Syllabus--ENGR 482 Ethics and Engineering, Fall 2003

Sec. 521-532: MW 10:20-11:10, Drs. James and Harris
Sec. 200, 501-511: MW 1:50-2:40m Zach 102, Drs. Heffington and Harris
(See Supplementary Syllabus Information for Contact information on Faculty and TAs)

Prerequisites: Junior Standing, Cross listed with PHIL 482

Text and Course Notes

Dr. Harris’ lecture notes are available in spiral from Notes-N-Quotes, 701 University Drive. Supplementary notes will be available at the TEES Copy Center on the second floor of Wiesenbaker, and other supplementary notes are available on Drs. James’ and Harris’ webpages. The notes are a valuable study aid in topical form but are not a substitute for attending class or reading the textbook.

Instructor Responsibility for Lectures
H=Harris, J=James, HF=Heffington

Course Objectives:

* Know the ethical standards of the engineering profession.
* Know the requirements of the Texas Engineering Practices Act.
* Know some of the types of ethical/professional problems that can confront practicing engineers.
* Know some methods for analyzing and resolving such conflicts.
* Improve skills in effective communication, especially with those in your profession, about ethical and professional issues.

Sept. 01 The Citicorp Building (video), J/HF
03 The Citicorp: Communication in Engineering, J/HF
05 Discussion Sections: Introduction, Discussion of Citicorp (Ch. 1)
08 The Challenger Video, J/HF
First Major Writing Assignment:Assigned
10 Factual, Conceptual, Application, and Moral Issues, H (Ch.2)
12 Discussion Sections: Cases 4,5,7 (Factual, Conceptual, Application, Moral)
15 Lecture: Communication in Engineering, J/HF
17  Line Drawing and Creative Middle Ways, H (Ch.3)
19  Discussion Sections: Cases 6,23,29 (Line Drawing, Creative Middle Ways)
First Major Writing Assignment: Due
22  Professionalism and Responsibility, J/HF (Ch.5)
24  Professionalism and Responsibility: TV Tower Case, J/HF
Second Major Writing Assignment: Assigned
26  Discussion Sections: Cases 1,4,7,12,28.
29  Integrity, Honesty, Conflicts of Interest, J/HF (Ch.6)

Oct.  01  Integrity, Honesty, Conflicts of Interest, J/HF
03  Discussion Sections: Review for Mid-Term
Second Major Writing Assignment: Due
06  Ethics in a Small Engineering Firm: Mr. David Brewer
08  Risk and Safety in Engineering, J/HF (Ch.7)
08  Mid-Term Exam, 7-9 P.M.
10  Discussion Sections Dismissed
13  Risk and Safety in Engineering, H.
15  Moral Theories: Utilitarianism, H (Ch.4, pp. 75-84)
17  Discussion Sections: Cases 18, 34
20  Moral Theories: Respect for Persons, H (Ch. 4, pp. 85-94)
22  Moral Theories: Continued
Third Major Writing Assignment: Assigned
24  Discussion Sections: Case 24
27  Environmental Ethics: Dr. Holtzapple (Lecture)
29  Environmental Ethics: Dr. Holtzapple (continued)
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 31</td>
<td>Discussion Sections: <strong>Ch. 9</strong>, Material Not Covered by Dr. Holtzapple</td>
</tr>
<tr>
<td>Nov. 30</td>
<td>Third Major Writing Assignment: Due</td>
</tr>
<tr>
<td>Nov. 03</td>
<td>Engineers as Employees, H (Ch. 8)</td>
</tr>
<tr>
<td>Nov. 05</td>
<td>Engineers as Employees</td>
</tr>
<tr>
<td>Nov. 07</td>
<td>Discussion Sections: Cases 11, 27, 32, 33.</td>
</tr>
<tr>
<td>Nov. 10</td>
<td>Computer Ethics, H (Lecture Notes)</td>
</tr>
<tr>
<td>Nov. 12</td>
<td>Computer Ethics, H</td>
</tr>
<tr>
<td>Nov. 14</td>
<td>Fourth Major Writing Assignment: Assigned</td>
</tr>
<tr>
<td>Nov. 17</td>
<td>Discussion Sections: Cases Assigned</td>
</tr>
<tr>
<td>Nov. 19</td>
<td>Promoting and Enforcing Ethics, J/HF (Ch. 11)</td>
</tr>
<tr>
<td>Nov. 21</td>
<td>Promoting and Enforcing Ethics</td>
</tr>
<tr>
<td>Nov. 24</td>
<td>Discussion Sections: Cases Assigned</td>
</tr>
<tr>
<td>Nov. 26</td>
<td>Fourth Major Writing Assignment: Due</td>
</tr>
<tr>
<td>Nov. 28</td>
<td>Race and Gender Issues, H (Lecture Notes)</td>
</tr>
<tr>
<td>Nov. 30</td>
<td>Class Dismissed</td>
</tr>
<tr>
<td>Dec. 01</td>
<td><strong>Thanksgiving Holiday, Nov. 27-30</strong> Discussion Sections Dismissed</td>
</tr>
<tr>
<td>Dec. 03</td>
<td>Representative from State Board</td>
</tr>
<tr>
<td>Dec. 05</td>
<td>Bovay Lecture</td>
</tr>
<tr>
<td>Dec. 08</td>
<td>Redefined Friday: Discussion Sections Dismissed</td>
</tr>
</tbody>
</table>

**Final Exams:**
- **Morning Lecture:** Tuesday, Dec. 16, 8:00 A.M., Zach. 102
- **Afternoon Lecture:** Tuesday, Dec. 16, 3:30 P.M., Zach. 102
Grading Policies:
Midterm Exam, 20% (may include written components)
Final Exam, 20%
Short Papers, 40%
Discussion Sections (attendance, writing, presentations, pop quizzes): 15%
Attendance in lecture: 5%

Attendance and Pop Quizzes: University excused absences will be recognized. Quality participation in the presentation of cases in the discussion groups is important.

Exams: The Mid-Term and Final Exams will focus on both lecture and textbook material. Some material from the book does not appear in the lectures and some lecture material does not appear in the book. Make sure you study both!

Short Essay Exams: There will be at least four essay assignments throughout the semester. The essays will involve analyses of cases and arguments or analyses of some issue. The length and composition of the essays will be determined for each essay. Writing quality as well as content will be evaluated.

Missed or Late Work: Such work will be excused only for University-recognized reasons. You should notify your instructor before the missed class. Make-up exams should be arranged with your TA. Pop Quizzes missed because of excused absences will not be made up. They will simply not figure in your quiz average.

Scholastic Integrity: Scholastic dishonesty can result in failure of the course. One form of scholastic dishonesty that is not well understood is plagiarism. As commonly defined, plagiarism consists of passing off as one’s own ideas, words, writings, etc., the work of another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is a very serious offense. In the professional world, plagiarism destroys the trust among colleagues, without which research cannot safely be communicated. Consult the latest issue of the Texas A&M University Student Rules, http://student-rules.tamu.edu/ under the section “Scholastic Dishonesty,” for further information on this issue. This caution against plagiarism does NOT rule out your discussing with others the case analyses or other assignments ahead of time. In fact, you are encouraged to discuss these issues with anyone. This can be a part of the learning experience in this course. You should not, of course, simply turn in a paper written by another person. This is plagiarism.

The handouts used in this course are copyrighted. By “handouts,” I mean all materials generated for this class, which include but at not limited to syllabi, notes, quizzes, exams, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts unless I expressly grant permission.

Scholastic dishonesty will be reported and handled in accordance with the University Regulations, Section 42. Some or all examinations will be closed book; retrieval of data,
formulae, examples, definitions, etc. from a crib sheet, calculator, computer or other device during these examinations is a violation of Texas A&M University Student Rule 20.1.1 Acquiring Information.

Writing Intensive Course: Because critical thinking skills are essential to the recognition, evaluation, and resolution of ethical issues, and because writing about these issues hones critical thinking skills as well as improves communication skills, writing is an important part of this course. Your grade will be strongly influenced by the quality of written assignments.

The course is designed to meet the University requirements for a writing-intensive course. This means that you will be asked to complete writing assignments, both in class and outside of class. Studies have shown that engineers spend over half of their time in communication-related tasks. Practice in communication (especially written communication) is therefore an important part of an engineer’s professional education.

The Writing Center: If you need help with writing, the Undergraduate University Writing Center is the place to go! They will help you with virtually every aspect of a writing assignment—except writing it for you! They provide one-on-one writing assistance from creating a rough draft, grammar, organization, citation, or revision. Each session lasts approximately 30-45 minutes and begins on the hour. If a person is more than five minutes late for an appointment, that person forfeits the appointment time. Come prepared. Bring a copy of your assignment if you have one, and think about what you want to work on.

The Center is located in Evans Library, second floor room 1.21B. The phone is 458-1455. The web address is http://uwc.tamu.edu. The web page is a great source of information for your writing needs. You can even get feedback from a consultant online. Please allow 48 hours turn-around time. You can request an appointment online at: http://uwc.tamu.edu/apptcal/student. You can also print hand-outs on virtually every aspect of writing at http://ywc,tany,edy/handouts/. The hours of the Center are Monday–Thursday, 10:00 am–10:00 pm and Friday 10:00am–2:00 pm.

ADA: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of student Life, Services for Students with Disabilities in Room 126 of the Koldus Building, or call 845-1637.