Cover Sheet: Request 14104

ENV 3930 Environmental Engineering Ethics Seminar

Info	
Process	Course Modify Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Elliot Douglas elliot.douglas@essie.ufl.edu
Created	8/5/2019 2:34:38 PM
Updated	10/8/2019 10:06:36 AM
Description of	Change in title and increase in credits from 1 to 2. This request is part of a major curriculum
request	change, request number 14095.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Environmental Engineering Sciences 011910000	Chang-Yu Wu		8/5/2019
No document c					
College	Approved	ENG - College of Engineering	Heidi Dublin	Approved by HWCOE Curriculum Committee and Faculty Council	9/23/2019
No document of		-	-		
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			9/23/2019
No document c	hanges				
Statewide Course Numbering System					
No document c	hanges				
Office of the Registrar					
No document of	hanges				
Student Academic Support System					
No document of	hanges				
Catalog					
No document o	hanges				
College Notified					
No document c	hanges				

Course|Modify for request 14104

Info

Request: ENV 3930 Environmental Engineering Ethics Seminar Description of request: Change in title and increase in credits from 1 to 2. This request is part of a major curriculum change, request number 14095. Submitter: Elliot Douglas elliot.douglas@essie.ufl.edu Created: 10/8/2019 10:05:31 AM Form version: 3

Responses

Current Prefix ENV Course Level 3 Number 930 Lab Code None Course Title Environmental Engineering Ethics Seminar Effective Term Spring Effective Year 2023 Requested Action Other (selecting this option opens additional form fields below) Change Course Prefix? No

Change Course Level? No

Change Course Number? No

Change Lab Code? No

Change Course Title? Yes Current Course Title Environmental Engineering Ethics Seminar Proposed Course Title Engineering Ethics and Environmental Justice Change Transcript Title? Yes Current Transcript Title Environ Ethics Sem Proposed Transcript Title (21 char. max) Eng Ethics & Env Just Change Credit Hours? Yes Current Credit Hours 1 Proposed Credit Hours 2 Change Variable Credit? No

Change S/U Only? No

Change Contact Type? No

Change Rotating Topic Designation? No

Change Repeatable Credit? No

Maximum Repeatable Credits 0 Change Course Description? Yes Current Course Description Intended for undergraduates majoring in environmental engineering. Lectures and discussion on ethics topics in environmental engineering sciences. Proposed Course Description (50 words max) Intended for undergraduates majoring in environmental engineering. Lectures and discussion on topics in ethics and environmental justice as related to environmental engineering. **Change Prerequisites?** No

Change Co-requisites? No

Rationale The title change more accurately reflects the course content. The change in credit hours will allow additional coverage of existing topics and more case studies for students to learn how to apply ethical principles in practice. Specifically, the following topics are being added: environmental justice; applications of environmental justice; environmental justice in communities; environmental justice and corporate responsibility. The increase in credit hours also allows more discussion. Considerations of ethics requires deep thinking and discussion, not just learning concepts. In the one credit version of the course each week consisted of lecture on concepts with some limited time for discussion. Four weeks were set aside to discuss case studies. With the increase to two credits, each week will be structured with a lecture on one day and extensive discussion of cases on the other day. This will allow the desired level of discussion, as well as removal of weeks dedicated to case studies and the addition of the topics listed above.

Environmental Engineering Ethics Seminar

ENV 3930 Section 3257 Class Periods: Tuesday period 6 Location: CHE 237 Academic Term: Spring 2019

Instructor:

Elliot P. Douglas <u>edouglas@ufl.edu</u> 352-846-2836 Office Hours: Monday period 4 in 217 Black Hall

Teaching Assistants:

Please contact through the Canvas website Elliott White Office hours: Tuesday period 3 in 115 Phelps Lab

Course Description

Intended for undergraduates majoring in environmental engineering. Lectures and discussion on ethics topics in environmental engineering sciences. (H) 1 credit hour. General Education – Humanities

Course Pre-Requisites / Co-Requisites

None

Course Objectives

- Learn different approaches to ethical decision-making
- Understand ethical behavior expected of engineers
- Understand how environmental engineering decisions impact society
- Learn how to effectively work in partnership with communities

Materials and Supply Fees

None

Professional Component (ABET):

This is a 1 credit course. It provides 1 credit towards towards general education.

Relation to Program Outcomes (ABET):

Outcome	Coverage*
1. Solve problems	
2. Design	
3. Communication	Medium
4. Make judgments	High
5. Teamwork	
6. Conduct experiments	
7. Acquire knowledge	Medium

*Coverage is given as high, medium, or low. An empty box indicates that this outcome is not part of the course.

Required Textbooks and Software

None. Readings will be provided through the Canvas website.

Recommended Materials

None

Course Schedule

- Week 1: Course Overview; What is ethics?
- Week 2: Principlism
- Week 3: Other ethical approaches
- Week 4: Codes of ethics
- Week 5: Case study 1
- Week 6: Case study 2
- Week 7: Virtue ethics
- Week 8: Apperception game
- Week 9: Case study 3
- Week 10: Ethnographic listening
- Week 11: Case study 4
- Week 12: Alternate codes of ethics
- Week 13: Engineers' responsibilities
- Week 14: Community engagement
- Week 15: What is ethics, revisited

Attendance Policy, Class Expectations, and Make-Up Policy

This class is primarily discussion-based and therefore attendance is expected. Your level of participation in the class discussions will count towards your grade. Absences will be excused consistent with university policies in the Graduate Catalog (<u>https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx</u>) and require appropriate documentation. Assignments will be accepted late only in accordance with university policies.

Evaluation of an ades			
Assignment	Total Points	Percentage of Final Grade	
Blog Entries	2 each	25%	
Class Participation	25	25%	
Mid-semester paper	100	25%	
Final Exam	100	25%	

Evaluation of Grades

<u>Blog entries:</u> Reading about engineering ethics is different from reading other subjects. Many of the readings are challenging, and you will have to work to understand them. Often, this will require *hard work*. One of the best ways to begin to understand the readings is to write about them. The blog assignments will give you specific questions to answer, but you should also try to restate the author's claims and arguments in your own words. Again, you may find this difficult. Keep working at it, and please do come see me during my office hours when (not if) you experience difficulty.

<u>Class participation</u>: Another good way to begin to understand the readings is to discuss them, both inside and outside of class. I have chosen readings that are likely to provoke thought and discussion. For this reason, I *expect* regular attendance in class. I also *expect* everyone to show respect for the opinions of others. I *encourage* you, however, to find respectful ways to disagree. The point of the class is not to reach a consensus, but rather to provoke thinking. I *encourage* you to participate actively in discussion. It is in your own interest if I know your name. You can participate in two ways: by contributing to the discussion during class periods and by responding to others' blog posts on the discussion forum.

<u>Mid-semester paper</u>: Application of ethics is not about individual principles, it is about looking holistically at a situation from multiple perspectives. The paper will give you an opportunity to examine a single case using all of the perspectives discussed to that point in the class. Good writing takes practice, and this assignment is designed to give you multiple opportunities to receive feedback and improve your writing. You will be given a topic to write about. Your paper should be 2-4 pages long, Times New Roman 12 point, single spaced, 1 inch margins on all sides. After the initial due date you may revise and resubmit your paper for an improved grade up to two times before the last day of class.

<u>Final exam</u>: As with the mid-semester paper, the final exam will ask you to consider a topic from the multiple perspectives discussed throughout the semester. The final exam will be essay-based. You will be given several prompts before the exam. The exam itself will ask you to respond to one or more of those prompts.

Grading Policy

Percent	Grade	Grade Points
93.0 - 100.0	Α	4.00
90.0 - 92.9	A-	3.67
87.0 - 89.9	B+	3.33
84.0 - 86.9	В	3.00
81.0 - 83.9	B-	2.67
78.0 - 80.9	C+	2.33
75.0 – 77.9	С	2.00
72.0 - 74.9	C-	1.67
69.0 - 71.9	D+	1.33
66.0 - 68.9	D	1.00
63.0 - 65.9	D-	0.67
0 - 62.9	Е	0.00

More information on UF grading policy may be found at: <u>https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</u>

Expectations for Honesty

Cheating is a very serious offense and will not be tolerated. All instances of cheating, no matter how minor it may seem to you, will be reported to the Dean of Students Office and prosecuted. The penalty for any instance of cheating is a grade of E for the semester. Actions that are considered cheating include, but are not limited to:

- Copying of homework solutions from another source or another student. Students are encouraged to work together to solve the homework, and thus it is expected that in some cases the homework solutions of two students will be the same. However, blatant copying can be identified and will be considered cheating.
- Copying from another student during an exam, or using disallowed resources (including programming information into a calculator) during an exam. Calculators will be spot-checked during exams.
- Plagiarism on written reports. Plagiarism is the practice of copying the text or ideas from other sources and presenting it as your own. A good explanation of plagiarism is available at https://tomprof.stanford.edu/posting/1178.
- Attempting to change answers or marked grades on homework assignments or exams after they have been graded and returned.
- Any other action which is an attempt to modify your grade for an assignment in a way that does not actually reflect your work or abilities.

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <u>https://www.dso.ufl.edu/drc</u>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <u>https://evaluations.ufl.edu/evals</u>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <u>https://evaluations.ufl.edu/results/</u>.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <u>http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html</u>

Campus Resources:

Health and Wellness

U Matter, We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: <u>http://www.counseling.ufl.edu/cwc</u>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

Academic Resources

E-learning technical suppor*t*, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <u>https://lss.at.ufl.edu/help.shtml</u>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. <u>https://www.crc.ufl.edu/</u>.

Library Support, <u>http://cms.uflib.ufl.edu/ask</u>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <u>https://teachingcenter.ufl.edu/</u>.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <u>https://writing.ufl.edu/writing-studio/</u>.

Student Complaints Campus: <u>https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf</u>.

On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint-process.

Engineering Ethics and Environmental Justice

ENV 3930 Section XXXX *Class Periods:* TBD *Location:* TBD *Academic Term:* Spring 2023

Instructor:

Elliot P. Douglas edouglas@ufl.edu 352-846-2836 Office Hours: TBD

Teaching Assistants:

Please contact through the Canvas website TBD

Course Description

Intended for undergraduates majoring in environmental engineering. Lectures and discussion on topics in ethics and environmental justice as related to environmental engineering. (H) 2 credit hours. General Education – Humanities

Course Pre-Requisites / Co-Requisites

None

Course Objectives

- Learn different approaches to ethical decision-making
- Understand ethical behavior expected of engineers
- Understand how environmental engineering decisions impact society through considerations of environmental justice
- Learn how to effectively work in partnership with communities

Materials and Supply Fees

None

Professional Component (ABET):

This course provides 1 credit towards engineering topics and 1 credit towards general education.

Relation to Program Outcomes (ABET):

Relation	Relation to Program Outcomes (ABET):			
Outco	me	Coverage*		
1.	An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics			
2.	An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors			
3.	An ability to communicate effectively with a range of audiences	Medium		
4.	An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	High		
5.	An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives			
6.	An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions			
	An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	Medium		

*Coverage is given as high, medium, or low. An empty box indicates that this outcome is not part of the course.

Required Textbooks and Software

None. Readings will be provided through the Canvas website.

Recommended Materials

None

Course Schedule

- Week 1: Course Overview; What is ethics?
- Week 2: Principlism
- Week 3: Other ethical approaches
- Week 4: Codes of ethics
- Week 5: Virtue ethics
- Week 6: Apperception game
- Week 7: Environmental justice
- Week 8: Applications of environmental justice
- Week 9: Ethnographic listening
- Week 10: Alternate codes of ethics

- Engineers' responsibilities Week 11:
- Week 12: **Community engagement**
- Environmental justice in communities Week 13:
- Week 14: Environmental justice and corporate responsibility
- Week 15: What is ethics, revisited

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Evaluation of Grades			
Assignment	Total Points	Percentage of Final Grade	
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Class Participation	25	25%	
Mid-semester paper	100	25%	
Final Exam	100	25%	

Evaluation of Crades

Grading philosophy: In my grading, a B means that you met expectations, demonstrated understanding of the material, answered the question, etc. An A is reserved for work that goes well above and beyond expectations. In this class that means that essays or comments in class spark new insights or lead discussion in new directions. I do not limit the number of A's that can be earned in the class.

<u>Blog entries:</u> Reading about engineering ethics is different from reading other subjects. Many of the readings are challenging, and you will have to work to understand them. Often, this will require *hard work*. One of the best ways to begin to understand the readings is to write about them. The blog assignments will give you specific questions to answer, but you should also try to restate the author's claims and arguments in your own words. Again, you may find this difficult. Keep working at it, and please do come see me during my office hours when (not if) you experience difficulty.

<u>Class participation</u>: Another good way to begin to understand the readings is to discuss them, both inside and outside of class. I have chosen readings that are likely to provoke thought and discussion. For this reason, I expect regular attendance in class. I also *expect* everyone to show respect for the opinions of others. I *encourage* you, however, to find respectful ways to disagree. The point of the class is not to reach a consensus, but rather to provoke thinking. I encourage you to participate actively in discussion. It is in your own interest if I know your name. You can participate in two ways: by contributing to the discussion during class periods and by responding to others' blog posts on the discussion forum. A B for class participation means that you met expectations – you participated at a reasonable level. An A means that you regularly provided insights that brought up new points and led the discussion in new directions.

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Grading Policy

Percent	Grade	Grade
		Points
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81.0 - 83.9	B-	2.67
78.0 - 80.9	C+	2.33
75.0 - 77.9	С	2.00
72.0 - 74.9	C-	1.67
69.0 - 71.9	D+	1.33
66.0 - 68.9	D	1.00
63.0 - 65.9	D-	0.67
0 - 62.9	Е	0.00

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Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://ufl.bluera.com/ufl/.

University Honesty Policy

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Commitment to a Safe and Inclusive Learning Environment

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Program Coordinator
- Robin Bielling, Director of Human Resources, 352-392-0903, <u>rbielling@eng.ufl.edu</u>

- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, taylor@eng.ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, nishida@eng.ufl.edu

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <u>https://registrar.ufl.edu/ferpa.html</u>

Campus Resources:

<u>Health and Wellness</u>

U Matter, We Care:

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Counseling and Wellness Center: <u>http://www.counseling.ufl.edu/cwc</u>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the <u>Office of Title IX Compliance</u>, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, <u>title-ix@ufl.edu</u>

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

<u>Academic Resources</u>

E-learning technical suppor*t*, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <u>https://lss.at.ufl.edu/help.shtml</u>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.

Library Support, <u>http://cms.uflib.ufl.edu/ask</u>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <u>https://teachingcenter.ufl.edu/</u>.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <u>https://writing.ufl.edu/writing-studio/</u>.

Student Complaints Campus: <u>https://care.dso.ufl.edu</u>.

On-Line Students Complaints: <u>http://www.distance.ufl.edu/student-complaint-process</u>.