

**INSY 6010/6016 – Safety Engineering (I)****Syllabus for Fall 2008****Bulletin Description:**

(3). Lec. 3, Pr., INSY 3020, or permission of the instructor. Occupational safety engineering and management with emphasis on control of hazardous materials, fire prevention, safety considerations in production facility design and maintenance, and operation of effective safety programs. Elective INSY curriculum course.

**Topics Discussed:**

OSHA standards, risk management, hazard identification and elimination, hazard communication, professional certification, and other applied safety topics intrinsic to industry and production facility design and operation.

**Faculty:** Jerry Davis, PhD, CPE, CSP  
3320 Shelby Center  
334-844-1411  
[davisga@auburn.edu](mailto:davisga@auburn.edu)  
Office Hours: By Appointment

**GTAs:** Adam Piper, MS  
[piperak@auburn.edu](mailto:piperak@auburn.edu)  
Brad Townson  
[townsby@auburn.edu](mailto:townsby@auburn.edu)  
3323 Shelby Center  
Office Hours: M/W 2:00–3:30 pm

**Text:** Safety and Health for Engineers, 2<sup>nd</sup> Ed., by Brauer. John Wiley & Sons, Inc. (2006).

**Blackboard:**

All course material is available on the AU Access Blackboard page for this course, INSY 5010/6010/6016, found at <https://blackboard.auburn.edu/webct/logon/216107961021>.

**Meetings:** T/R, 8:00-9:15 AM, 304b Ramsay Hall

**Professional Objectives:**

Expose students to the regulatory and professional aspects of occupational safety. Law and ethics are stressed throughout the course. Engineering skills are reinforced by requiring students to apply basic engineering principles to safety related problems.

**Evaluation of Student Performance:**

Exam (I)	30% of Final Grade
Exam (II)	30% of Final Grade
Course Project	25% of Final Grade
<u>Homework &amp; Quizzes</u>	<u>15% of Final Grade</u>
Total	100%

The Final Examination will be cumulative in nature. All examinations will be closed book/notes and be based solely on the materials covered during the course. All necessary formulae, etc. will be provided. See the section below regarding acceptable calculators.

**Notes:**

1. Although University policy does not mandate class attendance, students are expected to attend regularly. Much of the material presented in the classroom is not readily available elsewhere.
2. Announced and unannounced quizzes will be given at the discretion of the instructor.

3. The instructor will retain all graded assignments. A short review will be held after each examination that will allow students an opportunity to review their scores.
4. Students must show all calculations to receive full credit on homework and examination problems.

**Course Project:**

6010 & 6016 students will be required to complete a course project instead of a final exam. Details regarding the nature of this project will be discussed in class and on the course Blackboard page. A one page proposal will be due early in the semester, and the final report will be due prior to Thanksgiving break.

**Course Schedule (Dates are approximate):**

<u>Date</u>	<u>Lecture Topic or Event</u>
8/19	Introduction and Course Overview
8/21	Ch. 4,5 – Introduction to OSHA
8/26	Ch. 3 – Fundamental Concepts
8/28	Ch. 9 – Hazard Control
9/2	Ch. 10 – Mechanics & Structures
9/4	Ch. 11 – Walking & Working Surfaces
9/9	Ch. 11 – Slip, Trip & Fall
9/11-9/16	Ch. 12 – Electrical Safety
9/18	Ch. 13 – Lockout / Tagout (LOTO) <i>Course Project Proposals due (6010/6010 only) – 9/18/2008</i>
9/23	<b>EXAM #1</b> (covers all materials 8/19 – 9/18)
9/25	Ch. 13 – Machine Guarding
9/30	Ch. 15 – Manual Materials Handling & Ergonomics
10/2	Ch. 15 – Mechanized Materials Handling
10/7–10/9	Ch. 16, 29 – Fire Protection & Prevention, Egress
10/14	Ch. 16, 17 – Flammable & Combustible Liquids, Explosives
10/16	Ch. 18 – Heat Stress
10/21	Ch. 23 – Noise & Vibration
10/23	Ch. 24 – Confined Spaces
10/28	<b>EXAM #2</b> (covers all materials 9/25 – 10/23)
10/30	Ch. 24 – Chemicals, Hazard Communication (HAZCOM)
11/4	Ch. 28 – Personal Protective Equipment (PPE)
11/6	Ch. 22 – Ionizing & Non-ionizing Radiation
11/11	Ch. 31 – Workplace Violence
11/13	Ch. 32 – Safety Training and Communication
11/18	Ch. 34 – Safety Management
11/20	Ch. 34 – Safety Programs <i>Course Project Final Reports due (6010/6010 only) – 11/20/2008</i>

## THANKSGIVING HOLIDAYS

12/2	Instructor's discretionary topic
12/4	Instructor's discretionary topic
12/12	FINAL EXAM 8:00 – 10:30 am (5010 only, cumulative over entire semester)

**Grading:**

A = 90% - 100%

C = 70% - 79%

F = 0% - 59%

B = 80% - 89%

D = 60% - 69%

**Accommodations:**

Students who need accommodations are asked to arrange a meeting during the first week of classes, or as soon as possible if accommodations are needed immediately. Please bring a copy of the Accommodation Memo, and an Instructor Verification Form to the meeting. If the student does not have the necessary paperwork, an appointment with The Program for Students with Disabilities should be made, 1244 Haley Center, 844-2096.

**Calculator Policy:**

As stated in the Tiger Cub, any violation of the academic honesty code will be reported to the Academic Honesty Committee. To avoid academic dishonesty, students are not to have calculators that store text and/or can connect to Bluetooth devices during class. If acquiring an acceptable calculator becomes a problem, please see the instructor. **The only calculators that are acceptable for in class exams or quizzes are:**

- TI-30XA
- TI-30XIIB
- TI-34II

**Academic Honesty:**

All portions of the Auburn University student academic honesty code (Title X11) found in the Tiger Cub will apply to this class. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee. Violations include, but are not limited to:

- Cheating on an examination – This includes such things as copying from another's paper, using unauthorized notes, calculators, etc., or giving or receiving unauthorized aid, such as trading examinations, whispering answers, passing notes, or using electronic devices to transmit or receive information.
- Plagiarism – This is using someone else's work without giving credit. It is, for example, using ideas, phrases, papers, laboratory reports, computer programs, and data - copied directly or paraphrased - that you did not arrive at on your own. Sources include published works such as book, movies, web sites, and unpublished works such as other students' papers or material from a research service. In brief, representing someone else's work as your own is academically dishonest. The risk of plagiarism can be avoided in written work by clearly indicating, either in footnotes or in the paper itself, the source of any major or unique idea or wording that you did not arrive at on your own. Sources must be given regardless of whether the material is quoted directly or paraphrased. Copying another student's assignment and putting your name on it is plagiarism.
- Unauthorized collaboration – This is working with or receiving help from others on graded assignments without the specific approval of the instructor. If in doubt, seek permission from the instructor before working with others. Students are encouraged to learn from one another: Form study groups and discuss assignments, but each assignment must be individual work unless specifically stated and turned in as a group assignment. You are encouraged to talk to one another about your assignments, however, all assignments must be done by the student(s) whose name is (are) on it!
- Multiple submission – This means using the same work to fulfill the academic requirements in more than one course. Prior permission of the instructors is essential.