

School of Computing & Information Sciences

Course Title: Professional Ethics &
Social Issues in Computing

Date: January 19, 2010

Course Number: CGS 3092

Number of Credits: 1

Subject Area: Communications and Ethics	Subject Area Coordinator: Patricia McDermott-Wells Email: mcdwells@cis.fiu.edu
Catalog Description: Ethical, legal, social issues and the responsibility of computer professionals. Codes of conduct, risks, and reliability, responsibility, liability, privacy, security, free speech issues.	
Textbook: Suggested: Computer Ethics and Professional Responsibility edited by Bynum & Rogerson Blackwell Publishing, 2004 (ISBN: 1-85554-845-3)	
References: Students will access a variety of course materials through the Internet. Other materials will be provided through SCIS Online Course support.	
Prerequisites Courses: (COP 2250 or COP 2210) and ENC 3213	
Corequisites Courses: None	

Type: Required; Lecture with forum discussions

Prerequisites Topics:

Programming experience, English technical writing. Note: There is no programming in this course. The programming prerequisite is simply there to ensure maturity of the class.

Course Outcomes

1. Be able to understand and discuss the legal and social impacts of technology as related to intellectual property rights, and how the global reach of the Internet affects these issues.
2. Be able to understand and discuss the legal and social impacts of technology as related to individual privacy and anonymity in society.
3. Be able to understand and discuss a computing professional's roles and responsibilities as related to intellectual property, privacy, anonymity, legal, social, and ethical issues.
4. Be familiar with the special issues that virtual worlds present to intellectual property, privacy, anonymity, social identity, and social inclusion.
5. Be able to create and deliver a professional presentation on technology impact issues.
6. Be able to produce a research paper on technology impact issues.

Topic	Number of Lecture Hours	Outcome
<ul style="list-style-type: none"> • Unique aspects of computing technology <ul style="list-style-type: none"> ○ Unique problems created by technology 	0.5	1-7
<ul style="list-style-type: none"> • Intellectual property issues <ul style="list-style-type: none"> ○ Patents, copyrights, and trademarks in the U.S. ○ Software piracy, licensing, and patents ○ Media piracy ○ Reverse engineering of hardware or software ○ Technology's roles in protecting IP and infringing on IP rights 	1	1
<ul style="list-style-type: none"> • Privacy and security issues <ul style="list-style-type: none"> ○ U.S. Fourth Amendment rights and digital content ○ Governments' rights and responsibilities to prevent cyber or physical attacks vs. individual privacy rights ○ Privacy issues and the cultural, social, and legal aspects ○ Privacy in the workplace 	1	2
<ul style="list-style-type: none"> • Anonymity issues <ul style="list-style-type: none"> ○ Anonymity's role in freedom of expression ○ Anonymity's role in criminal or unethical activities 	1	2
<ul style="list-style-type: none"> • Freedom of expression and civil liberties issues <ul style="list-style-type: none"> ○ Ethical and legal basis for technological privacy protection ○ Ethical and legal framework for freedom of information ○ Freedom of expression in cyberspace vs. cultural, social, and legal issues in other societies 	1	3,4
<ul style="list-style-type: none"> • Software and critical public infrastructure <ul style="list-style-type: none"> ○ Proprietary software protection vs. government's requirements for public safety and disaster prevention/recovery ○ Risks of computing in the implementation of public policy and government (e.g., electronic voting, electronic health records, etc.) 	0.5	1
<ul style="list-style-type: none"> • Professional roles and responsibilities <ul style="list-style-type: none"> ○ Purpose & appropriateness of professional codes of conduct ○ Acceptable use policies ○ Whistle-blowing ○ Role of professionals in global computing issues ○ Staying current in technology skills ○ Evaluate ACM/IEEE Codes of Ethics 	1	1-5
<ul style="list-style-type: none"> • Computer-based games <ul style="list-style-type: none"> ○ Game developers responsibilities: do/should games teach ethical/unethical behaviors? 	0.5	3,4
<ul style="list-style-type: none"> • Virtual worlds <ul style="list-style-type: none"> ○ Real-world laws & social customs for virtual worlds? ○ Economic, social, and legal issues in virtual worlds 	1	1-5
<ul style="list-style-type: none"> • Student presentations <ul style="list-style-type: none"> ○ Individual research and presentations on related topics 	7	1-7

Oral and Written Communication:

Topic	Class Time	Student Performance Measures
All topics	Throughout the semester	Student prepares and delivers a presentation based on his/her research of a related topic
All topics	Throughout the semester	Student prepares a research paper exploring a technology-related issue with global implications
All topics	Throughout the semester	Student participates in forum discussions about related topics

Social and Ethical Implications of Computing Topics

Topic	Class Time	Student Performance Measures
All topics	Throughout the semester	Forum discussions, student presentations, and research papers

The Coverage of Knowledge Units within Information Technology Body of Knowledge

Knowledge Unit	Topic	Lecture Hours
SP.Professional Communications	Professional Communications	2
SP.Social Context of Computing	Social Context of Computing	1
SP.Intellectual Property	Intellectual Properties	1
SP.Legal Issues in Computing	Legal Issues in Computing	1
SP.Professional and Ethical Issues & Responsibilities	Professional and Ethical Issues & Responsibilities	1
SP.Privacy and Civil Liberties	Privacy and Civil Liberties	1

Source: *Information Technology 2008: Curriculum Guidelines for Undergraduate Degree Programs in Information Technology*, <http://www.acm.org/education/curricula/IT2008%20Curriculum.pdf>

The Coverage of Knowledge Units within Computer Science Body of Knowledge

Knowledge Unit	Topic	Lecture Hours
SP/ProfessionalEthics [core]	Professional and Ethical Issues & Responsibilities	2
SP/IntellecionProperty [core]	Intellectual Properties	2
SP/PrivacyAndCivilliberties [core]	Privacy and Civil Liberties	2
SP/SocialContext [core]	Social Context of Computing	1

Source: *Curriculum 2008: An Interim Revision of CS 2001*, <http://www.acm.org/education/curricula/ComputerScience2008.pdf>