September 26, 2018

TO: Members of the Board of Trustees

FROM: Craig H. Kennedy, Ph.D.
Provost and Executive Vice President for Academic Affairs

RE: Modification of Mode of Instruction for the Professional Science Master’s Degree in Energy and Environmental Management (MEEM)

RECOMMENDATION:

That the Board of Trustees approve a Modification of Mode of Instruction for the Professional Science Master’s Degree in Energy and Environmental Management (MEEM).

BACKGROUND:

The Professional Science Master’s Degree in Energy and Environmental Management (MEEM) was approved by the Board of Trustees on December 16, 2015. Extensive review of regional and national enrollment demand trends and programmatic features of existing programs at peer and aspirant institutions points to an online program as providing the greatest opportunity for success, and for attracting the best and brightest students. As a result, we are seeking approval to modify this degree program from face-to-face as originally proposed and approved to fully online effective fall 2018. The change to a fully online MEEM program will help ensure that we attract the best and brightest students regardless of where they reside.

This modification to the MEEM program requires no additional budget resources. The MEEM program coordinator will be supported with program fees through an MOU between NRE, GEOG, and School of Law. Staffing for all courses is provided by existing faculty. The Center for Excellence in Teaching and Learning and eCampus will provide necessary technical, administrative, and online course development support.
MASTER OF ENERGY AND ENVIRONMENTAL MANAGEMENT
PROGRAM CHANGE NOTIFICATION

Institution: University of Connecticut
Name of Program: Professional Science Master’s Degree in Energy and Environmental Management (MEEM)
Sponsoring Schools/Colleges: CAHNR, CLAS, LAW
Program Directors: Jason Vokoun, Department Head Natural Resources and the Environment; Director of Environmental Sciences
Carol Atkinson-Palombo, Director of Environmental Studies
CIP Code: 03.0201
Anticipated Start Date: 08/27/2018
Projected Enrollment: 30 students annually
Item: Modification to the Master of Energy and Environmental Management
Date: July 6, 2018

Background
The Professional Science Master’s Degree in Energy and Environmental Management (MEEM) was approved by the BOT 12/16/2015. At that time, the MEEM curriculum included more than 150 in-person and online graduate courses in ARE, Business, ECON, EEB, GEOG, GPAH, GSCI, HDFS, Law, MARN, MAST, NRE, and PUBH. Since that time, extensive planning and meetings by faculty from the three schools and colleges involved (CAHNR, CLAS, LAW) has resulted in the creation of a more tightly aligned curriculum consistent with overall MEEM program objectives and learning outcomes.

Extensive review of regional and national enrollment demand trends and programmatic features of existing programs at peer and aspirant institutions points to an online program as providing the greatest opportunity for success, and for attracting the best and brightest students. As a result, we are seeking approval to modify this degree program from face-to-face as originally proposed and approved to fully online effective fall 2018.

The competitive space for the MEEM program includes Master of Environmental Management, Master of Environmental Science, and Master of Environmental Policy degree programs. Of the more than 45 masters programs in this area only 5 are offered in an online format (Duke University, Johns Hopkins, Colorado State University, University of Vermont, and University of
In addition, we are not aware of any programs that integrate *energy and environment* as does the UConn MEEM, and we continue to believe that the unique partnership between CAHNR, CLAS, and LAW will be key to our program success. With anticipated employment growth in the renewable energy sector of 4 million jobs by 2030 (Wei et al. 2010), offering the MEEM online positions students to be maximally competitive in a dynamic job market where geographic mobility and transferable skills are key (OECD 2017). We expect that a fully online program would result in a competitive, high quality applicant pool that is geographically aligned with these emerging job opportunities. The change to a fully online MEEM program will help ensure that we attract the best and brightest students regardless of where they reside.

**Proposal**

- Modify the Professional Science Master’s Degree in Energy and Environmental Management to become a fully online program with a comprehensive fee of $825/credit hour.
- All of the courses under the proposed curriculum are existing courses and were approved as part of the original proposal.

**Current Curriculum (30 credits)**

- Core courses in social-ecological systems: (9 credits)
  - NRE 5200 Sustainable Natural Resources Management
  - NRE 5220 Environmental Planning for Sustainable Communities and Regions
  - LAW 7812 Energy Regulation & Policy
- Electives toward specializations: (18 credits)
  - Includes >150 graduate courses from the following departments and Schools: ARE, Business, ECON, EEB, GEOG, GPAH, GSCI, HDFS, Law, MARN, MAST, NRE, and PUBH
- Experiential learning component (supervised internship or capstone course): (3 credits)

**Proposed Curriculum (30 credits)**

- Core courses in social-ecological systems: 9 credits (no changes are proposed)
  - NRE 5200 Sustainable Natural Resources Management
  - NRE 5220 Environmental Planning for Sustainable Communities and Regions
  - LAW 7812 Energy Regulation & Policy
- Electives toward specializations: 18 credits. Proposed change is to *focus* the choice of electives to the following online courses:
  - NRE 5205 Decision Methods in Natural Resources and the Environment
  - NRE 5210 Communications for Environmental Decision Makers
  - NRE 5215 Geospatial Techniques for Environmental Management
  - NRE 5585 Geospatial Data Processing Techniques
  - GEOG 5100 Location Analysis
  - GEOG 5130 GIS in Transportation
  - GEOG 5500 Fundamentals of GIS
  - GEOG 5510 Application Issues of GIS
- GEOG 5520 GIS Modeling of the Urban Environment
- NRE 5575 Natural Resource Applications of Geographic Information Systems

- All credits earned in one of the related 12 credit UConn graduate certificates in Geographic Information Systems (GIS), Sustainable Environmental Planning and Management (SEPM), Energy and Environmental Law (EEL) may be counted toward the MEEM degree requirements.
- Experiential learning component (supervised internship or capstone course): 3 credits (no changes are proposed)

Resources Available to Support the MEEM Program

This modification to the MEEM program requires no additional budget resources. The MEEM program coordinator will be supported with program fees through an MOU between NRE, GEOG, and School of Law. Staffing for all courses is provided by existing faculty. The Center for Excellence in Teaching and Learning and eCampus will provide necessary technical, administrative, and online course development support.

Facilities/Equipment/Special Resources

No additional or unique resources are required for program success.