CS 4883: Social Issues in Computing

Required Course: Required
Course Number: CS 4883
Course Name: Social Issues in Computing
Credit Hours: 3
Lecture Hours: Online Course
Lab Hours: 0
Instructors: Dr. Rekha Bhowmik

Book Title(s): A Gift of Fire – Social, Legal and Ethical Issues for Computing and the Internet, 5th Edition
Book Author(s): Sara Baase
Book Year(s):

Course Description: The history and evolution of computing systems, providing the background for the analysis of the social impact of computers. The social implications of computer use and or misuse with emphasis on the effects on the individual, society, and other human institutions. Social responsibilities of people involved in using or applying computers.

Course Prerequisites: Senior standing and ENGL 3323 (Technical writing) or BCOM 3113 (Written Communication) or BCOM 3223 (Oral Communication) with a grade of 'C' or better.

Course Goals: After taking the course, students should:

- Understand the basics of different ethical systems.
- Know and be able to discuss and form opinions about contemporary social issues related to computing.
- Be able to articulate their stance on ethical issues and give arguments to support their conclusions.
- Be exposed to differing opinions about ethical issues related to computing.

Student Outcomes:

Student Outcome	Course Outcome
3	- Use understand different kinds of ethical systems. - Discussion of social issue related to computing - Analyze conflicting legal issues surrounding data ownership - Understand the ACM code of ethics and Software Engineering code of ethics.

	• Discussion of privacy and freedom of speech on the net
4	• Understand intellectual property, inappropriate business practices, ethical considerations in artificial intelligence. • Discussion of copyright laws, software patents.

Course Topics:

Knowledge Area	Total Hours of Coverage
Social Issues and Professional Practice (SP)	39

Body of Knowledge coverage:

Knowledge Area	Knowledge Unit	Topics Covered	Hours
SP	Social Context	• Summarize the implications of social media on individualism versus collectivism and culture.	2
SP	Analytical Tools	• Evaluate stakeholder positions in a given situation. • Analyze basic logical fallacies in an argument. • Analyze an argument to identify premises and conclusion. • Illustrate the use of example and analogy in ethical argument.	6
SP	Professional Ethics	• Describe the strengths and weaknesses of relevant professional codes as expressions of professionalism and guides to decision-making. • Analyze a global computing issue, observing the role of professionals and government officials in managing the problem. • Describe the consequences of inappropriate professional behavior, the consequences of inappropriate personal behavior.	6

SP	Intellectual Property	• Discuss the philosophical bases of intellectual property. Discuss the rationale for the legal protection of intellectual property. • Describe legislation aimed at digital copyright infringements. • Identify contemporary examples of intangible digital intellectual property. • Justify uses of copyrighted materials. The consequences of theft of intellectual property. • Discuss the issues involved in securing software patents.	7
SP	Privacy and Civil Liberties	• Discuss the philosophical basis for the legal protection of personal privacy. • Describe the role of data collection in the implementation of pervasive surveillance systems. • Investigate the impact of technological solutions to privacy problems. Legal foundations of privacy protection.	3
SP	Professional Communication	• Write clear, concise, and accurate technical documents following well-defined standards for format and for including appropriate tables, figures, and references. • Develop and deliver a good quality formal presentation. • Plan interactions (e.g. virtual, face-to-face, shared documents) with others in which they are able to get their point across and are also able to listen carefully and appreciate the points of others, even when they disagree, and are able to convey to others that they have heard.	5
SP	Economies of Computing	• Effect of skilled labor supply & demand on quality of products. • Impacts of outsourcing & offshoring software development, impacts on employment. • Consequences of globalization on the computing profession	5
		• Examine the ethical and legal issues surrounding the misuse of access and	5

| SP | Security Policies, Laws, Computer Crime | various breaches in security.
 • Discuss the professional's role in security and the trade-offs involved.
 • Issues surrounding the misuse of access and breaches in security | |