Course Information Sheet
CSCI 3030
Computing, Ethics, and Society

Brief Course Description
(50-words or less)

Introduction to social and ethical issues relating to computer science and information technology. Topics include intellectual property, open source software, the digital divide, globalization, and professional ethics. Students should have a working knowledge of personal computing.

Extended Course Description / Comments

This course addresses controversial social issues involving information technology, including issues of privacy, intellectual property, and social justice issues. The course focus is on defining and defending one's ethical choices based on any of a variety of systems of ethical decision making.

Pre-Requisites and/or Co-Requisites

None

Approved Textbooks
(if more than one listed, the textbook used is up to the instructor's discretion)

Author(s): Michael J. Quinn
Title: Ethics for the Information Age
Edition: 4th
ISBN-13: 978-0132133876

Specific Learning Outcomes
(Performance Indicators)

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At the end of the semester, all students will be able to do the following:
1. Describe major ethical theories including act utilitarianism, rule utilitarianism, Kantian ethics, and social contract theory
2. Evaluate new ethical problems based on one or more major ethical theories.
3. Explain and discuss contemporary legal and social issues related to intellectual property and information technology
4. Explain and discuss contemporary legal and social issues related to the effect of information technology on privacy
5. Explain and discuss contemporary legal and social issues related to the effect of information technology on work and employment
6. Explain and discuss contemporary legal and social issues related to the effect of information technology on globalization and vice versa
7. Describe the role and goals of information technology professional associations

Relationship Between Student Outcomes and Learning Outcomes

		Student Outcomes										
		a	b	c	d	e	f	g	h	i	j	k
Learning Outcomes	1					•	•	•				
	2					•	•	•				
	3					•	•	•				
	4					•	•	•				
	5					•	•	•				
	6					•	•	•				
	7								•			

Student Outcomes

a. An ability to apply knowledge of computing and mathematics appropriate to the discipline.
b. An ability to analyze a problem, and identify and define the computing

requirements appropriate to its solution.

c. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.

d. An ability to function effectively on teams to accomplish a common goal.

e. An understanding of professional, ethical, legal, security and social issues and responsibilities.

f. An ability to communicate effectively with a range of audiences.

g. An ability to analyze the local and global impact of computing on individuals, organizations, and society.

h. Recognition of the need for and an ability to engage in continuing professional development.

i. An ability to use current techniques, skills, and tools necessary for computing practice.

j. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.

k. An ability to apply design and development principles in the construction of software systems of varying complexity.

Major Topics Covered
(Approximate Course Hours)

3 credit hours = 37.5 contact hours
4 credit hours = 50 contact hours

Note: Exams count as a major topic covered

History of computing and networking	(2 hours)
General theories of ethics	(4 hours)
Network security threats	(8 hours)
Intellectual property concerns	(8 hours)
Privacy concerns	(6 hours)
Reliability concerns	(2 hours)
Professionalism	(2 hours)
Economic justice concerns	(2 hours)
Computerized weapons	(1.5 hours)
Tests	(2 hours)

Assessment Plan for this Course

Each time this course is offered, the class is initially informed of the Course Outcomes listed in this document, and they are included in the syllabus. At the end of the semester, an anonymous survey is administered to the class where each student is asked to rate how well the outcome was achieved. The choices provided use a 5-point Likert scale containing the following options: Strongly agree, Agree, Neither agree or disagree, disagree, and strongly disagree. The results of the anonymous survey are tabulated and results returned to the instructor of the course.

The course instructor takes the results of the survey, combined with sample student responses to homework and final exam questions corresponding to course outcomes, and reports these results to the ABET committee. If necessary, the instructor also writes a recommendation to the ABET committee for better achieving the course outcomes the next time the course is offered.

How Data is Used to Assess Program Outcomes

Each course Learning Outcome, listed above, directly supports one or more of the Student Outcomes, as is listed in "Relationships between

Course Master
Course History

Learning Outcomes and Student Outcomes". For CSCI 3030, Student Outcomes (e), (f), (j), and (h) are supported.

Dr. Daniel Everett

05/2008	Course Approval in CAPA
02/2012	Course Information Sheet Created