# ENGR A151 Introduction to Engineering Fall 2012

**Tuesdays 8:30-9:20am, Fine Arts Building Room 150, 1 credit hour**

**Instructor:** Dr. Steffen Peuker

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**Office Hours**: Tuesday 1-3pm, Thursday 9am-11am, 1-3pm

**Text (required):** Studying Engineering: A Road Map to a Rewarding Career, 3rd Edition by Raymond B. Landis, ISBN-10: 0-9646969-2-4

**Purpose of Course**:

To enhance your success as an engineering student and to help you decide which major engineering discipline to pursue at UAA.

**Grading:** The course will be based on the following:

Grade on the Journal you keep (30%)

Grade on homework/assignments (20%)

Grade on multiple choice exams (20%)

Grade on Project (30%)

**Attendance**: ***Attendance is mandatory***. There will be no excused absences except for reasons mentioned in the UAA Fact Finder Student Handbook. Students missing more than two classes will not receive credit for the course.

**Class Participation**: Regular attendance is required and active participation is expected from each student (as you will experience, this will help you in understanding the course material!).

**Project**: More information about the project will be provided in a separate handout.

**Journal:** A notebook will be provided for you to be used to document:

All notes taken in class

Your opinion of each section of the text

Questions, issues, or perspectives you gained

**Homework and multiple choice exams:**

There will be a variety of different homework assignments, online surveys, short papers, in-class handouts, etc. which will be announced in class and/or on the course blackboard page There will be several multiple choice exams throughout the semester. It is your responsibility to check the due dates of the individual assignments/exams. **No late submissions will be accepted**.

**E-mail Communication:** You are encouraged to visit Dr. Peuker during the office hours stated at the beginning of this document. If communicating by e-mail you need to include ENGR 151 in the subject, otherwise the instructors reserves the right to not answer your email. Unless otherwise announced by the instructor, emails will be answered within 48 hours.

**Accommodations:** If you have a disability that may affect your academic experience and are seeking accommodations, it is your responsibility to inform Disability Support Services as soon as possible. Please contact Disability Support Services to arrange for disability related accommodation. The DSS office is in RH 105. Their phone number and email address are available on their website, at www.uaa.alaska.edu/dss.

**Academic Integrity:**

Academic integrity is a basic principle, which requires that students take credit only for ideas

and efforts that are their own. Cheating, plagiarism, and other forms of academic dishonesty

are defined as the submission of materials in assignments, exams, or other academic work that is based on sources prohibited by the faculty member. Substantial portions of academic work that a student has submitted for a course may not be resubmitted for credit in another course without the knowledge and advance permission of the instructor.

In addition to any adverse academic action, which may result from engaging in academically

dishonest behavior, the University specifically reserves the right to address and sanction the

conduct involved through the student judicial review procedures. Disciplinary action may be initiated by the University and disciplinary sanctions imposed against any student or student organization found responsible for committing, attempting to commit, or intentionally assisting in the commission of Student Code of Conduct 1: Cheating, Plagiarism, or Other Forms of Academic Dishonesty.

Academic dishonesty is further defined in the Student Code of Conduct. The examples provided below of actions constituting forms of conduct prohibited by the Code are not intended to define prohibited conduct in exhaustive terms, but rather to set forth examples to serve as guidelines for acceptable and unacceptable behavior. (R09.02.020)

Student Code of Conduct 1. Cheating, Plagiarism, or Other Forms of Academic Dishonesty

a. using material sources not authorized by the faculty member during an examination or

assignment;

b. utilizing devices that are not authorized by the faculty member during an examination

or assignment;

c. providing assistance to another student or receiving assistance from another student during an examination or assignment in a manner not authorized by the faculty member;

d. presenting as their own the ideas or works of another person without proper acknowledgment of sources;

e. knowingly permitting their works to be submitted by another person without the faculty

member's permission;

f. acting as a substitute or utilizing a substitute in any examination or assignment;

g. fabricating data in support of laboratory or field work;

h. possessing, buying, selling, obtaining, or using a copy of any material intended to be used

as an instrument of examination or in an assignment in advance of its administration;

i. altering grade records of their own or another student's work; or

j. offering a monetary payment or other remuneration in exchange for a grade.

**Course Calendar:**

The below schedule is subject to change. Changes will be announced in class and/or on

blackboard. The assignments are listed when they are due, not when they are assigned.

NOTE: YOU ARE REQUIRED TO BRING YOUR TEXTBOOK AND

YOUR JOURNAL TO EVERY CLASS MEETING

#### Class #1⎯Tuesday, August 28th

Reading Assignment: Syllabus

Problem Assignment: None

Class Discussion: Purpose and philosophy of course

Class Activity: Syllabus Discussion

# Class #2⎯Tuesday, September 11th

Reading Assignment: Chapter 1

Problem Assignment: Freshman Engineering Survey

Exam 1

Class Discussion: Keys to success in engineering study

Class Activities: Small group discussions on “ability” versus “effort”

# Class #3⎯Tuesday, September 18th

Reading Assignment: Chapter 2, sections 2.1, 2.2, 2.3, 2.4, 2.5

Problem Assignment: Exam 2, Homework #1

Class Discussion: Rewards and opportunities of an engineering career

Greatest engineering achievements

Class Activities: What is engineering?

# Class #4⎯Tuesday, September 25th

Reading Assignment: Sections 2.6, 2.7, 2.8, 2.9, 2.10

Problem Assignment: List of questions for Prof. panel, Homework #2

Class Presentation: Panel of Engineering Department Representatives

Class Discussion: Ask the Professors!

# Class #5⎯Tuesday, October 2nd

Reading Assignment: Chapter 3

Problem Assignment: Exam 3, Homework #3

Class Discussion: Learning and learning styles

Metacognition

Become an Expert Learner

Teaching in college

Learning as a reinforcement process

Seeking help

Class Activities: Differences Between Engineering Study and High School

# Class #6⎯Tuesday, October 9th

### Note: Peer evaluations of journals are due

Reading Assignment: Chapter 4

Problem Assignment: Exam 4, Homework #4

Class Discussion: Early course preparation

Preparing for lectures

During your lectures

Making effective use of your professors

How to Email Your Professor

Class Activities: Making Effective Use of Your Professors

# Class #7⎯Tuesday, October 16th

Reading Assignment: Chapter 5

Problem Assignment: Exam 5, Homework #5

Class Discussion: Reading for comprehension

The Forgetting Curve

Organizing your learning process

Making effective use of your peers

Priority Management

### Note: Journals will be collected at the end of class

# Class #8⎯Tuesday, October 23rd

Reading Assignment: None

Problem Assignment: Library audio tour, Homework #6

Class Discussion: Library orientation

# Class #9⎯Tuesday, October 30th

Reading Assignment: Information handout on guest speakers

Problem Assignment: Prepare questions for guest speakers, Homework #7

Class Activity: Panel of practicing engineers

### Note: Journals will be returned.

# Class #10⎯Tuesday, November 6th

Reading Assignment: Chapter 6, sections 6.1, 6.2, 6.3, 6.4

Problem Assignment: Jung Typology Test

Class Discussion: Personal Development - Receptiveness to Change

Making Behavior Modification Work for You

Class Activities: Overcome Barriers

# Class #11⎯Tuesday, November 13th

Reading Assignment: Chapter 6, Section 6.5, 6.6, 6.7, 6.8

Problem Assignment: Exam 6, Homework #8

Class Discussion: Personal Development - Receptiveness to Change

Success

Maslow's Hierarchy of Needs

"Needs" and "Wants"

Self-Esteem

MBTI

Oral and Written Communications

Class Activities: Positive Aspects of being a College Student

# Class #12⎯Tuesday, November 20th

Reading Assignment: Chapter 8, sections 8.3, 8.4, 8.5

Problem Assignment: Homework #9

Class Discussion: Guest Speaker: Student Success Manager

# Class #13⎯Tuesday, November 27th

Reading Assignment: Chapter 7, Section 7.1

Problem Assignment: Homework #10

Class Discussion: Student Organizations

#### Class #14⎯Tuesday, December 4th

Reading Assignment: Incident at Morales Video, Chapter 8, section 8.6

Problem Assignment: Incident at Morales Worksheet

Class Discussion: Engineering Ethics, Academic Integrity

## Project report is due

#### Class #15⎯*Thursday*, December 13th 7:00am-9:45am

Problem Assignment: End of Semester Survey

Class Discussion: End of the term celebration