

## ISE 210: Engineering Perspectives

Fall 2008

Tue & Thu, 8:30 – 10:10AM, Fawcett 210

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- Course Description:** Provides an overview of engineering. Introduces the use of graphical presentation software, electronic spreadsheets, statistics, and other analytical tools for solving engineering problems. Discusses the ethical aspects of professional engineering decisions as they affect the environment and society;
- Objectives:** The goal of this course is to better prepare students to achieve success in engineering study. Specifically, the course objectives include:
- ❖ Provide general introductions to engineering principles, ethics, and professional responsibility
  - ❖ Develop skills in using engineering analytical tools and techniques
  - ❖ Foster collaboration among students through cooperative team project activities
  - ❖ Enhance writing and oral communication skills
- Instructor:** Dr. Yan Liu  
RUSS 230  
Phone: (937)775-5161  
Fax: (937)775-7364  
Email: [yan.liu@wright.edu](mailto:yan.liu@wright.edu)
- Office Hours:** RUSS 230, Mon & Wed, 1:00 – 3:00pm
- Textbook:** *Studying Engineering (3<sup>rd</sup> Edition)*, Raymond B. Landis, Discovery Press, 2007 (Required)  
*A Guide to Microsoft Excel (3<sup>rd</sup> Edition)*, Bernard V. Liengme, Butterworth Heinemann, 2002 (Recommended)
- Course Website:** <http://www.engineering.wright.edu/~yan.liu/ISE210>, where you can find information about the course materials, including a pre-course questionnaire, syllabus, lecture notes and assignments. I will try to put lecture notes online at least one day ahead.  
Your grades will be posted on WebCT (<http://wisdom.wright.edu/>).

**Writing Assignments:** This is an Area VI College Component General Education course and designated as an intensive writing course. There are five writing assignments, including three essays and two technical reports, throughout the course. The objectives of the intensive writing provision are to:

- ❖ Improve students' ability to develop ideas and transmit information for appropriate audiences in an organized and coherent fashion
- ❖ Encourage students to use writing as a learning tool to explore and structure ideas in order to articulate thoughts and questions
- ❖ Demonstrate the ways in which writing is integral to all disciplines, essential to the learning and conveying of knowledge in all fields

**Note:** All writing assignments are due at the beginning of class on the assigned date. No homework will be accepted more than three days past the due date, with 20% reduction in grades for each day late, unless arrangements are made prior to the due date or if a valid emergency exists.

**Group Projects:** Two group projects will be assigned in this course. Each group should consist of 3 or 4 students. An oral presentation will be scheduled for each project. In addition, a technical report, considered as a writing assignment, needs to be submitted for each project

**In-class Exercises:** There are several in-class exercises in this course, solving some problems using Microsoft Excel and Matlab

**Tests:** Two in-class tests, midterm and final exam, will be scheduled. In general, the tests will be closed-book; however, students are permitted and encouraged to create their own self-generated one-page (single-side) review notes which may be used during the tests

**Honesty & Integrity:** Students are expected be aware of and to adhere to the university standards of academic honesty found under academic information in the WSU student handbook, <http://www.wright.edu/students/judicial/integrity.html>  
 Students may discuss homework assignments with others but, with the exception of explicit group assignments, are expected to complete and turn in their own work.

<b>Grading Criteria:</b>	<u>Element</u>	<u>Proportional Value</u>
	Mid-term exam	25%
	Final exam	25%
	Writing	20% (4% each)
	Projects	20% (10% each)
	In-class exercises	10%

Grades

A: 90 – 100    B: 80 – 89    C: 70 – 79    D: 60 – 69    F:< 60

**My Expectations:**

- ❖ I expect that you will work hard in this course.
- ❖ I expect you to come to each class prepared to listen and understand. I expect that you will ask questions if things are not clear.
- ❖ I expect that you will use the textbook and other resources and read materials as assigned.
- ❖ I expect you to attend class regularly and promptly catch up on any classes you miss.
- ❖ I expect you to make honest attempts at assignments and ask for help when you need it. I expect you to not misrepresent the work of others as your own. The university standards of academic honesty under academic information can be found in the WSU student handbook, <http://www.wright.edu/students/judicial/integrity.html>.
- ❖ I expect you to behave appropriately and politely towards me and your fellow classmates at all times. This includes remaining quiet when others are speaking and being patient with the questions of others.

**Your Expectations:**

- ❖ You can expect that I will work hard in this course
- ❖ You can expect that I will do my best to explain and illustrate the materials in a way that makes sense to you. Sometimes I will need help and feedback from you in order to figure out the best way to explain something.
- ❖ You can expect that I will listen to your questions with respect and never ridicule; if the answer to your question is beyond the scope of this course, I will discuss it with you outside of class.
- ❖ You can expect that I will attempt to evaluate your work fairly and assign grades appropriate to your performance.
- ❖ You can expect that I will do my best to make this course a success for all of us. If you have other expectations, hopes, or suggestions, please let me know.