#### Engineering Faculty Document No. 23-17 November 3, 2016

TO:The Faculty of the College of EngineeringFROM:The Division of Environmental and Ecological EngineeringSUBJECT:New Graduate Course, EEE 69000, EEE Graduate Seminar

The Faculty of the Division of Environmental and Ecological Engineering has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

#### EEE 69000: EEE Graduate Seminar

Sem. 1, 2, Lecture 1, Credits 0 Restrictions: Open only to graduate students in EEE or with consent of instructor.

#### **Course description:**

Combination of invited speakers (outside and inside Purdue) including graduate students. Topics will range across environmental and ecological engineering with an emphasis on current topics.

#### **Reasons:**

This course is necessary for graduate students to learn about current topics in environmental and ecological engineering and to also have opportunities to present talks on their research area.

hin W. Autherland

John W. Sutherland, Head Division of Environmental and Ecological Engineering

Approved for the faculty of the Schools of Engineering by the Engineering Curriculum Committee

ECC Minutes # 8 Chairman ECC

#### PURDUE UNIVERSITY REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF A GRADUATE COURSE (50000-60000 LEVEL)

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DEPARTMENT Environmental and Ecologie	cal Engineering		17
INSTRUCTIONS: Please check the liten	is below which describe the purpose o		
	e number e tille	roposal form)	<ol> <li>8. Change in instructional hours</li> <li>9. Change in course description</li> <li>10. Change in course requisites</li> </ol>
Short Title EEE Graduate Seminar Abbreviated 68e will be entered by CREDIT TYPE CREDIT TYPE CREDIT TYPE CREDIT TYPE CREDIT TYPE CREDIT TYPE CREDIT Credit Cr. Hrs CREDIT TYPE CREDIT Credit Range: Minimum Cr. Hrs CRECK One) To Or Maximum Cr. Hrs CRECK One) Co Cr CRECK One) Co Cr CRECK One CRECK O	EXISTING: Subject Abbreviation Course Number Engineering Graduate Seminar Uhe Office of the Registrer If omitted. (30 CHARA Uhe Office of the Registrer If omitted. (30 CHARA 1. Pass/Not Pass Only 2. Satisfactory/Unsatisfactor 3. Repeatable Maximum Repeatable Maximum Repeatable 4. Credit by Examination 5. Fees Coop L Le Include comment to explair Weeks % of Credit Weeks % of Credit Weeks % of Credit 00	COURSE ATTRIBUT COURSE ATTRIBUT 6. Registra 7. Variable 7. Variable 10. Variable 10. Off Can 10. Off Can 10. Off Can	
		· · · · · · · · · · · · · · · · · · ·	eale a separate document and attach to this form) and internal speakers.
COURSE LEARNING OUTCOMES: (Note:	If course learning outcomes will not fit in spa	ce provided, please create a separate do	ocument and attach it to this form.)
More in depth	n knowledge o	of current top	bics in Env & Ecol Eng
Calumet Department Head	Date Calumet School Dean	Date	Calumet Director of Graduale Studies
Fort Wayne Department Head	Date Fort Wayne School Dean	Date	Fort Wayne Director of Graduate Studies
Indianapolis Department Head	Date Indianapolis School Dean	Date	IUPUI Associate Dean for Graduate Education
North Central Perariment Head	11/3/16 //1/////	Hamin 4/14/16	North Central Director of Graduate Studies
West Lafayette Department Head	Date West Latayette Cojlege/Sc	hool Dean Date '	Date Approved by Graduate Council
Graduate Area Committee Convener	Date Graduate Dean	Date	Graduate Council Secretary
			West Lafayette Registrar
Grad Form 40G must include the Gr		CE OF THE REGISTRAR nt, which is available at http://www	v.purdue.edu.registrar/forms/form_40_Intro.html

## **Detailed Graduate Course Proposal for Academic Review**

Note: The detailed course proposal is intended for academic review by the appropriate area committee of the Graduate Council. It supplements the Form 40G that is intended for administrative review of the Graduate School and Registrar.

То:	Purdue University Graduate Council			
From:	Faculty Member: Department: Campus:	John W. Sutherland Environmental and Ecological Engineering West Lafayette		
Date:	November 4, 2016			
Subject:	Proposal for New Graduate Course			
Contact for information if questions arise:		Name: Phone: Email: Address:	Nina Robinson 67578 nlrobins@purdue.edu POTR 364E	
Course N	Course Number: EEE 60000			

Course Number:	EEE 69000
<b>Course Title:</b>	Environmental and Ecological Engineering Graduate Seminar
Short Title:	EEE Graduate Seminar

#### **Course Description:**

Combination of invited speakers (outside and inside Purdue) including graduate students. Topics will range across environmental and ecological engineering with an emphasis on current topics.

## A. Justification for the Course

#### Justification of the need for the course

• This course is necessary for graduate students to learn about current topics in environmental and ecological engineering and to have an opportunity for them to make presentations on their own graduate research.

### Justification that course will be taught at a graduate level

• This course is intended for graduate students to learn about current research in the field of Environmental and Ecological Engineering. There will be presentations by external speakers, by faculty at Purdue, and by graduate students within the Environmental and Ecological Engineering program.

### Justification of the demand for the course

- Anticipated enrollment
  - o Undergraduate 0
  - Graduate 20 to 30 each semester

### Justification for online delivery

This will not be an online course.

## **B.** Learning Outcomes and Methods of Assessment

- 1. Increased understanding of academic and research topics in Environmental and Ecological Engineering (EEE).
- 2. Improve ability of EEE graduate students to think critically about research and presentation skills of others.
- 3. Increase student's ability to critique his or her own work.

Learning Outcomes	Assessment Methods
Increased understanding of academic and research topics in Env and Ecol Eng	Attendance
Improve ability of EEE graduate students to think critically about research and presentation skills of others.	Attendance
Increase student's ability to critique his or her own work.	Attendance

### **Final Grading Criteria**

Describing the criteria that will be used to assess students and how the final grade will be determined. Add and delete rows as needed.

Assessment Methods (should match method types in the previous table)	Weight Toward Final Course Grade
Class Participation	100%

#### **Methods of Instruction**

Class Hrs/Week	Method of Instruction	Contribution to Outcomes
1	Seminar	This is a seminar series and all outcomes will come from attendance.

# C. Prerequisite(s)

• Graduate student standing

# **D.** Course Instructor(s)

Name	Rank	School, dept., or center	Graduate Faculty or expected date
Ernest (Chip) Blatchley	Professor	CE/EEE	Yes
Hua Cai	Assistant Professor	EEE/IE	Yes
Abigail Engelberth	Assistant Professor	ABE/EEE	Yes
Brady Hardiman	Assistant Professor	EEE/FNR	Yes
John Howarter	Assistant Professor	EEE/MSE	Yes
Inez Hua	Professor	CE/EEE	Yes
Chad Jafvert	Professor	CE/EEE	Yes
Michael Mashtare	Assistant Professor	AGRY/EEE	Yes
Roshanak Nateghi	Assistant Professor	EEE/IE	Yes
Loring (Larry) Nies	Assistant Professor	CE/EEE	Yes
Lindsey Payne	Courtesy Appointment	CIE/EEE	Yes
Amisha Shah	Assistant Professor	CE/EEE	Yes
Shweta Singh	Assistant Professor	ABE/EEE	Yes
John Sutherland	Professor	EEE/ME	Yes
Andrew Whelton	Assistant Professor	CE/EEE	Yes
Fu Zhao	Associate Professor	EEE/ME	Yes
Zhi (George) Zhou	Assistant Professor	CE/EEE	Yes

## E. Course Schedule or Outline

## **Option 1: Schedule Format**

Week	Topic(s)	Activity (optional)
1	• Introduction and Expectations	• [Activity]
2	• External Speaker 1	• [Activity]
3	• Purdue Speaker 1	• [Activity]
4	• Purdue Speaker 2	• [Activity]
5	• Purdue Speaker 3	• [Activity]
6	• External Speaker 2	• [Activity]
7	• Purdue Speaker 4	• [Activity]
8	• Purdue Speaker 5	• [Activity]
9	• Purdue Speaker 6	• [Activity]
10	• External Speaker 3	• [Activity]
11	• Purdue Speaker 7	• [Activity]
12	• Purdue Speaker 8	• [Activity]
13	• Purdue Speaker 9	• [Activity]
14	• External Speaker 4	• [Activity]
15	• Wrap up and feedback	• [Activity]
16	Not applicable	

## F. Reading List (including course text)

### **Primary Reading List**

• There will be no reading assignments since this is a seminar course.

### Secondary Reading List

o <u>See above</u>

## **G.** Library Resources

There will be no library resources needed for this class.

# H. Course Syllabus (now required)

• Please see the above course schedule for a proposed syllabus.