EGN 3000 – Foundations of Engineering Fall 2003

SECTION 005 TUESDAYS 12:00 – 1:30 PM IN ENB 108, EXCEPT SEPT. 2, OCT. 14, & DEC. 2: 9:30 – 10:45 AM IN CHE 105

INSTRUCTOR: Dr. Kenneth J. Christensen, Computer Science and Engineering

| OFFICE: | Office room # | ENB 319 |
|---------|----------------|-------------------------|
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TEXTBOOK: Studying Engineering, Second Edition, by R. Landis, Discovery Press, 2000

- COMPUTER TOOLS: Internet Browser, Email, Microsoft Word, Excel, and PowerPoint
- **DESCRIPTION:** This one credit hour course covers the following: techniques for being a successful student; time management in the university environment; effective networking; campus facilities (computers, recreation, coop, societies, tutoring); adjusting counterproductive attitudes/behaviors; engineering professions; group design projects; brainstorming sessions for new inventions; reverse engineering sessions; engineering issues; and written and oral communication.

OBJECTIVES:

1. Students will be introduced to the university environment and given advice on successful student strategies.

- 2. Students will learn about the different engineering professions.
- 3. Students will learn strategies for succeeding in mathematics courses.
- 4. Students will learn strategies for maximizing performance in engineering courses.
- 5. Students will learn how to be successful on examinations.
- 6. Students will learn procedures for effective problem solving.
- 7. Students will learn about the ethical aspects of the engineering profession.
- 8. Students will gain experience in working as part of an engineering team.
- 9. Students will be introduced to the engineering design experience.
- 10. Students will get practice in written and oral communication

GRADING PROCEDURES:

- 1. Grades will be partially determined by performance on five short in-class quizzes, based on text readings and lecture. Each quiz will be scored from 0 to 100.
- 2. Grades will also be determined by performance on two group design or experimental projects. Note that if the projects are not presented on the assigned date, no members of the group pass the course.
- 3. Participation is a component of the grade. No absences are allowed unless excused for a verifiable and significant reason (illness, hurricane evacuation, and so on). Each unexcused absence will decrease your grade by 3.33 pts up to one full letter grade (10 pts). If you find the class boring, please feel free to quietly sit in the back of the room and do your homework or reading for some other course.

- 4. Final grades will be based on the "new university +/- grade scale" with the following percent contributions:
 - In-class quizzes 30% of final grade (5 quizzes at 6% each)
 - Project #1 30% of final grade
 - Project #2 30% of final grade
 - Participation
 10% of final grade
- 5. The grading policy is as follows:
 - $90 100 \Rightarrow A$ $80 89 \Rightarrow B$ $70 79 \Rightarrow C$ $60 69 \Rightarrow D$ 59 or below $\Rightarrow F$
 - + and designations determined by the instructor.

TENTATIVE SCHEDULE

In most weeks we will also have some small in-class activity. These activities are not shown in the below schedule. There will likely be minor modifications to the below schedule. All quizzes are open notes (notes may not include photocopies), <u>but closed book</u>. If you have taken good notes, then the quizzes will be "a piece of cake".

- Week 1. Welcome, administrivia, and class introductions
- Week 2. Monster Section held in CHE 105 from 9:30 10:45
- Week 3. Chapter 1 Keys to success in engineering study
- Week 4. Chapter 2 The engineering profession and quiz on chapter 1
- Week 5. Chapter 2 The engineering profession (continued) and kick-off of the first design project (including discussion of how to present a project)
- Week 6. Chapter 3 Academic success strategies and quiz on chapter 2
- Week 7 Student group presentations on first group design projects.
- Week 8. Monster Section held in CHE 105 from 9:30 10:45
- Week 9 Video: "Spider"
- Week 10 Chapter 4 Personal growth and development, quiz on chapter 3, and kick-off of the second design project
- Week 11 Chapter 5 Broadening your education and quiz on chapter 4
- Week 12 Veterans Day holiday (no classes)
- Week 13 Presentation of the second group design project and course evaluation
- Week 14 Chapter 6 Orientation in engineering education and quiz on chapter 5
- Week 15 Monster Section held in CHE 105 from 9:30 10:45

NOTE FROM THE PROVOST REGARDING RELIGIOUS OBSERVANCES:

"Students who anticipate the necessity of being absent from class due to the observation of a major religious observance must provide notice of the date(s) to the instructor, in writing, by the second class meeting."
