

School of Computer Science

**Course Title: Professional Ethics and
Social Issues in Computer Science**

Date: Oct 7, 2003

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 reading, Sara Baase, <i>A Gift of Fire</i> 2nd Edition, Prentice Hall, 2002. ISBN# 0-13-008215-5.	
References: Students will access a variety of course materials through the Internet. Some of these sites are: The Miami Herald , New York Times , ABC News.COM , MSNBC News.COM , TechTV.COM , PC Magazine , PC World , Wired News , etc. Other materials will be accessed from Course Reserves which are available at the Library's home page. Additionally, students will be receiving hyperlinks to other readings via email. Students will need to download Acrobat Reader 4.0 to view articles in PDF format and RealPlayer Basic to play NPR's Justice Talking.	
Prerequisites Courses: COP-3337 is a prerequisite.	
Corequisites Courses: None	

Type: Required

Prerequisites Topics:

Although COP-3337 is a prerequisite, there is no programming in this course. The prerequisite is simply there to ensure maturity of the class.

Course Objectives:

- Be familiar with social implications of decisions and actions of computing professionals;
- Be familiar with ethical and legal issues facing computing professionals;
- Be able to write papers involving legal, ethical, and professional issues in computing;
- Gain experience with making oral presentations, participating in informal debates, class discussions, and in critically observing others' presentations
- Gain exposure to team problem solving

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Outline

Topic	Number of Weeks	Objective
<ul style="list-style-type: none"> • Copyright Laws and Intellectual Property 	1	<ul style="list-style-type: none"> • Be familiar with ethical and legal issues facing computing professionals; • Be able to write papers involving legal, ethical, and professional issues in computing; • Gain exposure to team problem solving
<ul style="list-style-type: none"> • Social Issues <ul style="list-style-type: none"> ○ Spam ○ Digital Piracy ○ Email monitoring ○ Carnivore 	2	<ul style="list-style-type: none"> • Be familiar with ethical and legal issues facing computing professionals; • Be able to write papers involving legal, ethical, and professional issues in computing; • Gain exposure to team problem solving
<ul style="list-style-type: none"> • Various Issues <ul style="list-style-type: none"> ○ Student presentations 	4	<ul style="list-style-type: none"> • Gain experience with making oral presentations, participating in informal debates, class discussions, and in critically observing others' presentations

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Laboratory Projects

Number of Weeks	Objective

Oral and Written Communication:

Number of written reports: 1 - 2

Approximate number of pages for each report: 2 - 3

Number of required oral presentations: 1

Approximate time for each presentation: 10 - 15 minutes

Social and Ethical Implications of Computing Topics

Topic	Class time	student performance measures
Copyright and Intellectual Property Law	3 hrs	Quiz, Case Study, Final Exam
Spamming, digital piracy, email monitoring, electronic surveillance	4 hr	Quiz, Case Study, Final Exam
Various topics (35 total)	10 hr	Presentation

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Approximate number of credit hours devoted to fundamental CS topics

Algorithms: 0	Data Structures: 0
Software Design: 0	Concepts of Programming Languages: 0
Computer Organization and Architecture: 0	

Theoretical Contents

Topic	Class time

Problem Analysis Experiences

None in terms of typical programming and algorithms problem. Significant legal and ethical analysis throughout.

Solution Design Experiences

None

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The Coverage of Knowledge Units within Computer Science Body of Knowledge¹

Knowledge Unit	Topic	Lecture Hours
SP1	History of Computing	0
SP2	Social Context of Computing	2
SP3	Methods and Tools of Analysis	3 (integrated throughout course)
SP4	Professional and Ethical Responsibilities	3
SP5	Risks and Liabilities of Computer-Based Systems	2
SP6	Intellectual Property	4
SP7	Privacy and Civil Liberties	3
SP8	Computer Crime	1
SP9	Economic Issues in Computing	1

¹See <http://www.computer.org/education/cc2001/final/chapter05.htm> for a description of Computer Science Knowledge units