studies. Professors Bose, Brown, Gregory, and Lucia; Associate Professors Bothun, Greenfield, and Rivero-Hudec; Assistant Professors Meenach and Worthen; Research Professor Crisman; Adjunct Professor Nystrom, Adjunct Associate Professor Mehos, Professors Emeriti Barnett, Gray, Knickle, Rockett, and Rose.

Specializations

Biochemical engineering: reactors, purification methods, degradation, and chemical production.

Bionanotechnology: hybrid bio/nano materials, drug delivery, biomolecular processes, nanocomposite hydrogels and microparticles, sensors and devices.

Energy engineering: analysis of energy systems, multiphase flow and water conservation.

Environmental engineering: separation methods, heavy metal removal, solvent recovery, hazardous waste minimization, and desalination.

Materials engineering: corrosion and erosion, electronic materials processing, ceramic processing, polymer films, conducting polymers and thin film materials and sensors.


Polymer engineering: thermophysical properties of polymers, polymer process modeling and control, and molecular modeling.
Process simulation: process design, optimization, and analysis; process control; numerical methods.

Surface, interfacial and colloidal phenomena: soft and hard colloids, nano composites, and imaging techniques.

Master of Science

Admission requirements: bachelor’s degree in chemical engineering; candidates from other engineering fields or from mathematics, biology, chemistry, or physics may be accepted into the program with possible addition of prerequisite courses.

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. Nonthesis option for part-time students, with permission of the chair, requires master’s examination and comprehensive report with oral examination. Attendance in CHE 501 or 502 is required every semester for all on-campus students.

Doctor of Philosophy

Admission requirements: B.S. or M.S. degree in chemical engineering; candidates from other engineering fields or from mathematics, biology, chemistry, or physics may be accepted into the program with possible addition of prerequisite courses.

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, and must include at least one course each in CHE thermodynamics (513, 614) and CHE transport (541) at URI. Students with a masters degree require CHE 501, 502, 699 (25 credits) and fifteen credits of course work beyond the MS. Students with a bachelors degree require a qualifying exam, CHE 501, 502, 699 (37 credits), and 33 credits of course work. A comprehensive examination and an acceptable dissertation are required of all students to complete the program. Attendance in CHE 501 or 502 is required every semester for all on-campus students. Off-campus students can replace 501 and 502 with additional 691, 692, or 699 credits.

Polymer Certificate Program

The postbacallaureate certificate program in polymers is targeted toward students who possess a bachelor’s degree in an engineering or science field and are seeking further education in polymers. The program provides opportunities for students to improve their knowledge of polymers in areas outside of their specific field of expertise, to apply their technical knowledge to problems in polymer engineering and science, and to develop technical skills that can be applied in industrial polymer engineering positions.

Admission requirements: same as for M.S.

Program requirements: successful completion of four courses from CHE 513, 529, 530, 531, and 537.

2) College of the Environment and Life Sciences
MESM program proposal [this is the same thing sent to us for the Nov. 2013 Curriculum Committee]

Notice of Change for
Date: 22 August 2013

A. PROGRAM INFORMATION
1. Name of institution
University of Rhode Island
2. Name of department, division, school or college
Division: Masters of Environmental Science and Management (MESM)
College: CELS
3. Intended initiation date of program change. Include anticipated date for granting first degrees or certificates, if appropriate.
Initiation date: Fall, 2014
First degree date: May, 2016
4. Intended location of the program
Kingston campus
5. Summary description of proposed program (not to exceed 2 pages)
Attached
6. Signature of the President
___________________________________________
David M. Dooley

ENVIRONMENTAL PLANNING AND DESIGN (EPD) MESM TRACK
The Environmental Planning and Design track of MESM will provide graduate students 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 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)

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.

3) College of Human Science and Services
Human Development and Family Studies

HDF program proposes to waive the GRE requirement:

MEMO
TO: Keith Killingbeck, Chair of the Graduate Curriculum Committee
FROM: Sue Adams-Labonte
DATE: January 24, 2014
RE: Change to HDF Master’s program requirements

Dear Dr. Killingbeck,
The Developmental Science Master’s program in Human Development and Family Studies is requesting that the GRE requirements be waived for all future applicants beginning in the 2014-2015 academic year. The rationale for this request is below:

1. The GRE’s are not currently used in any meaningful way by our program to determine admittance. Rather, we more heavily rely on undergraduate grades and letters of recommendation. If this request is granted, we plan to require at least two academic references. Currently, we allow one academic letter and one supervisor/employer letter. We also plan to increase the minimum GPA requirement from 3.0 to 3.2, which has been more reflective of success completing our program.

2. The College Student Personnel Master’s program in Human Development and Family Studies waived the GRE requirement many years ago. We are hoping to more closely align with their admittance requirements.

3. We are hoping that waiving this requirement will increase enrollment in our program.

Please feel free to contact me, Sue K. Adams, at 401-874-5958 with any additional questions or concerns.

Regards,

Sue K. Adams
HDF Developmental Science Program Director

B. Policies, Standards & Appeals Committee

The PSA Committee has met to develop Graduate School policies for the Graduate School Manual that would guide the delivery of Post-baccalaureate Certificate
Programs. A first iteration of the proposed wording for that policy is attached. The Committee is particularly interested in creating a policy that is simple, yet complete.

V. Old Business

A. Update on the proposal from Pharmacy related to their request to share credits between the PharmD and Master's Programs.

B. Ted Myatt and Mary Riedford from the Research Integrity Office of the URI Division of Research and Economic Development will join us to present a proposal to require training in the ‘responsible conduct of research’ for all graduate students in thesis/dissertation programs, and for all faculty and staff involved in research. Please see the attached proposal.

C. Julia Lovett will continue the discussion on the issues that have arisen regarding the embargo of electronic theses/dissertations. Briefly, the questions to be wrestled with are 1) should the default point for theses/dissertations be an automatic two-year embargo on open-access publication, and 2) should major professors have veto power on the decisions of their students regarding open-access publication of theses/dissertations. The student members of the Graduate Council will report on the responses of graduate students to these issues.

D. Continued discussion of policies related to master’s thesis defenses including the requirements surrounding the signatures required on the defense set-up form and the deadline by which thesis proposals need to be submitted to the Graduate School.

VI. New Business

VII. Adjournment