Date: June 29, 2010
Course Number: ERE 797
Course Title: Research Methods in Environmental Resources Engineering

☐ New Course OR ☑ Changes in existing course (check all that apply):

☐ Prefix
☐ Number
☐ Credits
☒ Title
☐ Description
☐ Pre-requisite(s)
☐ Co-requisite(s)
☐ Shared Resources
☐ Course Format
☐ Content
☐ Semester Offered

This course meets the General Education standards in the following knowledge and skills area (check all that apply):

☐ American History
☐ The Arts
☐ Basic Communication
☐ Humanities
☐ Mathematics
☐ Natural Sciences
☐ Other World Civilizations
☐ Social Sciences
☐ Western Civilization

Prequisites or co-requisite requirements:

☐ Prerequisites: ☐ Co-requisites:

Institutional Impact:

Anticipated Enrollment: 12 per semester

Technology and Classroom Resource Demands: Projector for Internet and document camera
Computing Resources: N/A
Library Resources: Online journals and database searches
Transportation Requirements: N/A
Forest Properties or Field Practicum Facilities Required: N/A
DETAILED COURSE DESCRIPTION

COURSE:  ERE 797  Research Methods in Environmental Resources Engineering
1-3 credit hours

SCOPE:

1.  Level of Instruction:
   a.  ERE 797 is a graduate level seminar course.

2.  Relation to curriculum or to other ESF or Syracuse University courses:
   a.  ERE 797 is used to satisfy College requirements for engineering graduate students to
       participate in seminar.  Shared resource requirements: none

STUDENT LEARNING OUTCOMES:

Students will be able to
- Review and evaluate technical papers suitable to the breadth and scope of environmental
  resources engineering.
- Present technical materials commonly associated with scholarly products in engineering.
- Discuss recent developments in environmental resources engineering.
- Share viewpoints with engineers and scientists from other disciplines and academic
  institutions.

METHODS

This seminar is intended to introduce graduate students to the resources, methods and
materials used by graduate students and scholars at SUNY ESF.  The one-credit seminar
is required of all ERE graduate students.  Students will participate in weekly discussion of
papers and scholarly works relevant to the field of environmental resources engineering.
Students will be introduced to the field through seminar presentations by invited guests,
including Department faculty and scholars from industry, academia and government.
Students will prepare materials designed to introduce students to scholarship and research
methods at SUNY ESF.

CATALOG DESCRIPTION  (Please provide using the precise format to be included in the ESF
catalog, please do not exceed 50 words)

ERE 797  Research Methods in Environmental Resources Engineering (1-3)

One to three hours of discussion/ seminar per week.  Introduction to research facilities,
opportunities, and responsibilities of graduate scholarship.  Discussion of ERE research
topics, including journal reading, proposal formulation, funding, and engineering tools.
Use of scholarly resources including e-journals, web, proposal development, and
presentations.  Fall and Spring

COURSE HISTORY:
Last approved: ERE 797 was approved by the C of ES & F Faculty on 12/16/76 and replaced the courses PSE 797, FEG 797, and WPE 797. This version updates the course title and description in light of administrative changes made within the Division of Engineering.

Revised Draft: March 1, 2010 (form in protected format: 6/29/10)
# Health and Safety Considerations:

Conditions or situations present in association with the course?

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes / No</th>
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<tbody>
<tr>
<td>1. Will substances with any of the following properties be used during instruction? (flammability, toxicity, corrosivity, reactivity, registered pesticide, legally controlled, or other characteristics with the potential to cause harm or injury?)</td>
<td>No</td>
</tr>
<tr>
<td>2. Will any physical hazards be present during instruction? (e.g., machines that need safety guards; razor blades or syringes; compressed gases, etc.)</td>
<td>No</td>
</tr>
<tr>
<td>3. Will any biological hazards be present during instruction? (e.g., handling animals (rabies or hantavirus); cultures or stocks of infectious agents (fungal spores, viruses, bacteria, etc.)</td>
<td>No</td>
</tr>
<tr>
<td>4. Will any radiation hazards be present during instruction? (e.g., radioisotopes, X-rays, ultraviolet rays, lasers, etc.)</td>
<td>No</td>
</tr>
<tr>
<td>5. Will any electrical equipment that, due to its design, location, or method of use, pose any threat to safety during instruction? (Give considerable thought to electrical use outdoors, or any potentially wet location.)</td>
<td>No</td>
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<tr>
<td>6. Will there be any personal safety issues related to the class? (e.g., due to time of day or location, at the end of any organized class exercise, will students be in danger of physical assault, etc.)</td>
<td>No</td>
</tr>
<tr>
<td>7. Will any students be driving official state or research sponsored land or water vehicles during any class or instructional exercise?</td>
<td>No</td>
</tr>
<tr>
<td>8. Will any type of personal protective equipment be necessary during class exercises? (e.g., hard-hats, eye/face protection, hearing protection, hand/foot protection, lab coat, visibility clothing, etc.)</td>
<td>No</td>
</tr>
</tbody>
</table>

If the answer was “Yes” to any of the HEALTH AND SAFETY questions, please explain:

**CATALOG DESCRIPTION** (Please provide using the precise format currently used in the ESF catalog, please do not exceed 500 characters):

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