CSC/CPE 300 Professional Responsibilities

1. CSC/CPE 300 Professional Responsibilities

2. credit units 4  contact hours 6

3. Course Coordinator: Clark Turner


5. a. Course Description: The responsibilities of the computer science professional. The ethics of science and the IEEE/ACM Software Engineering Code of Ethics. Quality tradeoffs, software system safety, intellectual property, history of computing and the social implications of computers in the modern world. Applications to ethical dilemmas in computing. Technical presentation methods and practice. 3 lectures, 1 laboratory. Crosslisted as CPE/CSC 300.

   b. Prerequisite: CSC/CPE 357 and junior standing.

   c. Required/Elective/Selective Elective for CPE, CSC, EE, SE

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6. a. Course Goals/Outcomes

   The student will be able to:

   • Comprehension:
     o Students will understand the field of software reliability and software safety
     o Students will understand the legal principles of liability for unsafe software systems
     o Students will understand the legal principles underlying intellectual property

   • Application:
     o Students are able to discuss and write about the social impacts of software and computers

   • Synthesis:
     o Students are able to make rational computer and software engineering tradeoffs

   • Evaluation:
     o Students are able to apply the IEEE/ACM Software Engineering Code of Ethics to real situations
     o Students can present alternative software design rationales in professional presentations.

   b. How Student Outcomes addressed

   (“B” = Basic level, “I” = Intermediate level, “A” = Advanced level)
7. **Major Topics Covered: (number of lecture hours each)**

- Ethical Basics in Technical Context (4)
- IEEE/ACM Software Engineering Code of Ethics (2)
- Social Case Studies (4)
- Information Privacy (issues, policies and laws) (4)
- Software Safety (issues, policies and laws) (6)
- Computer Crime (2)
- Intellectual Property (2)
- Technical Presentation Principles (2)
- Student Presentations (10)

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