Syllabus - Engineering Ethics and Communications –
Spring 2013 Semester
ESI 6912 – Section 028G (On-campus class)
ESI 6912 – Sections 028H and 029A (EDGE program)

1. Catalog Description: Engineering Ethics and Communication is designed to introduce engineering graduate students to the concepts, theory and practice of engineering ethics and effective written and oral communications and presentations. Students apply classical moral theory and decision making to engineering applications encountered in academic and professional careers. 3 SCH

2. Credit Hours: 3
Graduate students will not receive graduate credit for taking the undergraduate version of the class. They are allowed to enroll in the undergraduate section, but the credits will then not count toward the degree.

3. Pre-requisites and Co-requisites: N/A

4. Course Objectives: Prepare students to understand the foundation of classical moral theory and decision making in the context of science and engineering applications. Help students to recognize and evaluate ethical challenges that they will face in their academic and professional careers through knowledge and exercises that deeply challenge their decision making processes and ethics. Assist students in improving their effective communications and presentation skills.

5. Contribution of course to meeting the professional component: N/A as course is not specific to a major

6. Instructor: Bill McElroy, P.E., CH2M HILL, Vice-President and Gainesville Area Manager
   a. Office location: On-campus (NEB) Tuesdays; off-campus other days
   b. Telephone: 352-384-7126 (office direct)
   c. E-mail address: bill.mcelroy@ch2m.com
   d. Web site: UF course Sakai web site
   e. Office hours: Flexible

7. Teaching Assistant: N/A

8. Meeting Times: Tuesdays, Periods 7-9 (1:55 p.m. – 4:55 p.m.)

9. Class schedule: The course will typically be delivered weekly through a lecture overview by the instructor and/or a lecture/seminar/workshop administered by the instructor and supported by guest presenters, plus class discussions and presentations.
10. Meeting Location: NEB 102

11. Material and Supply Fees: N/A

12. Textbooks Required:
   a. Title: Fundamentals of Ethics for Scientists and Engineers
   b. Author: Seebauer, E. G. and R. L. Barry
   c. Publication date and edition: 2000, 1st Edition
   d. ISBN number: 9780195134889

   Students should expect to have additional reading assignments that will be posted in the course schedule.

13. Recommended Reading: assigned in class as applicable

14. Course Outline: Engineering Ethics and Communications is designed to introduce engineering graduate students to the concepts, theory and practice of ethics in academic, professional, and personal life environments and means to effectively and persuasively communicate through ethical quandaries with various stakeholders. Students will obtain a strong individual and team-based, hands-on, learning experience through a course curriculum consisting of lectures; supporting seminars and workshops; case studies; and team-based activities. The course will generally be delivered along the following outline:
   
   a. Classical Moral Theory as Applied to Science and Engineering - The Importance of Ethics in Science and Engineering; Philosophy, Religion, and Ethics; Moral Analysis; The Role of Codes of Ethics, Virtues and the Psyche; Habits and Morals; Distinguishing Exterior and Interior Morality; The Importance of Intention; Hierarchy of Moral Values; Virtuous Imprinting
   
   b. Evaluating Ethical Judgments - Evaluating Exterior Acts; Factors Limiting Moral Responsibility and Degrees of Responsibility; Truth in Actions and Words; Harm from Deception, Withholding Truth and Spreading Truth; Whistleblowing; Privacy Issues; Recognition from Scientific Publication; Plagiarism; Black and Gray in Scientific Practice and Publication; Responsible Conduct of Research; Conflict of Interest; Credit and Blame in Team Projects; Authorship
   
   c. Persuasive Communications – Oral and written communications; Persuasive presentation of ideas; Messaging; Communication of ethical breaches with stakeholders
d. Ethics in the Global Engineering Profession - Fairness in Supervising; Fairness in Contracting; Intellectual Property and Society; Environmental and Sustainability Issues; Social Aspects of Employment; Resource Allocation by Merit, Social Worth, Need, Ability to Pay, Equal or Random Assignment and Similarity; Differing Anthropologies, Principles, and Methods; Global Cultural Considerations

15. Attendance and Expectations: For on-campus students, attendance is mandatory at all sessions, and more than one absence can result in a loss of a letter grade per each absence over one at the discretion of the instructor, subject to the UF attendance policies. All assigned readings are mandatory and are to be completed before the corresponding class session. Each reading has been specifically chosen to provide a certain insight or skill. Unless stated otherwise, assignments are to be submitted via Sakai by the stated deadline. Late submissions are not accepted, subject to the policies of the undergraduate (https://catalog.ufl.edu/ugrad/current) or graduate (http://gradschool.ufl.edu/students/catalog.html) catalogues, as appropriate.

16. Grading: Final grades for the course will be determined as follows:
   Code of Conduct Assignments (2) - 20%, Case Analyses and Presentations (5) - 60%, Final Exam-20%


For graduate students: In order to graduate, graduate students must have an overall GPA and an upper-division GPA of 3.0 or better (B or better). Note: a B- average is equivalent to a GPA of 2.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html

18. Make-up Exam Policy: Makeup exams will only be allowed under rare circumstances at the discretion of the instructor, subject to the policies of the undergraduate (https://catalog.ufl.edu/ugrad/current) or graduate (http://gradschool.ufl.edu/students/catalog.html) catalogues, as appropriate.

19. Honesty Policy: All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.

20. Accommodation for Students with Disabilities: Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.
UF Counseling Services: Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services
- Career Resource Center, Reitz Union, 392-1601, career and job search services.

21. **Software Use:** All faculty, staff and student 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.