

Course Number: CSC 300

Course Title: Ethics, Communication and Tools for SW Development

Number of Credits: 3

Schedule: Three hours of lecture per week.

Prerequisite: grade C or better in CSC 210 or equivalent; grade C or better in English 214 or equivalent

Catalog Description

Privacy and security, legal and ethical issues in software development. Communication relevant to software development such as reports, contracts, requirements, documentation, collaboration, e-mail, presentations. Study and use of basic tools for software development and collaboration.

This course satisfies the GWAR requirement.

Expanded Description

Introduction to ethical, social and professional issues in the field of computer science and software development. Professional and ethical responsibilities in computer science and software development. Privacy and personal data in on-line world. An overview of ethics and plagiarism policy of the CS Dept.

Intellectual property rights and protection. Legal perspective, copyright laws, patents, trade secrets, trademarks, cheating and plagiarism, piracy, federal regulations, software protection, public domain, fair use, use of open source software.

Effective written communication and tools used in computer science and in collaborative software development such as:

- e-mail, forums, collaborative and group communication
- Executive summaries, abstracts and short technical reports
- Software contracts, requirements, specifications, use cases
- Software documentation
- Use of text in WWW
- Coding style
- Creation of effective technical presentations (e.g. using PowerPoint)

Intro to basic tools for SW development at SFSU

- SFSU IT environment and basic tools
- Brief overview of Windows, Mac and Unix
- Remote text editors
- Tools for basic SW development at SFSU CS Department
- Use of tools that might raise ethical and privacy issues
- Appropriate use of intellectual property

Course Objectives and Role in Program

The objectives of this course cover three important areas:

- To introduce students to the study of ethics and how it applies to the field of computer science and practice of software engineering, including legal, intellectual property and privacy issues.
- Present and discuss ethics and plagiarism policy of the CS Department.
- To teach students how to communicate effectively in writing in the context of computer science and software development
- To teach students how to use basic tools for SW development and collaboration
- Appropriate use of SW tools to avoid ethical and privacy issues

This course satisfies **Graduation Writing Assessment Requirement**

Learning Outcomes

At the end of this course students will be able to:

- Evaluate ethical issues that are associated with accessing on-line information or developing software
- Understand the ethics and plagiarism policy of the CS Department
- Understand, evaluate and apply the various legal, privacy and intellectual property concerns related to on-line information and software
- Apply professional responsibility, accountability when writing software
- Use written communication effectively in the context of computer science and collaborative software development
- Prepare effective materials for oral presentations
- Use various SW tools necessary for their study at CS Department at SFSU

Method of Evaluation and Grading

Student learning will be evaluated and graded on the basis of

- Grades of in-class written quizzes covering ethics, legal and privacy issues. (30% of the grade)
- Assignments ensuring student learning of SW tools usage (20%)
- Several written assignments (with revisions) covering written communication skills for SW engineers graded for content and quality of writing (50%)

Required Textbook

A Gift of Fire(2nd edition), Sara Baase, Prentice Hall, 2002

Number of on-line references and on-line tools documentation will also be provided in the class

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