CSE 3981
Social and Ethical Issues in Computing

REQUIRED/ELECTIVE:
- Computer Science: Required
- Software Engineering: Required
- Computer Engineering: Elective

CATALOG DATA:
CSE 3981. Social and Ethical Issues in Computing. (1) (Prerequisite: Senior standing.) One hour lecture. Study of major social and ethical issues in computing, including history of computing, impact of computers on society, and the computer professional’s code of ethics.

PREREQUISITE BY TOPIC:
1. Maturity in the software development process.

TEXTBOOKS AND OTHER REQUIRED MATERIAL:

COORDINATOR:
Julian E. Boggess, Ph.D.

COURSE OBJECTIVES:
1. To make students aware of their responsibilities and duties as a computer professional.
2. To help students analyze the social implications of the rapid computerization of our culture.
3. To acquaint students with the ethical issues involved in computing.
4. To assist students in formulating their own code describing their moral and ethical responsibilities as computer professionals.

TOPICS COVERED: (Number of class hrs)
1. Privacy and information 2
2. Reliability and safety of computer systems 2
3. Protecting software and other intellectual property 2
4. Philosophical bases for computer ethics 2
5. Computer crime and legal issues 2
6. Computers and social issues 1
7. Issues on the impact and control of computer technology 2
8. Codes of ethics 2

CONTRIBUTION TO PROFESSIONAL COMPONENT:
General Education Topics

ASSESSMENTS:
1. Class presentations
2. Topic papers
3. Exam
4. Classroom discussion
RELATIONSHIP TO PROGRAM OUTCOMES:
1. Students will become knowledgeable about the codes of ethics in computing and be able to use them in their professional careers, including during the process of decision-making. (f, h, j, cpe8, se2, se6, se8)
2. Students will be able to participate in well-reasoned discussions of social and ethical issues in computing. (f, g, h, j, cpe8, se2, se6, se8)

PREPARED BY:
Julian Eugene Boggess, III; Associate Professor
Department of Computer Science and Engineering
15 April 2005

ESTIMATE CSAB CATEGORY CONTENT:

<table>
<thead>
<tr>
<th>CORE</th>
<th>ADVANCED</th>
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<tbody>
<tr>
<td>Data Structures</td>
<td>0</td>
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<td>Algorithms</td>
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<td>Software Design</td>
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<td>Computer Organization and Architecture</td>
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<td>Concepts of Programming Languages</td>
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ORAL AND WRITTEN COMMUNICATIONS:
Every student is required to submit at least 4 written reports (not including exams, tests, quizzes, or commented programs) of typically 2-3 pages and to make 1 oral presentation of typically 15 minutes duration. Include only material that is graded for grammar, spelling, style, and so forth, as well as for technical content, completeness, and accuracy. (Note: The final exam is also a paper, a case study 5-7 pages in length, graded on the same criteria.)

SOCIAL AND ETHICAL ISSUES:
The entire course directly addresses social and ethical issues; see the Topics Covered section above for a list of topics and class time. All assessment is directed at evaluating the students’ understanding of these topics. Students are evaluated on the basis of five essays, an oral presentation, and active participation in class discussion.

THEORETICAL CONTENT:
None

PROBLEM ANALYSIS:
None

SOLUTION DESIGN:
None