

# ENGR 109: Engineering Orientation

## Winter 2014

M 12:20-2:10 pm WHI 248

### Instructor

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### Textbooks and Supplies

- *Studying Engineering: A Road Map to a Rewarding Career*, 4<sup>th</sup> Edition, Landis, Discovery Press, 2013. – Available in the bookstore.
- Internet Access: Available in campus computer labs.

### EvCC Engineering LinkedIN Group

The EvCC engineering department distributes important information to students (advising and schedule updates, internship and scholarship opportunities, important deadline reminders, and event announcements) using our LinkedIN group. LinkedIN is quickly becoming the primary professional networking venue for engineering and other professions. Keep up to date on what is going on by building a LinkedIN profile and joining the Everett Community College Engineering group (<http://www.linkedin.com/groups/Everett-Community-College-Engineering-5056966>)

### Course Description

The primary goal of this course is to provide you with the resources you need to make an informed decision about your future education and career goals and to outline the path to **make those goals your reality**. This course provides an orientation to the engineering profession and the educational options in engineering. A series of speakers from industry and universities will give presentations sampling the breadth of educational and career opportunities in engineering and related fields. Additional class activities will help you develop the attitudes and strategies that promote a success in the engineering curriculum.

### Canvas

Canvas will be used in support of this class. To access Canvas, go to <https://everettcc.instructure.com/> and follow the student login instructions. The Canvas site will include the following features to facilitate student learning:

- Gradebook – keep track of your progress in the course
- Up to date speaker schedule
- Homework assignment instructions
- Completed notes from class sessions (where applicable)
- Tegrity videos of class sessions (where applicable)
- Discussion forums

## Important Dates

Friday, January 10 – 100% refund deadline

Friday, January 17 – Deadline to drop a class without transcript entry

Friday, January 24 – 50% refund deadline, 20/40 payment plan second installment due

Friday, January 31 – Deadline to apply for spring quarter graduation

Friday, February 14 – 20/40 payment plan final installment due

Friday, February 28 – Last day to drop with W grade or change to audit

## Course Requirements

Engineering 109 is a pass/fail class. Students must earn a minimum of 20 to earn a passing grade. Points are earned as described below.

### *Class Participation Points (Max 10 possible)*

Participation is an integral part of this class due to the number of in-class activities and the unique opportunities provided by guest speakers. Regular attendance and contributions to group activities are necessary in order to earn a passing grade in the course. All students begin the quarter with **2 points** for participation. You will lose **1 point** for each class session missed. In addition to showing up and actively engaging in class activities, students must complete a one paragraph summary of **each** speaker presentation to be turned in at the following class session. You earn **1 point** per completed summary. Note that attendance will be taken for each class period and your summary will not be accepted if you were not in attendance. There will be 8 speakers over the course of the quarter.

### *Homework Points (Max 20 possible)*

There will be four Homework assignments for this class. The homework assignments for this course will build on class discussions/activities and are generally things you should be doing anyways to assess your academic skills, research information on possible career choices, and explore academic pathways. Homework assignments are worth up to **5 points** each and will be graded on the following scale:

**5 points** – Word processed and nicely organized work. Assignment deliverable demonstrates excellent effort that includes thoughtful personal reflection, thorough information gathering and/or accurate information as relevant to the assignment. This grade is generally reserved for work of **exceptional quality** that goes above and beyond the requirements explicitly outlined in the assignment.

**4 points** – Word processed and nicely organized work. Assignment deliverable is complete and meets all requirements. Work demonstrates thorough effort, thought, and personal reflection. Most assignments generally receive this grade if they are neat and complete.

**3 points** – Word processed and nicely organized work. Assignment is generally of lower than average quality as indicated by brevity, inaccuracies, or is incomplete. Assignments must be at least 75% complete to earn this grade.

**2 points** – Assignment is handwritten, messy and/or poorly organized. Little more than a token effort is indicated.

**1 point** – Assignment demonstrates little effort.

Due dates will be announced with each homework assignment. Late homework assignments will not be accepted except under unusual extenuating circumstances discussed (email okay) with the instructor **BEFORE** the due date.

#### *Exams*

There are no exams for this course.

**Note: Students who do not attend regularly and/or fail to do required work, should withdraw from this class. Failure to follow proper procedures may result with an (F) grade. Review the college catalog for grading details.**

#### **Learning Outcomes**

The assignments outlined above all serve to develop the following outcomes:

The college has the following six core learning outcomes:

1. *Engage and take responsibility as active learners*

Students will be involved in the learning process as they gain deeper levels of understanding of the subject matter. They will design, complete, and analyze projects while developing group interaction and leadership skills.

2. *Think critically*

Students will develop and practice analytical skills, problem-solving skills, and quantitative reasoning skills. Using creativity and self-reflection, they will be able to engage in inquiry that produces well-reasoned, meaningful conclusions.

3. *Communicate effectively*

Students will develop the organizational and research skills necessary to write and speak effectively. The students will demonstrate awareness of different audiences, styles, and approaches to oral and written communication.

4. *Participate in diverse environments*

Students will gain the awareness of and sensitivity to diversity, including one's own place as a global citizen. Students attain knowledge and understanding of the multiple expressions of diversity, and the skills to recognize, analyze, and evaluate diverse issues and perspectives.

5. *Utilize information literacy skills*

Students will develop and employ skills to recognize when information is needed and to locate, evaluate, effectively use and communicate information in its various forms.

6. *Demonstrate computer and technology proficiency*

Students will use computers and technology as appropriate in their course of study.

This course works to develop a subset of those outcomes with the following course-specific objectives:

Upon successful completion of this course, the student will be able to:

1. Distinguish between different fields of engineering and engineering technology.
2. Prepare an academic plan leading to an Associate of Science degree in an engineering major.
3. Outline the specific job opportunities and educational requirements in at least one field of engineering.
4. Demonstrate attitudes and learning strategies that promote success in engineering study.
5. Successfully navigate campus resources and services.

## Tentative Schedule

Week Starting	Speaker/Class Activities	Reading
1/6	Welcome/Course Overview EvCC Engr Program Overview EvCC Engineering Related Clubs LinkedIN page	Ch. 1
1/13	Speaker TBA	Ch. 2
1/20	MLK Holiday – campus closed	Ch. 2
1/27	Jeffrey Newcomer Professor and Department Chair WWU Engineering Programs (NEW!)	Ch. 3
2/3	WSU Engineering Programs (Everett and Pullman)	Ch. 3
2/10	Speaker TBA EvCC Library Presentation	Ch. 4
2/17	Presidents Day – campus closed	Ch. 4
2/24	Speaker TBA	Ch. 5
3/3	Speaker TBA	Ch. 5
3/10	Speaker TBA	Ch. 6
3/17	Speaker TBA	

Note: The above schedule and procedures in this course are subject to change; students will be given advance notice of such changes through Canvas.