Master Course Description for

No: EE 492
Title: Electrical Engineering Leadership Seminar
Credits: 1 (1 seminar)
Coordinator: John Sahr, Professor

Goals: The EE Leadership Seminar Series was created to demonstrate to current EE students the depth and breadth of a degree in electrical engineering. Each week one or more alumni will speak about their UW path to industry and best practices along the way.

Learning Objectives:
At the end of the course, the student should have gained an understanding of the wide variety of career paths available to Electrical Engineers.

This understanding will include the ability to evaluate the relative strengths of work as an engineer for large and small companies, opportunities in management and sales, as well as opportunities in business, law, and intellectual property.

Textbook: No text is required for the course.

Prerequisites: None.

Topics: Seminar content will vary weekly by speaker.

Course Structure: The course meets weekly for one seminar hour.

Computer Resources: A webpage for the class will contain the course schedule, grading policy, and brief biographies of the speakers. The instructor will periodically communicate with the students by email.

Grading: The course grade is based primarily upon student participation through observation of the presentations, and by asking questions of the speaker. Also two short essays will be assigned, one due mid-quarter, and one due during Finals week.

In order to obtain credit for the course students are required to participate in at least 8 class meetings, and to complete two short essays on topics identified by the instructor based upon material provided by the speakers.

Outcome Coverage:
(a) An ability to apply knowledge of mathematics, science, and engineering: (N/A)
(b) An ability to design and conduct experiments, as well as to analyze and interpret data: (N/A)
(c) An ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability. (N/A)

(d) An ability to function on multidisciplinary teams. (N/A)

(e) An ability to identify, formulate and solve engineering problems. (N/A)

(f) An understanding of professional and ethical responsibilities. (N/A)

(g) An ability to communicate effectively. (N/A)

(h) (M) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context. Speakers have embraced a wide variety of careers, within the traditional definition of the field, in expanding the boundaries of the field, and completely outside of generally accepted engineering practice

(i) (M) A recognition of the need for and an ability to engage in life-long learning. Speakers will discuss how their own careers have depended on experience outside of the role of a student.

(j) Knowledge of contemporary issues. (N/A)

(k) An ability to use the techniques, skills and modern engineering tools necessary for engineering practice. (N/A)

Prepared By: John Sahr, 9/30/2016; 12/7/2016