# Purdue University Request for Addition, Expiration, or Revision of a Graduate Course

**Department:** Environmental and Ecological Engineering  
**Effective Session:** Fall 2015

**Course Information:**

- **Subject Abbreviation:** EEE  
- **Course Number:** 59500
- **Long Title:** Environmental and Ecological Engineering Projects
- **Short Title:** Environ Ecoll Eng Prj

**Credit Type:**

- **Fixed Credit:** Cr. Hrs.
  - 2. Variable Credit Range: [Min, Max]
- **Equivalent Credit:** Yes/No
- **Equivalent Credit:** Yes/No

**Course Attributes:**

- **Pass/Not Pass Only:**
- **Satisfactory/Unsatisfactory Only:**
- **Repeatability:**
- **Credit by Examination:**
- **Fee:**
  - Coop
  - Lab
  - Rate Request

**Schedule Type:**

- **Lecture:**
- **Presentation:**
- **Laboratory:**
- **Clinic:**
- **Distance:**
- **Field Work:**
- **Study:**
- **Research:**
- **Ind. Study:**

**Course Description (Include Requisites/Restrictions):**

**Learning Outcomes:**

Learning outcomes will be designed by the instructor to meet a level of academic rigor consistent with the course level given the specific course content.

**Received:** SEP 01, 2015

**Office of the Registrar:**

**Signature:** 

**Offices of the Registrar:**

**Date:** 3/2/15
Supporting Document
to accompany the Registrar's FORM 40G when:
1. Requesting a New Graduate Course (Complete Section I)
or
2. Adding Distance as an Additional Schedule Type (Complete Section II)

To: Purdue University Graduate Council
From: Faculty Member: John W. Sutherland
       Department: Environmental and Ecological Engineering
       Campus: West Lafayette
Date: Jan. 8, 2015
Subject: Supporting Document to the Registrar's Form 40G

Contact for information if questions arise:
Name: Nina L. Robinson
Phone Number: 67578
E-mail: nlorbins@purdue.edu
Campus Address: POTR
Course Subject Abbreviation and Number: E E E 5 9 5 0 0
Course Title: Environmental and Ecological Engineering Projects

SECTION I

A. Justification for the Course:

• Provide a complete and detailed explanation of the need for the course (e.g., in the preparation of students, in providing new knowledge/training in one or more topics, in meeting degree requirements, etc.), how the course contributes to existing majors and/or concentrations, and how the course relates to other graduate courses offered by the department, other departments, or interdisciplinary programs.

There is a need to have a temporary course number that will allow the faculty in Environmental and Ecological Engineering (EEE) to develop new courses, assess their effectiveness and finalize their structure prior to obtaining a permanent course number. By having this be a 50000 level course both graduates and undergraduates students will be able to take this course.

• Justify the level of the proposed graduate course (50000- or 60000-level) including statements on, but not limited to: (1) the target audience, including the anticipated number of undergraduate and graduate students who will enroll in the course; and (2) the rigor of the course.

The target audience will be graduate students in engineering and senior undergraduates. We anticipate that the enrollment will vary from 10-20 depending on the subject matter. Depending on the subject matter the course may be delivered by lecture or laboratory or a combination. The courses will be taught at the graduate level so it is appropriate that it is a 50000 level course.
B. Learning Outcomes and Method of Evaluation or Assessment:

- Describe the course objectives and student learning outcomes that address the objectives (i.e., knowledge, communication, critical thinking, ethical research, etc.).

Students will gain knowledge of topics in environmental engineering.
Students will learn critical thinking through analysis of the primary literature (such as journal articles).
Students will be aware of ethical issues that touch upon topics in environmental engineering.

- Describe the methods of evaluation or assessment of student learning outcomes. (Include evidence for both direct and indirect methods.)

This will depend on the instructor. We anticipate that it will be a combination of tests, essays, and in class presentations.

- Grading criteria (select from drop down boxes); include a statement describing the criteria that will be used to assess students and how the final grade will be determined.

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<tr>
<th>Criteria</th>
<th>Exams and Quizzes</th>
<th>Papers and Projects</th>
<th>Laboratory Exercises</th>
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<td>Criteria</td>
<td>Attendance and Class Participation</td>
<td>Criteria</td>
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- Identify the method(s) of instruction (select from drop down box) and describe how the methods promote the likely success of the desired student learning outcomes.

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<tr>
<th>Method of Instruction</th>
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<th>Laboratory</th>
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C. Prerequisite(s):

- List prerequisite courses by subject abbreviation, number, and title.

None

- List other prerequisites and/or experiences/background required. If no prerequisites are indicated, provide an explanation for their absence.

Must be a graduate student or advanced undergraduate. Permission of instructor will be required.

D. Course Instructor(s):

- Provide the name, rank, and department/program affiliation of the instructor(s).

Variable - it will always be by a member of the Graduate Faculty

- Is the instructor currently a member of the Graduate Faculty?  X Yes — No

(If the answer is no, indicate when it is expected that a request will be submitted.)
E. Course Outline:

- Provide an outline of topics to be covered and indicate the relative amount of time or emphasis devoted to each topic. If laboratory or field experiences are used to supplement a lecture course, explain the value of the experience(s) to enhance the quality of the course and student learning. For special topics courses, include a sample outline of a course that would be offered under the proposed course.

The course outline will vary by instructor and topic.

F. Reading List (including course text):

- A primary reading list or bibliography should be limited to material the students will be required to read in order to successfully complete the course. It should not be a compilation of general reference material.

The reading list, if required, will vary by instructor and topic.

G. Library Resources

- Describe the library resources that are currently available or the resources needed to support this proposed course.

The engineering library is located in POTR which all students have access to when the library is open.

H. Example of a Course Syllabus (While not a necessary component of this supporting document, an example of a course syllabus is available, for information, by clicking on the link below, which goes to the Graduate School's Policies and Procedures Manual for Administering Graduate Student Programs. See Appendix K.)


(Revised and Approved by the Graduate Council 2/13)
To: The Faculty of the College of Engineering  
From: Division of Environmental and Ecological Engineering (DEEE)  
Subject: New Course EEE 59500

The faculty of the Division of Environmental and Ecological Engineering have approved the following new course to offer independent study projects and/or temporary courses to graduate students. This action is now submitted to the Engineering Faculty with a recommendation for approval.

EEE 59500 Environmental and Ecological Engineering Projects  
Sem. 1, 2. SS. Cr. 0-6.

Course description: Topics vary. Arrange Hours and Credit. Permission of instructor required.

Reasons: The Division of Environmental and Ecological Engineering will be offering projects and courses to Purdue graduate students. The goal is to provide graduate students the opportunity to explore environmental and ecological engineering topics.